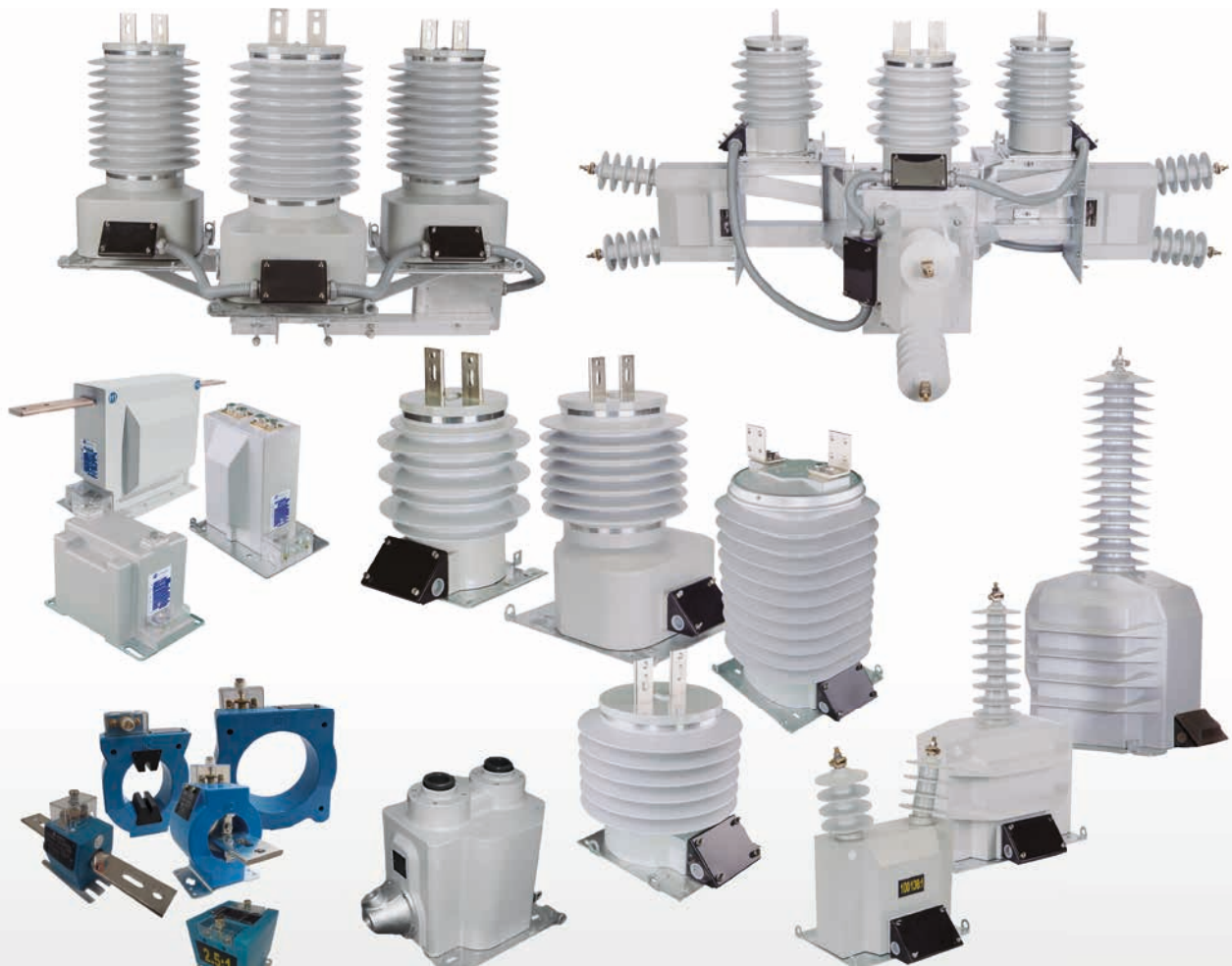


arteche



REFERENCE GUIDE

# INSTRUMENT TRANSFORMERS

INDOOR / OUTDOOR  
CAST RESIN CONSTRUCTION

This document may be subject to changes. Contact ARTECHE to confirm the characteristics and availability of the products described here.



# MOVING TOGETHER



# CONTENTS

The instrument transformers listed in this guide are the most common for the electrical utilities and industries. ARTECHE has a much wider range of characteristics and models. For any different detail than the ones listed, please contact ARTECHE or your local representative/distributor.

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# GENERAL TECHNICAL DATA

# APPLICATION DATA

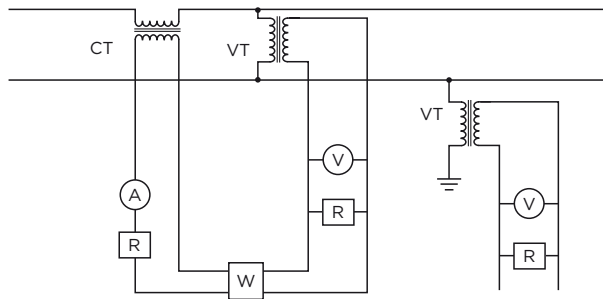
## INTRODUCTION

The Purpose of instrument transformers:

- › The purpose of instrument transformers is to reduce the voltage and current of an electrical network to standardized, non-hazardous levels.
- › They isolate operators and instruments from the high voltage circuits allowing a less hazardous work environment. Without these transformers, measurements would require expensive insulated instrument panels.

There are two types of instrument transformer:

- › Current transformers (CT): Under normal operating conditions their secondary current is practically proportional to the primary current, and its phase is shifted by an angle close to zero.
- › Voltage transformers (VT): Under normal operating conditions the secondary voltage is practically proportional to the primary voltage and its phase is shifted by an angle close to zero.



› Figure 1: CT and VT diagram connection

## VT VOLTAGE DESIGNATIONS

### Single-phase Voltage transformers (UR/UC/UX)

The “U” in the type name and the “GY” in the primary voltage column of the data sheet indicate that the VT has one insulated bushing, making it suitable for line-to-ground connection only.

- › **40250/69000GY**. This unit is rated for 40250 operating Volts. It can be connected at 40250 Volts line-to-ground on a 69000 Volt system (line-to-line Volts are 69000 V).
- › **34500/34500GY**. This unit is rated for 34500 operating Volts. However, it can only be connected line-to-ground on a 34500 V system. Therefore, the actual operating voltage of the unit would be  $34500/\sqrt{3}$ . The accuracy and thermal ratings of this unit are based on 34500 V. This is typical where there is a relay connected to the unit which should operate when there is a single line-to-ground fault. In this condition, the line-to-ground voltage becomes equal to the line-to-line voltage.

### Phase-to-phase Voltage transformers (VR/VC/VX)

The “V” in the type name and the “Y” in the primary voltage column of the data sheet indicate that the VT has two fully insulated bushings, making it suitable for line-to-line connection.

- › **27600/47804Y**. This unit is rated for 27600 operating Volts. It can be connected at 27600 Volts line-to-ground on a 47804 Volt system (line-to-line Volts are 47804 V) OR it can be connected line-to-line on a system with 27600 V line-to-line. This unit is not suitable for operation at 47804 Volts.
- › **46000/46000Y**. This unit is rated for 46000 operating Volts. It can be connected at 46000 Volts line-to-line.

## RATING FACTORS

Rating factors given in this brochure are standard at 30°C Characteristics for different thermal loadings on request.

## STANDARDS

All the instrument transformers listed in this guide comply with the following standards where applicable:

- › IEEE C57.13-2016. Standard Requirements for Instrument transformers.
- › ANSI C12.11-2007. American National Standard for Instrument transformers for Revenue Metering 10kV BIL through 350 kV BIL (0.6 kV NSV through 69 kV NSV).
- › CSA/IEC 61869. Instrument Transformers.
- › IEC 61869. Instrument Transformers.

## HOW TO SPECIFY INSTRUMENT TRANSFORMERS

There are several parameters that must be specified when ordering or requesting for proposals or quotations. If the requirements needed fits exactly into the characteristics listed in the data sheets of each model, it is enough to mention the code. However, when non-standard equipment will be needed, the following parameters must be specified:

- › Highest nominal voltage system
- › Basic impulse level (BIL)
- › Type of service (outdoor/indoor)
- › Frequency
- › Ratio

### Only for current transformers

- › Continuous thermal current rating factor
- › Short-time thermal current (kA/1s)
- › Class and burden

### Only for voltage transformers

- › Rated continuous voltage
- › Rated voltage factor (30sec)
- › Total thermal burden
- › Accuracy class and burden

# ACCURACY STANDARDS

## CURRENT TRANSFORMERS (CT)

The accuracy class of a current transformer for measuring is given by a number (class rate) representing the ratio error limit expressed as a percentage of the rated primary current when the transformer is running at its “accuracy load”.

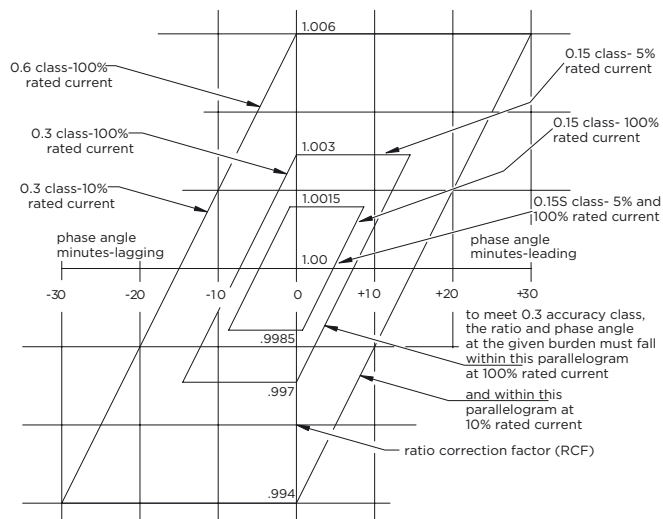
Accuracy classes for current transformers are: 0.15S; 0.15; 0.15N; 0.3S; 0.3; 0.6 and 1.2. For Accuracy class 0.3, 0.6, 0.15N and 1.2 the ratio correction factor must fall within the parallelograms for 100% and 10% respectively. For accuracy class 0.15, 0.15S and 0.3S the ratio correction factor must fall within the parallelograms for 100% and 5% respectively.

The following example calculates the correction factor for a current transformer with the following characteristics:

- › 0.3 accuracy class
- › 100% rated current
- › Ratio correction factor: 1.003
- › Maximum allowable phase angle: +15.6 minutes

$$\text{Transformer Correction Factor} = \text{RCF} - (\beta/2600) = 1.003 - (15.6/2600) = 0.997$$

The ratio correction factor and phase angle for any point inside the 0.3 class parallelogram for 100% rated current will always produce a TCF between 0.997 and 1.003.



› Figure 2: CT Equivalent Parallelogram.

## VOLTAGE TRANSFORMERS (VT)

The accuracy class of a voltage transformer for measuring is given by a number (class rate) representing the ratio error limit expressed as a percentage of the rated primary voltage when the transformer is running at its “accuracy load”.

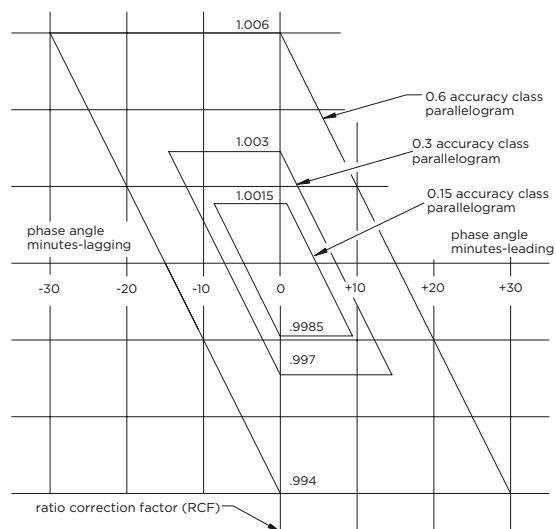
Accuracy classes for voltage transformers are: 0.15; 0.3; 0.6 and 1.2.

The following example calculates the correction factor for a voltage transformer with the following characteristics:

- › 0.3 accuracy class
- › 100% rated voltage
- › Ratio correction factor: 1.003
- › Maximum allowable phase angle: -15.6 minutes

$$\text{Transformer Correction Factor} = \text{RCF} + (\gamma/2600) = 1.003 + (-15.6/2600) = 0.997$$

The ratio correction factor and phase angle for any point inside the 0.3 class parallelogram, will always produce a TCF between 0.997 and 1.003.



› Figure 3: VT Equivalent Parallelogram.

# ACCURACY STANDARDS

## HIGH ACCURACY EXTENDED RANGE CURRENT TRANSFORMERS

Extended range current transformers are designed for modern power generation systems. They accurately measure a wider range of current without making physical changes in the primary or in the secondary connections of a current transformer.

To ensure the best performance on nominal primary current readings from 1% to Rating factor (please, see charts below), these current transformers have been designed using magnetic materials that minimize excitation losses and a winding distribution that virtually eliminates stray losses.

High accuracy extended range current transformers can increase utility revenue through improved metering. This occurs on systems with variable currents such as wind or solar power generation. In the past, current transformers

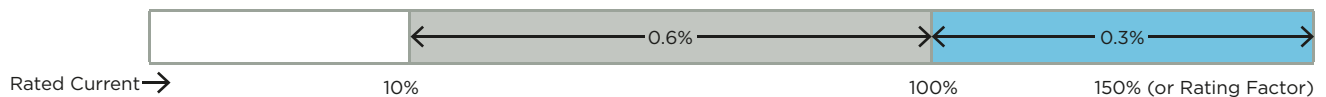
were designed to accurately measure down to 10% of the current rating on the name plate of the transformer.

However, the recent deployment of variable generation has created a need to accurately measure a new range of currents produced by these systems; especially below the rated current of the transformer.

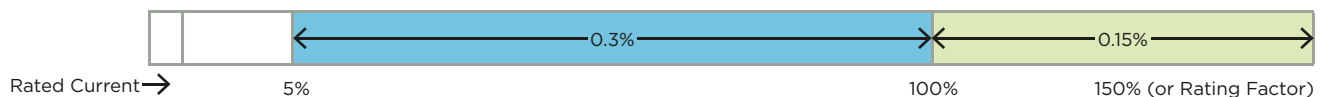
Historically, some energy usage revenue went unmeasured. Today Arteche's high accuracy extended range current transformers accurately measure these variable loads.

Extended range current transformers answer "Standard CT's problem" by expanding the amperage load that can be accurately measured. The wider current range helps to reduce the number of different ratios, reducing the amount of inventory needed to respond to customer demands.

- › **"Standard Class 0.3"** means that from 100% of nominal current through the rating factor, accuracy is guaranteed to be  $\pm 0.3\%$ , and from 10% of nominal current through 100% of nominal current accuracy is guaranteed to be  $\pm 0.6\%$ .



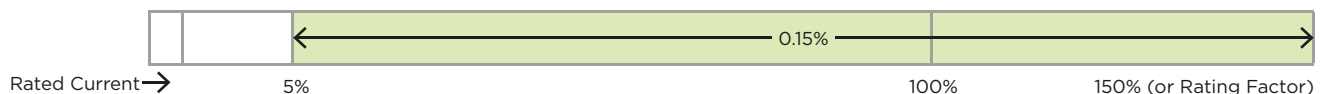
- › **"High Accuracy Class 0.15"** means that from 100% of nominal current through the rating factor, accuracy is guaranteed to be  $\pm 0.15\%$ , and from 5% of nominal current through 100% of nominal current accuracy is guaranteed to be  $\pm 0.3\%$ .



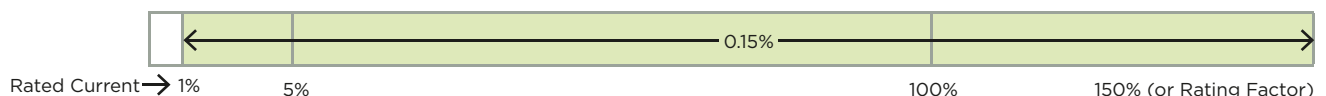
- › **"Accuracy Class 0.3S"** means that from 5% of nominal current through the rating factor, accuracy is guaranteed to be  $\pm 0.3\%$ .



- › **"Accuracy Class 0.15S"** means that from 5% of nominal current through the rating factor, accuracy is guaranteed to be  $\pm 0.15\%$ .



- › **"High Accuracy. Extended Range Class 0.15"** means that from 1% of nominal current through the rating factor, accuracy is guaranteed to be  $\pm 0.15\%$ . This goes beyond IEEE C57.13 requirements.



# OTHER INFORMATION

## CURRENT TRANSFORMERS

| Standard burden characteristics @ 60Hz and 5Amps secondary |                   |                          |                  |              |              |
|--|-------------------|--------------------------|------------------|--------------|--------------|
| Burden designation   | Resistance (ohms) | Inductance (millihenrys) | Impedance (ohms) | Volt-Amperes | Power factor |
| <b>METERING BURDENS</b>                                    |                   |                          |                  |              |              |
| B-01   | 0.09              | 0.116                    | 0.1              | 2.5          | 1.0          |
| B-02   | 0.18              | 0.232                    | 0.2              | 5.0          | 0.9          |
| B-05   | 0.45              | 0.580                    | 0.5              | 12.5         | 0.9          |
| B-0.9  | 0.81              | 1.040                    | 0.9              | 22.5         | 0.9          |
| B-1.8  | 1.62              | 2.080                    | 1.8              | 45.0         | 0.9          |
| <b>RELAYING BURDENS</b>                                    |                   |                          |                  |              |              |
| B-1  | 0.5               | 2.3                      | 1.0              | 25           | 0.5          |
| B-2  | 1.0               | 4.6                      | 2.0              | 50           | 0.5          |
| B-4  | 2.0               | 9.2                      | 4.0              | 100          | 0.5          |
| B-8  | 4.0               | 18.5                     | 8.0              | 200          | 0.5          |

As per IEEE C57.13-2016. Tables 10 and 13.

## VOLTAGE TRANSFORMERS

| Standard burden @ 60Hz |                        |                     |
|------------------------|------------------------|---------------------|
| Burden designation     | Secondary Volt-Amperes | Burden Power Factor |
| W                      | 12.5                   | 0.10                |
| X                      | 25.0                   | 0.70                |
| M                      | 35.0                   | 0.20                |
| Y                      | 75.0                   | 0.85                |
| Z                      | 200.0                  | 0.85                |
| ZZ                     | 400.0                  | 0.85                |

As per IEEE C57.13-2016. Table 19.

## CROSS REFERENCE OF MOST COMMONLY USED TYPES

| INDOOR              |             |              |                        |                     |         |          |               |
|---------------------|-------------|--------------|------------------------|---------------------|---------|----------|---------------|
| Current transformer |             |              |                        | Voltage transformer |         |          |               |
| ARTECHE             | GE          | ABB          | KUHLMAN                | ARTECHE             | GE      | ABB      | KUHLMAN       |
| CID-17              | JKM-5.5A    | KIR-11       | CID-17                 | U/VCE-17            | JVM-4.5 | VIZ-11   | U/VCD-17      |
| OUTDOOR             |             |              |                        |                     |         |          |               |
| Current transformer |             |              |                        | Voltage transformer |         |          |               |
| ARTECHE             | GE          | ABB          | KUHLMAN                | ARTECHE             | GE      | ABB      | KUHLMAN       |
| CRB-17              | JCK-5       | KOR-11       | BB-15-972              | VRL-17              | JVW-3   | VOY-60   | PTT-110-977   |
| CRE-17              | JKW-3.4     | KOR-60.75    | BB-15-971 & BB-15-971H | URJ-17              | JVW-4.5 | VOZ-75   | PTT-110-9710G |
| CRE-24              | JKW-6       | KON-12       | BB-25-974              | VRJ-17              | JVW-4.5 | VOZ-75   | PTT-110-9710  |
| CRF-24              | JKW-6       | KOR-15C      | BB-25-973 & BB-25-973H | URN-17              | JVW-6   | VOG-12   | PTT-150-9710G |
| CRF-36              | JKW-7       | KOR-20       | BB-34-975 & BB-34-976  | VRN-17              | JVW-4.5 | VOZ-75   | PTT-110-9710  |
|                     |             |              |                        | URN-24              | JVW-6   | VOY-15G  | PTT-150-9710G |
|                     |             |              |                        | VRN-24              | JVW-6   | VOY-15   | PTT-150-9710  |
|                     |             |              |                        | URS-36              | JVW-7   | VOY-20G  | PTT-200-9710G |
|                     |             |              |                        | VRS-36              | JVW-7C  | VOY-20   | PTT-200-9710  |
| CE-034-E2           | JKW-150.200 | KOTD-150.200 | LG(X)                  | URU-52              | JVS-250 | VOZZ-25G | --            |
| CE-046-E2           | JKW-250     | KOTD-250     | CE-046                 | VRU-52              | JVT-250 | VOZZ-25  | --            |
| CE-069-E2           | JKW-350     | --           | CE-069                 | URU-72              | JVS-350 | --       | --            |

# OTHER INFORMATION

## IT TYPE DESIGNATIONS

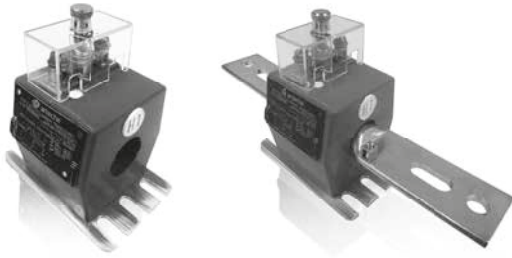
|                   | ARTECHE Design            | 1st position   | 2nd position   | 3rd position*   | 4th&5th position   |  |   |  |
|-------------------|---------------------------|--|--|---|--|--|---|--|
| <b>5kV - 36kV</b> |                           |  |  |   |  |  |   |  |
| CT's<br>Indoor    | ACA-36                    | A=CT Indoor transformer Up to 36 kV with DIN standard        | C=insulation of resin  | A=0.3 B0.1 up to B0.5                                     | Insulation class:<br>12=8.7/26/75 kV<br>17=15/34/110 kV<br>24=25/50/150 kV<br>36=34.5/70/200 kV  |  |   |  |
|                   | ACD-12. ACD-17.<br>ACD-24 |  |  | D=0.3 B0.1 up To B0.9 depending on the ratio              |  |  |   |  |
|                   | ACI-17                    |  |  | I=0.3 B0.5 up To B0.9 depending on the ratio              |  |  |   |  |
|                   | ACH-17. ACH-24            |  |  | H=0.3 B0.5 up To B1.8 depending on the ratio              |  |  |   |  |
|                   | ACF-36                    |  |  | F=burden B0.5 up To B1.8 depending on the ratio           |  |  |   |  |
|                   | AGPE-12                   |  |  | A=CT Indoor transformer Up to 36 kV toroidal              |  | G=insulation resin. window type  | P=Burden B0.1 up to B1.8 C-200  | E= indoor & outdoor service<br>12=8.7/26/75 kV |
|                   | CID-17                    |  |  | C=CT Indoor up to 34.5 kV only for America                |  | I=insulation and molded in resin   | D=0.3 B1.8 C-200  |  |
| VT's<br>Indoor    | VCE-7. VCE-17             | V=Line To Line connection<br><br>U=line to ground connection | C=insulation and molded in resin<br><br>X=insulation and molded in resin with relief valve | Accuracy and burden:<br>E=0.3WX. 0.3WXY                   | Insulation class:<br>12=8.7/26/75 kV<br>17=15/34/110 kV<br>24=25/50/150 kV<br>36=34.5/70/200 kV<br>52=46/95/250 kV<br>72=69/140/350 kV |  |   |  |
|                   | UCE-7. UCE-17             |  |  |   |  |  |   |  |
|                   | UXI-12                    |  |  |   |  |  |   |  |
|                   | UCI-17                    |  |  |   |  |  |   |  |
|                   | VCL-17. VCL-24            |  |  |   |  |  |   |  |
|                   | UXL-17                    |  |  |   |  |  |   |  |
|                   | UCJ-24                    |  |  |   |  |  |   |  |
|                   | VCN-36                    |  |  |   |  |  |   |  |
|                   | UXN-36                    |  |  |   |  |  |   |  |
|                   | UEI-24                    |  |  | U=line to ground connection                               |  | E=Insulation and molded in resin with metal coated body                  | I=0.3WXY  | 24=25/50/150 kV                                |
| <b>5kV - 72kV</b> |                           |  |  |   |  |  |   |  |
| CT's<br>Outdoor   | CRB-17                    | C=CT Outdoor up to 69 kV. post type                          | R=insulation of cycloaliphatic resin   | B=0.3B0.5   | Insulation class:<br>17=15/34/110 kV<br>24=25/50/150 kV<br>36=34.5/70/200 kV<br>52=46/95/250 kV<br>72=69/140/350 kV                    |  |   |  |
|                   | CRE-17. CRE-24            |  |  | E=0.3B1.8 T-150   |  |  |   |  |
|                   | CRF-24. CRF-36            |  |  | F=0.3B1.8 T-200   |  |  |   |  |
|                   | CRH-36. CRH-52.<br>CRH-72 |  |  | H=0.3B1.8 T-200   |  |  |   |  |
|                   | CRK-36. CRK-52.<br>CRK-72 |  |  | K=0.3B1.8 T-400   |  |  |   |  |
|                   | CE-034-E2                 |  |  | C=CT Outdoor up to 69 kV. top-core with metal coated head |  | E=Insulation of cycloaliphatic resin and top-core with metal coated head | <b>3rd.4th&amp;5th position</b>   | <b>6th position</b>                            |
|                   | CE-046-E2                 |  |  |   |  |  | Insulation level:<br>034= 34.5/70/200 kV<br>046= 46/95/250 kV<br>069= 69/140/350 kV | Accuracy and burden<br>E2=0.3B1.8 T-400        |
| CE-069-E2         |                           |  |  |   |  |  |   |  |
| VT's<br>Outdoor   | VRL-17                    | V=line To Line connection<br>U=line to ground connection     | R=insulation Of cycloaliphatic resin   | Accuracy and burden<br>L.J.N.S=0.3WXY                     | Insulation class:<br>17= 15/34/110 kV<br>24=25/50/150 kV<br>36=34.5/70/200 kV  |  |   |  |
|                   | URL-17                    |  |  |   |  |  |   |  |
|                   | VRJ-17. VRJ-24            |  |  |   |  |  |   |  |
|                   | URJ-17                    |  |  |   |  |  |   |  |
|                   | VRN-17. VRN-24            |  |  |   |  |  |   |  |
|                   | URN-17. URN-24            |  |  |   |  |  |   |  |
|                   | VRS-36                    |  |  |   |  |  |   |  |
|                   | URS-36                    |  |  |   |  |  |   |  |
|                   | VRU-52                    |  |  |   |  |  |   |  |
|                   | URU-52                    |  |  |   |  |  |   |  |
| URU-72            | U=0.3WXYZ                 | 52=46/95/250 kV<br>72=69/140/350 kV                          |  |   |  |  |   |  |

\*The letter in the 3rd position is the size of the CT. each letter means a different size. increasing the size in alphabetical order.

600 V  
INSTRUMENT  
TRANSFORMERS

# IRH-1

## 600 V CURRENT TRANSFORMER



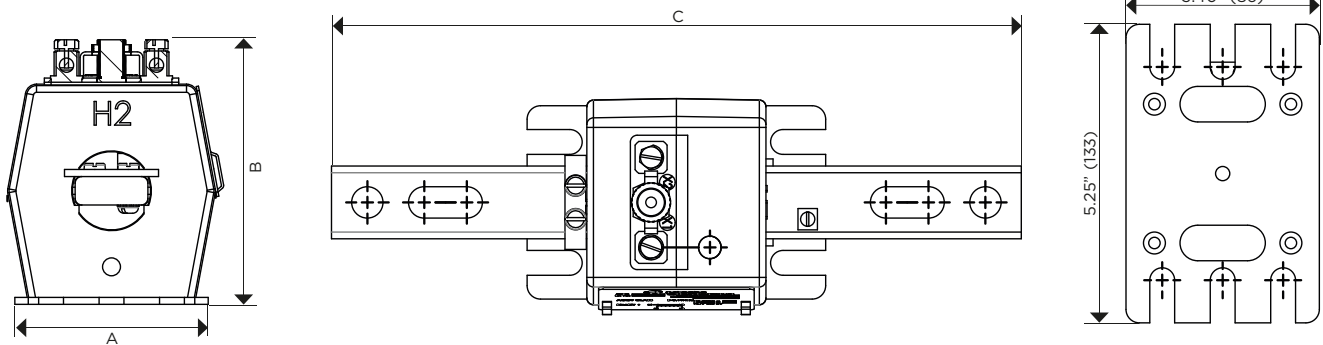
ARTECHE IRH series are dry type indoor/outdoor service current transformers. The core is encapsulated with epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

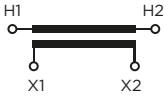
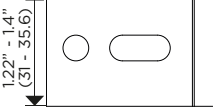
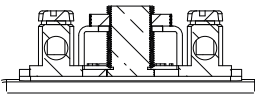
INDOOR-OUTDOOR  
60 Hertz

### Mechanical characteristics

|                     |       |
|---------------------|-------|
| Insulation Material | Color |
| Resin               | Blue  |



| Drawing | A     | B     | C      | Weight | Type |
|---------|-------|-------|--------|--------|------|
| 4287699 | 3.66" | 4.65" | 12.13" | 7.5 Lb | Bar  |

|  |   |                    |  |  |
|--|---|--------------------|--|--|
| <b>MARKING</b><br>(Single Primary Ratio) | <b>ONE SECONDARY</b><br> | <b>CONNECTIONS</b> | <b>PRIMARY TERMINAL</b><br> <p>Type: NEMA2<br/>Material: Copper</p> | <b>SECONDARY TERMINALS AND SHORT CIRCUIT DEVICE</b><br> <p>Secondary terminals.<br/>Type: Quick Connector<br/>Material: Brass<br/>Diameter: 1/4"</p> |
|--|---|--------------------|--|--|

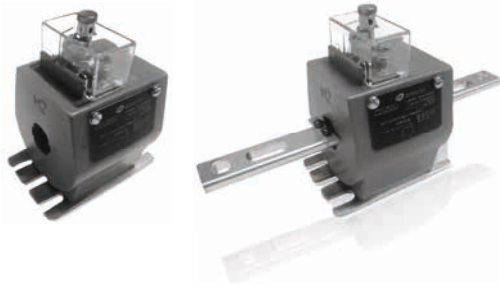
Approximate dimensions in inches (mm).





# IRH-1E

## 600 V CURRENT TRANSFORMER



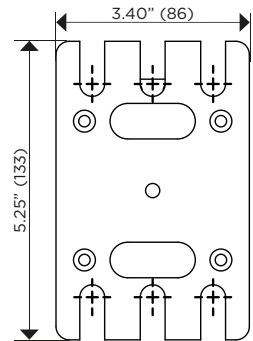
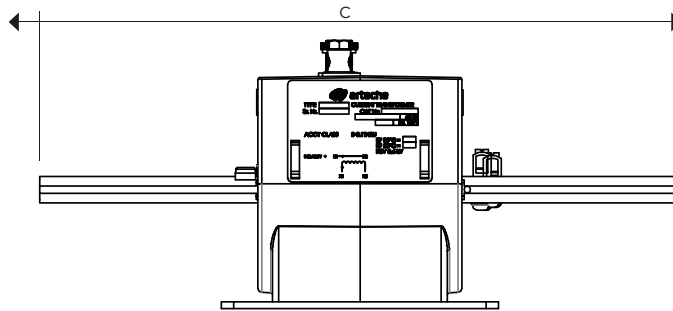
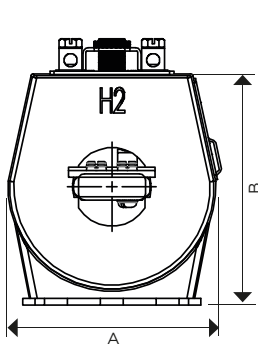
ARTECHE IRH series are dry type indoor/outdoor service current transformers. The core is encapsulated with epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

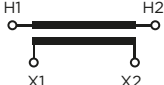
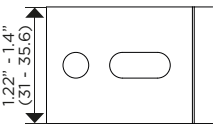
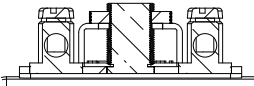
INDOOR-OUTDOOR  
60 Hertz

### Mechanical characteristics

|                     |       |
|---------------------|-------|
| Insulation Material | Color |
| Resin               | Blue  |



| Drawing | A     | B     | C      | Weight | Type |
|---------|-------|-------|--------|--------|------|
| 4288499 | 3.91" | 4.36" | 12.13" | 8 Lb   | Bar  |

|   |   |                  |   |   |
|---|---|------------------|---|---|
| MARKING<br>(Single<br>Primary<br>Ratio) | ONE<br>SECONDARY  | CONNEC-<br>TIONS | PRIMARY TERMINAL  | SECONDARY TERMINALS<br>AND SHORT CIRCUIT DEVICE   |
|   |  |                  |  <p>Type: NEMA2<br/>Material: Copper</p> |  <p>Secondary terminals.<br/>Type: Quick Connector<br/>Material: Brass<br/>Diameter: 1/4"</p> |

Approximate dimensions in inches (mm).



# IRH-3

## 600 V CURRENT TRANSFORMER



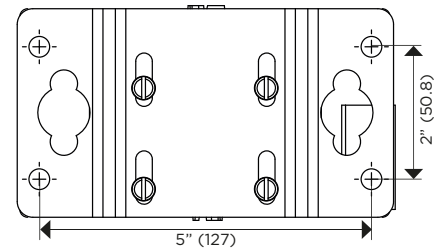
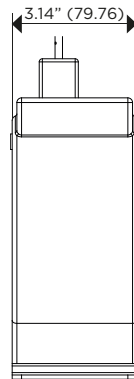
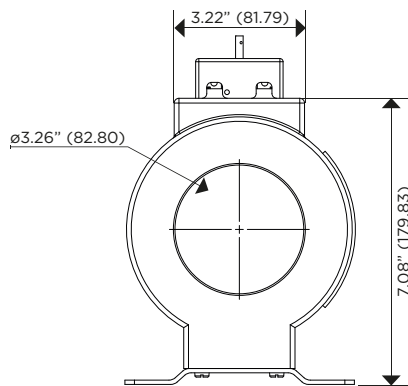
INDOOR-  
OUTDOOR  
60 Hertz

ARTECHE IRH series are dry type indoor/outdoor service current transformers. The core is encapsulated with epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

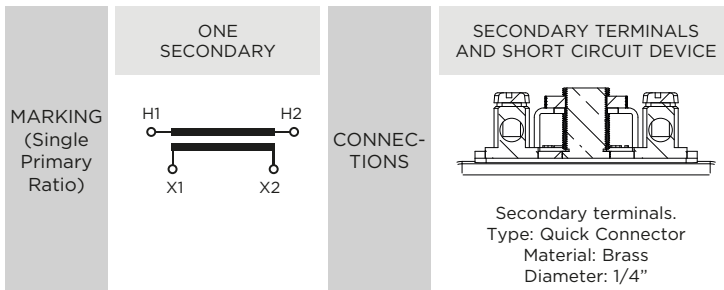
The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

### Mechanical characteristics

| Insulation Material | Color | Weight (lbs.) |
|---------------------|-------|---------------|
| Resin               | Blue  | 8.8           |



Drawing number: 4286166



Approximate dimensions in inches (mm).



# IRH-5

## 600 V CURRENT TRANSFORMER



ARTECHE IRH series are dry type indoor/outdoor service current transformers. The core is encapsulated with epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

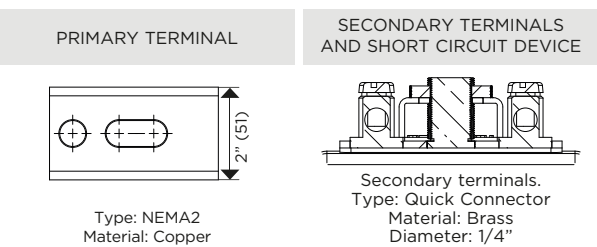
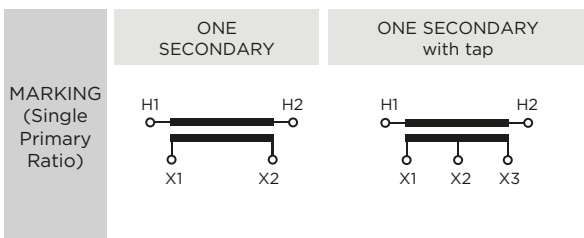
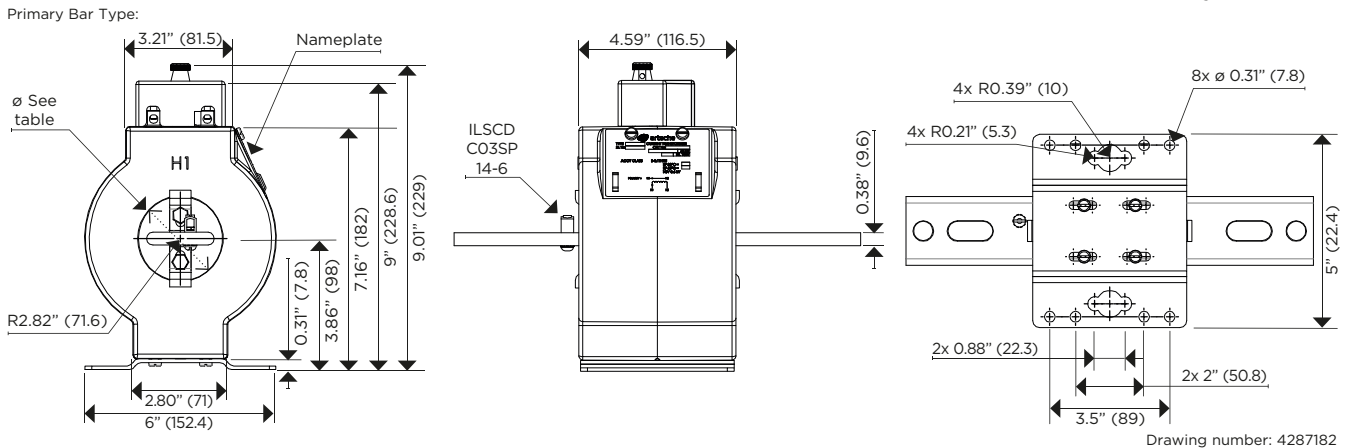
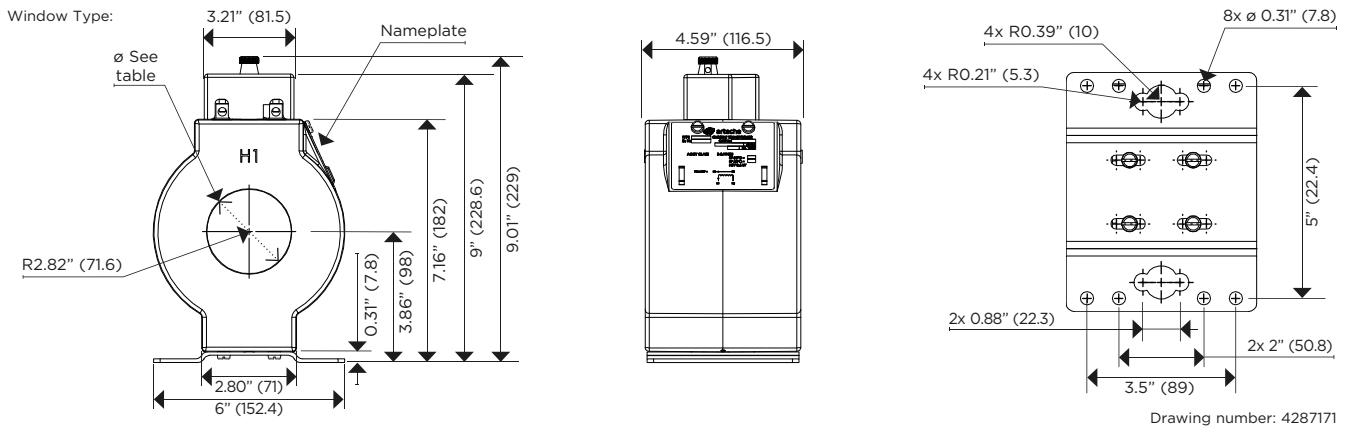
The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

INDOOR-OUTDOOR  
60 Hertz

**UL** UL Recognized Component File No.:E252140

### Mechanical characteristics

| Insulation Material | Color | Weight (lbs.)                             |
|---------------------|-------|---|
| Resin               | Blue  | Window Type: 10/12 / Primary Bar Type: 15 |



Approximate dimensions in inches (mm).

# IRH-5

## 600 V CURRENT TRANSFORMER

| Electrical characteristics |  |   |   |                        |                |                 |             |                  |
|----------------------------|--|---|---|------------------------|----------------|-----------------|-------------|------------------|
| Code                       | Current Ratio (Primary: Secondary) (A) | Continuous Thermal Current Rating Factor @ 30°C | Continuous Thermal Current Rating Factor @ 55°C | IEEE Metering Accuracy | Drawing number | Type            | Window Size | Accessories      |
| 735301010                  | 50:5                                   | 4.0   | 3.0   | 1.2 B0.1               | 4287171        | Window          | 2.55"       | Complete         |
| 735301020                  | 100:5                                  | 4.0   | 3.0   | 0.3 B0.1               | 4287171        | Window          | 2.55"       | Complete         |
| 735301040                  | 200:5                                  | 4.0   | 3.0   | 0.3 B0.5               | 4287171        | Window          | 2.55"       | Complete         |
| 735301060                  | 300:5                                  | 4.0   | 3.0   | 0.3 B0.5               | 4287171        | Window          | 3.15"       | Complete         |
| 735301080                  | 400:5                                  | 4.0   | 3.0   | 0.3 B0.5               | 4287171        | Window          | 3.15"       | Complete         |
| 735301100                  | 500:5                                  | 3.0   | 2.2   | 0.3 B0.5               | 4287171        | Window          | 3.15"       | Complete         |
| 735301120                  | 600:5                                  | 2.0   | 1.5   | 0.3 B0.5               | 4287171        | Window          | 3.15"       | Complete         |
| 735301160                  | 800:5                                  | 2.0   | 1.5   | 0.3 B0.5               | 4287171        | Window          | 3.15"       | Complete         |
| 735301200                  | 1000:5                                 | 2.0   | 1.5   | 0.3 B0.5               | 4287171        | Window          | 3.15"       | Complete         |
| 735301240                  | 1200:5                                 | 1.5   | 1.2   | 0.3 B1.8               | 4287171        | Window          | 3.15"       | Complete         |
| 735302040                  | 200/400:5                              | 4.0/2.0   | 3.0/1.5   | 0.3 B0.2/0.3 B0.5      | 4287171        | Window          | 2.55"       | Complete         |
| 735302060                  | 300/600:5                              | 3.0/2.0   | 2.2/1.5   | 0.3 B0.2/0.3 B0.5      | 4287171        | Window          | 3.15"       | Complete         |
| 735302080                  | 400/800:5                              | 2.0/2.0   | 1.5/1.5   | 0.3 B0.2/0.3 B0.5      | 4287171        | Window          | 3.15"       | Complete         |
| 735300060                  | 50:5                                   | 4.0   | 3.0   | 1.2 B0.1               | 4287171        | Window          | 2.55"       | No base          |
| 735300061                  | 100:5                                  | 4.0   | 3.0   | 0.3 B0.1               | 4287171        | Window          | 2.55"       | No base          |
| 735300062                  | 200:5                                  | 4.0   | 3.0   | 0.3 B0.5               | 4287171        | Window          | 2.55"       | No base          |
| 735300063                  | 300:5                                  | 4.0   | 3.0   | 0.3 B0.5               | 4287171        | Window          | 3.15"       | No base          |
| 735300064                  | 400:5                                  | 4.0   | 3.0   | 0.3 B0.5               | 4287171        | Window          | 3.15"       | No base          |
| 735300065                  | 500:5                                  | 3.0   | 2.2   | 0.3 B0.5               | 4287171        | Window          | 3.15"       | No base          |
| 735300066                  | 600:5                                  | 2.0   | 1.5   | 0.3 B0.5               | 4287171        | Window          | 3.15"       | No base          |
| 735300067                  | 800:5                                  | 2.0   | 1.5   | 0.3 B0.5               | 4287171        | Window          | 3.15"       | No base          |
| 735300068                  | 1000:5                                 | 2.0   | 1.5   | 0.3 B0.5               | 4287171        | Window          | 3.15"       | No base          |
| 735300069                  | 1200:5                                 | 1.5   | 1.2   | 0.3 B1.8               | 4287171        | Window          | 3.15"       | No base          |
| 735300180                  | 200/400:5                              | 4.0/2.0   | 3.0/1.5   | 0.3 B0.2/0.3 B0.5      | 4287171        | Window          | 2.55"       | No base          |
| 735300181                  | 300/600:5                              | 3.0/2.0   | 2.2/1.5   | 0.3 B0.2/0.3 B0.5      | 4287171        | Window          | 3.15"       | No base          |
| 735300182                  | 400/800:5                              | 2.0/2.0   | 1.5/1.5   | 0.3 B0.2/0.3 B0.5      | 4287171        | Window          | 3.15"       | No base          |
| 735300080                  | 50:5                                   | 4.0   | 3.0   | 1.2 B0.1               | 4287171        | Window          | 2.55"       | No base/no cover |
| 735300081                  | 100:5                                  | 4.0   | 3.0   | 0.3 B0.1               | 4287171        | Window          | 2.55"       | No base/no cover |
| 735300082                  | 200:5                                  | 4.0   | 3.0   | 0.3 B0.5               | 4287171        | Window          | 2.55"       | No base/no cover |
| 735300083                  | 300:5                                  | 4.0   | 3.0   | 0.3 B0.5               | 4287171        | Window          | 3.15"       | No base/no cover |
| 735300084                  | 400:5                                  | 4.0   | 3.0   | 0.3 B0.5               | 4287171        | Window          | 3.15"       | No base/no cover |
| 735300085                  | 500:5                                  | 3.0   | 2.2   | 0.3 B0.5               | 4287171        | Window          | 3.15"       | No base/no cover |
| 735300086                  | 600:5                                  | 2.0   | 1.5   | 0.3 B0.5               | 4287171        | Window          | 3.15"       | No base/no cover |
| 735300087                  | 800:5                                  | 2.0   | 1.5   | 0.3 B0.5               | 4287171        | Window          | 3.15"       | No base/no cover |
| 735300088                  | 1000:5                                 | 2.0   | 1.5   | 0.3 B0.5               | 4287171        | Window          | 3.15"       | No base/no cover |
| 735300089                  | 1200:5                                 | 1.5   | 1.2   | 0.3 B1.8               | 4287171        | Window          | 3.15"       | No base/no cover |
| 735300200                  | 200/400:5                              | 4.0/2.0   | 3.0/1.5   | 0.3 B0.2/0.3 B0.5      | 4287171        | Window          | 2.55"       | No base/no cover |
| 735300201                  | 300/600:5                              | 3.0/2.0   | 2.2/1.5   | 0.3 B0.2/0.3 B0.5      | 4287171        | Window          | 3.15"       | No base/no cover |
| 735300202                  | 400/800:5                              | 2.0/2.0   | 1.5/1.5   | 0.3 B0.2/0.3 B0.5      | 4287171        | Window          | 3.15"       | No base/no cover |
| 735305010                  | 50:5                                   | 4.0   | 3.0   | 1.2 B0.1               | 4287182        | Nema 2 Bar Type | 2.55"       | Complete         |
| 735305020                  | 100:5                                  | 4.0   | 3.0   | 0.3 B0.1               | 4287182        | Nema 2 Bar Type | 2.55"       | Complete         |
| 735305040                  | 200:5                                  | 4.0   | 3.0   | 0.3 B0.5               | 4287182        | Nema 2 Bar Type | 2.55"       | Complete         |
| 735305060                  | 300:5                                  | 4.0   | 3.0   | 0.3 B0.5               | 4287182        | Nema 2 Bar Type | 3.15"       | Complete         |
| 735305080                  | 400:5                                  | 4.0   | 3.0   | 0.3 B0.5               | 4287182        | Nema 2 Bar Type | 3.15"       | Complete         |
| 735305100                  | 500:5                                  | 3.0   | 2.2   | 0.3 B0.5               | 4287182        | Nema 2 Bar Type | 3.15"       | Complete         |
| 735305120                  | 600:5                                  | 2.0   | 1.5   | 0.3 B0.5               | 4287182        | Nema 2 Bar Type | 3.15"       | Complete         |
| 735305160                  | 800:5                                  | 2.0   | 1.5   | 0.3 B0.5               | 4287182        | Nema 2 Bar Type | 3.15"       | Complete         |
| 735305200                  | 1000:5                                 | 2.0   | 1.5   | 0.3 B0.5               | 4287182        | Nema 2 Bar Type | 3.15"       | Complete         |
| 735305240                  | 1200:5                                 | 1.5   | 1.2   | 0.3 B1.8               | 4287182        | Nema 2 Bar Type | 3.15"       | Complete         |
| 735306040                  | 200/400:5                              | 4.0/2.0   | 3.0/1.5   | 0.3 B0.2/0.3 B0.5      | 4287182        | Nema 2 Bar Type | 2.55"       | Complete         |
| 735306060                  | 300/600:5                              | 3.0/2.0   | 2.2/1.5   | 0.3 B0.2/0.3 B0.5      | 4287182        | Nema 2 Bar Type | 3.15"       | Complete         |
| 735306080                  | 400/800:5                              | 2.0/2.0   | 1.5/1.5   | 0.3 B0.2/0.3 B0.5      | 4287182        | Nema 2 Bar Type | 3.15"       | Complete         |
| 735300100                  | 50:5                                   | 4.0   | 3.0   | 1.2 B0.1               | 4287182        | Nema 2 Bar Type | 2.55"       | No base          |
| 735300101                  | 100:5                                  | 4.0   | 3.0   | 0.3 B0.1               | 4287182        | Nema 2 Bar Type | 2.55"       | No base          |
| 735300102                  | 200:5                                  | 4.0   | 3.0   | 0.3 B0.5               | 4287182        | Nema 2 Bar Type | 2.55"       | No base          |
| 735300103                  | 300:5                                  | 4.0   | 3.0   | 0.3 B0.5               | 4287182        | Nema 2 Bar Type | 3.15"       | No base          |
| 735300104                  | 400:5                                  | 4.0   | 3.0   | 0.3 B0.5               | 4287182        | Nema 2 Bar Type | 3.15"       | No base          |
| 735300105                  | 500:5                                  | 3.0   | 2.2   | 0.3 B0.5               | 4287182        | Nema 2 Bar Type | 3.15"       | No base          |
| 735300106                  | 600:5                                  | 2.0   | 1.5   | 0.3 B0.5               | 4287182        | Nema 2 Bar Type | 3.15"       | No base          |
| 735300107                  | 800:5                                  | 2.0   | 1.5   | 0.3 B0.5               | 4287182        | Nema 2 Bar Type | 3.15"       | No base          |

| Electrical characteristics |  |   |   |                        |                |                     |             |                  |
|----------------------------|--|---|---|------------------------|----------------|---------------------|-------------|------------------|
| Code                       | Current Ratio (Primary: Secondary) (A) | Continuous Thermal Current Rating Factor @ 30°C | Continuous Thermal Current Rating Factor @ 55°C | IEEE Metering Accuracy | Drawing number | Type                | Window Size | Accessories      |
| 735300108                  | 1000:5                                 | 2.0   | 1.5   | 0.3 B0.5               | 4287182        | Nema 2 Bar Type     | 3.15"       | No base          |
| 735300109                  | 1200:5                                 | 1.5   | 1.2   | 0.3 B1.8               | 4287182        | Nema 2 Bar Type     | 3.15"       | No base          |
| 735300220                  | 200/400:5                              | 4.0/2.0   | 3.0/1.5   | 0.3 B0.2/0.3 B0.5      | 4287182        | Nema 2 Bar Type     | 2.55"       | No base          |
| 735300221                  | 300/600:5                              | 3.0/2.0   | 2.2/1.5   | 0.3 B0.2/0.3 B0.5      | 4287182        | Nema 2 Bar Type     | 3.15"       | No base          |
| 735300222                  | 400/800:5                              | 2.0/2.0   | 1.5/1.5   | 0.3 B0.2/0.3 B0.5      | 4287182        | Nema 2 Bar Type     | 3.15"       | No base          |
| 735300121                  | 50:5                                   | 4.0   | 3.0   | 1.2 B0.1               | 4287182        | Nema 2 Bar Type     | 2.55"       | No base/no cover |
| 735300122                  | 100:5                                  | 4.0   | 3.0   | 0.3 B0.1               | 4287182        | Nema 2 Bar Type     | 2.55"       | No base/no cover |
| 735300123                  | 200:5                                  | 4.0   | 3.0   | 0.3 B0.5               | 4287182        | Nema 2 Bar Type     | 2.55"       | No base/no cover |
| 735300124                  | 300:5                                  | 4.0   | 3.0   | 0.3 B0.5               | 4287182        | Nema 2 Bar Type     | 3.15"       | No base/no cover |
| 735300125                  | 400:5                                  | 4.0   | 3.0   | 0.3 B0.5               | 4287182        | Nema 2 Bar Type     | 3.15"       | No base/no cover |
| 735300126                  | 500:5                                  | 3.0   | 2.2   | 0.3 B0.5               | 4287182        | Nema 2 Bar Type     | 3.15"       | No base/no cover |
| 735300127                  | 600:5                                  | 2.0   | 1.5   | 0.3 B0.5               | 4287182        | Nema 2 Bar Type     | 3.15"       | No base/no cover |
| 735300128                  | 800:5                                  | 2.0   | 1.5   | 0.3 B0.5               | 4287182        | Nema 2 Bar Type     | 3.15"       | No base/no cover |
| 735300129                  | 1000:5                                 | 2.0   | 1.5   | 0.3 B0.5               | 4287182        | Nema 2 Bar Type     | 3.15"       | No base/no cover |
| 735300130                  | 1200:5                                 | 1.5   | 1.2   | 0.3 B1.8               | 4287182        | Nema 2 Bar Type     | 3.15"       | No base/no cover |
| 735300240                  | 200/400:5                              | 4.0/2.0   | 3.0/1.5   | 0.3 B0.2/0.3 B0.5      | 4287182        | Nema 2 Bar Type     | 2.55"       | No base/no cover |
| 735300241                  | 300/600:5                              | 3.0/2.0   | 2.2/1.5   | 0.3 B0.2/0.3 B0.5      | 4287182        | Nema 2 Bar Type     | 3.15"       | No base/no cover |
| 735300242                  | 400/800:5                              | 2.0/2.0   | 1.5/1.5   | 0.3 B0.2/0.3 B0.5      | 4287182        | Nema 2 Bar Type     | 3.15"       | No base/no cover |
| 735300003                  | 300:5                                  | 4.0   | 3.0   | 0.3 B0.5               | 4288843        | Nema 4 Bar Type (1) | 3.15"       | Complete         |
| 735300004                  | 400:5                                  | 4.0   | 3.0   | 0.3 B0.5               | 4288843        | Nema 4 Bar Type (2) | 3.15"       | Complete         |
| 735300005                  | 500:5                                  | 3.0   | 2.2   | 0.3 B0.5               | 4288843        | Nema 4 Bar Type (2) | 3.15"       | Complete         |
| 735300006                  | 600:5                                  | 2.0   | 1.5   | 0.3 B0.5               | 4288843        | Nema 4 Bar Type (1) | 3.15"       | Complete         |
| 735300007                  | 800:5                                  | 2.0   | 1.5   | 0.3 B0.5               | 4288843        | Nema 4 Bar Type (2) | 3.15"       | Complete         |
| 735300008                  | 1000:5                                 | 2.0   | 1.5   | 0.3 B0.5               | 4288843        | Nema 4 Bar Type (2) | 3.15"       | Complete         |
| 735300009                  | 1200:5                                 | 1.5   | 1.2   | 0.3 B1.8               | 4288843        | Nema 4 Bar Type (2) | 3.15"       | Complete         |
| 735300021                  | 300/600:5                              | 3.0/2.0   | 2.2/1.5   | 0.3 B0.2/0.3 B0.5      | 4288843        | Nema 4 Bar Type (1) | 3.15"       | Complete         |
| 735300022                  | 400/800:5                              | 2.0/2.0   | 1.5/1.5   | 0.3 B0.2/0.3 B0.5      | 4288843        | Nema 4 Bar Type (2) | 3.15"       | Complete         |
| 735300143                  | 300:5                                  | 4.0   | 3.0   | 0.3 B0.5               | 4288843        | Nema 4 Bar Type (1) | 3.15"       | No base          |
| 735300144                  | 400:5                                  | 4.0   | 3.0   | 0.3 B0.5               | 4288843        | Nema 4 Bar Type (2) | 3.15"       | No base          |
| 735300145                  | 500:5                                  | 3.0   | 2.2   | 0.3 B0.5               | 4288843        | Nema 4 Bar Type (2) | 3.15"       | No base          |
| 735300146                  | 600:5                                  | 2.0   | 1.5   | 0.3 B0.5               | 4288843        | Nema 4 Bar Type (1) | 3.15"       | No base          |
| 735300147                  | 800:5                                  | 2.0   | 1.5   | 0.3 B0.5               | 4288843        | Nema 4 Bar Type (2) | 3.15"       | No base          |
| 735300148                  | 1000:5                                 | 2.0   | 1.5   | 0.3 B0.5               | 4288843        | Nema 4 Bar Type (2) | 3.15"       | No base          |
| 735300149                  | 1200:5                                 | 1.5   | 1.2   | 0.3 B1.8               | 4288843        | Nema 4 Bar Type (2) | 3.15"       | No base          |
| 735300261                  | 300/600:5                              | 3.0/2.0   | 2.2/1.5   | 0.3 B0.2/0.3 B0.5      | 4288843        | Nema 4 Bar Type (1) | 3.15"       | No base          |
| 735300262                  | 400/800:5                              | 2.0/2.0   | 1.5/1.5   | 0.3 B0.2/0.3 B0.5      | 4288843        | Nema 4 Bar Type (2) | 3.15"       | No base          |
| 735300163                  | 300:5                                  | 4.0   | 3.0   | 0.3 B0.5               | 4288843        | Nema 4 Bar Type (1) | 3.15"       | No base/no cover |
| 735300164                  | 400:5                                  | 4.0   | 3.0   | 0.3 B0.5               | 4288843        | Nema 4 Bar Type (2) | 3.15"       | No base/no cover |
| 735300165                  | 500:5                                  | 3.0   | 2.2   | 0.3 B0.5               | 4288843        | Nema 4 Bar Type (2) | 3.15"       | No base/no cover |
| 735300166                  | 600:5                                  | 2.0   | 1.5   | 0.3 B0.5               | 4288843        | Nema 4 Bar Type (1) | 3.15"       | No base/no cover |
| 735300167                  | 800:5                                  | 2.0   | 1.5   | 0.3 B0.5               | 4288843        | Nema 4 Bar Type (2) | 3.15"       | No base/no cover |
| 735300168                  | 1000:5                                 | 2.0   | 1.5   | 0.3 B0.5               | 4288843        | Nema 4 Bar Type (2) | 3.15"       | No base/no cover |
| 735300169                  | 1200:5                                 | 1.5   | 1.2   | 0.3 B1.8               | 4288843        | Nema 4 Bar Type (2) | 3.15"       | No base/no cover |
| 735300281                  | 300/600:5                              | 3.0/2.0   | 2.2/1.5   | 0.3 B0.2/0.3 B0.5      | 4288843        | Nema 4 Bar Type (1) | 3.15"       | No base/no cover |
| 735300282                  | 400/800:5                              | 2.0/2.0   | 1.5/1.5   | 0.3 B0.2/0.3 B0.5      | 4288843        | Nema 4 Bar Type (2) | 3.15"       | No base/no cover |
| 735307120                  | 600:5                                  | 2.0   | 1.5   | 0.15S B0.5             | 4287171        | Window              | 3.15"       | Complete         |
| 735300120                  | 600:5                                  | 3.0   | 2.0   | 0.15S B0.2             | 4287171        | Window              | 3.15"       | Complete         |
| 735307200                  | 1000:5                                 | 2.0   | 1.5   | 0.15S B0.5             | 4287171        | Window              | 3.15"       | Complete         |
| 735300300                  | 600:5                                  | 2.0   | 1.5   | 0.15S B0.5             | 4287171        | Window              | 3.15"       | No base          |
| 735300301                  | 600:5                                  | 3.0   | 2.0   | 0.15S B0.2             | 4287171        | Window              | 3.15"       | No base          |
| 735300302                  | 1000:5                                 | 2.0   | 1.5   | 0.15S B0.5             | 4287171        | Window              | 3.15"       | No base          |
| 735300320                  | 600:5                                  | 2.0   | 1.5   | 0.15S B0.5             | 4287171        | Window              | 3.15"       | No base/no cover |
| 735300321                  | 600:5                                  | 3.0   | 2.0   | 0.15S B0.2             | 4287171        | Window              | 3.15"       | No base/no cover |
| 735300322                  | 1000:5                                 | 2.0   | 1.5   | 0.15S B0.5             | 4287171        | Window              | 3.15"       | No base/no cover |
| 735308120                  | 600:5                                  | 2.0   | 1.5   | 0.15S B0.5             | 4287182        | Nema 2 Bar Type     | 3.15"       | Complete         |
| 735309120                  | 600:5                                  | 3.0   | 2.0   | 0.15S B0.2             | 4287182        | Nema 2 Bar Type     | 3.15"       | Complete         |
| 735308200                  | 1000:5                                 | 2.0   | 1.5   | 0.15S B0.5             | 4287182        | Nema 2 Bar Type     | 3.15"       | Complete         |
| 735300340                  | 600:5                                  | 2.0   | 1.5   | 0.15S B0.5             | 4287182        | Nema 2 Bar Type     | 3.15"       | No base          |





# IRH-7

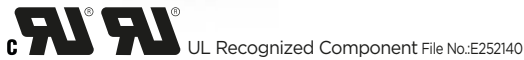
## 600 V CURRENT TRANSFORMER



INDOOR-  
OUTDOOR  
60 Hertz

ARTECHE IRH series are dry type indoor/outdoor service current transformers. The core is encapsulated with epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

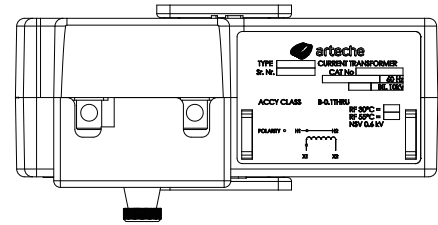
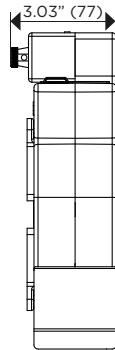
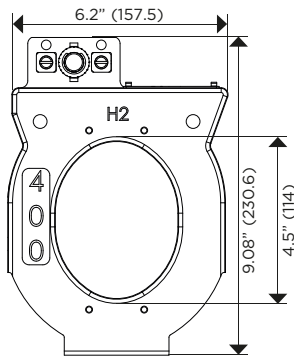
The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.



### Mechanical characteristics

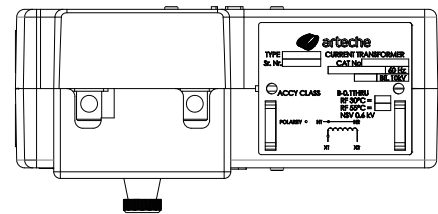
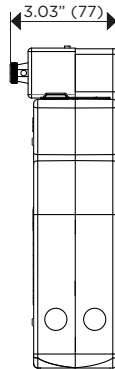
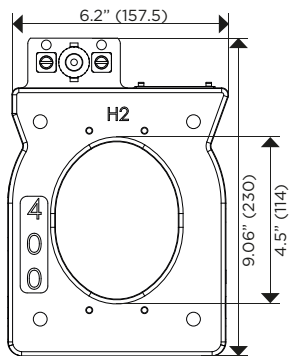
| Insulation Material | Color | Weight (lbs.)                      |
|---------------------|-------|------------------------------------|
| Resin               | Blue  | Tapered Type: 7.5 / Wide Type: 8.5 |

Tapered Type:



Drawing number: 4287265

Wide Type:



Drawing number: 4287356

|   |                  |                  |   |
|---|------------------|------------------|---|
| MARKING<br>(Single<br>Primary<br>Ratio) | ONE<br>SECONDARY | CONNEC-<br>TIONS | SECONDARY TERMINALS<br>AND SHORT CIRCUIT DEVICE |
|   |                  |                  |   |

Secondary terminals.  
Type: Quick Connector  
Material: Brass  
Diameter: 1/4"

Approximate dimensions in inches.

# IRH-7

## 600 V CURRENT TRANSFORMER

| Electrical characteristics |  |   |   |                        |                |         |             |                               |
|----------------------------|--|---|---|------------------------|----------------|---------|-------------|-------------------------------|
| Code                       | Current Ratio (Primary: Secondary) (A) | Continuous Thermal Current Rating Factor @ 30°C | Continuous Thermal Current Rating Factor @ 55°C | IEEE Metering Accuracy | Drawing number | Type    | Window Size | Accuracy metering explanation |
| 735323020                  | 100:5                                  | 4.0   | 3.0   | 1.2 B0.1               | 4287265        | Tapered | 4.5X3.5"    |                               |
| 735323040                  | 200:5                                  | 4.0   | 3.0   | 0.3 B0.1               | 4287265        | Tapered | 4.5X3.5"    |                               |
| 735323060                  | 300:5                                  | 4.0   | 3.0   | 0.3 B0.2               | 4287265        | Tapered | 4.5X3.5"    |                               |
| 735323080                  | 400:5                                  | 4.0   | 3.0   | 0.3 B0.2               | 4287265        | Tapered | 4.5X3.5"    |                               |
| 735323100                  | 500:5                                  | 3.0   | 2.2   | 0.3 B0.5               | 4287265        | Tapered | 4.5X3.5"    |                               |
| 735323120                  | 600:5                                  | 3.0   | 2.2   | 0.3 B0.5               | 4287265        | Tapered | 4.5X3.5"    |                               |
| 735323160                  | 800:5                                  | 3.0   | 2.2   | 0.3 B0.5               | 4287265        | Tapered | 4.5X3.5"    |                               |
| 735323200                  | 1000:5                                 | 2.0   | 1.5   | 0.3 B0.5               | 4287265        | Tapered | 4.5X3.5"    |                               |
| 735323240                  | 1200:5                                 | 2.0   | 1.5   | 0.3 B0.9               | 4287265        | Tapered | 4.5X3.5"    |                               |
| 735323300                  | 1500:5                                 | 2.0   | 1.5   | 0.3 B0.9               | 4287265        | Tapered | 4.5X3.5"    |                               |
| 735323400                  | 2000:5                                 | 1.5   | 1.2   | 0.3 B1.8               | 4287265        | Tapered | 4.5X3.5"    |                               |
| 735323600                  | 3000:5                                 | 1.3   | 1.0   | 0.3 B1.8               | 4287265        | Tapered | 4.5X3.5"    |                               |
| 735323800                  | 4000:5                                 | 1.0   | Z   | 0.3 B1.8               | 4287265        | Tapered | 4.5X3.5"    |                               |
| 735324020                  | 100:5                                  | 4.0   | 3.0   | 1.2 B0.1               | 4287356        | Wide    | 4.5X3.5"    |                               |
| 735324040                  | 200:5                                  | 4.0   | 3.0   | 0.3 B0.1               | 4287356        | Wide    | 4.5X3.5"    |                               |
| 735324060                  | 300:5                                  | 4.0   | 3.0   | 0.3 B0.2               | 4287356        | Wide    | 4.5X3.5"    |                               |
| 735324080                  | 400:5                                  | 4.0   | 3.0   | 0.3 B0.2               | 4287356        | Wide    | 4.5X3.5"    |                               |
| 735324100                  | 500:5                                  | 3.0   | 2.2   | 0.3 B0.5               | 4287356        | Wide    | 4.5X3.5"    |                               |
| 735324120                  | 600:5                                  | 3.0   | 2.2   | 0.3 B0.5               | 4287356        | Wide    | 4.5X3.5"    |                               |
| 735324160                  | 800:5                                  | 3.0   | 2.2   | 0.3 B0.5               | 4287356        | Wide    | 4.5X3.5"    |                               |
| 735324200                  | 1000:5                                 | 2.0   | 1.5   | 0.3 B0.5               | 4287356        | Wide    | 4.5X3.5"    |                               |
| 735324240                  | 1200:5                                 | 2.0   | 1.5   | 0.3 B0.9               | 4287356        | Wide    | 4.5X3.5"    |                               |
| 735324300                  | 1500:5                                 | 2.0   | 1.5   | 0.3 B0.9               | 4287356        | Wide    | 4.5X3.5"    |                               |
| 735324400                  | 2000:5                                 | 1.5   | 1.2   | 0.3 B1.8               | 4287356        | Wide    | 4.5X3.5"    |                               |
| 735324600                  | 3000:5                                 | 1.3   | 1.0   | 0.3 B1.8               | 4287356        | Wide    | 4.5X3.5"    |                               |
| 735324800                  | 4000:5                                 | 1.0   | 0.75  | 0.3 B1.8               | 4287356        | Wide    | 4.5X3.5"    |                               |
| 735327100                  | 500:5                                  | 2.0   | 1.5   | 0.15S B0.2             | 4287265        | Tapered | 4.5X3.5"    | 5% to RF                      |
| 735328100                  | 500:5                                  | 2.0   | 1.5   | 0.15S B0.2             | 4287356        | Wide    | 4.5X3.5"    | 5% to RF                      |
| 735320250                  | 1000:5                                 | 2.0   | 1.5   | 0.15S B0.5             | 4287265        | Tapered | 4.5X3.5"    | 5% to RF                      |
| 735327400                  | 2000:5                                 | 2.0   | 1.5   | 0.15S B0.5             | 4287265        | Tapered | 4.5X3.5"    | 5% to RF                      |
| 735320230                  | 600:5                                  | 2.0   | 1.5   | 0.15S B0.5             | 4287265        | Tapered | 4.5X3.5"    | 5% to RF                      |
| 735328200                  | 1000:5                                 | 2.0   | 1.5   | 0.15S B0.5             | 4287356        | Wide    | 4.5X3.5"    | 5% to RF                      |
| 735328400                  | 2000:5                                 | 2.0   | 1.5   | 0.15S B0.5             | 4287356        | Wide    | 4.5X3.5"    | 5% to RF                      |
| 735320220                  | 500:5                                  | 2.0   | 1.5   | 0.15 B0.2*             | 4287265        | Tapered | 4.5X3.5"    | * Accuracy range: 1% to RF    |
| 735320225                  | 600:5                                  | 2.0   | 1.5   | 0.15 B0.2*             | 4287265        | Tapered | 4.5X3.5"    | * Accuracy range: 1% to RF    |
| 735320240                  | 800:5                                  | 2.0   | 1.5   | 0.15 B0.5*             | 4287265        | Tapered | 4.5X3.5"    | * Accuracy range: 1% to RF    |
| 735320010                  | 1000:5                                 | 2.0   | 1.5   | 0.15 B0.5*             | 4287265        | Tapered | 4.5X3.5"    | * Accuracy range: 1% to RF    |
| 735320260                  | 2000:5                                 | 2.0   | 1.5   | 0.15 B0.5*             | 4287265        | Tapered | 4.5X3.5"    | * Accuracy range: 1% to RF    |

Additional ratings available upon request.

Notes: .....

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# IRH-10

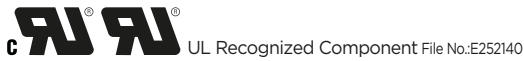
## 600 V CURRENT TRANSFORMER



INDOOR-  
OUTDOOR  
60 Hertz

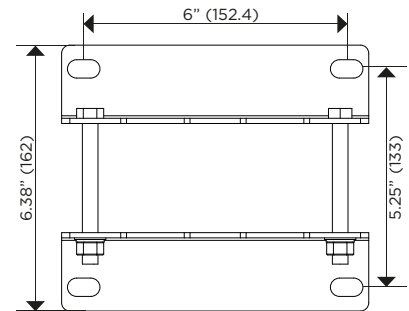
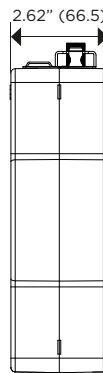
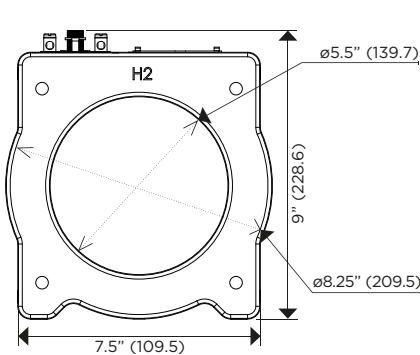
ARTECHE IRH series are dry type indoor/outdoor service current transformers. The core is encapsulated with epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

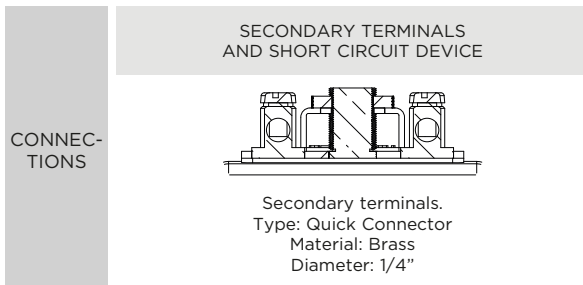
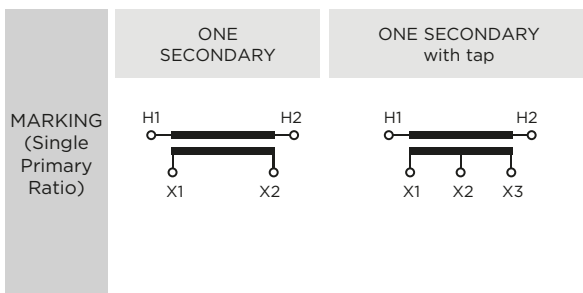


### Mechanical characteristics

| Insulation Material | Color | Weight (lbs.) |
|---------------------|-------|---------------|
| Resin               | Blue  | 13            |



Drawing number: 4287273



Approximate dimensions in inches (mm).

# IRH-10

## 600 V CURRENT TRANSFORMER

| Electrical characteristics |   |   |   |                              |                   |              |                |                  |
|----------------------------|---|---|---|------------------------------|-------------------|--------------|----------------|------------------|
| Code                       | Current Ratio<br>(Primary:<br>Secondary)<br>(A) | Continuous<br>Thermal<br>Current<br>Rating Factor<br>@ 30°C | Continuous<br>Thermal<br>Current<br>Rating Factor<br>@ 55°C | IEEE<br>Metering<br>Accuracy | Drawing<br>number | Type         | Window<br>Size | Accessories      |
| 735341080                  | 400:5   | 3.0   | 2.2   | 0.3 B0.2                     | 4287273           | Window       | 5.5"           | Complete         |
| 735341100                  | 500:5   | 4.0   | 3.0   | 0.3 B0.5                     | 4287273           | Window       | 5.5"           | Complete         |
| 735341120                  | 600:5   | 3.0   | 2.2   | 0.3 B0.5                     | 4287273           | Window       | 5.5"           | Complete         |
| 735341160                  | 800:5   | 2.0   | 1.5   | 0.3 B0.5                     | 4287273           | Window       | 5.5"           | Complete         |
| 735341200                  | 1000:5  | 2.0   | 1.5   | 0.3 B0.5                     | 4287273           | Window       | 5.5"           | Complete         |
| 735341240                  | 1200:5  | 2.0   | 1.5   | 0.3 B0.9                     | 4287273           | Window       | 5.5"           | Complete         |
| 735341300                  | 1500:5  | 3.0   | 2.2   | 0.3 B0.9                     | 4287273           | Window       | 5.5"           | Complete         |
| 735341400                  | 2000:5  | 2.0   | 1.5   | 0.3 B1.8                     | 4287273           | Window       | 5.5"           | Complete         |
| 735341600                  | 3000:5  | 1.5   | 1.2   | 0.3 B1.8                     | 4287273           | Window       | 5.5"           | Complete         |
| 735341800                  | 4000:5  | 1.33  | 1.0   | 0.3 B1.8                     | 4287273           | Window       | 5.5"           | Complete         |
| 735342120                  | 600/1200:5                                      | 3.0/2.0   | 2.2/1.5   | 0.3 B0.2/B0.9                | 4287273           | Window       | 5.5"           | Complete         |
| 735342160                  | 800/1600:5                                      | 3.0/2.0   | 2.2/1.5   | 0.3 B0.2/B1.8                | 4287273           | Window       | 5.5"           | Complete         |
| 735342200                  | 1000/2000:5                                     | 3.0/2.0   | 2.2/1.5   | 0.3 B0.5/B1.8                | 4287273           | Window       | 5.5"           | Complete         |
| 735342300                  | 1500/3000:5                                     | 2.0/1.5   | 1.5/1.2   | 0.3 B0.9/B1.8                | 4287273           | Window       | 5.5"           | Complete         |
| 735342400                  | 2000/4000:5                                     | 2.0/1.33  | 1.5/1.0   | 0.3 B1.8/B1.8                | 4287273           | Window       | 5.5"           | Complete         |
| 735340000                  | 400:5   | 3.0   | 2.2   | 0.3 B0.2                     | 4287273           | Window       | 5.5"           | No base          |
| 735340001                  | 500:5   | 4.0   | 3.0   | 0.3 B0.5                     | 4287273           | Window       | 5.5"           | No base          |
| 735340002                  | 600:5   | 3.0   | 2.2   | 0.3 B0.5                     | 4287273           | Window       | 5.5"           | No base          |
| 735340003                  | 800:5   | 2.0   | 1.5   | 0.3 B0.5                     | 4287273           | Window       | 5.5"           | No base          |
| 735340004                  | 1000:5  | 2.0   | 1.5   | 0.3 B0.5                     | 4287273           | Window       | 5.5"           | No base          |
| 735340005                  | 1200:5  | 2.0   | 1.5   | 0.3 B0.9                     | 4287273           | Window       | 5.5"           | No base          |
| 735340006                  | 1500:5  | 3.0   | 2.2   | 0.3 B0.9                     | 4287273           | Window       | 5.5"           | No base          |
| 735340007                  | 2000:5  | 2.0   | 1.5   | 0.3 B1.8                     | 4287273           | Window       | 5.5"           | No base          |
| 735340008                  | 3000:5  | 1.5   | 1.2   | 0.3 B1.8                     | 4287273           | Window       | 5.5"           | No base          |
| 735340009                  | 4000:5  | 1.33  | 1.0   | 0.3 B1.8                     | 4287273           | Window       | 5.5"           | No base          |
| 735340160                  | 600/1200:5                                      | 3.0/2.0   | 2.2/1.5   | 0.3 B0.2/B0.9                | 4287273           | Window       | 5.5"           | No base          |
| 735340161                  | 800/1600:5                                      | 3.0/2.0   | 2.2/1.5   | 0.3 B0.2/B1.8                | 4287273           | Window       | 5.5"           | No base          |
| 735340162                  | 1000/2000:5                                     | 3.0/2.0   | 2.2/1.5   | 0.3 B0.5/B1.8                | 4287273           | Window       | 5.5"           | No base          |
| 735340163                  | 1500/3000:5                                     | 2.0/1.5   | 1.5/1.2   | 0.3 B0.9/B1.8                | 4287273           | Window       | 5.5"           | No base          |
| 735340164                  | 2000/4000:5                                     | 2.0/1.33  | 1.5/1.0   | 0.3 B1.8/B1.8                | 4287273           | Window       | 5.5"           | No base          |
| 735340020                  | 400:5   | 3.0   | 2.2   | 0.3 B0.2                     | 4287273           | Window       | 5.5"           | No base/no cover |
| 735340021                  | 500:5   | 4.0   | 3.0   | 0.3 B0.5                     | 4287273           | Window       | 5.5"           | No base/no cover |
| 735340022                  | 600:5   | 3.0   | 2.2   | 0.3 B0.5                     | 4287273           | Window       | 5.5"           | No base/no cover |
| 735340023                  | 800:5   | 2.0   | 1.5   | 0.3 B0.5                     | 4287273           | Window       | 5.5"           | No base/no cover |
| 735340024                  | 1000:5  | 2.0   | 1.5   | 0.3 B0.5                     | 4287273           | Window       | 5.5"           | No base/no cover |
| 735340025                  | 1200:5  | 2.0   | 1.5   | 0.3 B0.9                     | 4287273           | Window       | 5.5"           | No base/no cover |
| 735340026                  | 1500:5  | 3.0   | 2.2   | 0.3 B0.9                     | 4287273           | Window       | 5.5"           | No base/no cover |
| 735340027                  | 2000:5  | 2.0   | 1.5   | 0.3 B1.8                     | 4287273           | Window       | 5.5"           | No base/no cover |
| 735340028                  | 3000:5  | 1.5   | 1.2   | 0.3 B1.8                     | 4287273           | Window       | 5.5"           | No base/no cover |
| 735340029                  | 4000:5  | 1.33  | 1.0   | 0.3 B1.8                     | 4287273           | Window       | 5.5"           | No base/no cover |
| 735340180                  | 600/1200:5                                      | 3.0/2.0   | 2.2/1.5   | 0.3 B0.2/B0.9                | 4287273           | Window       | 5.5"           | No base/no cover |
| 735340181                  | 800/1600:5                                      | 3.0/2.0   | 2.2/1.5   | 0.3 B0.2/B1.8                | 4287273           | Window       | 5.5"           | No base/no cover |
| 735340182                  | 1000/2000:5                                     | 3.0/2.0   | 2.2/1.5   | 0.3 B0.5/B1.8                | 4287273           | Window       | 5.5"           | No base/no cover |
| 735340183                  | 1500/3000:5                                     | 2.0/1.5   | 1.5/1.2   | 0.3 B0.9/B1.8                | 4287273           | Window       | 5.5"           | No base/no cover |
| 735340184                  | 2000/4000:5                                     | 2.0/1.33  | 1.5/1.0   | 0.3 B1.8/B1.8                | 4287273           | Window       | 5.5"           | No base/no cover |
| 735340040                  | 400:5   | 3.0   | 2.2   | 0.3 B0.2                     | 4287567           | Window plate | 5.5"           | Complete         |
| 735340041                  | 500:5   | 4.0   | 3.0   | 0.3 B0.5                     | 4287567           | Window plate | 5.5"           | Complete         |
| 735340042                  | 600:5   | 3.0   | 2.2   | 0.3 B0.5                     | 4287567           | Window plate | 5.5"           | Complete         |
| 735340043                  | 800:5   | 2.0   | 1.5   | 0.3 B0.5                     | 4287567           | Window plate | 5.5"           | Complete         |
| 735340044                  | 1000:5  | 2.0   | 1.5   | 0.3 B0.5                     | 4287567           | Window plate | 5.5"           | Complete         |
| 735340045                  | 1200:5  | 2.0   | 1.5   | 0.3 B0.9                     | 4287567           | Window plate | 5.5"           | Complete         |
| 735340046                  | 1500:5  | 3.0   | 2.2   | 0.3 B0.9                     | 4287567           | Window plate | 5.5"           | Complete         |
| 735340047                  | 2000:5  | 2.0   | 1.5   | 0.3 B1.8                     | 4287567           | Window plate | 5.5"           | Complete         |
| 735340048                  | 3000:5  | 1.5   | 1.2   | 0.3 B1.8                     | 4287567           | Window plate | 5.5"           | Complete         |
| 735340049                  | 4000:5  | 1.33  | 1.0   | 0.3 B1.8                     | 4287567           | Window plate | 5.5"           | Complete         |
| 735340200                  | 600/1200:5                                      | 3.0/2.0   | 2.2/1.5   | 0.3 B0.2/B0.9                | 4287567           | Window plate | 5.5"           | Complete         |
| 735340201                  | 800/1600:5                                      | 3.0/2.0   | 2.2/1.5   | 0.3 B0.2/B1.8                | 4287567           | Window plate | 5.5"           | Complete         |
| 735340202                  | 1000/2000:5                                     | 3.0/2.0   | 2.2/1.5   | 0.3 B0.5/B1.8                | 4287567           | Window plate | 5.5"           | Complete         |
| 735340203                  | 1500/3000:5                                     | 2.0/1.5   | 1.5/1.2   | 0.3 B0.9/B1.8                | 4287567           | Window plate | 5.5"           | Complete         |
| 735340204                  | 2000/4000:5                                     | 2.0/1.33  | 1.5/1.0   | 0.3 B1.8/B1.8                | 4287567           | Window plate | 5.5"           | Complete         |

| Electrical characteristics |   |   |   |                              |                   |                     |                |                  |
|----------------------------|---|---|---|------------------------------|-------------------|---------------------|----------------|------------------|
| Code                       | Current Ratio<br>(Primary:<br>Secondary)<br>(A) | Continuous<br>Thermal<br>Current<br>Rating Factor<br>@ 30°C | Continuous<br>Thermal<br>Current<br>Rating Factor<br>@ 55°C | IEEE<br>Metering<br>Accuracy | Drawing<br>number | Type                | Window<br>Size | Accessories      |
| 735340060                  | 400:5   | 3.0   | 2.2   | 0.3 B0.2                     | 4287567           | Window plate        | 5.5"           | No base          |
| 735340061                  | 500:5   | 4.0   | 3.0   | 0.3 B0.5                     | 4287567           | Window plate        | 5.5"           | No base          |
| 735340062                  | 600:5   | 3.0   | 2.2   | 0.3 B0.5                     | 4287567           | Window plate        | 5.5"           | No base          |
| 735340063                  | 800:5   | 2.0   | 1.5   | 0.3 B0.5                     | 4287567           | Window plate        | 5.5"           | No base          |
| 735340064                  | 1000:5  | 2.0   | 1.5   | 0.3 B0.5                     | 4287567           | Window plate        | 5.5"           | No base          |
| 735340065                  | 1200:5  | 2.0   | 1.5   | 0.3 B0.9                     | 4287567           | Window plate        | 5.5"           | No base          |
| 735340066                  | 1500:5  | 3.0   | 2.2   | 0.3 B0.9                     | 4287567           | Window plate        | 5.5"           | No base          |
| 735340067                  | 2000:5  | 2.0   | 1.5   | 0.3 B1.8                     | 4287567           | Window plate        | 5.5"           | No base          |
| 735340068                  | 3000:5  | 1.5   | 1.2   | 0.3 B1.8                     | 4287567           | Window plate        | 5.5"           | No base          |
| 735340069                  | 4000:5  | 1.33  | 1.0   | 0.3 B1.8                     | 4287567           | Window plate        | 5.5"           | No base          |
| 735340220                  | 600/1200:5                                      | 3.0/2.0   | 2.2/1.5   | 0.3 B0.2/B0.9                | 4287567           | Window plate        | 5.5"           | No base          |
| 735340221                  | 800/1600:5                                      | 3.0/2.0   | 2.2/1.5   | 0.3 B0.2/B1.8                | 4287567           | Window plate        | 5.5"           | No base          |
| 735340222                  | 1000/2000:5                                     | 3.0/2.0   | 2.2/1.5   | 0.3 B0.5/B1.8                | 4287567           | Window plate        | 5.5"           | No base          |
| 735340223                  | 1500/3000:5                                     | 2.0/1.5   | 1.5/1.2   | 0.3 B0.9/B1.8                | 4287567           | Window plate        | 5.5"           | No base          |
| 735340224                  | 2000/4000:5                                     | 2.0/1.33  | 1.5/1.0   | 0.3 B1.8/B1.8                | 4287567           | Window plate        | 5.5"           | No base          |
| 735340080                  | 400:5   | 3.0   | 2.2   | 0.3 B0.2                     | 4287567           | Window plate        | 5.5"           | No base/no cover |
| 735340081                  | 500:5   | 4.0   | 3.0   | 0.3 B0.5                     | 4287567           | Window plate        | 5.5"           | No base/no cover |
| 735340082                  | 600:5   | 3.0   | 2.2   | 0.3 B0.5                     | 4287567           | Window plate        | 5.5"           | No base/no cover |
| 735340083                  | 800:5   | 2.0   | 1.5   | 0.3 B0.5                     | 4287567           | Window plate        | 5.5"           | No base/no cover |
| 735340084                  | 1000:5  | 2.0   | 1.5   | 0.3 B0.5                     | 4287567           | Window plate        | 5.5"           | No base/no cover |
| 735340085                  | 1200:5  | 2.0   | 1.5   | 0.3 B0.9                     | 4287567           | Window plate        | 5.5"           | No base/no cover |
| 735340086                  | 1500:5  | 3.0   | 2.2   | 0.3 B0.9                     | 4287567           | Window plate        | 5.5"           | No base/no cover |
| 735340087                  | 2000:5  | 2.0   | 1.5   | 0.3 B1.8                     | 4287567           | Window plate        | 5.5"           | No base/no cover |
| 735340088                  | 3000:5  | 1.5   | 1.2   | 0.3 B1.8                     | 4287567           | Window plate        | 5.5"           | No base/no cover |
| 735340089                  | 4000:5  | 1.33  | 1.0   | 0.3 B1.8                     | 4287567           | Window plate        | 5.5"           | No base/no cover |
| 735340228                  | 600/1200:5                                      | 3.0/2.0   | 2.2/1.5   | 0.3 B0.2/B0.9                | 4287567           | Window plate        | 5.5"           | No base/no cover |
| 735340241                  | 800/1600:5                                      | 3.0/2.0   | 2.2/1.5   | 0.3 B0.2/B1.8                | 4287567           | Window plate        | 5.5"           | No base/no cover |
| 735340242                  | 1000/2000:5                                     | 3.0/2.0   | 2.2/1.5   | 0.3 B0.5/B1.8                | 4287567           | Window plate        | 5.5"           | No base/no cover |
| 735340243                  | 1500/3000:5                                     | 2.0/1.5   | 1.5/1.2   | 0.3 B0.9/B1.8                | 4287567           | Window plate        | 5.5"           | No base/no cover |
| 735340244                  | 2000/4000:5                                     | 2.0/1.33  | 1.5/1.0   | 0.3 B1.8/B1.8                | 4287567           | Window plate        | 5.5"           | No base/no cover |
| 735340100                  | 400:5   | 3.0   | 2.2   | 0.3 B0.2                     | 4288844           | Nema 4 Bar Type (1) | 5.5"           | Complete         |
| 735340101                  | 500:5   | 4.0   | 3.0   | 0.3 B0.5                     | 4288844           | Nema 4 Bar Type (2) | 5.5"           | Complete         |
| 735340102                  | 600:5   | 3.0   | 2.2   | 0.3 B0.5                     | 4288844           | Nema 4 Bar Type (2) | 5.5"           | Complete         |
| 735340103                  | 800:5   | 2.0   | 1.5   | 0.3 B0.5                     | 4288844           | Nema 4 Bar Type (1) | 5.5"           | Complete         |
| 735340104                  | 1000:5  | 2.0   | 1.5   | 0.3 B0.5                     | 4288844           | Nema 4 Bar Type (2) | 5.5"           | Complete         |
| 735340105                  | 1200:5  | 2.0   | 1.5   | 0.3 B0.9                     | 4288844           | Nema 4 Bar Type (2) | 5.5"           | Complete         |
| 735340106                  | 1500:5  | 3.0   | 2.2   | 0.3 B0.9                     | 4288844           | Nema 4 Bar Type (3) | 5.5"           | Complete         |
| 735340107                  | 2000:5  | 2.0   | 1.5   | 0.3 B1.8                     | 4288844           | Nema 4 Bar Type (3) | 5.5"           | Complete         |
| 735340108                  | 3000:5  | 1.5   | 1.2   | 0.3 B1.8                     | 4288844           | Nema 4 Bar Type (3) | 5.5"           | Complete         |
| 735340109                  | 4000:5  | 1.33  | 1.0   | 0.3 B1.8                     | 4288844           | Nema 4 Bar Type (4) | 5.5"           | Complete         |
| 735340158                  | 600/1200:5                                      | 3.0/2.0   | 2.2/1.5   | 0.3 B0.2/B0.9                | 4288844           | Nema 4 Bar Type (2) | 5.5"           | Complete         |
| 735340261                  | 800/1600:5                                      | 3.0/2.0   | 2.2/1.5   | 0.3 B0.2/B1.8                | 4288844           | Nema 4 Bar Type (2) | 5.5"           | Complete         |
| 735340262                  | 1000/2000:5                                     | 3.0/2.0   | 2.2/1.5   | 0.3 B0.5/B1.8                | 4288844           | Nema 4 Bar Type (3) | 5.5"           | Complete         |
| 735340263                  | 1500/3000:5                                     | 2.0/1.5   | 1.5/1.2   | 0.3 B0.9/B1.8                | 4288844           | Nema 4 Bar Type (3) | 5.5"           | Complete         |
| 735340264                  | 2000/4000:5                                     | 2.0/1.33  | 1.5/1.0   | 0.3 B1.8/B1.8                | 4288844           | Nema 4 Bar Type (4) | 5.5"           | Complete         |
| 735340120                  | 400:5   | 3.0   | 2.2   | 0.3 B0.2                     | 4288844           | Nema 4 Bar Type (1) | 5.5"           | No base          |
| 735340121                  | 500:5   | 4.0   | 3.0   | 0.3 B0.5                     | 4288844           | Nema 4 Bar Type (2) | 5.5"           | No base          |
| 735340122                  | 600:5   | 3.0   | 2.2   | 0.3 B0.5                     | 4288844           | Nema 4 Bar Type (2) | 5.5"           | No base          |
| 735340123                  | 800:5   | 2.0   | 1.5   | 0.3 B0.5                     | 4288844           | Nema 4 Bar Type (1) | 5.5"           | No base          |
| 735340124                  | 1000:5  | 2.0   | 1.5   | 0.3 B0.5                     | 4288844           | Nema 4 Bar Type (2) | 5.5"           | No base          |
| 735340125                  | 1200:5  | 2.0   | 1.5   | 0.3 B0.9                     | 4288844           | Nema 4 Bar Type (2) | 5.5"           | No base          |
| 735340126                  | 1500:5  | 3.0   | 2.2   | 0.3 B0.9                     | 4288844           | Nema 4 Bar Type (3) | 5.5"           | No base          |
| 735340127                  | 2000:5  | 2.0   | 1.5   | 0.3 B1.8                     | 4288844           | Nema 4 Bar Type (3) | 5.5"           | No base          |
| 735340128                  | 3000:5  | 1.5   | 1.2   | 0.3 B1.8                     | 4288844           | Nema 4 Bar Type (3) | 5.5"           | No base          |
| 735340129                  | 4000:5  | 1.33  | 1.0   | 0.3 B1.8                     | 4288844           | Nema 4 Bar Type (4) | 5.5"           | No base          |
| 735340280                  | 600/1200:5                                      | 3.0/2.0   | 2.2/1.5   | 0.3 B0.2/B0.9                | 4288844           | Nema 4 Bar Type (2) | 5.5"           | No base          |
| 735340281                  | 800/1600:5                                      | 3.0/2.0   | 2.2/1.5   | 0.3 B0.2/B1.8                | 4288844           | Nema 4 Bar Type (2) | 5.5"           | No base          |
| 735340282                  | 1000/2000:5                                     | 3.0/2.0   | 2.2/1.5   | 0.3 B0.5/B1.8                | 4288844           | Nema 4 Bar Type (3) | 5.5"           | No base          |
| 735340283                  | 1500/3000:5                                     | 2.0/1.5   | 1.5/1.2   | 0.3 B0.9/B1.8                | 4288844           | Nema 4 Bar Type (3) | 5.5"           | No base          |
| 735340284                  | 2000/4000:5                                     | 2.0/1.33  | 1.5/1.0   | 0.3 B1.8/B1.8                | 4288844           | Nema 4 Bar Type (4) | 5.5"           | No base          |





# IRH-12

## 600 V CURRENT TRANSFORMER



INDOOR-  
OUTDOOR  
60 Hertz

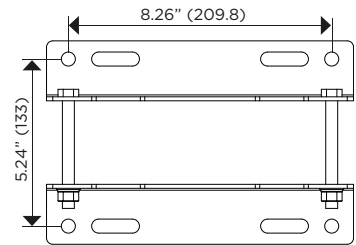
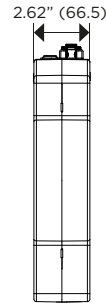
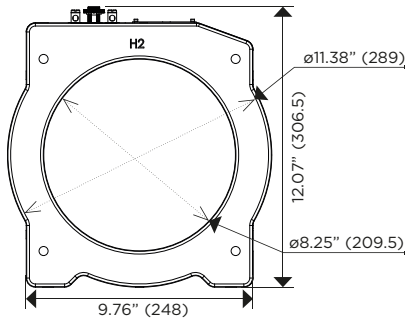
ARTECHE IRH series are dry type indoor/outdoor service current transformers. The core is encapsulated with epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

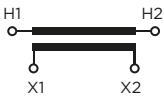
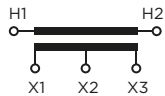


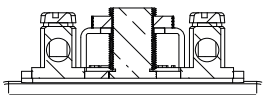
### Mechanical characteristics

| Insulation Material | Color | Weight (lbs.) |
|---------------------|-------|---------------|
| Resin               | Blue  | 19            |



Drawing number: 4287275

|                                | ONE SECONDARY   | ONE SECONDARY with tap  |
|--------------------------------|---|---|
| MARKING (Single Primary Ratio) |  |  |

|             | SECONDARY TERMINALS AND SHORT CIRCUIT DEVICE   |
|-------------|--|
| CONNECTIONS |  <p>Secondary terminals.<br/>Type: Quick Connector<br/>Material: Brass<br/>Diameter: 1/4"</p> |

Approximate dimensions in inches (mm).





# IFD-1

# 600 V CURRENT TRANSFORMER



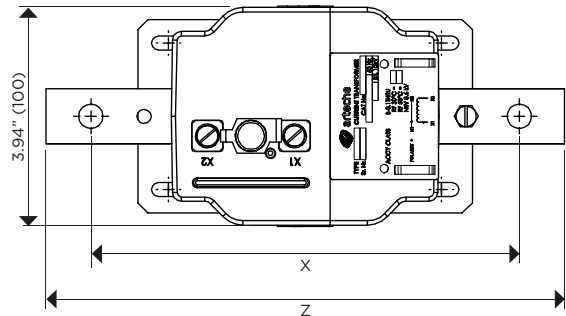
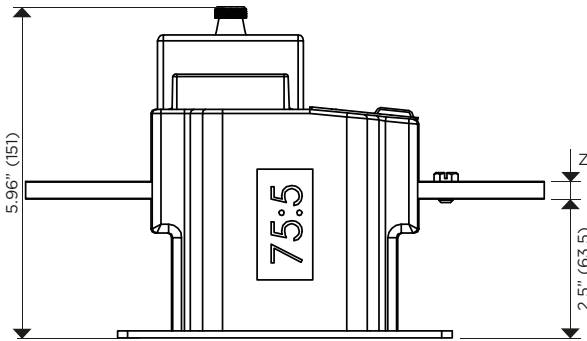
INDOOR  
60 Hertz

ARTECHE IFD series are dry type indoor service current transformers. The core is encapsulated with epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

### Mechanical characteristics

| Insulation Material | Color | Weight (lbs.)       |
|---------------------|-------|---------------------|
| Resin               | Blue  | Primary Bar Type: 7 |



Drawing number: 4288334

### PRIMARY BAR DIMENSIONS

| AMPS      | W | X      | Y      | Z     | MARK |
|-----------|---|--------|--------|-------|------|
| 75-100    | 1 | 7-3/4  | 9-3/8  | 5/16  | A    |
| 150-250   | 1 | 7-3/4  | 9-3/8  | 5/16  | B    |
| 300-400   | 1 | 7-3/4  | 9-3/8  | 5/16  | C    |
| 500-800   | 2 | 10-1/2 | 11-1/2 | 3/8   | D    |
| 1000-1200 | 2 | 10-1/2 | 11-1/2 | 29/64 | E    |

Approximate dimensions in inches (mm).



# IFD-3

# 600 V CURRENT TRANSFORMER



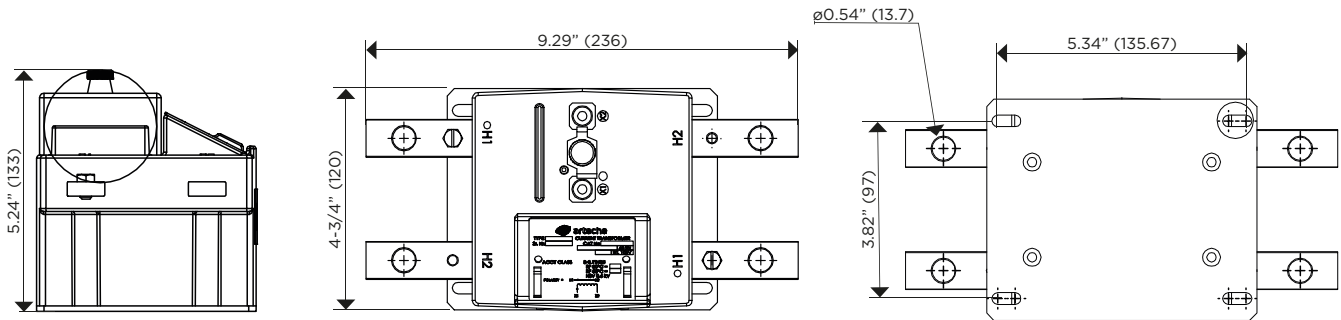
INDOOR  
60 Hertz

ARTECHE IFD series are dry type indoor service current transformers. The core is encapsulated with epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

### Mechanical characteristics

| Insulation Material | Color | Weight (lbs.)         |
|---------------------|-------|-----------------------|
| Resin               | Blue  | Primary Bar Type: 8.3 |



Drawing number: 4288335

Approximate dimensions in inches (mm).



# ICP-3

## 600 V CURRENT TRANSFORMER



INDOOR  
60 Hertz

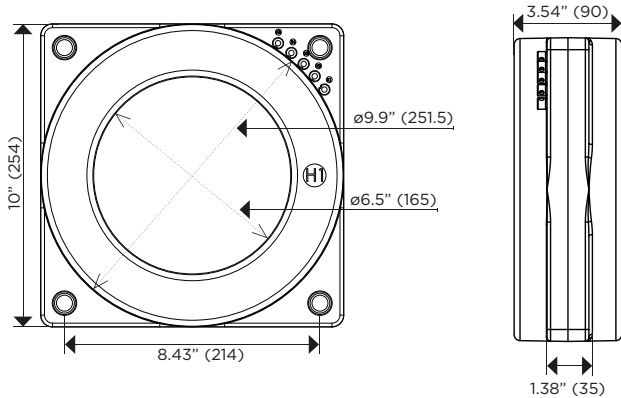
ARTECHE ICP series are dry type indoor service current transformers. The core is encapsulated with an impact-resistant polycarbonate which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

The core is built with high permeability grain oriented silicon steel laminations for low losses.

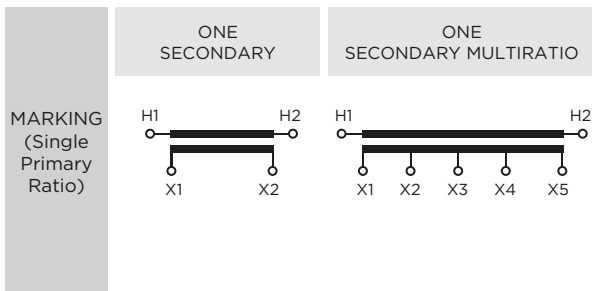
The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

### Mechanical characteristics

| Insulation Material | Color | Weight (lbs.) |
|---------------------|-------|---------------|
| Polycarbonate       | Black | 26            |



Drawing number: 4287899



Approximate dimensions in inches (mm).

# ICP-3

## 600 V CURRENT TRANSFORMER

| Electrical characteristics |  |   |   |                                 |                |                             |          |   |  |               |
|----------------------------|--|---|---|---------------------------------|----------------|-----------------------------|----------|---|--|---------------|
| Code                       | Current Ratio (Primary: Secondary) (A) | Continuous Thermal Current Rating Factor @ 30°C | Continuous Thermal Current Rating Factor @ 55°C | IEEE Metering Accuracy          | Relay Accuracy | Nominal Voltage System (kV) | BIL (kV) | Power-Frequency Withstand Voltage (1 min) |  | Type          |
|                            |  |   |   |                                 |                |                             |          | Primary & Secondary (kV <sub>rms</sub> )  | Secondary Winding (kV <sub>rms</sub> ) |               |
| 735131015                  | 75:5                                   | 2.0   | 1.5   | 2.4B0.2                         | C10            | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735131020                  | 100:5                                  | 2.0   | 1.5   | 1.2B0.1/2.4B0.2                 | C10            | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735131030                  | 150:5                                  | 2.0   | 1.5   | 0.6B0.1/1.2B0.2/2.4B0.5         | C20            | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735131040                  | 200:5                                  | 2.0   | 1.5   | 0.6B0.2/1.2B0.5                 | C20            | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735131050                  | 250:5                                  | 2.0   | 1.5   | 0.6B0.2/1.2B0.5/2.4B0.9         | C20            | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735131060                  | 300:5                                  | 2.0   | 1.5   | 0.3B0.1/0.6B0.2/1.2B0.9/2.4B1.8 | C20            | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735131080                  | 400:5                                  | 2.0   | 1.5   | 0.3B0.2/0.6B0.5/1.2B1.8         | C50            | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735131100                  | 500:5                                  | 2.0   | 1.5   | 0.3B0.5/0.6B0.9/1.2B1.8         | C50            | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735131120                  | 600:5                                  | 2.0   | 1.5   | 0.3B0.5/0.6B1.8                 | C100           | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735131160                  | 800:5                                  | 2.0   | 1.5   | 0.3B0.9/0.6B1.8                 | C100           | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735131200                  | 1000:5                                 | 2.0   | 1.5   | 0.3B1.8                         | C100           | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735131240                  | 1200:5                                 | 2.0   | 1.5   | 0.3B1.8                         | C200           | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735131300                  | 1500:5                                 | 2.0   | 1.5   | 0.3B1.8                         | C200           | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735131400                  | 2000:5                                 | 2.0   | 1.5   | 0.3B1.8                         | C200           | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735131500                  | 2500:5                                 | 2.0   | 1.5   | 0.3B1.8                         | C200           | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735131600                  | 3000:5                                 | 2.0   | 1.5   | 0.3B1.8                         | C200           | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735131800                  | 4000:5                                 | 1.5   | 1.2   | 0.3B1.8                         | C200           | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735132120                  | 600:5 MR                               | 2.0   | 1.5   | 0.3B0.5/0.6B1.8                 | C100           | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735132240                  | 1200:5 MR                              | 2.0   | 1.5   | 0.3B1.8                         | C200           | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735132400                  | 2000:5 MR                              | 2.0   | 1.5   | 0.3B1.8                         | C200           | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735132600                  | 3000:5 MR                              | 2.0   | 1.5   | 0.3B1.8                         | C200           | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735132800                  | 4000:5 MR                              | 1.5   | 1.2   | 0.3B1.8                         | C200           | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |

Additional ratings available upon request.

Notes: .....

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# ICP-5

# 600 V CURRENT TRANSFORMER



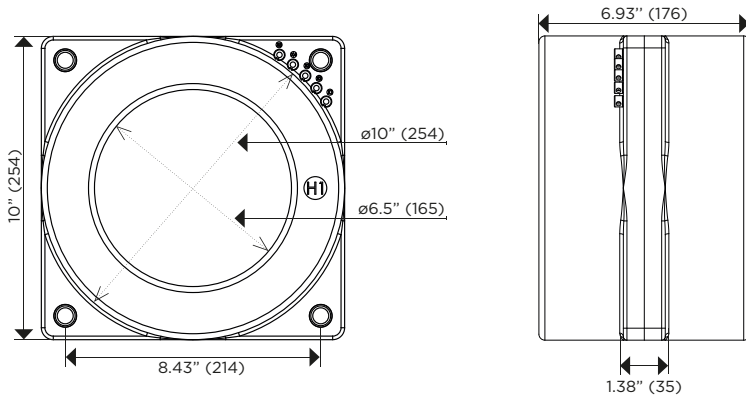
INDOOR  
60 Hertz

ARTECHE ICP series are dry type indoor service current transformers. The core is encapsulated with an impact-resistant polycarbonate which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

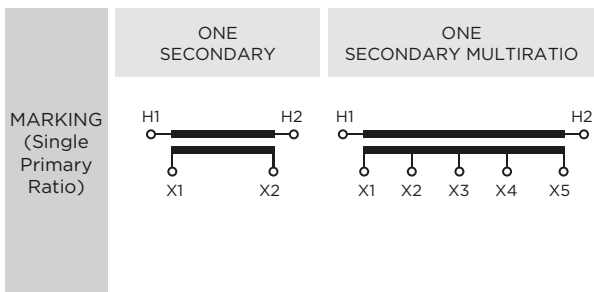
The core is built with high permeability grain oriented silicon steel laminations for low losses.

The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

| Mechanical characteristics |       | Weight (lbs.) |
|----------------------------|-------|---------------|
| Insulation Material        | Color |               |
| Polycarbonate              | Black | 54.8          |



Drawing number: 4287900



Approximate dimensions in inches (mm).



# ICP-5

## 600 V CURRENT TRANSFORMER

| Electrical characteristics |  |   |   |                                 |                |                             |          |   |  |               |
|----------------------------|--|---|---|---------------------------------|----------------|-----------------------------|----------|---|--|---------------|
| Code                       | Current Ratio (Primary: Secondary) (A) | Continuous Thermal Current Rating Factor @ 30°C | Continuous Thermal Current Rating Factor @ 55°C | IEEE Metering Accuracy          | Relay Accuracy | Nominal Voltage System (kV) | BIL (kV) | Power-Frequency Withstand Voltage (1 min) |  | Type          |
|                            |  |   |   |                                 |                |                             |          | Primary & Secondary (kV <sub>rms</sub> )  | Secondary Winding (kV <sub>rms</sub> ) |               |
| 735151010                  | 50:5                                   | 2.0   | 1.5   | 1.2B0.1/2.4B0.2                 | C10            | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735151015                  | 75:5                                   | 2.0   | 1.5   | 1.2B0.2/2.4B0.5                 | C20            | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735151020                  | 100:5                                  | 2.0   | 1.5   | 0.6B0.1/1.2B0.2/2.4B0.5         | C20            | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735151030                  | 150:5                                  | 2.0   | 1.5   | 0.6B0.2/1.2B0.5/2.4B0.9         | C50            | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735151040                  | 200:5                                  | 2.0   | 1.5   | 0.3B0.2/0.6B0.5/1.2B0.9/2.4B1.8 | C50            | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735151050                  | 250:5                                  | 2.0   | 1.5   | 0.3B0.2/0.6B0.5/1.2B0.9/2.4B1.8 | C50            | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735151060                  | 300:5                                  | 2.0   | 1.5   | 0.3B0.5/0.6B0.9/1.2B1.8         | C100           | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735151080                  | 400:5                                  | 2.0   | 1.5   | 0.3B0.5/0.6B1.8                 | C100           | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735151100                  | 500:5                                  | 2.0   | 1.5   | 0.3B0.9/0.6B1.8                 | C100           | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735151120                  | 600:5                                  | 2.0   | 1.5   | 0.3B0.9/0.6B1.8                 | C200           | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735151160                  | 800:5                                  | 2.0   | 1.5   | 0.3B1.8                         | C200           | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735151200                  | 1000:5                                 | 2.0   | 1.5   | 0.3B1.8                         | C200           | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735151240                  | 1200:5                                 | 2.0   | 1.5   | 0.3B1.8                         | C400           | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735151300                  | 1500:5                                 | 2.0   | 1.5   | 0.3B1.8                         | C400           | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735151400                  | 2000:5                                 | 2.0   | 1.5   | 0.3B1.8                         | C400           | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735151500                  | 2500:5                                 | 2.0   | 1.5   | 0.3B1.8                         | C400           | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735151600                  | 3000:5                                 | 2.0   | 1.5   | 0.3B1.8                         | C400           | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735151800                  | 4000:5                                 | 1.5   | 1.2   | 0.3B1.8                         | C400           | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735159991                  | 5000:5                                 | 1.2   | 1   | 0.3B1.8                         | C400           | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735159992                  | 6000:5                                 | 1.0   | 0.75  | 0.3B1.8                         | C400           | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735152120                  | 600:5 MR                               | 2.0   | 1.5   | 0.3B0.9/0.6B1.8                 | C200           | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735152240                  | 1200:5 MR                              | 2.0   | 1.5   | 0.3B1.8                         | C400           | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735152400                  | 2000:5 MR                              | 2.0   | 1.5   | 0.3B1.8                         | C400           | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735152600                  | 3000:5 MR                              | 2.0   | 1.5   | 0.3B1.8                         | C400           | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735152800                  | 4000:5 MR                              | 1.5   | 1.2   | 0.3B1.8                         | C400           | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735159993                  | 5000:5 MR                              | 1.2   | 1   | 0.3B1.8                         | C400           | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |
| 735159994                  | 6000:5 MR                              | 1.0   | 0.75  | 0.3B1.8                         | C400           | 0.6                         | 10       | 4   | 2.5                                    | Window (6.5") |

Additional ratings available upon request.

Notes: .....

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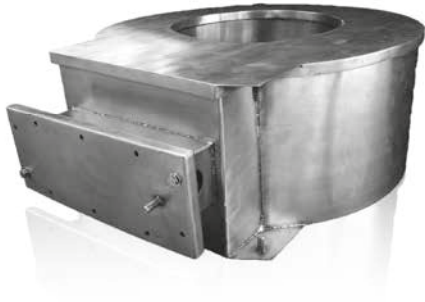
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## OVER BUSHING CURRENT TRANSFORMER

## 600 V CURRENT TRANSFORMER



The ARTECHE Over Bushing CT series are 600 V rated units designed to fit over a variety of specified bushing sizes. Primary current ratios are available from 200:5 thru 5000:5 at 60 Hz with a Rating Factor of up to 4.0.

This Slip-Over type CT will operate with high accuracy for metering or relay applications.

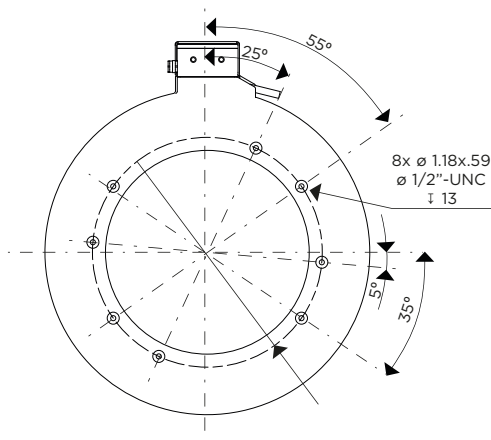
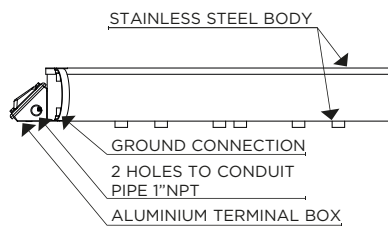
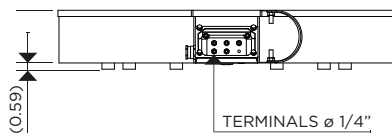
OUTDOOR  
60 Hertz  
Single, Dual and Multi Ratios, Window Type, Metering/Relaying

### Mechanical characteristics

The core and coil assembly is wound and tape wrapped and is available in window sizes from 2.5 to 45 inches. The secondary leads are typically #10 AWG or #12 AWG. The bushing insulation provides the dielectric protection for the CT.

A metal housing covers the whole Current Transformer.

The core of the CT is constructed from high permeability grain oriented silicon steel laminations which provide low core losses. The windings are constructed with copper wire and copper plate double isolation. Concentric distribution of the CT coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses under adverse operating conditions.





## BUSHING CURRENT TRANSFORMER

## 600 V CURRENT TRANSFORMER



**INDOOR**  
60 Hertz  
Single, Dual and  
Multi Ratios,  
Window Type,  
Metering/Relaying

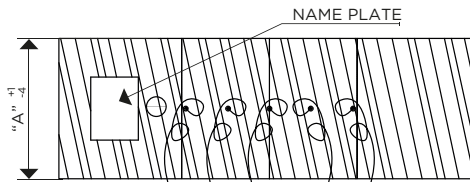
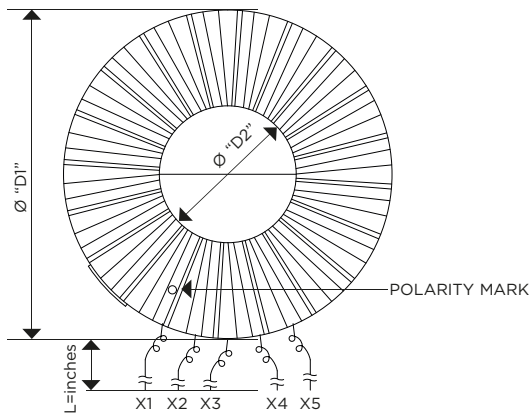
ARTECHE Bushing CT series are designed to fit over a variety of specified bushing sizes. Primary current ratios are available from 200:5 thru 5000:5 at 60 Hz with a Rating Factor up to 4.0. This tape-wound CT will operate for metering or relaying applications.

### Mechanical characteristics

The core and coil assembly is wound and tape wrapped and is available in window sizes from 2.5 to 45 inches.

The secondary leads are typically #10 AWG or #12 AWG. The bushing insulation provides the dielectric protection for the CT. Optional TEFZEL insulation for the CT is also available.

The core of the CT is constructed from high permeability grain oriented silicon steel laminations which provide low core losses. The windings are constructed with copper wire and copper plate double insulated. All secondary windings are fully distributed around the core, which provides low leakage reactance on each ratio, achieving greater accuracy and higher capacity to withstand mechanical stresses under adverse operating conditions.

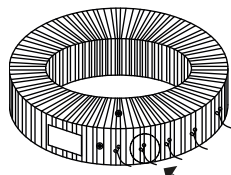


$\phi 'D1''$     $\phi 'D2''$    "A"   "L"=inches   WEIGHT lbs.

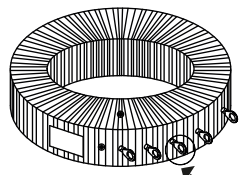
Specs and dimensions available upon request.

Drawing number: 4285816

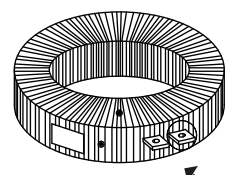
**TYPE OF CONNECTIONS**  
(Secondary terminal)



COPPER WIRE 10-12 AWG



FLAT CONNECTION 1/4"



COPPER TERMINAL



# URC-3

## 600 V VOLTAGE TRANSFORMER



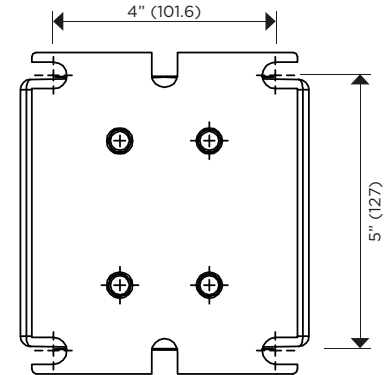
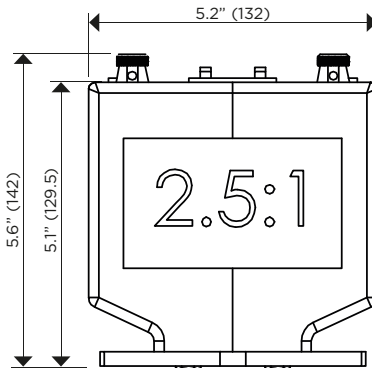
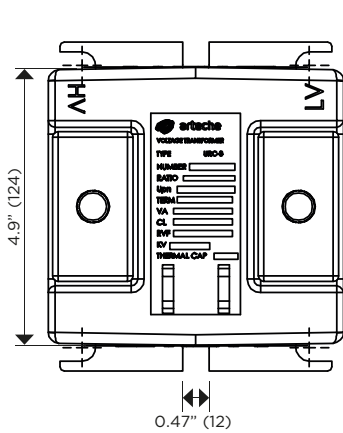
INDOOR/OUTDOOR  
60 Hertz

ARTECHE URC series are dry type indoor/outdoor service voltage transformers. The core is encapsulated with epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

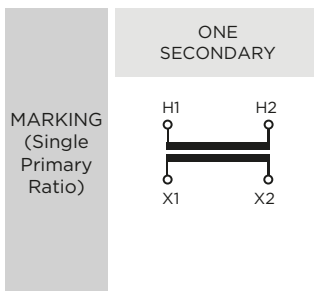
The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) |
|---------------------|--------|---------------|
| Resin               | Blue   | 15.43         |



Drawing number: 4216163



Approximate dimensions in inches (mm).



# URC-5

## 600 V VOLTAGE TRANSFORMER



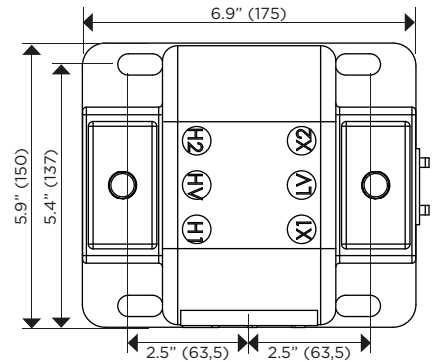
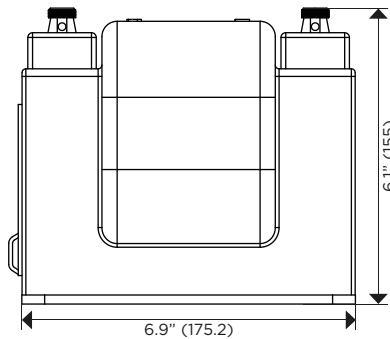
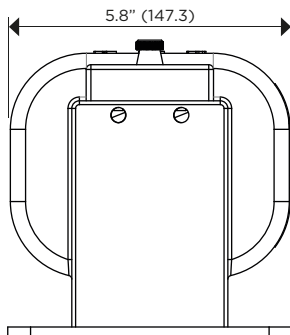
ARTECHE URC series are dry type indoor/outdoor service voltage transformers. The core is encapsulated with epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

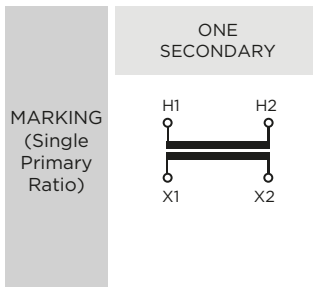
INDOOR/OUTDOOR  
60 Hertz

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) |
|---------------------|--------|---------------|
| Resin               | Blue   | 15.6          |



Drawing number: 4287986



Approximate dimensions in inches (mm).



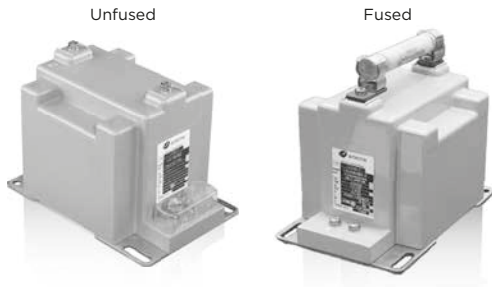




5 kV – 34.5 kV  
INDOOR  
INSTRUMENT  
TRANSFORMERS

# UCE-7

# 5 kV VOLTAGE TRANSFORMER



INDOOR  
60 Hertz

ARTECHE UC/UX/VC series are dry type indoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

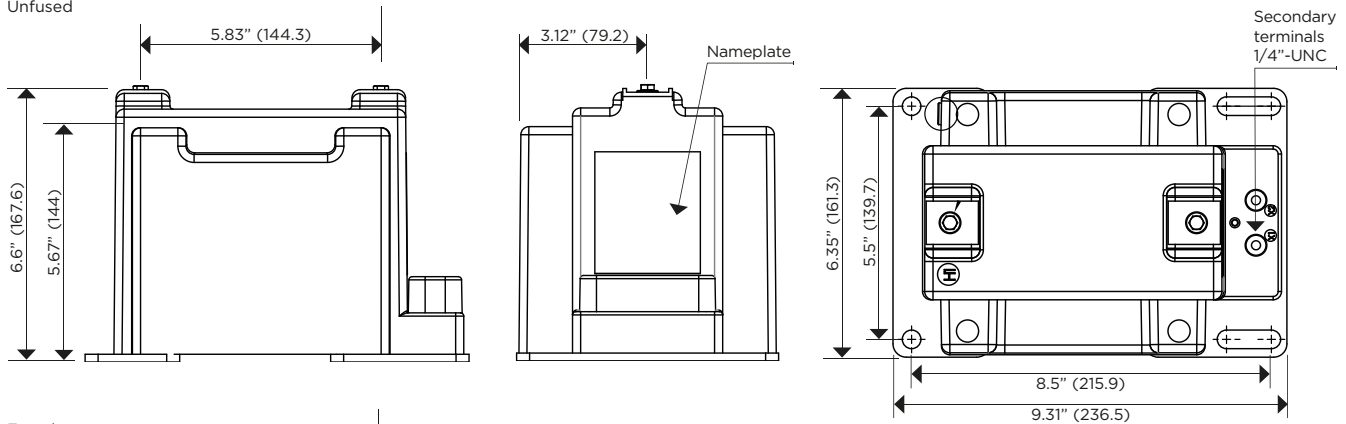
Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.



### Mechanical characteristics

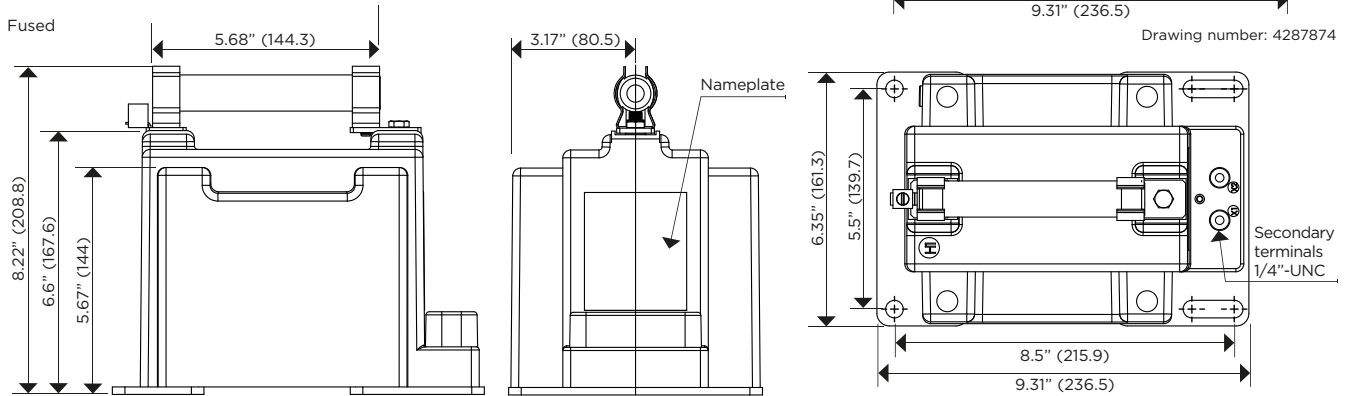
| Insulation Material | Colors | Weight (lbs.) |
|---------------------|--------|---------------|
| Resin               | Gray   | 32            |

Unfused

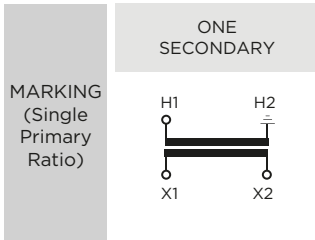


Drawing number: 4287874

Fused



Drawing number: 4286786



Approximate dimensions in inches (mm).



# VCE-7

# 5 kV VOLTAGE TRANSFORMER

Unfused

Fused

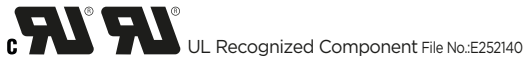


INDOOR  
60 Hertz

ARTECHE UC/UX/VC series are dry type indoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

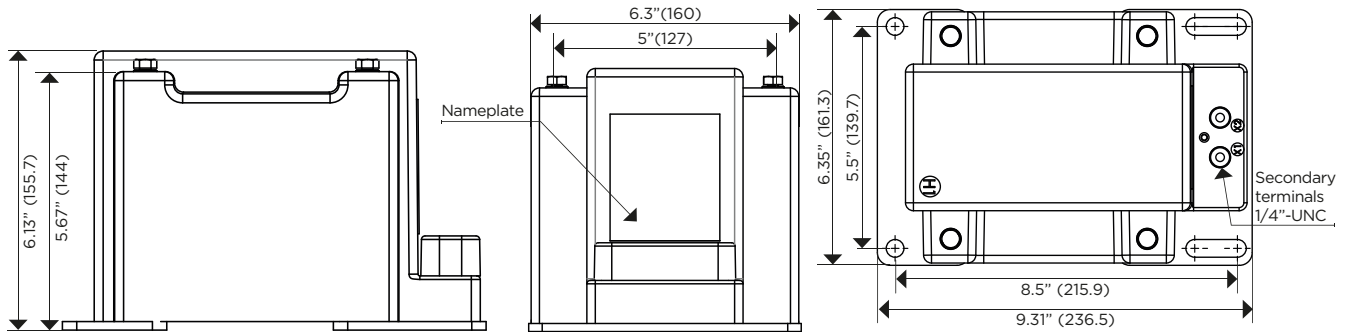
Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.



### Mechanical characteristics

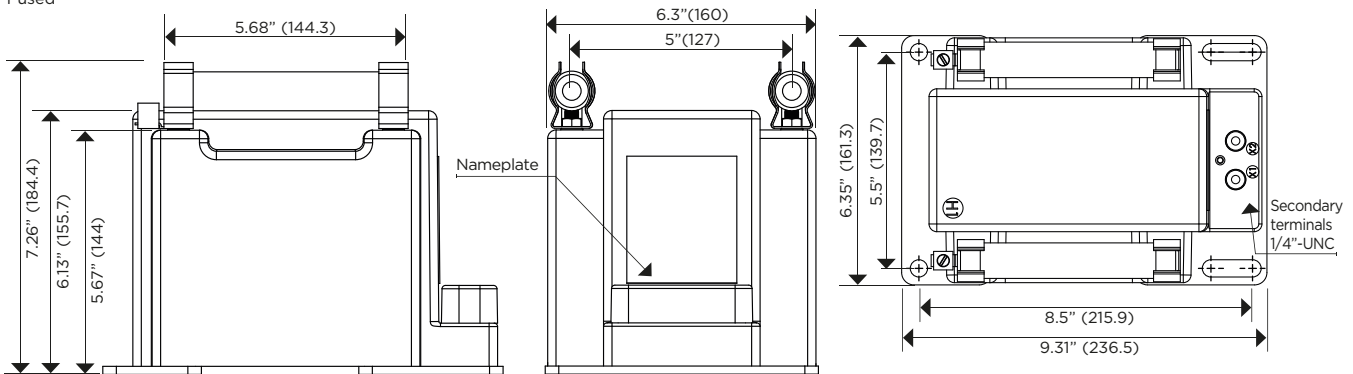
| Insulation Material | Colors | Weight (lbs.) |
|---------------------|--------|---------------|
| Resin               | Gray   | 32            |

Unfused



Drawing number: 428786

Fused



Drawing number: 4286786

ONE  
SECONDARY

MARKING  
(Single  
Primary  
Ratio)



Approximate dimensions in inches (mm).



# UXI-12

## 8.7 kV VOLTAGE TRANSFORMER

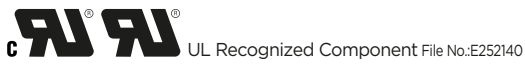


**INDOOR  
60 Hertz**

ARTECHE UC/UX/VC series are dry type indoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

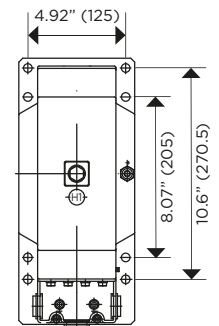
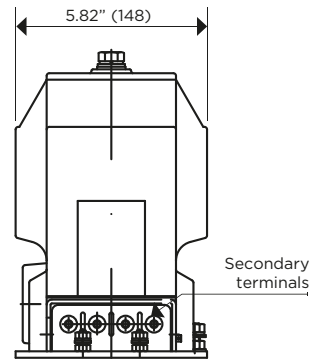
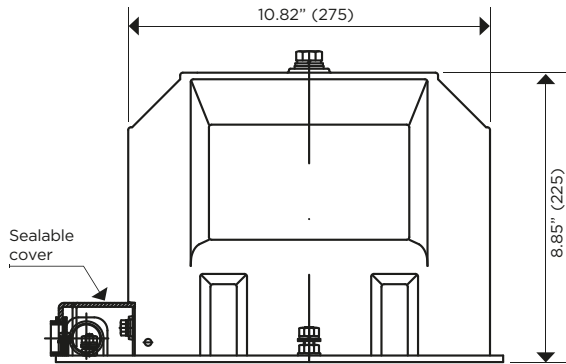
The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

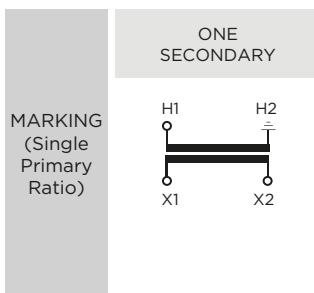


### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) |
|---------------------|--------|---------------|
| Resin               | Gray   | 60            |



Drawing number: 4286155



Approximate dimensions in inches (mm).





# UCE-17

# 15 kV VOLTAGE TRANSFORMER

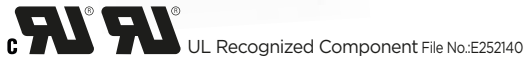


**INDOOR  
60 Hertz**

ARTECHE UC/UX/VC series are dry type indoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

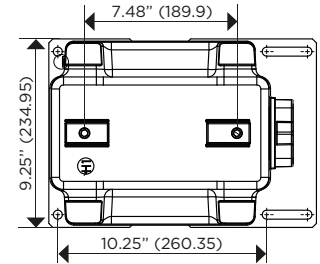
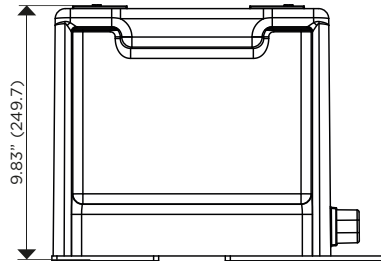
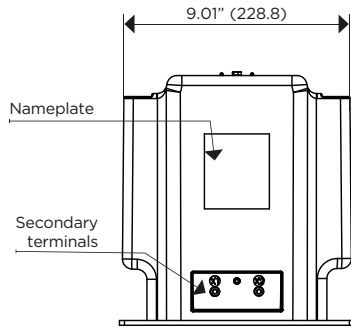
Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.



### Mechanical characteristics

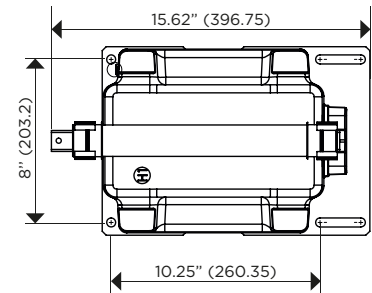
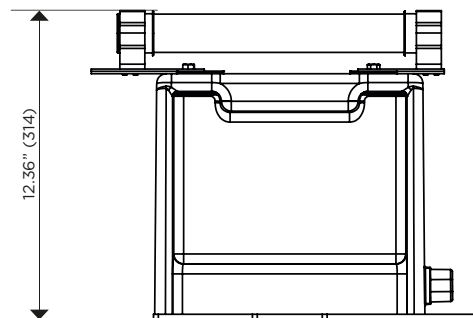
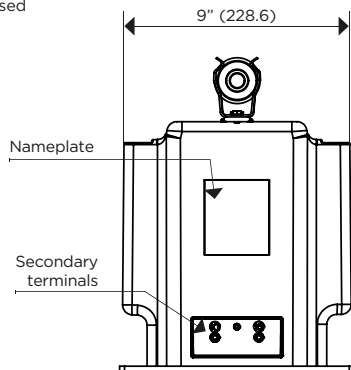
| Insulation Material | Colors | Weight (lbs.) |
|---------------------|--------|---------------|
| Resin               | Gray   | 85            |

Unfused

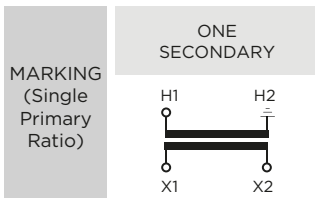


Drawing number: 4287875

Fused



Drawing number: 4286373



Approximate dimensions in inches (mm).



# UCI-17

# 15 kV VOLTAGE TRANSFORMER

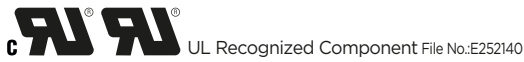


**INDOOR  
60 Hertz**

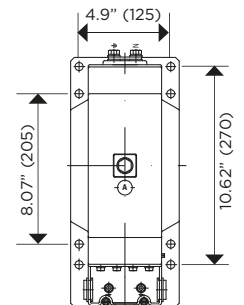
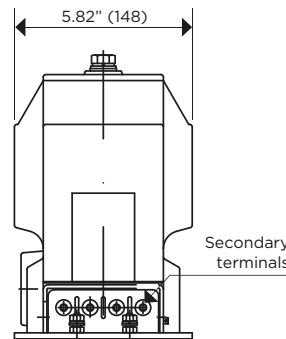
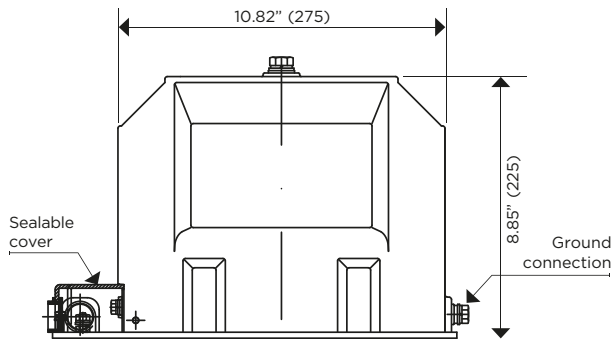
ARTECHE UC/UX/VC series are dry type indoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

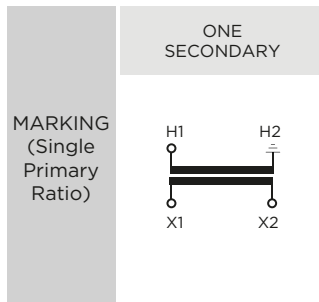
Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.



| Mechanical characteristics |        | Weight (lbs.) |
|----------------------------|--------|---------------|
| Insulation Material        | Colors |               |
| Resin                      | Gray   | 60            |



Drawing number: 4286160



Approximate dimensions in inches (mm).



# UEN-17

# 15 kV VOLTAGE TRANSFORMER



**INDOOR  
60 Hertz**

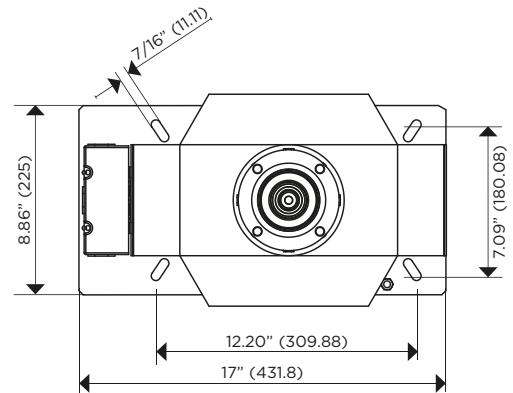
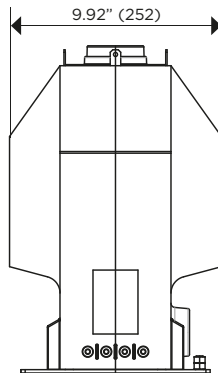
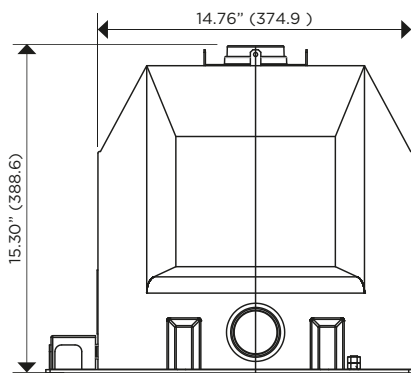
ARTECHE UEN series are dry type indoor service voltage transformers. The entire surface of the transformer is coated with a conductive layer that is intended to be solidly grounded when energized. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

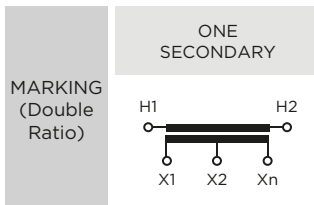
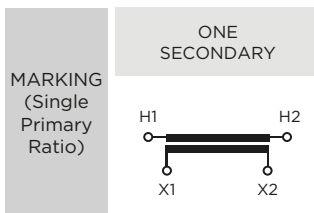
Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) |
|---------------------|--------|---------------|
| Resin               | Gray   | 133           |



Drawing number: 4288294



Approximate dimensions in inches (mm).



# UENS-17

## 15 kV VOLTAGE TRANSFORMER



INDOOR  
60 Hertz

ARTECHE UENS series are dry type indoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

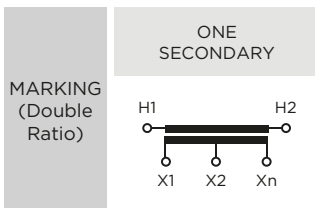
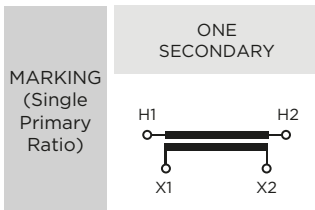
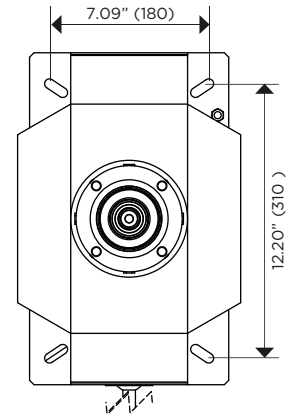
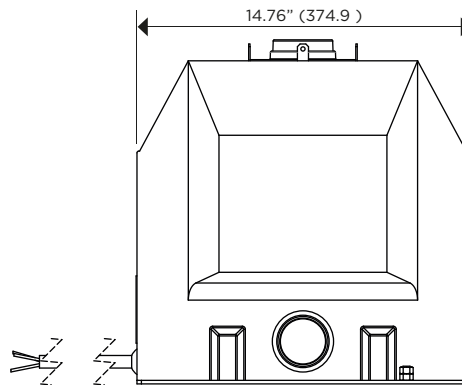
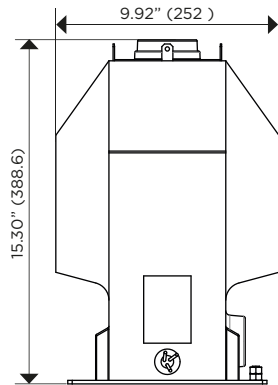
The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

The new design is a voltage transformer for 19 feet (about 6 meter) intermittent submersible application with metallic coating. The model is cast in epoxy resin and is strongly insulated to environment. The UENS (single phase) models are metering units and rated for use up to 15kV submersible operation up to 110kV BIL. The medium voltage terminals are bushing wells compatible with IEEE 386 interfaces.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) |
|---------------------|--------|---------------|
| Resin               | Gray   | 101           |



Drawing number: 4288296

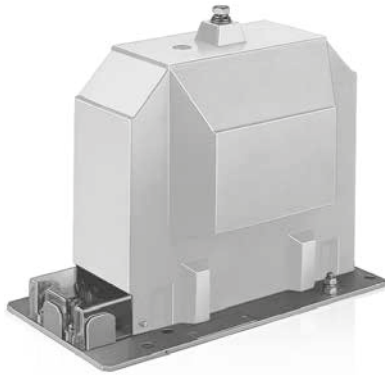
Approximate dimensions in inches (mm).





# UXL-17

# 15 kV VOLTAGE TRANSFORMER

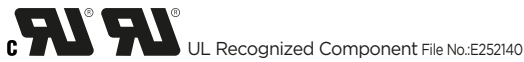


**INDOOR  
60 Hertz**

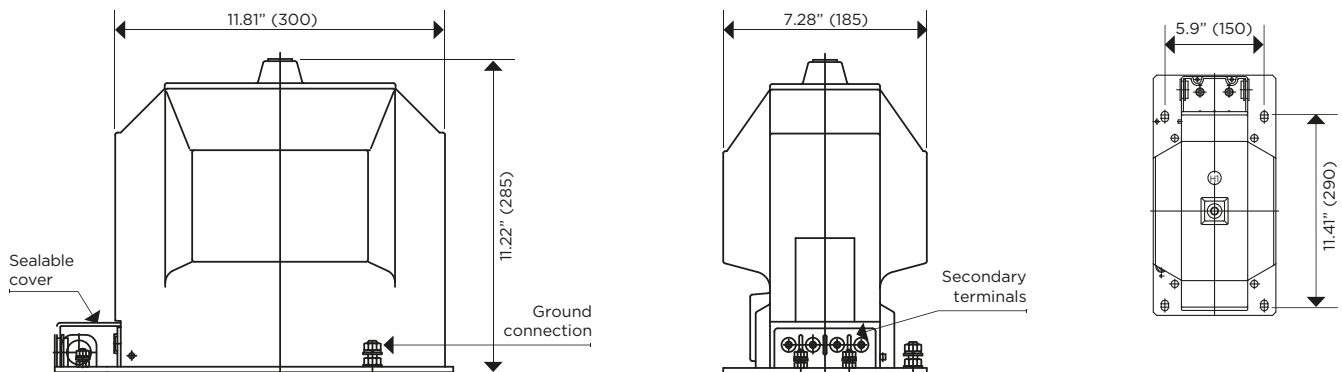
ARTECHE UC/UX/VC series are dry type indoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

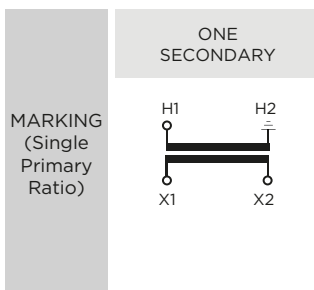
Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.



| Mechanical characteristics |        |               |
|----------------------------|--------|---------------|
| Insulation Material        | Colors | Weight (lbs.) |
| Resin                      | Gray   | 60            |



Drawing number: 4286157



Approximate dimensions in inches (mm).



# VCE-17

# 15 kV VOLTAGE TRANSFORMER



**INDOOR  
60 Hertz**

ARTECHE UC/UX/VC series are dry type indoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

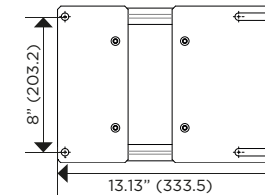
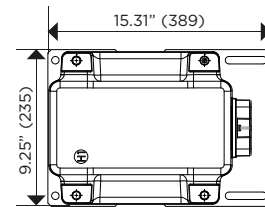
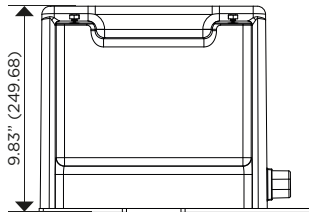
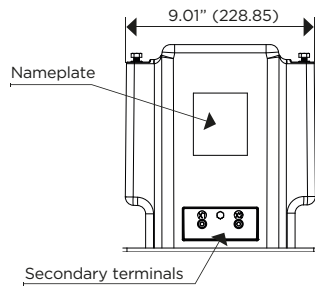
Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

**UL** UL Recognized Component File No.:E252140

### Mechanical characteristics

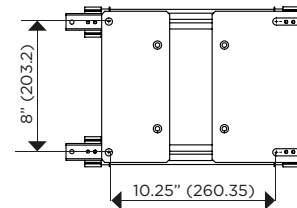
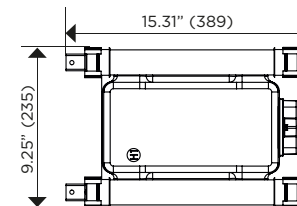
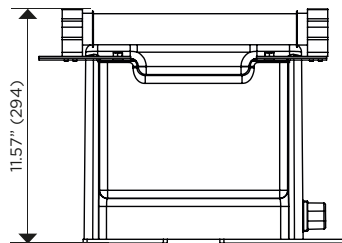
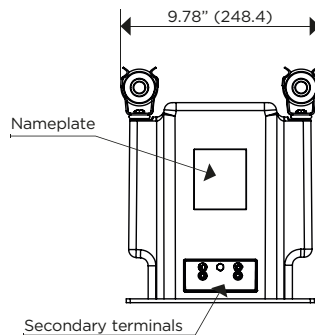
| Insulation Material | Colors | Weight (lbs.) |
|---------------------|--------|---------------|
| Resin               | Gray   | 85            |

Unfused

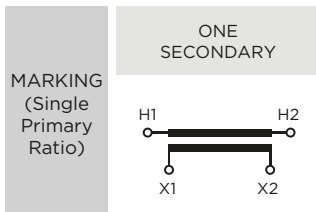


Drawing number: 4287539

Fused



Drawing number: 4286372



Approximate dimensions in inches (mm).



# VCL-17

# 15 kV VOLTAGE TRANSFORMER

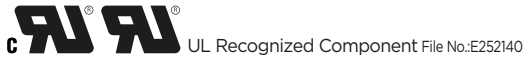


**INDOOR  
60 Hertz**

ARTECHE UC/UX/VC series are dry type indoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

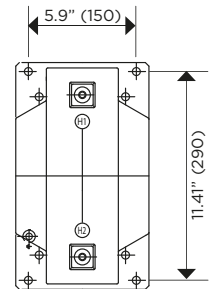
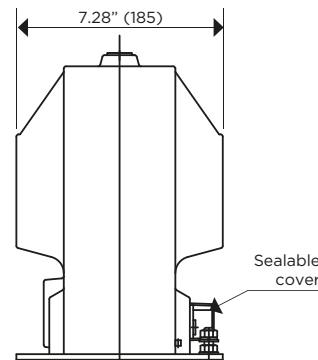
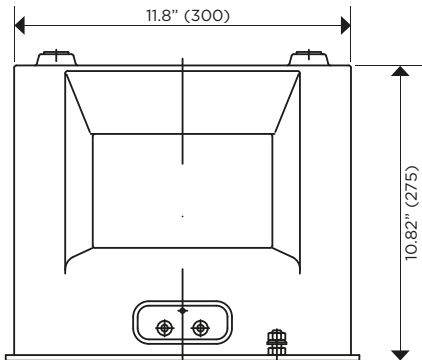
The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

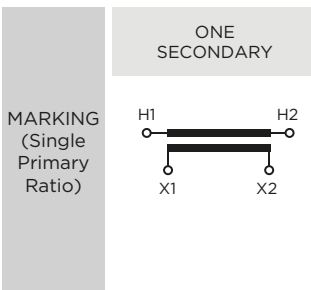


### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) |
|---------------------|--------|---------------|
| Resin               | Gray   | 62            |



Drawing number: 4286156



Approximate dimensions in inches (mm).



# VEN-17

## 15 kV VOLTAGE TRANSFORMER



**INDOOR  
60 Hertz**

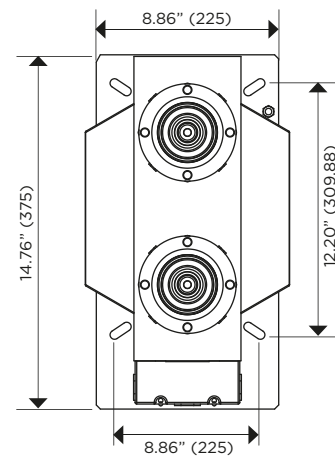
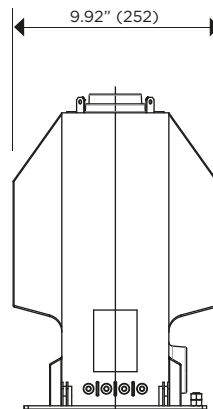
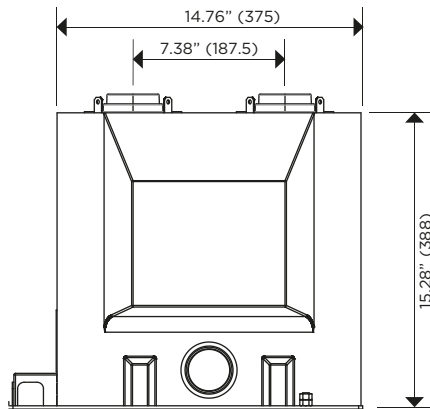
ARTECHE VEN series are dry type indoor service voltage transformers. The entire surface of the transformer is coated with a conductive layer that is intended to be solidly grounded when energized. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

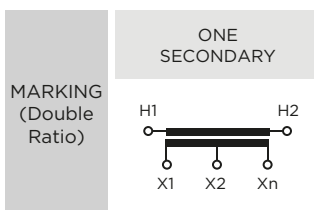
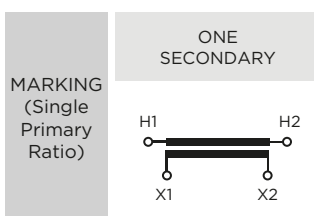
Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) |
|---------------------|--------|---------------|
| Resin               | Gray   | 140           |



Drawing number: 4288298



Approximate dimensions in inches (mm).





# VENS-17

## 15 kV VOLTAGE TRANSFORMER



**INDOOR  
60 Hertz**

ARTECHE VENS series are dry type indoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

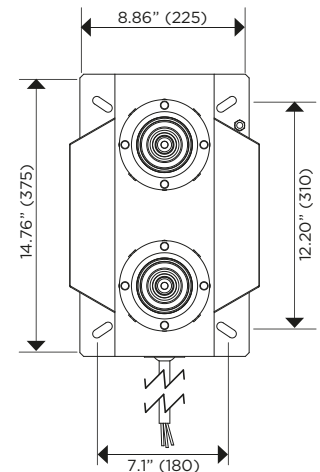
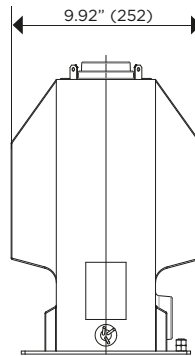
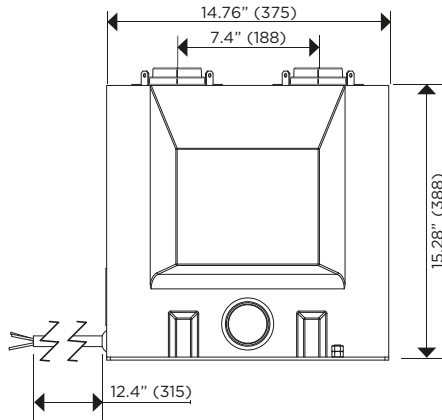
The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

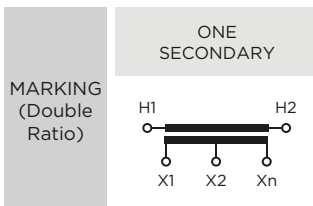
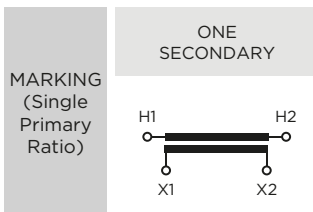
The new design is a voltage transformer for 19 feet (about 6 meter) intermittent submersible application with metallic coating. The model is cast in epoxy resin and is strongly insulated to environment. The VEN-17 (two phase) models are metering units and rated for use up to 15kV submersible operation up to 110kV BIL. The medium voltage terminals are bushing wells compatible with IEEE 386 interfaces.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) |
|---------------------|--------|---------------|
| Resin               | Gray   | 140           |



Drawing number: 4288301



Approximate dimensions in inches (mm).



# UCJ-24

# 25 kV VOLTAGE TRANSFORMER

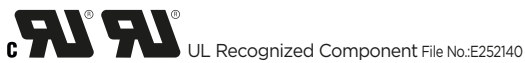


**INDOOR  
60 Hertz**

ARTECHE UC/UX/VC series are dry type indoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

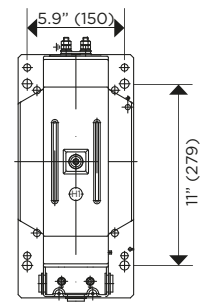
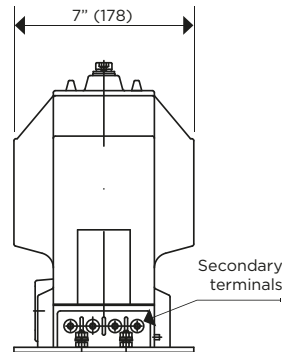
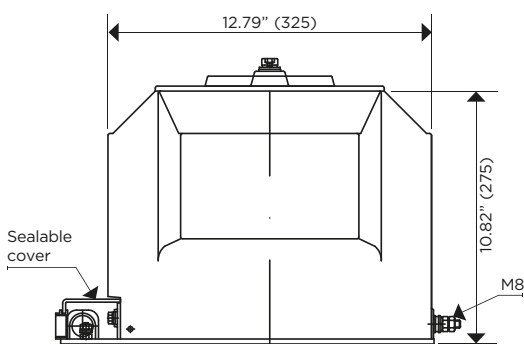
The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

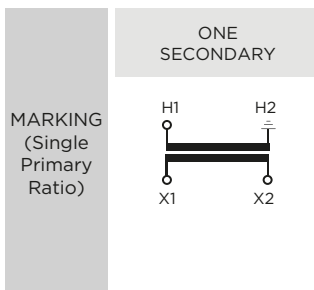


### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) |
|---------------------|--------|---------------|
| Resin               | Gray   | 66            |



Drawing number: 4286163



Approximate dimensions in inches (mm).



# UEI-24

# 25 kV VOLTAGE TRANSFORMER



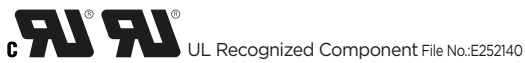
**INDOOR  
60 Hertz**

ARTECHE UE series are dry type indoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

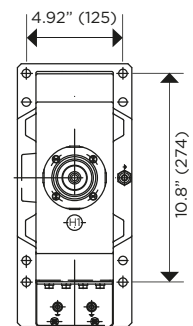
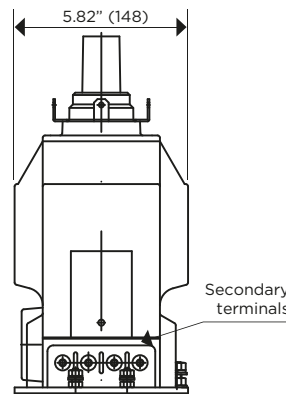
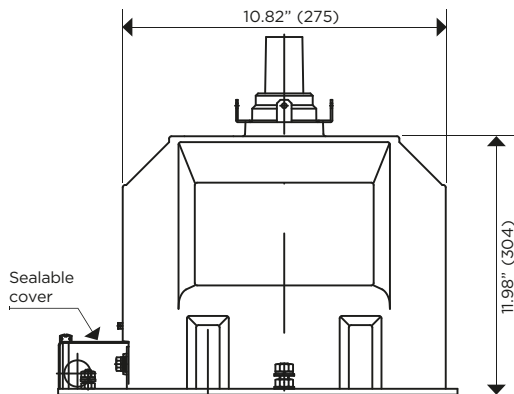
The entire surface of the transformer is coated with a conductive layer that is intended to be solidly grounded when energized. This allows for compact mounting inside switchgear or enclosures.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

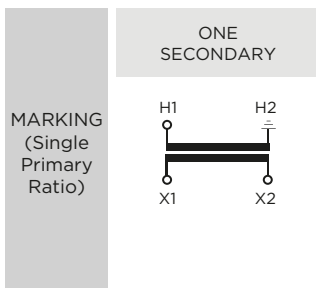
Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.



| Mechanical characteristics |        |               |
|----------------------------|--------|---------------|
| Insulation Material        | Colors | Weight (lbs.) |
| Resin                      | Gray   | 62            |



Drawing number: 4286164



Approximate dimensions in inches (mm).



# UEN-24

# 25 kV VOLTAGE TRANSFORMER



**INDOOR  
60 Hertz**

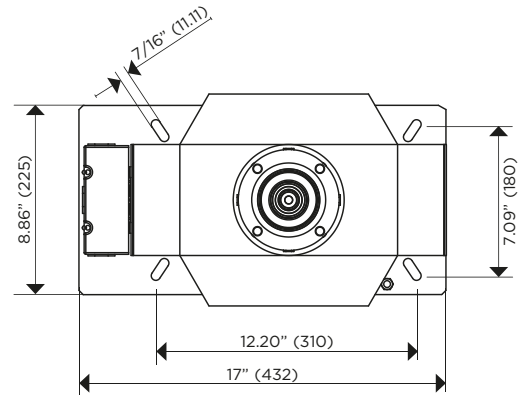
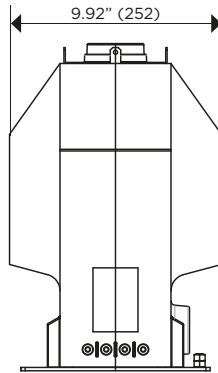
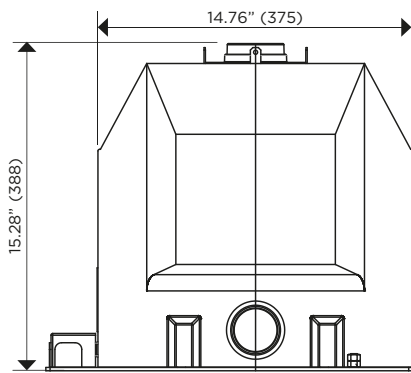
ARTECHE UEN series are dry type indoor service voltage transformers. The entire surface of the transformer is coated with a conductive layer that is intended to be solidly grounded when energized. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

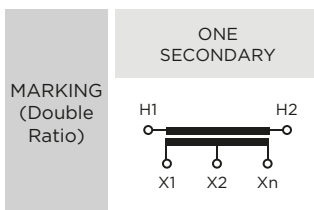
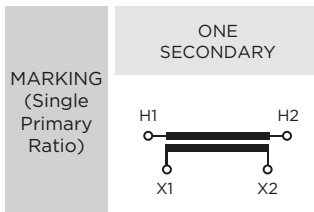
Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

**UL**  UL Recognized Component File No.:E252140

| Mechanical characteristics |        |               |
|----------------------------|--------|---------------|
| Insulation Material        | Colors | Weight (lbs.) |
| Resin                      | Gray   | 110           |



Drawing number: 4287887



Approximate dimensions in inches (mm).





# UENS-24

## 25 kV VOLTAGE TRANSFORMER



INDOOR  
60 Hertz

ARTECHE UENS series are dry type indoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

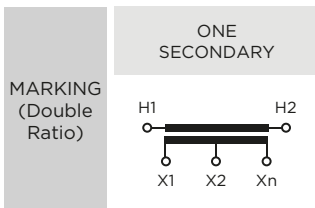
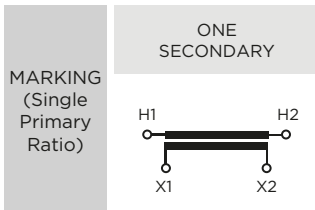
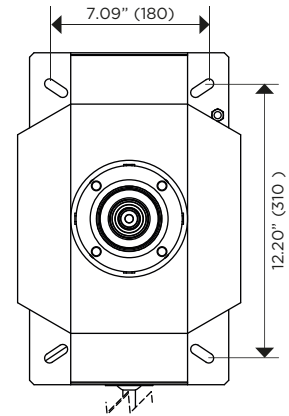
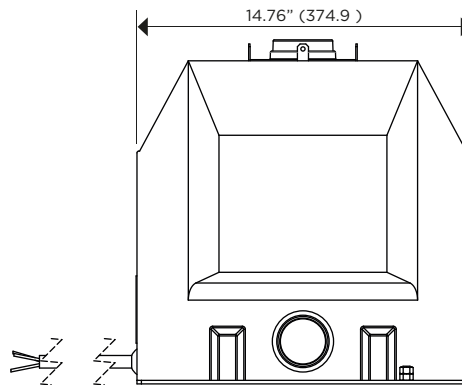
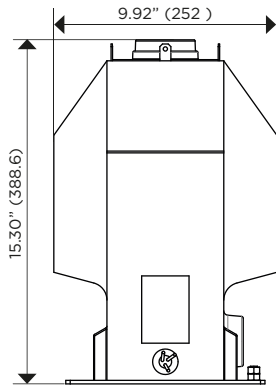
The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

The new design is a voltage transformer for 19 feet (about 6 meter) intermittent submersible application with metallic coating. The model is cast in epoxy resin and is strongly insulated to environment. The UENS (single phase) models are metering units and rated for use up to 25kV submersible operation up to 150kV BIL. The medium voltage terminals are bushing wells compatible with IEEE 386 interfaces.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) |
|---------------------|--------|---------------|
| Resin               | Gray   | 101           |



Drawing number: 4288297

Approximate dimensions in inches (mm).



# VCL-24

## 25 kV VOLTAGE TRANSFORMER



INDOOR  
60 Hertz

ARTECHE UC/UX/VC series are dry type indoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

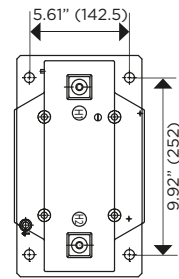
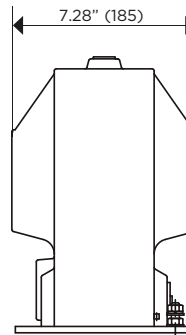
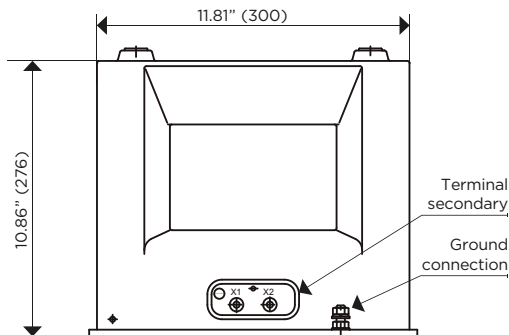
The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

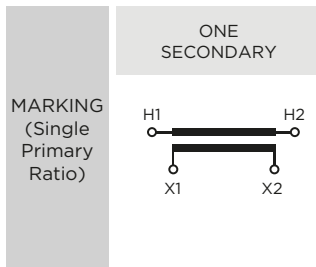


### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) |
|---------------------|--------|---------------|
| Resin               | Gray   | 62            |



Drawing number: 4286158



Approximate dimensions in inches (mm).



# VEN-24

## 25 kV VOLTAGE TRANSFORMER



**INDOOR  
60 Hertz**

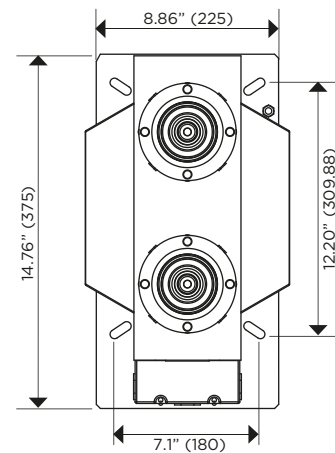
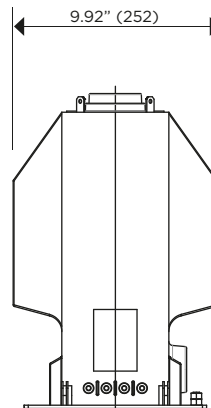
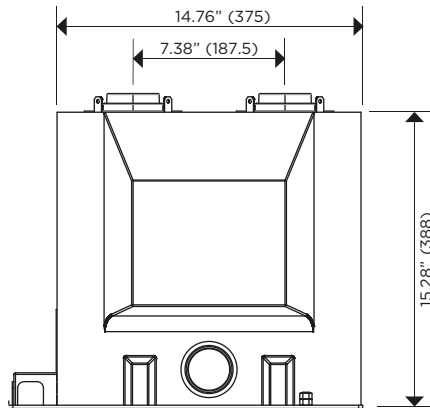
ARTECHE VEN series are dry type indoor service voltage transformers. The entire surface of the transformer is coated with a conductive layer that is intended to be solidly grounded when energized. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

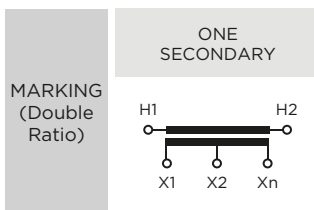
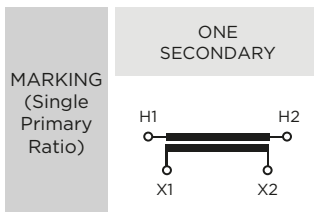
Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) |
|---------------------|--------|---------------|
| Resin               | Gray   | 140           |



Drawing number: 4288299



Approximate dimensions in inches (mm).



# VENS-24

## 25 kV VOLTAGE TRANSFORMER



**INDOOR  
60 Hertz**

ARTECHE VENS series are dry type indoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

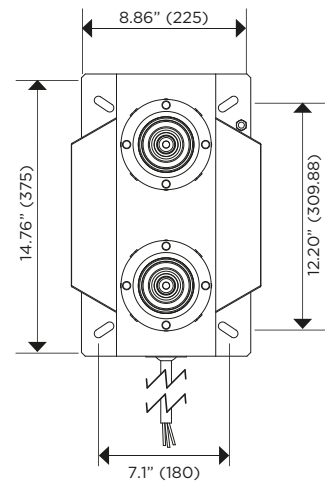
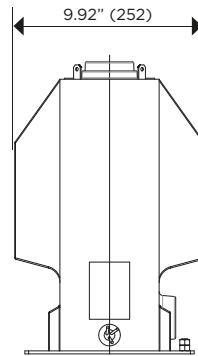
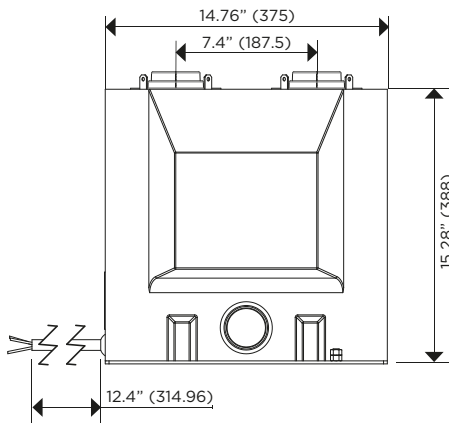
The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

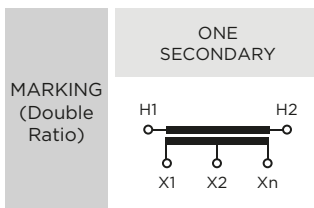
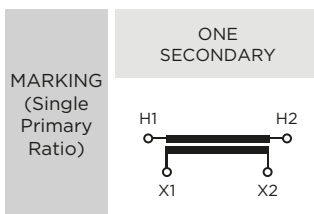
The new design is a voltage transformer for 19 feet (about 6 meter) intermittent submersible application with metallic coating. The model is cast in epoxy resin and is strongly insulated to environment. The VEN-24 (two phase) models are metering units and rated for use up to 25kV submersible operation up to 150kV BIL. The medium voltage terminals are bushing wells compatible with IEEE 386 interfaces.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) |
|---------------------|--------|---------------|
| Resin               | Gray   | 140           |



Drawing number: 4288302



Approximate dimensions in inches (mm).





# UEN-36

# 34.5 kV VOLTAGE TRANSFORMER



**INDOOR  
60 Hertz**

ARTECHE UEN series are dry type indoor service voltage transformers. The entire surface of the transformer is coated with a conductive layer that is intended to be solidly grounded when energized. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

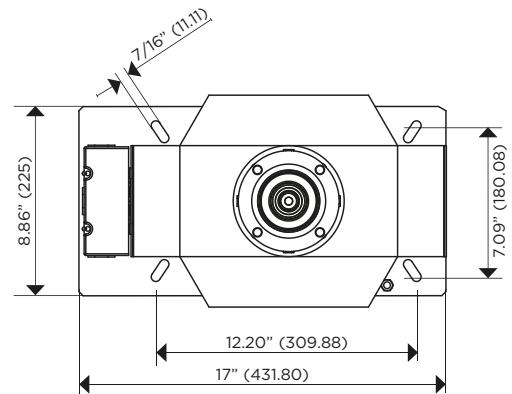
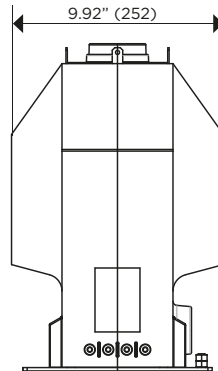
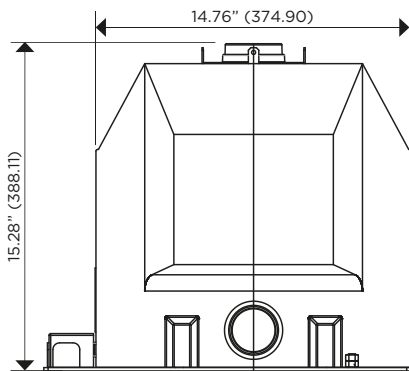
The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

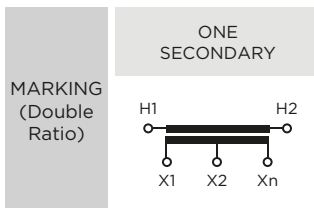
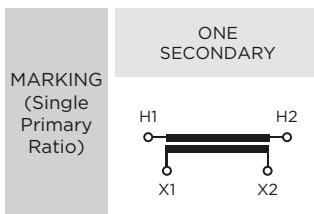
**UL** UL Recognized Component File No.:E252140

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) |
|---------------------|--------|---------------|
| Resin               | Gray   | 133           |



Drawing number: 4288217



Approximate dimensions in inches (mm).



# UENS-36

## 34.5 kV VOLTAGE TRANSFORMER



**INDOOR  
60 Hertz**

ARTECHE UENS series are dry type indoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

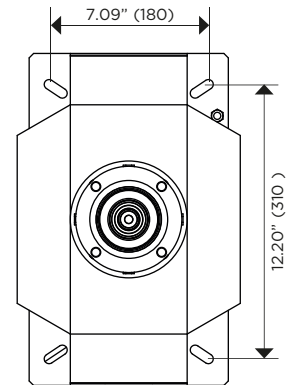
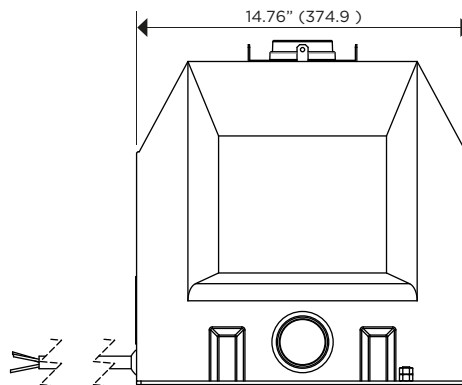
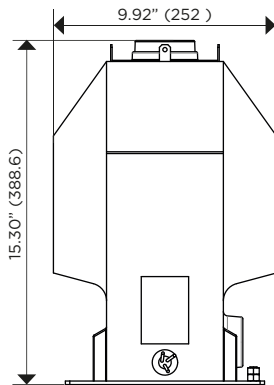
The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

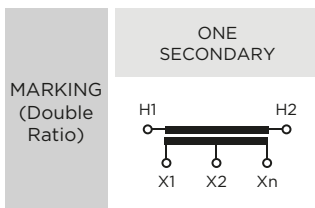
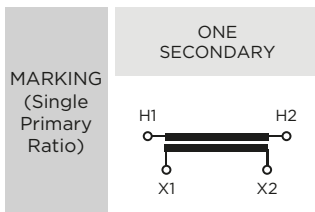
The new design is a voltage transformer for 19 feet (about 6 meter) intermittent submersible application with metallic coating. The model is cast in epoxy resin and is strongly insulated to environment. The UENS (single phase) models are metering units and rated for use up to 34.5kV submersible operation up to 200kV BIL. The medium voltage terminals are bushing wells compatible with IEEE 386 interfaces.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) |
|---------------------|--------|---------------|
| Resin               | Gray   | 133           |



Drawing number: 4288217

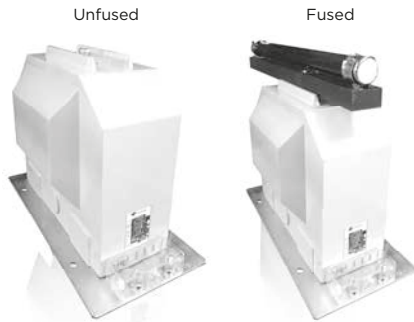


Approximate dimensions in inches (mm).



# UCS-36

# 34.5 kV VOLTAGE TRANSFORMER

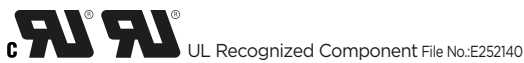


INDOOR  
60 Hertz

ARTECHE UC/UX/VC series are dry type indoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

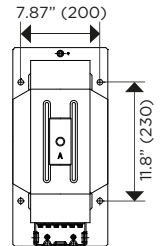
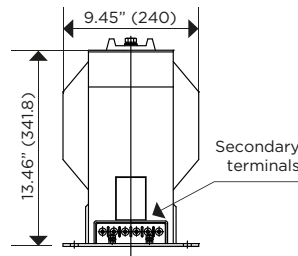
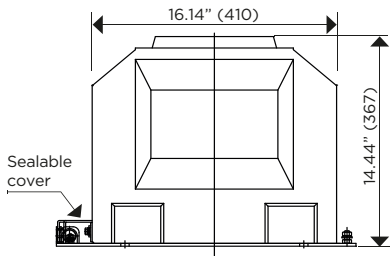
The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.



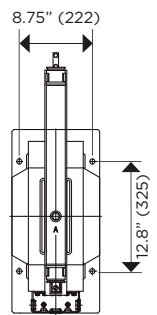
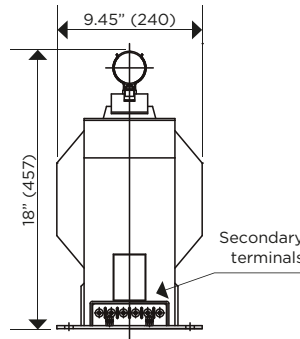
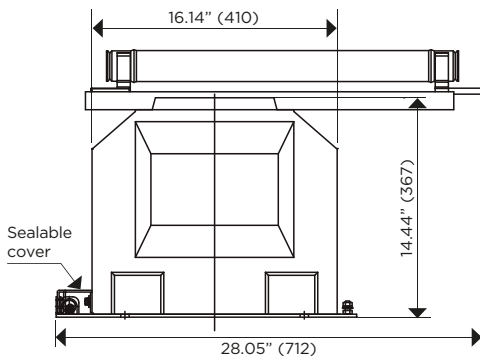
| Mechanical characteristics |        |               |
|----------------------------|--------|---------------|
| Insulation Material        | Colors | Weight (lbs.) |
| Resin                      | Gray   | 167           |

Unfused:

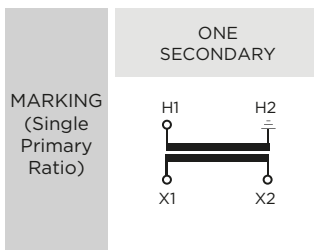


Drawing number: 4287357

Fused:



Drawing number: 3287479

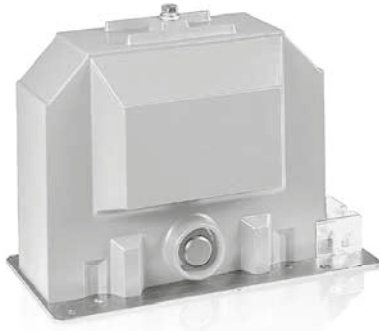


Approximate dimensions in inches (mm).



# UXN-36

# 34.5 kV VOLTAGE TRANSFORMER



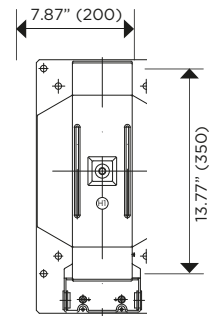
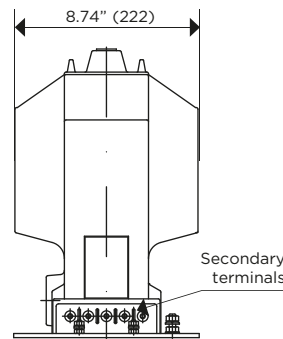
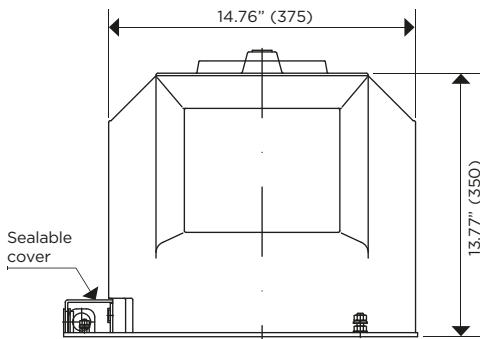
**INDOOR  
60 Hertz**

ARTECHE UC/UX/VC series are dry type indoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

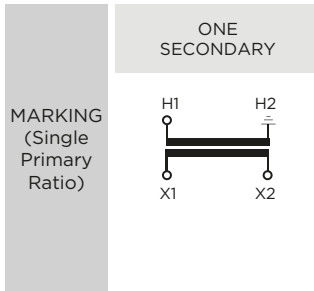
The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

| Mechanical characteristics |        |               |
|----------------------------|--------|---------------|
| Insulation Material        | Colors | Weight (lbs.) |
| Resin                      | Gray   | 97            |



Drawing number: 4286161



Approximate dimensions in inches (mm).





# VCN-36

# 34.5 kV VOLTAGE TRANSFORMER

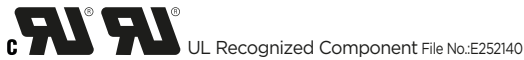


**INDOOR  
60 Hertz**

ARTECHE UC/UX/VC series are dry type indoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

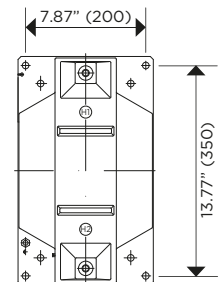
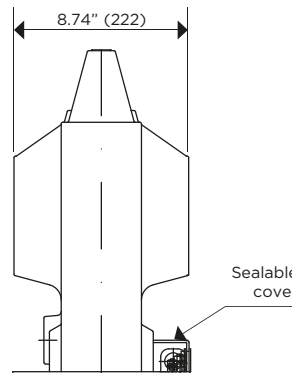
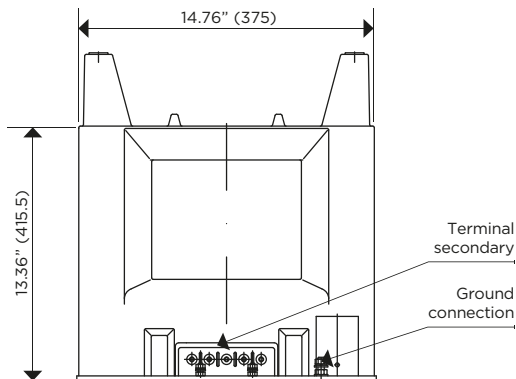
The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

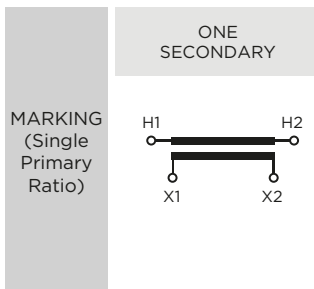


### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) |
|---------------------|--------|---------------|
| Resin               | Gray   | 99            |



Drawing number: 4286162



Approximate dimensions in inches (mm).



# VEN-36

## 34.5 kV VOLTAGE TRANSFORMER



**INDOOR  
60 Hertz**

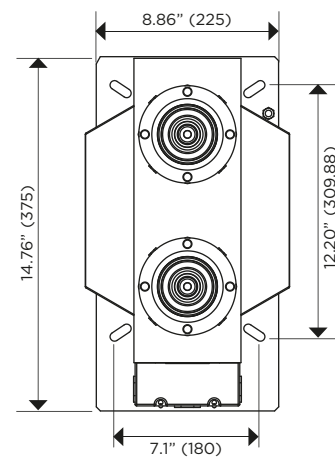
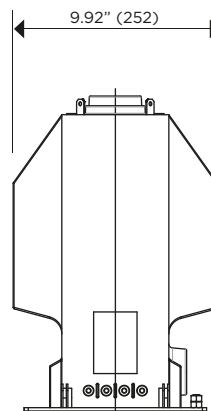
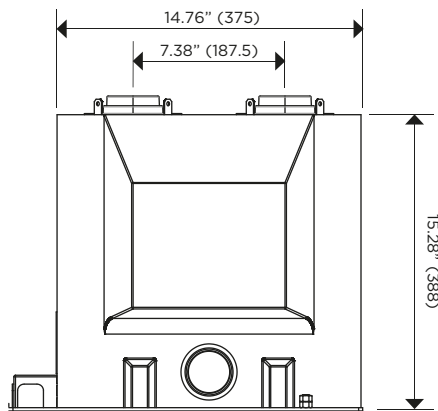
ARTECHE VEN series are dry type indoor service voltage transformers. The entire surface of the transformer is coated with a conductive layer that is intended to be solidly grounded when energized. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

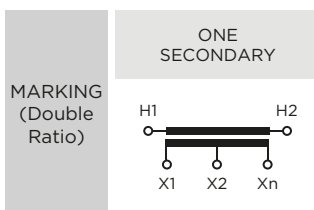
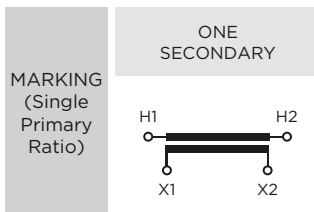
Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) |
|---------------------|--------|---------------|
| Resin               | Gray   | 140           |



Drawing number: 4288300



Approximate dimensions in inches (mm).



# VENS-36

## 34.5 kV VOLTAGE TRANSFORMER



**INDOOR  
60 Hertz**

ARTECHE VENS series are dry type indoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

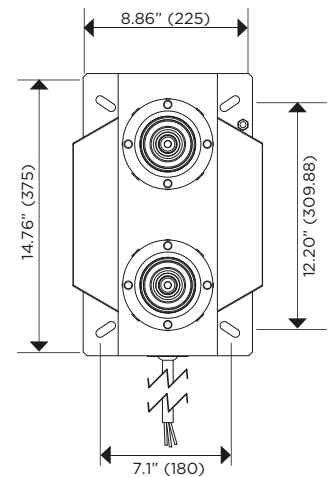
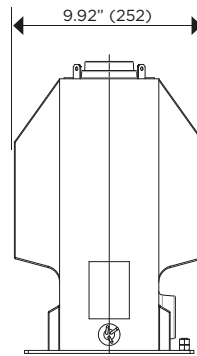
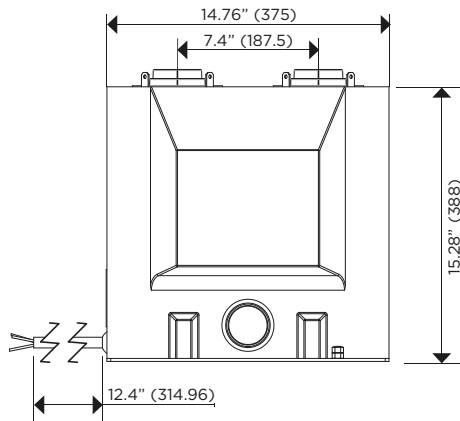
The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

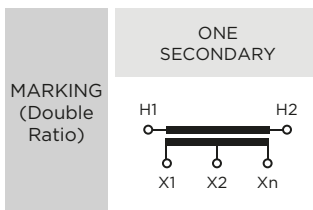
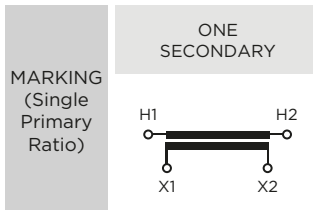
The new design is a voltage transformer for 19 feet (about 6 meter) intermittent submersible application with metallic coating. The model is cast in epoxy resin and is strongly insulated to environment. The VEN-36 (two phase) models are metering units and rated for use up to 34.5kV submersible operation up to 200kV BIL. The medium voltage terminals are bushing wells compatible with IEEE 386 interfaces.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) |
|---------------------|--------|---------------|
| Resin               | Gray   | 140           |



Drawing number: 4288303



Approximate dimensions in inches (mm).

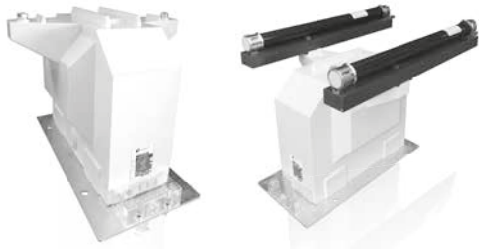


# VCS-36

# 34.5 kV VOLTAGE TRANSFORMER

Unfused

Fused



INDOOR  
60 Hertz

ARTECHE UC/UX/VC series are dry type indoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

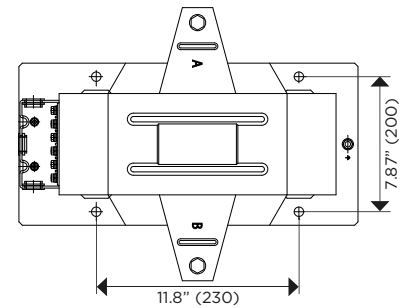
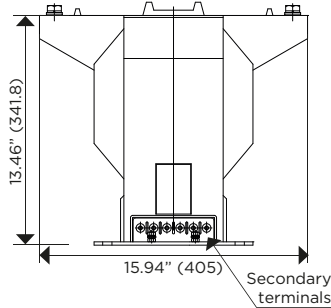
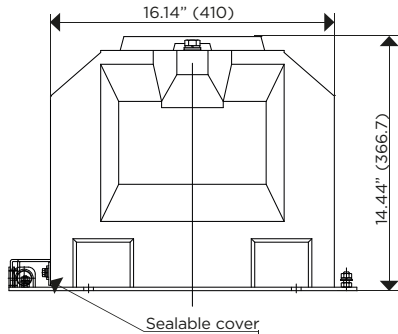
Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.



### Mechanical characteristics

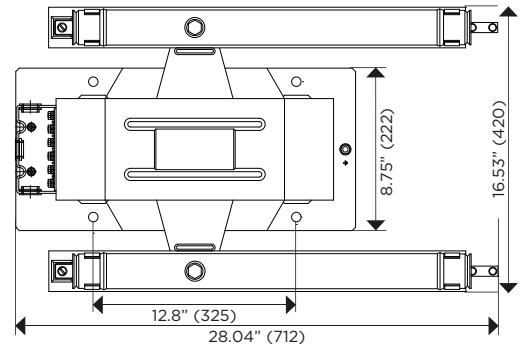
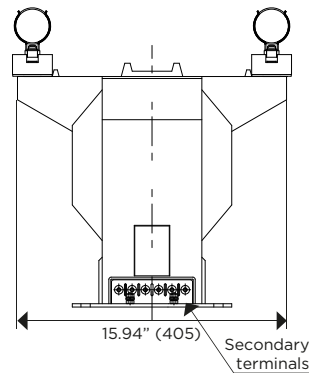
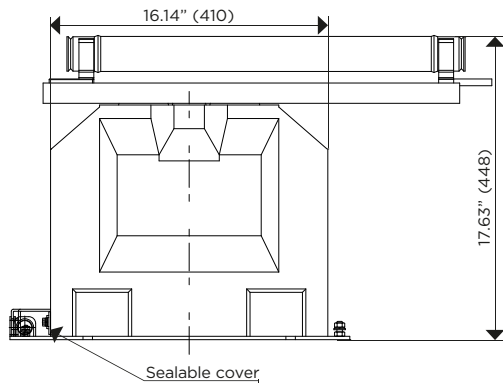
| Insulation Material | Colors | Weight (lbs.) |
|---------------------|--------|---------------|
| Resin               | Gray   | 174           |

Unfused:

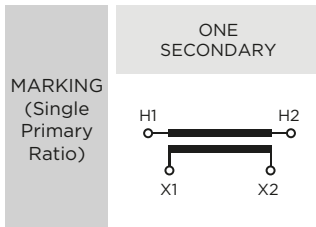


Drawing number: 4287358

Fused:



Drawing number: 4286162



Approximate dimensions in inches (mm).





# CID-7

# 5 kV CURRENT TRANSFORMER

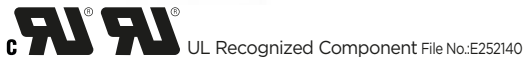


INDOOR  
60 Hertz

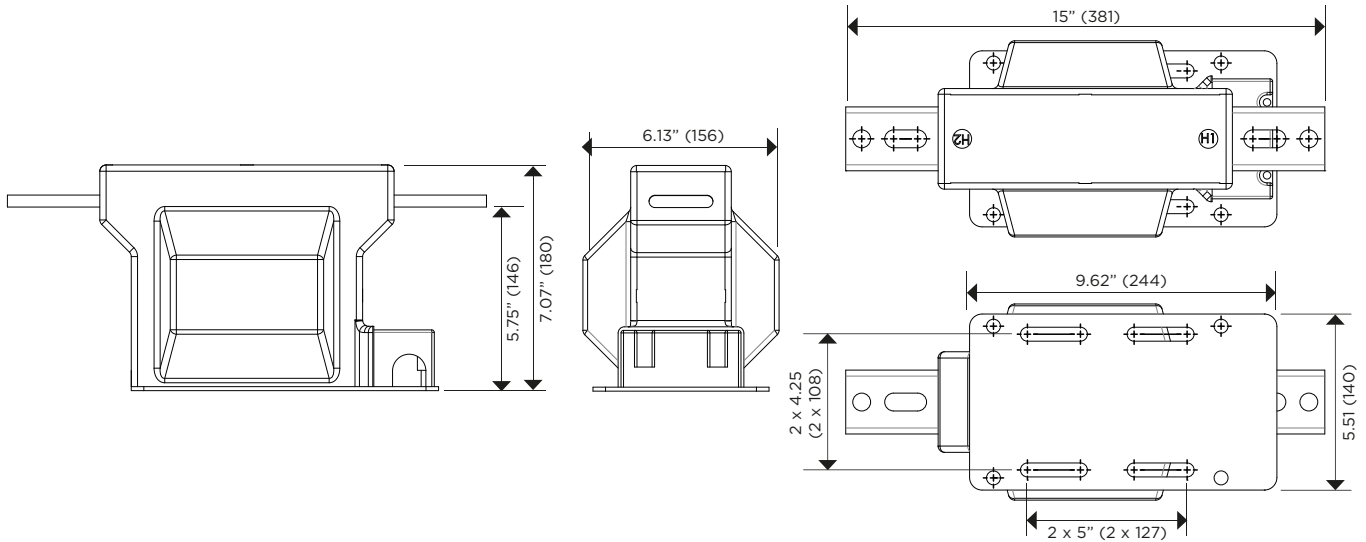
ARTECHE AC/CID Series are dry type indoor service current transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

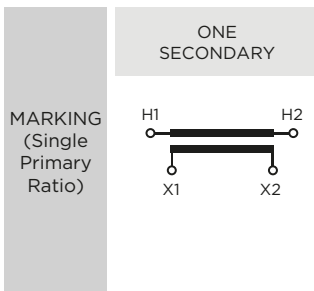
Partial discharge measurements exceed IEEE C57.13 2016 requirements.



| Mechanical characteristics |        |               |
|----------------------------|--------|---------------|
| Insulation Material        | Colors | Weight (lbs.) |
| Resin                      | Gray * | 38            |



Drawing number: 4287524



Approximate dimensions in inches (mm).



# ACD-12

# 8.7 kV CURRENT TRANSFORMER

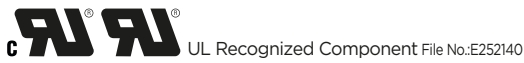


**INDOOR  
60 Hertz**

ARTECHE AC series are dry insulated indoor service current transformers. The CT core is encapsulated with Type B epoxy resin resulting in excellent internal dielectric properties and mechanical strength. The device is maintenance free, providing a long mechanical and electrical service life.

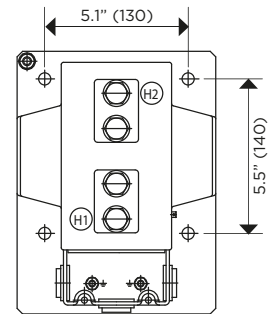
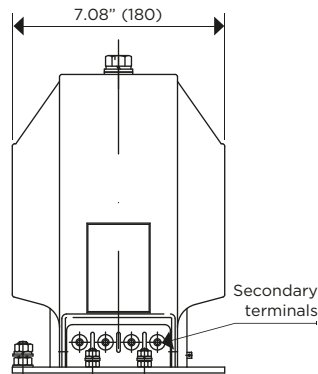
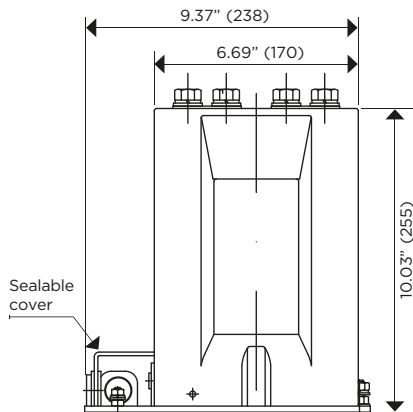
The core of the CT is constructed from silicon steel laminations with a high permeability grain orientation resulting in low core losses. The windings are copper wire with copper plate double isolation. Concentric distribution of the CT coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses under adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

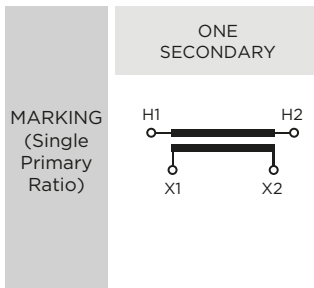


### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) |
|---------------------|--------|---------------|
| Resin               | Gray   | 35.3          |



Drawing number: 4286138



Approximate dimensions in inches (mm).



# AGPE-12

## 8.7 kV CURRENT TRANSFORMER



**INDOOR  
60 Hertz**

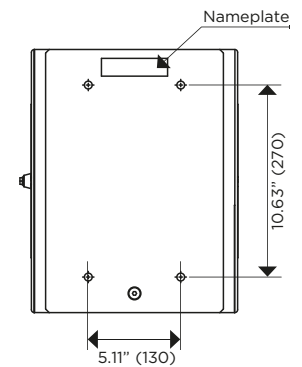
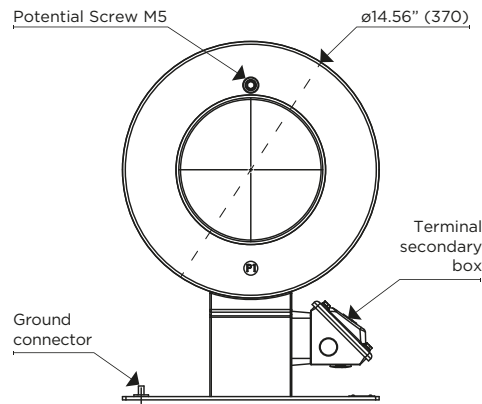
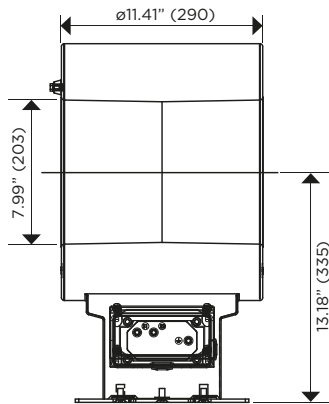
ARTECHE AG Series are dry type indoor service current transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

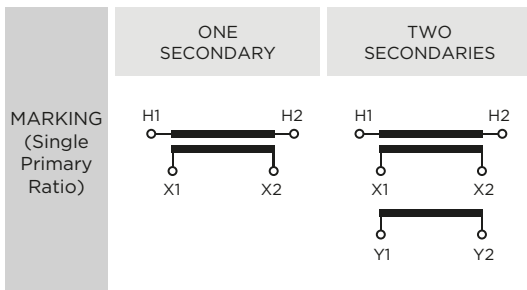
Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) |
|---------------------|--------|---------------|
| Resin               | Gray   | 165.3         |



Drawing number: 4286137



Approximate dimensions in inches (mm).



# ACD-17

# 15 kV CURRENT TRANSFORMER

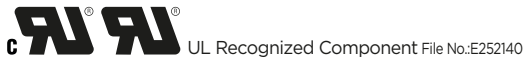


**INDOOR  
60 Hertz**

ARTECHE AC/CID Series are dry type indoor service current transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

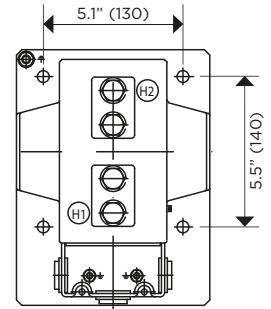
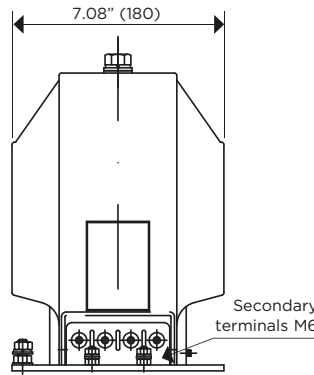
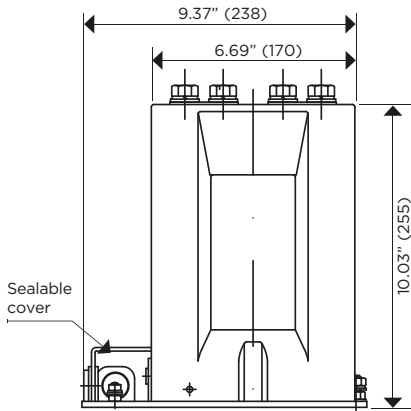
The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

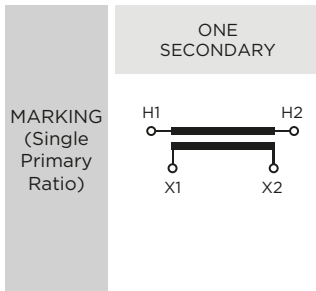


**Mechanical characteristics**

| Insulation Material | Colors | Weight (lbs.) |
|---------------------|--------|---------------|
| Resin               | Gray   | 35.3          |



Drawing number: 4286139



Approximate dimensions in inches (mm).





# ACH-17

# 15 kV CURRENT TRANSFORMER



**INDOOR  
60 Hertz**

ARTECHE AC/CID Series are dry type indoor service current transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

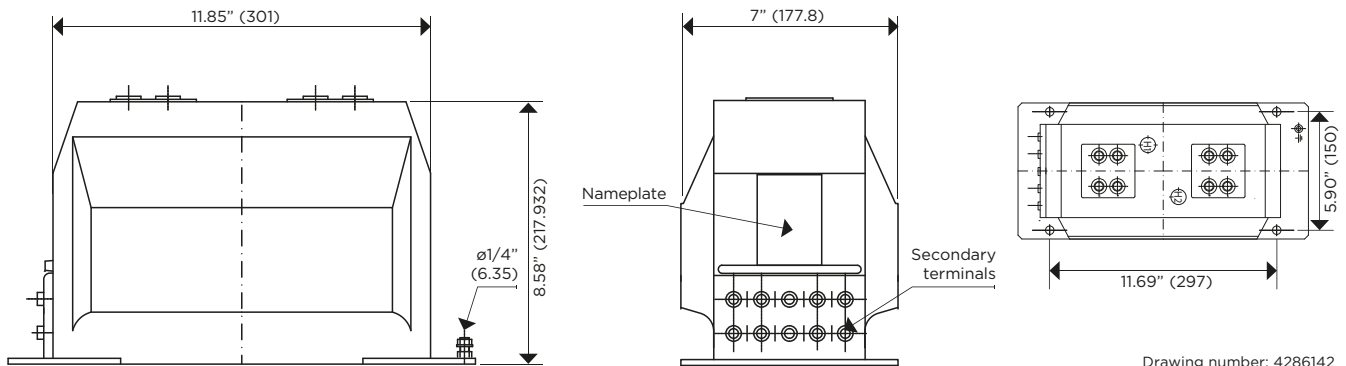
The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

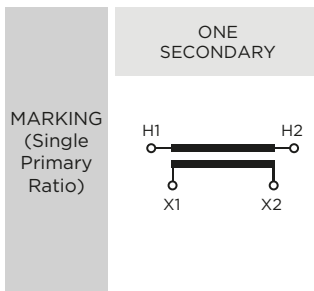


### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) |
|---------------------|--------|---------------|
| Resin               | Gray   | 63.8          |



Drawing number: 4286142



Approximate dimensions in inches (mm).



# ACI-17

## 15 kV CURRENT TRANSFORMER

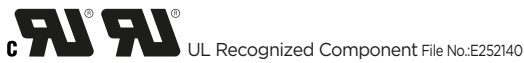


**INDOOR  
60 Hertz**

ARTECHE AC/CID Series are dry type indoor service current transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

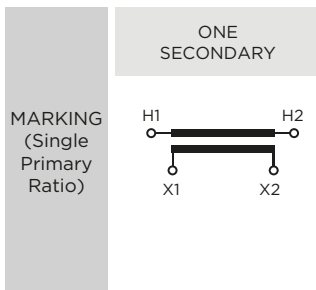
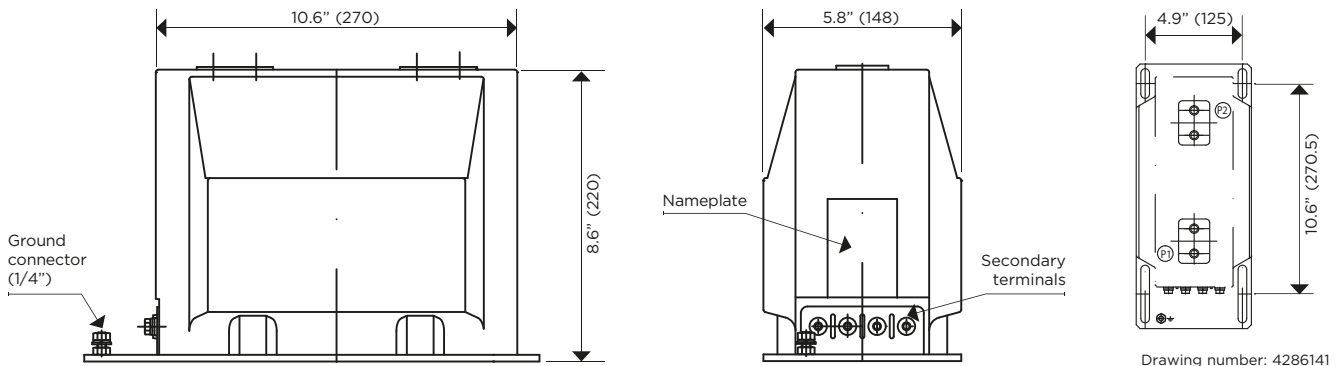
The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.



### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) |
|---------------------|--------|---------------|
| Resin               | Gray   | 46.2          |



Approximate dimensions in inches (mm).



# CID-17

# 15 kV CURRENT TRANSFORMER



**INDOOR  
60 Hertz**

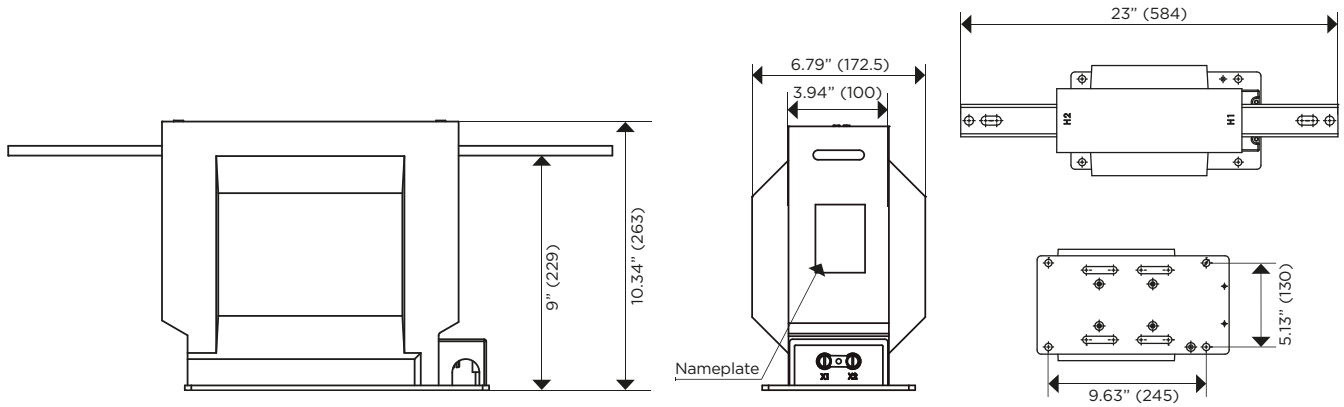
ARTECHE AC/CID Series are dry type indoor service current transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

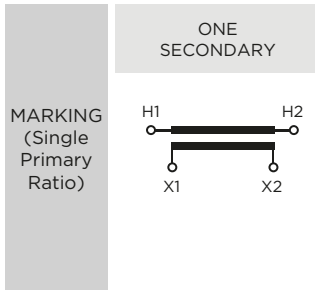
Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.



| Mechanical characteristics |        |               |
|----------------------------|--------|---------------|
| Insulation Material        | Colors | Weight (lbs.) |
| Resin                      | Gray   | 55            |



Drawing number: 4287278



Approximate dimensions in inches (mm).

# CID-17

## 15 kV CURRENT TRANSFORMER

| Electrical characteristics |  |   |                                    |   |                        |                |                             |          |   |  |
|----------------------------|--|---|------------------------------------|---|------------------------|----------------|-----------------------------|----------|---|--|
| Code                       | Current Ratio (Primary: Secondary) (A) | Continuous Thermal Current Rating Factor @ 30°C | Short-time Thermal Current (kA/1s) | Short-time Mechanical Current (kA <sub>peak</sub> ) | IEEE Metering Accuracy | Relay Accuracy | Nominal Voltage System (kV) | BIL (kV) | Power-Frequency Withstand Voltage (1 min) |  |
|                            |  |   |                                    |   |                        |                |                             |          | Primary & Secondary (kV <sub>rms</sub> )  | Secondary Winding (kV <sub>rms</sub> ) |
| 750961001                  | 5:5                                    | 1.5   | 0.5                                | 1   | 0.3 B-1.8              | C-200          | 15                          | 110      | 34  | 2.5                                    |
| 750961002                  | 10:5                                   | 1.5   | 1                                  | 2   | 0.3 B-1.8              | C-200          | 15                          | 110      | 34  | 2.5                                    |
| 750961003                  | 15:5                                   | 1.5   | 1.5                                | 3   | 0.3 B-1.8              | C-200          | 15                          | 110      | 34  | 2.5                                    |
| 750961004                  | 20:5                                   | 1.5   | 2                                  | 4   | 0.3 B-1.8              | C-200          | 15                          | 110      | 34  | 2.5                                    |
| 750961005                  | 25:5                                   | 1.5   | 2.5                                | 5   | 0.3 B-1.8              | C-200          | 15                          | 110      | 34  | 2.5                                    |
| 750961006                  | 30:5                                   | 1.5   | 3                                  | 6   | 0.3 B-1.8              | C-200          | 15                          | 110      | 34  | 2.5                                    |
| 750961008                  | 40:5                                   | 1.5   | 4                                  | 8   | 0.3 B-1.8              | C-200          | 15                          | 110      | 34  | 2.5                                    |
| 750961010                  | 50:5                                   | 1.5   | 5                                  | 10  | 0.3 B-1.8              | C-200          | 15                          | 110      | 34  | 2.5                                    |
| 750961015                  | 75:5                                   | 1.5   | 7.5                                | 15  | 0.3 B-1.8              | C-200          | 15                          | 110      | 34  | 2.5                                    |
| 750961020                  | 100:5                                  | 1.5   | 10                                 | 20  | 0.3 B-1.8              | C-200          | 15                          | 110      | 34  | 2.5                                    |
| 750961030                  | 150:5                                  | 1.5   | 15                                 | 30  | 0.3 B-1.8              | C-200          | 15                          | 110      | 34  | 2.5                                    |
| 750961040                  | 200:5                                  | 1.5   | 20                                 | 40  | 0.3 B-1.8              | C-200          | 15                          | 110      | 34  | 2.5                                    |
| 750961060                  | 300:5                                  | 1.5   | 30                                 | 60  | 0.3 B-1.8              | C-200          | 15                          | 110      | 34  | 2.5                                    |
| 750961080                  | 400:5                                  | 1.5   | 40                                 | 80  | 0.3 B-1.8              | C-200          | 15                          | 110      | 34  | 2.5                                    |
| 750961120                  | 600:5                                  | 1.5   | 50                                 | 95  | 0.3 B-1.8              | C-200          | 15                          | 110      | 34  | 2.5                                    |
| 750961160                  | 800:5                                  | 1.5   | 60                                 | 120   | 0.3 B-1.8              | C-200          | 15                          | 110      | 34  | 2.5                                    |
| 750961200                  | 1000:5                                 | 1.5   | 75                                 | 135   | 0.3 B-1.8              | C-200          | 15                          | 110      | 34  | 2.5                                    |
| 750961240                  | 1200:5                                 | 1.2   | 84                                 | 150   | 0.3 B-1.8              | C-200          | 15                          | 110      | 34  | 2.5                                    |
| 750969001                  | 5:5                                    | 1.5   | 0.5                                | 1   | 0.15 B0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 750969002                  | 10:5                                   | 1.5   | 1                                  | 2   | 0.15 B0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 750969003                  | 15:5                                   | 1.5   | 1.5                                | 3   | 0.15 B0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 750969004                  | 20:5                                   | 1.5   | 2                                  | 4   | 0.15 B0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 750969005                  | 25:5                                   | 1.5   | 2.5                                | 5   | 0.15 B0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 750969006                  | 30:5                                   | 1.5   | 3                                  | 6   | 0.15 B0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 750969008                  | 40:5                                   | 1.5   | 4                                  | 8   | 0.15 B0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 750969010                  | 50:5                                   | 1.5   | 5                                  | 10  | 0.15 B0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 750969015                  | 75:5                                   | 1.5   | 7.5                                | 15  | 0.15 B0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 750969020                  | 100:5                                  | 1.5   | 10                                 | 20  | 0.15 B0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 750969030                  | 150:5                                  | 1.5   | 15                                 | 30  | 0.15 B0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 750969040                  | 200:5                                  | 1.5   | 20                                 | 40  | 0.15 B0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 750969060                  | 300:5                                  | 1.5   | 30                                 | 60  | 0.15 B0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 750969080                  | 400:5                                  | 1.5   | 40                                 | 80  | 0.15 B0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 750969120                  | 600:5                                  | 1.5   | 50                                 | 95  | 0.15 B0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 750969160                  | 800:5                                  | 1.5   | 60                                 | 120   | 0.15 B0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 750969200                  | 1000:5                                 | 1.5   | 75                                 | 135   | 0.15 B0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 750969240                  | 1200:5                                 | 1.2   | 84                                 | 150   | 0.15 B0.5              | -              | 15                          | 110      | 34  | 2.5                                    |

Additional ratings available upon request.

| Electrical characteristics  |   |  |   |  |                           |                   |                                      |             |   |  |
|---|---|--|---|--|---------------------------|-------------------|--------------------------------------|-------------|---|--|
| Code  | Current Ratio<br>(Primary:<br>Secondary)<br>(A) | Continuous<br>Thermal<br>Current<br>Rating<br>Factor @<br>30°C | Short-<br>time<br>Thermal<br>Current<br>(kA/1s) | Short-time<br>Mechanical<br>Current<br>(kA <sub>peak</sub> ) | IEEE Metering<br>Accuracy | Relay<br>Accuracy | Nominal<br>Voltage<br>System<br>(kV) | BIL<br>(kV) | Power-Frequency<br>Withstand Voltage<br>(1 min) |  |
|   |   |  |   |  |                           |                   |                                      |             | Primary &<br>Secondary<br>(kV <sub>rms</sub> )  | Secondary<br>Winding<br>(kV <sub>rms</sub> ) |
| <b>High Accuracy Extended Range 5% nominal current to Rating Factor</b> |   |  |   |  |                           |                   |                                      |             |   |  |
| 750967001   | 5:5   | 1.5  | 0.5   | 1  | 0.15S B0.5                | -                 | 15                                   | 110         | 34  | 2.5  |
| 750967002   | 10:5  | 1.5  | 1   | 2  | 0.15S B0.5                | -                 | 15                                   | 110         | 34  | 2.5  |
| 750967003   | 15:5  | 1.5  | 1.5   | 3  | 0.15S B0.5                | -                 | 15                                   | 110         | 34  | 2.5  |
| 750967004   | 20:5  | 1.5  | 2   | 4  | 0.15S B0.5                | -                 | 15                                   | 110         | 34  | 2.5  |
| 750967005   | 25:5  | 1.5  | 2.5   | 5  | 0.15S B0.5                | -                 | 15                                   | 110         | 34  | 2.5  |
| 750967006   | 30:5  | 1.5  | 3   | 6  | 0.15S B0.5                | -                 | 15                                   | 110         | 34  | 2.5  |
| 750967008   | 40:5  | 1.5  | 4   | 8  | 0.15S B0.5                | -                 | 15                                   | 110         | 34  | 2.5  |
| 750967010   | 50:5  | 1.5  | 5   | 10   | 0.15S B0.5                | -                 | 15                                   | 110         | 34  | 2.5  |
| 750967015   | 75:5  | 1.5  | 7.5   | 15   | 0.15S B0.5                | -                 | 15                                   | 110         | 34  | 2.5  |
| 750967020   | 100:5   | 1.5  | 10  | 20   | 0.15S B0.5                | -                 | 15                                   | 110         | 34  | 2.5  |
| 750967030   | 150:5   | 1.5  | 15  | 30   | 0.15S B0.5                | -                 | 15                                   | 110         | 34  | 2.5  |
| 750967040   | 200:5   | 1.5  | 20  | 40   | 0.15S B0.5                | -                 | 15                                   | 110         | 34  | 2.5  |
| 750967060   | 300:5   | 1.5  | 30  | 60   | 0.15S B0.5                | -                 | 15                                   | 110         | 34  | 2.5  |
| 750967080   | 400:5   | 1.5  | 40  | 80   | 0.15S B0.5                | -                 | 15                                   | 110         | 34  | 2.5  |
| 750967120   | 600:5   | 1.5  | 50  | 95   | 0.15S B0.5                | -                 | 15                                   | 110         | 34  | 2.5  |
| 750967160   | 800:5   | 1.5  | 60  | 120  | 0.15S B0.5                | -                 | 15                                   | 110         | 34  | 2.5  |
| 750967200   | 1000:5  | 1.5  | 75  | 135  | 0.15S B0.5                | -                 | 15                                   | 110         | 34  | 2.5  |
| 750967240   | 1200:5  | 1.2  | 84  | 150  | 0.15S B0.5                | -                 | 15                                   | 110         | 34  | 2.5  |
| <b>High Accuracy Extended Range 1% nominal current to Rating Factor</b> |   |  |   |  |                           |                   |                                      |             |   |  |
| 750968040   | 200:5   | 2.0  | 20  | 40   | 0.15 B-1.8                | -                 | 15                                   | 110         | 34  | 2.5  |
| 750968120   | 600:5   | 2.0  | 50  | 95   | 0.15 B-1.8                | -                 | 15                                   | 110         | 34  | 2.5  |
| 750968200   | 1000:5  | 1.5  | 75  | 135  | 0.15 B-1.8                | -                 | 15                                   | 110         | 34  | 2.5  |
| 750968240   | 1200:5  | 1.2  | 84  | 150  | 0.15 B-1.8                | -                 | 15                                   | 110         | 34  | 2.5  |

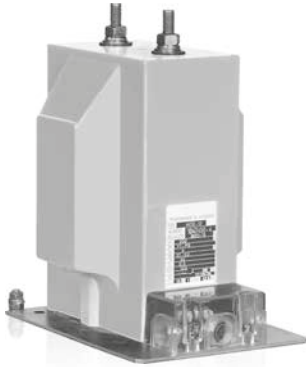
Additional ratings available upon request.





# ACD-24

# 25 kV CURRENT TRANSFORMER



**INDOOR  
60 Hertz**

ARTECHE AC/CID Series are dry type indoor service current transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

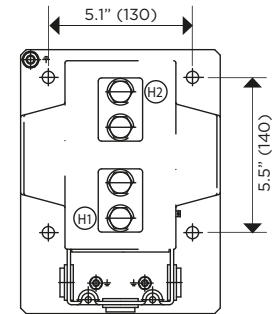
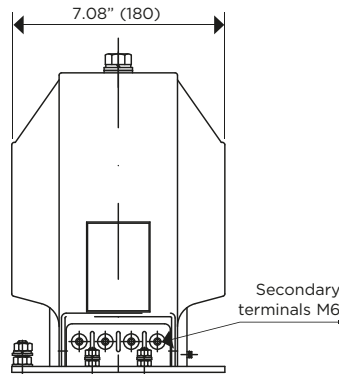
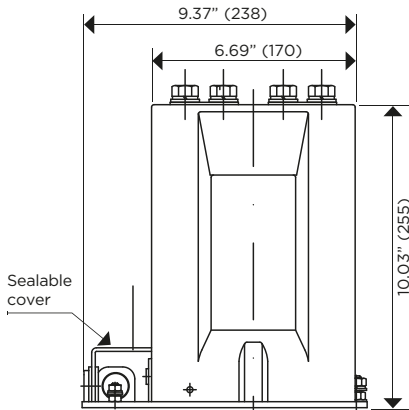
The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

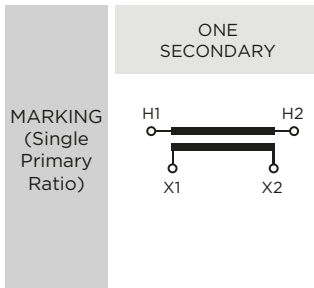
**UL** UL Recognized Component File No.:E252140

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) |
|---------------------|--------|---------------|
| Resin               | Gray   | 35.3          |



Drawing number: 4286140



Approximate dimensions in inches (mm).



# ACH-24

# 25 kV CURRENT TRANSFORMER

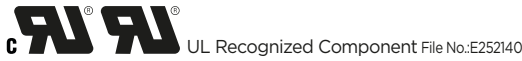


**INDOOR  
60 Hertz**

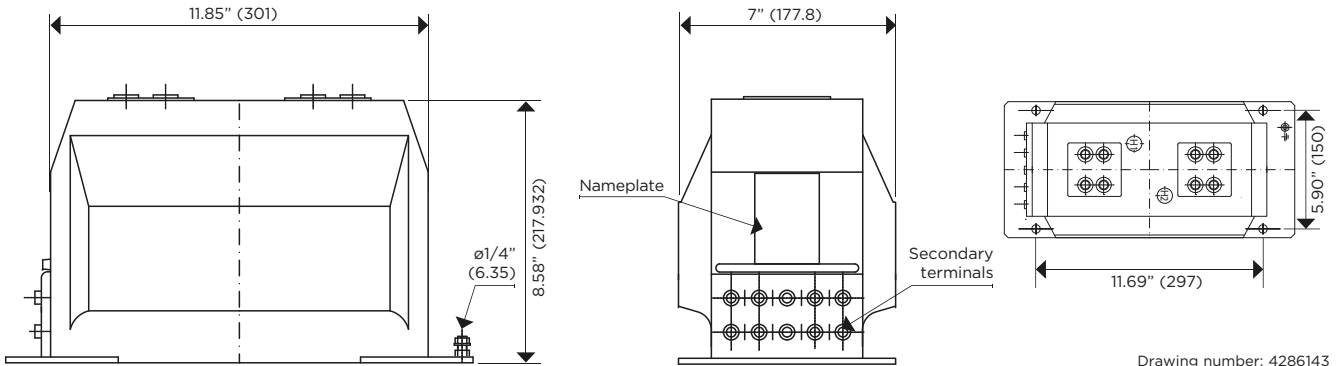
ARTECHE AC/CID Series are dry type indoor service current transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

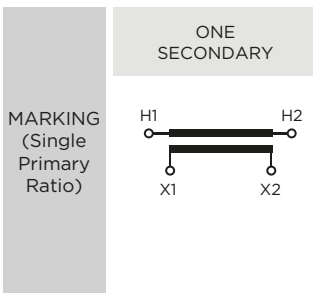
Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.



| Mechanical characteristics |        |               |
|----------------------------|--------|---------------|
| Insulation Material        | Colors | Weight (lbs.) |
| Resin                      | Gray   | 63.8          |



Drawing number: 4286143



Approximate dimensions in inches (mm).



# ACA-36

# 34.5 kV CURRENT TRANSFORMER

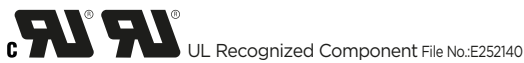


**INDOOR  
60 Hertz**

ARTECHE AC/CID Series are dry type indoor service current transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

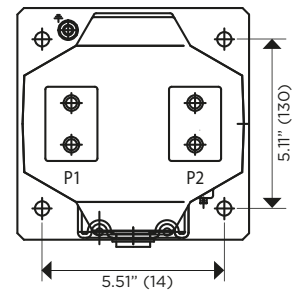
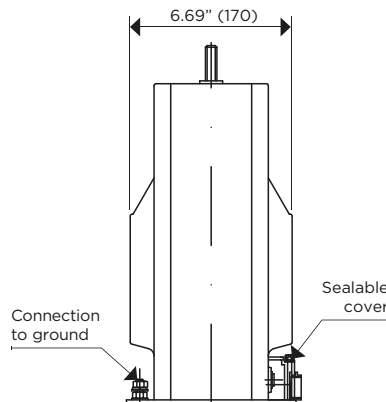
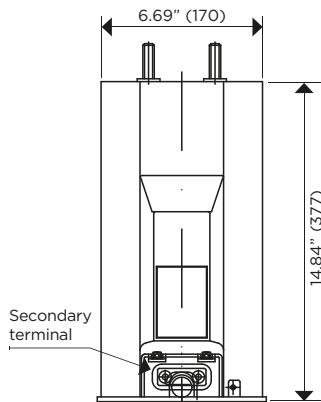
The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

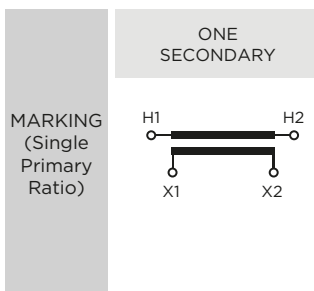


### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) |
|---------------------|--------|---------------|
| Resin               | Gray   | 35.3          |



Drawing number: 4286144



Approximate dimensions in inches (mm).



# ACF-36

# 34.5 kV CURRENT TRANSFORMER

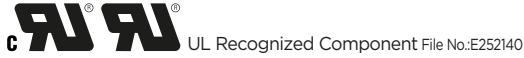


**INDOOR  
60 Hertz**

ARTECHE AC/CID Series are dry type indoor service current transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

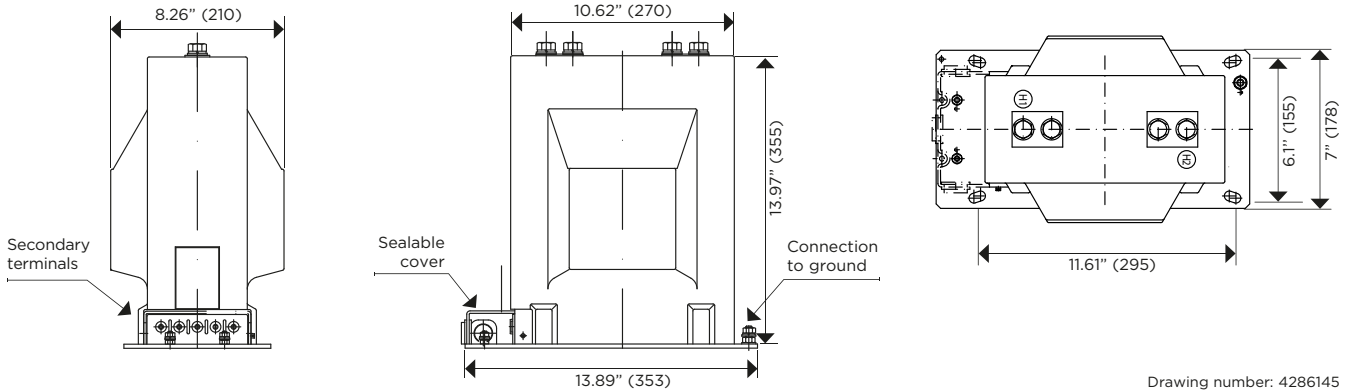
The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.



### Mechanical characteristics

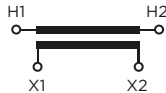
| Insulation Material | Colors | Weight (lbs.) |
|---------------------|--------|---------------|
| Resin               | Gray   | 79.4          |



Drawing number: 4286145

ONE  
SECONDARY

MARKING  
(Single  
Primary  
Ratio)



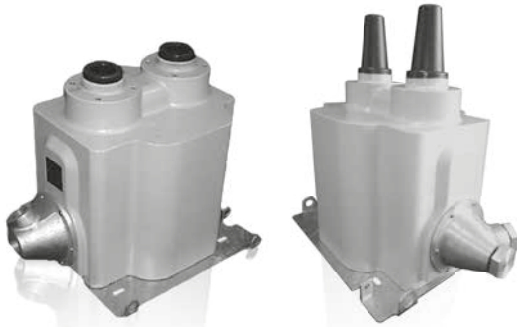
Approximate dimensions in inches (mm).





# KCB-17

# 15 kV COMBINED TRANSFORMER



KCB 200 A

KCB 600 A

INDOOR  
60 Hertz

ARTECHE KCB series are dry type indoor service dead-front combination CT-PT

The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

The entire surface of the transformer is coated with a conductive layer that is intended to be solidly grounded when energized. This allows for compact mounting inside switchgear or enclosures.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

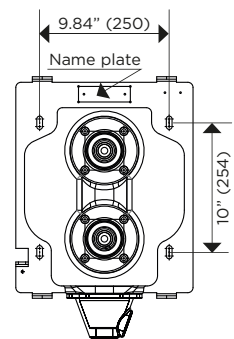
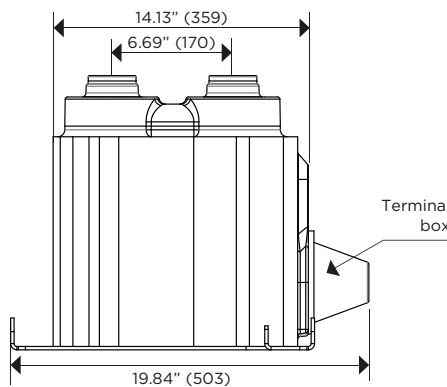
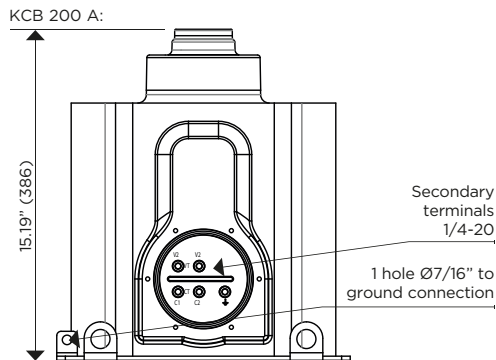
Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

The primary terminals are standard 200 or 600 Ampere rated dead-front bushing well and can be connected using IEEE 368 standard inserts and elbow connectors.

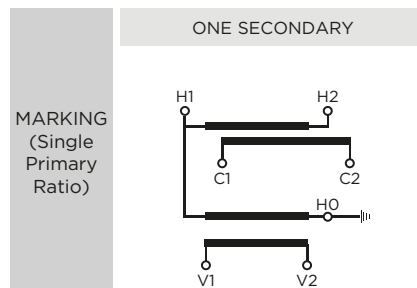
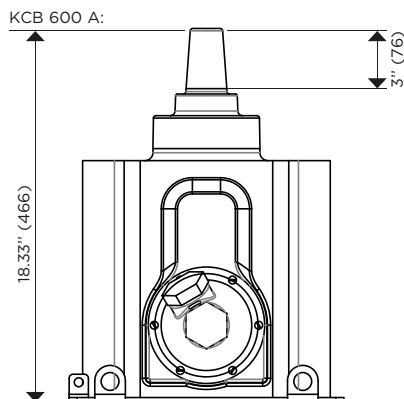
The secondary terminals are 1/4" slotted screws with flat and lock washers located inside a metallic terminal cover with two 1" NPT conduit hubs. The ground terminal is provided inside the terminal cover along with a manually operated CT secondary shorting device for safety purposes.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) |
|---------------------|--------|---------------|
| Metallized resin    | Gray   | 150           |



Drawing number: 4286592 (200 A) / 4287655 (600 A)



MARKING  
(Single  
Primary  
Ratio)

Approximate dimensions in inches (mm).

# KCB-17

## 15 kV COMBINED TRANSFORMER

| Electrical characteristics |  |  |   |  |  |   |                                      |             |  |   |                                   |
|----------------------------|--|--|---|--|--|---|--------------------------------------|-------------|--|---|-----------------------------------|
| Code                       | Current Ratio<br>(Primary:<br>Secondary) | Continuous<br>Thermal<br>Current<br>Rating<br>Factor @<br>30°C | Short-<br>time<br>Thermal<br>Current<br>(kA/1s) | Short-time<br>Mechanical<br>Current<br>(kA <sub>peak</sub> ) | IEEE<br>Metering<br>Accuracy<br>[Current<br>Transformer] | IEEE Metering<br>Accuracy<br>[Voltage<br>Transformer] | Nominal<br>Voltage<br>System<br>(kV) | BIL<br>(kV) | Power-Frequency<br>Withstand Voltage<br>(1 min)              |   | Primary<br>Terminals              |
|                            |  |  |   |  |  |   |                                      |             | Power<br>frequency<br>applied<br>voltage<br>test<br>(kV rms) | Power<br>frequency<br>secondary<br>applied<br>voltage<br>test (kV<br>rms) |                                   |
| 770034011                  | 5:5                                      | 2.0  | 0.5   | 1.25   | 0.3 B-0.5  | 0.3 W,X,M,Y/1.2Z                                      | 15                                   | 95          | 34   | 2.5   | 200 A Bushing Well Interface      |
| 770034021                  | 10:5                                     | 2.0  | 1   | 2.5  | 0.3 B-0.5  | 0.3 W,X,M,Y/1.2Z                                      | 15                                   | 95          | 34   | 2.5   | 200 A Bushing Well Interface      |
| 770034031                  | 15:5                                     | 2.0  | 1.5   | 3.75   | 0.3 B-0.5  | 0.3 W,X,M,Y/1.2Z                                      | 15                                   | 95          | 34   | 2.5   | 200 A Bushing Well Interface      |
| 770034041                  | 20:5                                     | 2.0  | 2   | 5  | 0.3 B-0.5  | 0.3 W,X,M,Y/1.2Z                                      | 15                                   | 95          | 34   | 2.5   | 200 A Bushing Well Interface      |
| 770034051                  | 25:5                                     | 2.0  | 2.5   | 6.25   | 0.3 B-0.5  | 0.3 W,X,M,Y/1.2Z                                      | 15                                   | 95          | 34   | 2.5   | 200 A Bushing Well Interface      |
| 770034061                  | 30:5                                     | 2.0  | 3   | 7.5  | 0.3 B-0.5  | 0.3 W,X,M,Y/1.2Z                                      | 15                                   | 95          | 34   | 2.5   | 200 A Bushing Well Interface      |
| 770034081                  | 40:5                                     | 2.0  | 4   | 10   | 0.3 B-0.5  | 0.3 W,X,M,Y/1.2Z                                      | 15                                   | 95          | 34   | 2.5   | 200 A Bushing Well Interface      |
| 770034101                  | 50:5                                     | 2.0  | 5   | 12.5   | 0.3 B-0.5  | 0.3 W,X,M,Y/1.2Z                                      | 15                                   | 95          | 34   | 2.5   | 200 A Bushing Well Interface      |
| 770034151                  | 75:5                                     | 2.0  | 7.5   | 18.75  | 0.3 B-0.5  | 0.3 W,X,M,Y/1.2Z                                      | 15                                   | 95          | 34   | 2.5   | 200 A Bushing Well Interface      |
| 770034201                  | 100:5                                    | 2.0  | 10  | 25   | 0.3 B-0.5  | 0.3 W,X,M,Y/1.2Z                                      | 15                                   | 95          | 34   | 2.5   | 200 A Bushing Well Interface      |
| 770035301                  | 150:5                                    | 1.33   | 10  | 25   | 0.3 B-0.5  | 0.3 W,X,M,Y/1.2Z                                      | 15                                   | 95          | 34   | 2.5   | 200 A Bushing Well Interface      |
| 770035401                  | 200:5                                    | 1.0  | 10  | 25   | 0.3 B-0.5  | 0.3 W,X,M,Y/1.2Z                                      | 15                                   | 95          | 34   | 2.5   | 200 A Bushing Well Interface      |
| 770031131                  | 300:5                                    | 1.5  | 30  | 75   | 0.3 B-0.5  | 0.3 W,X,M,Y/1.2Z                                      | 15                                   | 95          | 34   | 2.5   | 600 A Dead break Interface 15.2kV |
| 770031141                  | 400:5                                    | 1.5  | 40  | 100  | 0.3 B-0.5  | 0.3 W,X,M,Y/1.2Z                                      | 15                                   | 95          | 34   | 2.5   | 600 A Dead break Interface 15.2kV |
| 770031251                  | 600:5                                    | 1.0  | 60  | 150  | 0.3 B-0.5  | 0.3 W,X,M,Y/1.2Z                                      | 15                                   | 95          | 34   | 2.5   | 600 A Dead break Interface 15.2kV |
| 770031101                  | 100:5                                    | 2.0  | 10  | 25   | 0.15 B-0.5*  | 0.3 W,X,M,Y/1.2Z                                      | 15                                   | 95          | 34   | 2.5   | 200 A Bushing Well Interface      |
| 770031121                  | 200:5                                    | 2.0  | 20  | 50   | 0.15 B-0.5*  | 0.3 W,X,M,Y/1.2Z                                      | 15                                   | 95          | 34   | 2.5   | 600 A Dead break Interface 15.2kV |
| 770031151                  | 600:5                                    | 1.0  | 48  | 120  | 0.15 B-0.5*  | 0.3 W,X,M,Y/1.2Z                                      | 15                                   | 95          | 34   | 2.5   | 600 A Dead break Interface 15.2kV |

\* Accuracy range: 1% to RF

| Voltage Ratings |              |               |                     |                                      |                               |
|-----------------|--------------|---------------|---------------------|--------------------------------------|-------------------------------|
| VT Ratio        | Primary (V)  | Secondary (V) | Thermal Burden (VA) | Continuous Rated Voltage Factor (Un) | Rated Voltage Factor 30s (Un) |
| 60:1            | 7200/12470GY | 120           | 750                 | 1.1                                  | 1.25                          |

Additional VT ratios are available. Please contact Artech for details.

### Notes:

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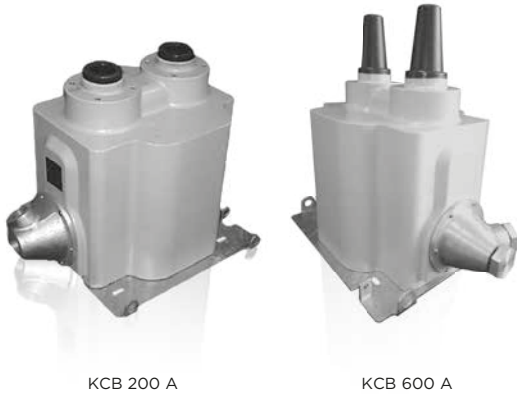
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# KCB-24

# 25 kV COMBINED TRANSFORMER



INDOOR  
60 Hertz

ARTECHE KCB series are dry type indoor service dead-front combination CT-PT.

The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

The entire surface of the transformer is coated with a conductive layer that is intended to be solidly grounded when energized. This allows for compact mounting inside switchgear or enclosures.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

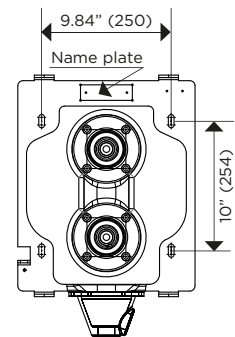
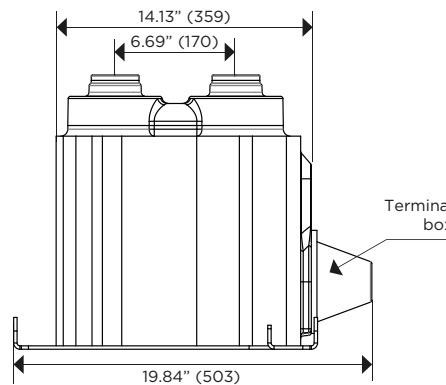
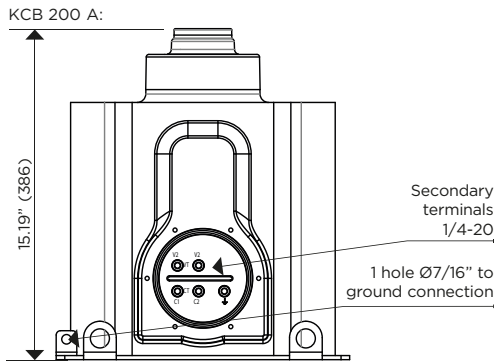
Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

The primary terminals are standard 200 or 600 Ampere rated dead-front bushing well and can be connected using IEEE 368 standard inserts and elbow connectors.

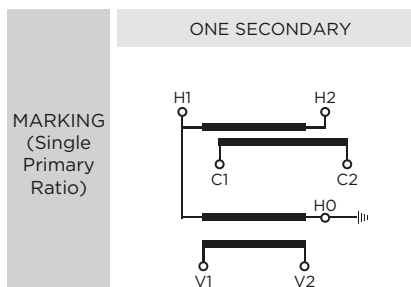
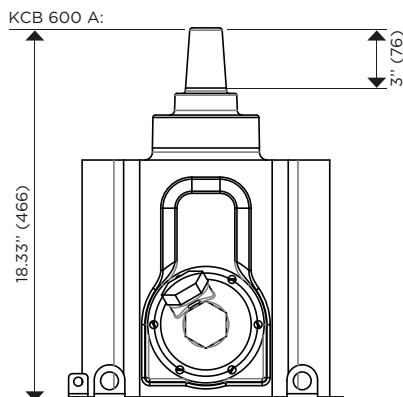
The secondary terminals are 1/4" slotted screws with flat and lock washers located inside a metallic terminal cover with two 1" NPT conduit hubs. The ground terminal is provided inside the terminal cover along with a manually operated CT secondary shorting device for safety purposes.

## Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) |
|---------------------|--------|---------------|
| Metallized resin    | Gray   | 150           |



Drawing number: 9449854 (200 A) / 4287736 (600 A)



Approximate dimensions in inches (mm).

# KCB-24

## 25 kV COMBINED TRANSFORMER

| Electrical characteristics |                                       |   |                                    |   |  |  |                             |          |   |   |                                   |
|----------------------------|---------------------------------------|---|------------------------------------|---|--|--|-----------------------------|----------|---|---|-----------------------------------|
| Code                       | Current Ratio<br>(Primary: Secondary) | Continuous Thermal Current Rating Factor @ 30°C | Short-time Thermal Current (kA/1s) | Short-time Mechanical Current (kA <sub>peak</sub> ) | IEEE Metering Accuracy [Current Transformer] | IEEE Metering Accuracy [Voltage Transformer] | Nominal Voltage System (kV) | BIL (kV) | Power-Frequency Withstand Voltage (1 min)     |   | Primary Terminals                 |
|                            |                                       |   |                                    |   |  |  |                             |          | Power frequency applied voltage test (kV rms) | Power frequency secondary applied voltage test (kV rms) |                                   |
| 770104016                  | 5:5                                   | 2.0   | 0.5                                | 1.25  | 0.3 B-0.5                                    | 0.3 W,X,M,Y/1.2Z                             | 25                          | 125      | 50  | 2.5   | 200 A Bushing Well Interface      |
| 770104026                  | 10:5                                  | 2.0   | 1                                  | 2.5   | 0.3 B-0.5                                    | 0.3 W,X,M,Y/1.2Z                             | 25                          | 125      | 50  | 2.5   | 200 A Bushing Well Interface      |
| 770104036                  | 15:5                                  | 2.0   | 1.5                                | 3.75  | 0.3 B-0.5                                    | 0.3 W,X,M,Y/1.2Z                             | 25                          | 125      | 50  | 2.5   | 200 A Bushing Well Interface      |
| 770104046                  | 20:5                                  | 2.0   | 2                                  | 5   | 0.3 B-0.5                                    | 0.3 W,X,M,Y/1.2Z                             | 25                          | 125      | 50  | 2.5   | 200 A Bushing Well Interface      |
| 770104056                  | 25:5                                  | 2.0   | 2.5                                | 6.25  | 0.3 B-0.5                                    | 0.3 W,X,M,Y/1.2Z                             | 25                          | 125      | 50  | 2.5   | 200 A Bushing Well Interface      |
| 770104066                  | 30:5                                  | 2.0   | 3                                  | 7.5   | 0.3 B-0.5                                    | 0.3 W,X,M,Y/1.2Z                             | 25                          | 125      | 50  | 2.5   | 200 A Bushing Well Interface      |
| 770104086                  | 40:5                                  | 2.0   | 4                                  | 10  | 0.3 B-0.5                                    | 0.3 W,X,M,Y/1.2Z                             | 25                          | 125      | 50  | 2.5   | 200 A Bushing Well Interface      |
| 770104106                  | 50:5                                  | 2.0   | 5                                  | 12.5  | 0.3 B-0.5                                    | 0.3 W,X,M,Y/1.2Z                             | 25                          | 125      | 50  | 2.5   | 200 A Bushing Well Interface      |
| 770104156                  | 75:5                                  | 2.0   | 7.5                                | 18.75   | 0.3 B-0.5                                    | 0.3 W,X,M,Y/1.2Z                             | 25                          | 125      | 50  | 2.5   | 200 A Bushing Well Interface      |
| 770104206                  | 100:5                                 | 2.0   | 10                                 | 25  | 0.3 B-0.5                                    | 0.3 W,X,M,Y/1.2Z                             | 25                          | 125      | 50  | 2.5   | 200 A Bushing Well Interface      |
| 770105306                  | 150:5                                 | 1.33  | 10                                 | 25  | 0.3 B-0.5                                    | 0.3 W,X,M,Y/1.2Z                             | 25                          | 125      | 50  | 2.5   | 200 A Bushing Well Interface      |
| 770105406                  | 200:5                                 | 1.0   | 10                                 | 25  | 0.3 B-0.5                                    | 0.3 W,X,M,Y/1.2Z                             | 25                          | 125      | 50  | 2.5   | 200 A Bushing Well Interface      |
| 770101136                  | 300:5                                 | 1.5   | 30                                 | 75  | 0.3 B-0.5                                    | 0.3 W,X,M,Y/1.2Z                             | 25                          | 125      | 50  | 2.5   | 600 A Dead break Interface 21.1kV |
| 770101146                  | 400:5                                 | 1.5   | 40                                 | 100   | 0.3 B-0.5                                    | 0.3 W,X,M,Y/1.2Z                             | 25                          | 125      | 50  | 2.5   | 600 A Dead break Interface 21.1kV |
| 770101256                  | 600:5                                 | 1.0   | 60                                 | 150   | 0.3 B-0.5                                    | 0.3 W,X,M,Y/1.2Z                             | 25                          | 125      | 50  | 2.5   | 600 A Dead break Interface 21.1kV |
| 770101106                  | 100:5                                 | 2.0   | 10                                 | 25  | 0.15 B-0.5*                                  | 0.3 W,X,M,Y/1.2Z                             | 25                          | 125      | 50  | 2.5   | 200 A Bushing Well Interface      |
| 770101126                  | 200:5                                 | 2.0   | 20                                 | 50  | 0.15 B-0.5*                                  | 0.3 W,X,M,Y/1.2Z                             | 25                          | 125      | 50  | 2.5   | 600 A Dead break Interface 21.1kV |
| 770101156                  | 600:5                                 | 1.0   | 48                                 | 120   | 0.15 B-0.5*                                  | 0.3 W,X,M,Y/1.2Z                             | 25                          | 125      | 50  | 2.5   | 600 A Dead break Interface 21.1kV |

\* Accuracy range: 1% to RF

| Voltage Ratings |               |               |                     |                                      |                               |
|-----------------|---------------|---------------|---------------------|--------------------------------------|-------------------------------|
| VT Ratio        | Primary (V)   | Secondary (V) | Thermal Burden (VA) | Continuous Rated Voltage Factor (Un) | Rated Voltage Factor 30s (Un) |
| 120:1           | 14400/24940GY | 120           | 750                 | 1.1                                  | 1.25                          |

Additional VT ratios are available. Please contact Artech for details.

### Notes:

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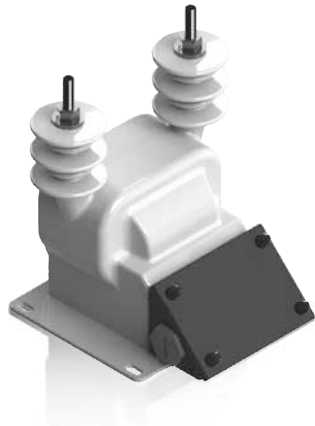
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5 kV – 69 kV  
OUTDOOR  
INSTRUMENT  
TRANSFORMERS  
& METERING  
UNITS

# VRL-7

# 5 kV VOLTAGE TRANSFORMER



**OUTDOOR**  
60 Hertz

ARTECHE VRL/URL-7 series are dry type outdoor service voltage transformers.

The core and coils are encapsulated with Cycloaliphatic Epoxy Resin (CEP) which provides excellent dielectric properties, mechanical strength, resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life.

URL-7/VRL-7 family can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which additionally increases the transformer's weatherability and offers better performance in heavily polluted environments. The transformer is maintenance free.

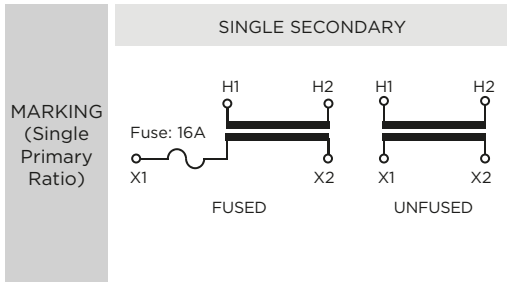
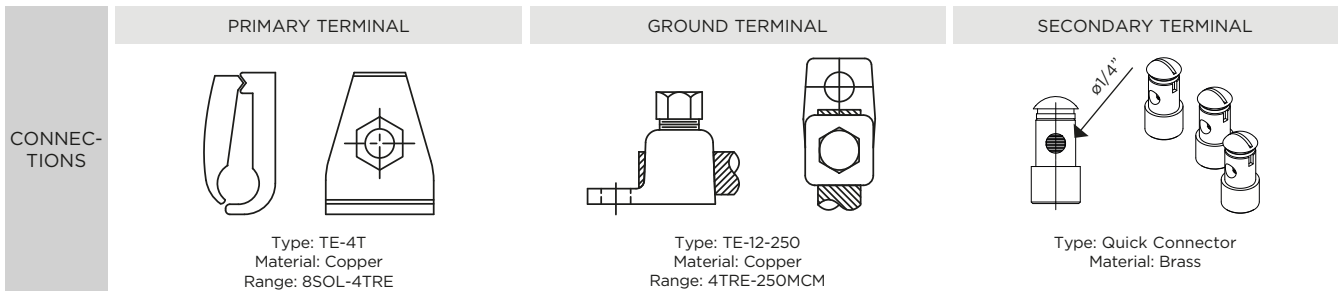
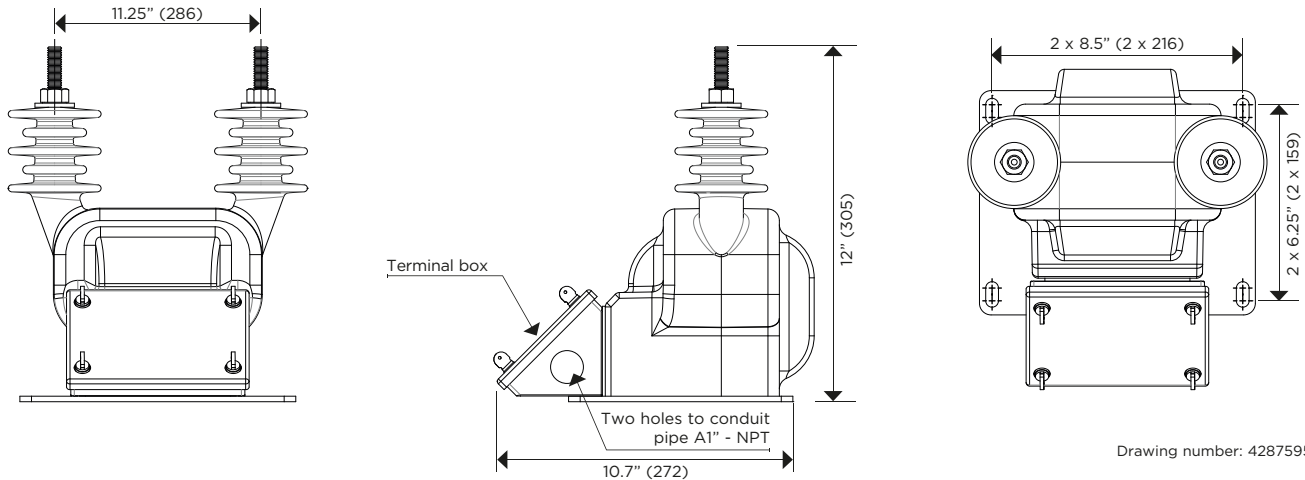
The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE requirements.

This voltage transformer is designed for mounting on poles or substation structures in an upright, underhung or cantilever position.

**Mechanical characteristics**

| Insulation Material | Colors | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|---------------------|--------|---------------|------------------------|----------------------|
| Resin               | Gray   | 40            | 15.8                   | 3                    |



Approximate dimensions in inches (mm).





# URJR-17

# 15 kV VOLTAGE TRANSFORMER



**OUTDOOR  
60 Hertz**

ARTECHE URJR/VRJR series are dry type outdoor service voltage transformers.

The core and coils are encapsulated with Cycloaliphatic Epoxy Resin (CEP) which provides excellent dielectric properties, mechanical strength, resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life.

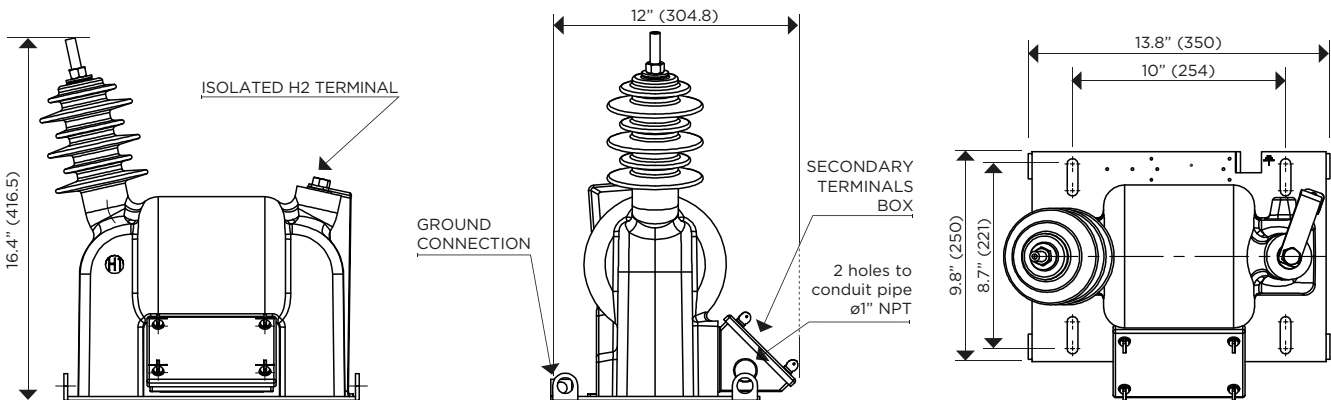
URJR/VRJR family can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which additionally increases the transformer's weatherability and offers better performance in heavily polluted environments. The transformer is maintenance free.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

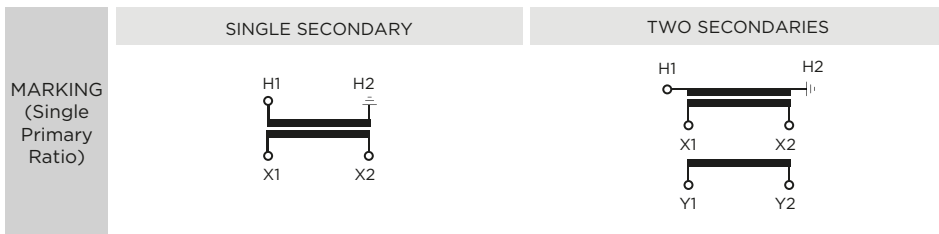
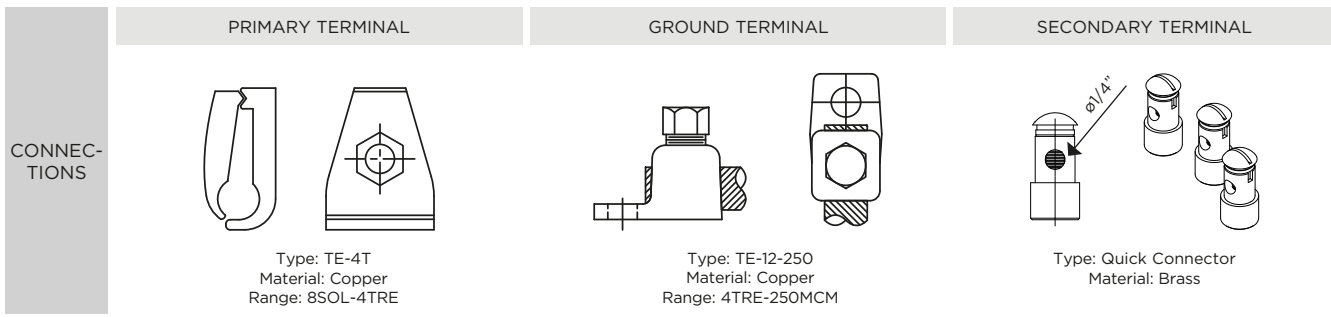
Partial Discharge measurements exceed the IEEE requirements.

This voltage transformer is designed for mounting on poles or substation structures in an upright, underhung or cantilever position.

| Mechanical characteristics |        | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|----------------------------|--------|---------------|------------------------|----------------------|
| Insulation Material        | Colors |               |                        |                      |
| Resin                      | Gray   | 68.5          | 25.75                  | 11.5                 |



Drawing number: 4288685



Approximate dimensions in inches (mm).



# URJ-17

# 15 kV VOLTAGE TRANSFORMER



**OUTDOOR  
60 Hertz**

ARTECHE UR/VR series are dry type outdoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

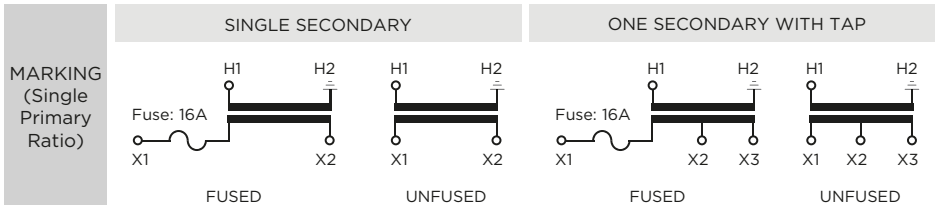
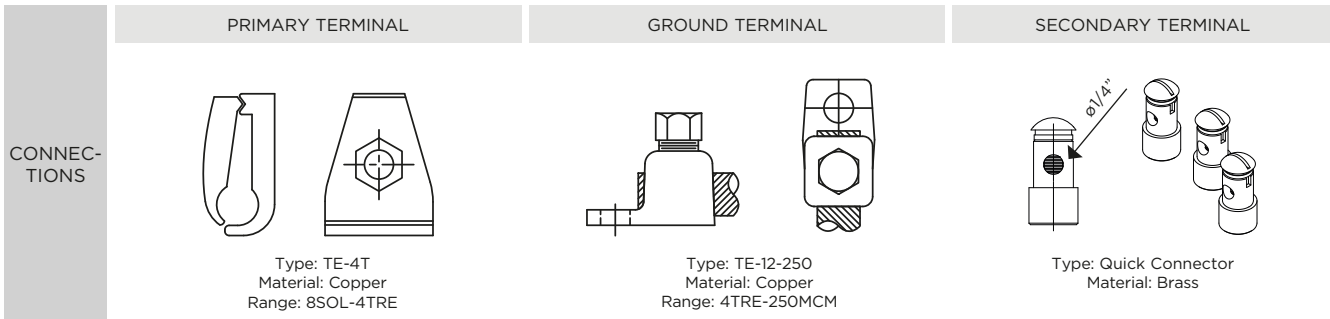
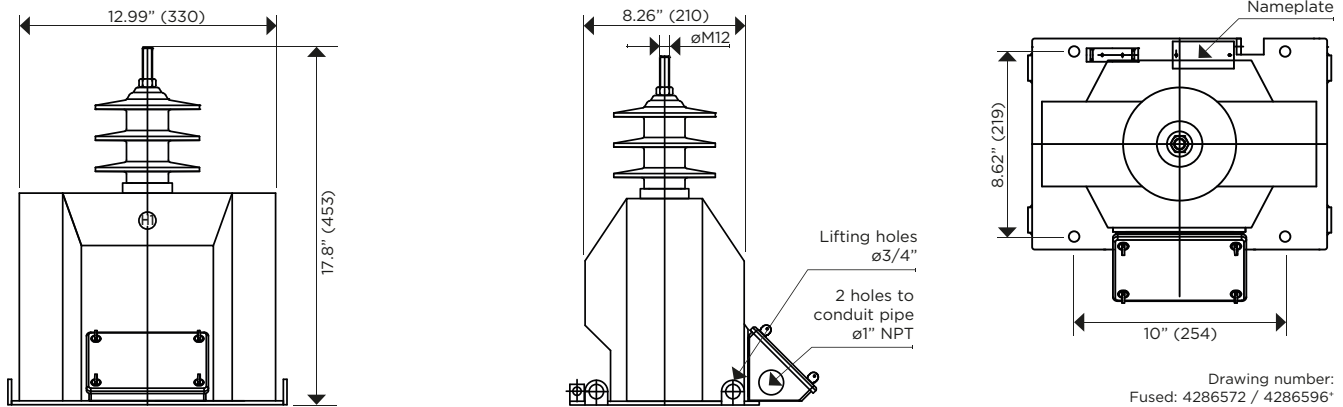
The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|---------------------|--------|---------------|------------------------|----------------------|
| Resin               | Gray   | 94.6          | 21.45/25*              | 11.61/12.5*          |



Approximate dimensions in inches (mm).



# URL-17

# 15 kV VOLTAGE TRANSFORMER



**OUTDOOR  
60 Hertz**

ARTECHE UR/VR series are dry type outdoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

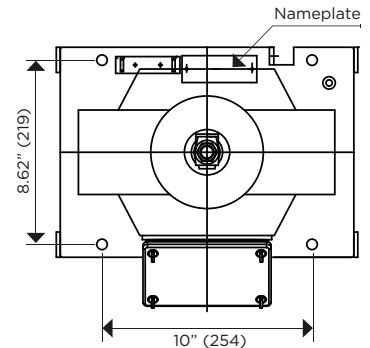
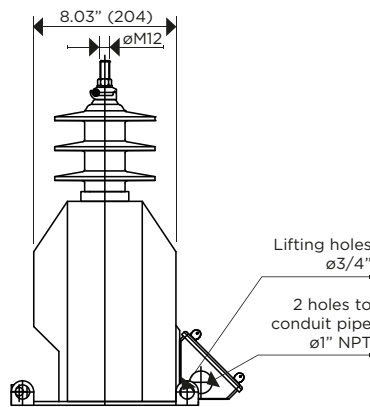
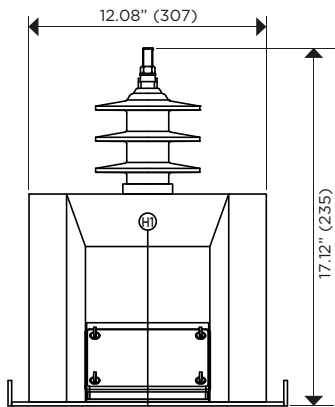
The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|---------------------|--------|---------------|------------------------|----------------------|
| Resin               | Gray   | 80            | 21.65                  | 12.2                 |



Drawing number:  
Fused: 4286570  
Unfused: 4286769

|             | PRIMARY TERMINAL                                    | GROUND TERMINAL   | SECONDARY TERMINAL                       |
|-------------|---|---|--|
| CONNECTIONS |   |   |  |
|             | Type: TE-4T<br>Material: Copper<br>Range: 8SOL-4TRE | Type: TE-12-250<br>Material: Copper<br>Range: 4TRE-250MCM | Type: Quick Connector<br>Material: Brass |

|                                   | SINGLE SECONDARY |
|-----------------------------------|------------------|
| MARKING<br>(Single Primary Ratio) |                  |
|                                   | FUSED            |
|                                   |                  |
|                                   | UNFUSED          |

Approximate dimensions in inches (mm).

# URL-17

## 15 kV VOLTAGE TRANSFORMER

| Electrical characteristics               |             |         |              |               |                        |                                      |                                |                     |                             |          |   |  |
|--|-------------|---------|--------------|---------------|------------------------|--------------------------------------|--------------------------------|---------------------|-----------------------------|----------|---|--|
| Code (CEP)                               | Code (HCEP) | Ratio   | Primary (V)  | Secondary (V) | IEEE Metering Accuracy | Continuous Rated Voltage Factor (Un) | Rated Voltage Factor 30 s (Un) | Thermal Burden (VA) | Nominal Voltage System (kV) | BIL (kV) | Power-Frequency Withstand Voltage (1 min) |  |
|  |             |         |              |               |                        |                                      |                                |                     |                             |          | Primary & Secondary (kV <sub>rms</sub> )  | Secondary Winding (kV <sub>rms</sub> ) |
| <b>With FUSE in the secondary box</b>    |             |         |              |               |                        |                                      |                                |                     |                             |          |   |  |
| 757031020                                | 757030000-H | 20:1    | 2400/4160GY  | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.5                            | 500                 | 5                           | 60       | 19  | 2.5                                    |
| 757031035                                | 757030001-H | 35:1    | 4200/7280GY  | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.5                            | 500                 | 5                           | 60       | 19  | 2.5                                    |
| 757031040                                | 757030002-H | 40:1    | 4200/4200GY  | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.5                            | 500                 | 5                           | 60       | 19  | 2.5                                    |
| 757031042                                | 757030003-H | 42:1    | 5040/8730GY  | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.5                            | 500                 | 8.7                         | 75       | 26  | 2.5                                    |
| 757031060                                | 757030004-H | 60:1    | 7200/12470GY | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.5                            | 500                 | 15                          | 110      | 34  | 2.5                                    |
| 757031063                                | 757030005-H | 63.5:1  | 7620/13200GY | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.5                            | 500                 | 15                          | 110      | 34  | 2.5                                    |
| 757031066                                | 757030006-H | 66.4:1  | 7968/13800GY | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.5                            | 500                 | 15                          | 110      | 34  | 2.5                                    |
| 757031067                                | 757030007-H | 66.67:1 | 8000/13856GY | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.5                            | 500                 | 15                          | 110      | 34  | 2.5                                    |
| 757031070                                | 757030008-H | 70:1    | 8400/14550GY | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.5                            | 500                 | 15                          | 110      | 34  | 2.5                                    |
| 757035020                                | 757030071-H | 20:1    | 2400/4160GY  | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 5                           | 60       | 19  | 2.5                                    |
| 757035035                                | 757030072-H | 35:1    | 4200/7280GY  | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 5                           | 60       | 19  | 2.5                                    |
| 757035040                                | 757030073-H | 40:1    | 4200/4200GY  | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 5                           | 60       | 19  | 2.5                                    |
| 757035042                                | 757030074-H | 42:1    | 5040/8730GY  | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 8.7                         | 75       | 26  | 2.5                                    |
| 757035060                                | 757030075-H | 60:1    | 7200/12470GY | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 15                          | 110      | 34  | 2.5                                    |
| 757035063                                | 757030076-H | 63.5:1  | 7620/13200GY | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 15                          | 110      | 34  | 2.5                                    |
| 757035066                                | 757030077-H | 66.4:1  | 7968/13800GY | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 15                          | 110      | 34  | 2.5                                    |
| 757035067                                | 757030078-H | 66.67:1 | 8000/13856GY | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 15                          | 110      | 34  | 2.5                                    |
| 757035070                                | 757030079-H | 70:1    | 8400/14550GY | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 15                          | 110      | 34  | 2.5                                    |
| <b>Without FUSE in the secondary box</b> |             |         |              |               |                        |                                      |                                |                     |                             |          |   |  |
| 757034020                                | 757030091-H | 20:1    | 2400/4160GY  | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.5                            | 500                 | 5                           | 60       | 19  | 2.5                                    |
| 757034035                                | 757030092-H | 35:1    | 4200/7280GY  | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.5                            | 500                 | 5                           | 60       | 19  | 2.5                                    |
| 757034040                                | 757030093-H | 40:1    | 4200/4200GY  | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.5                            | 500                 | 5                           | 60       | 19  | 2.5                                    |
| 757034042                                | 757030094-H | 42:1    | 5040/8730GY  | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.5                            | 500                 | 8.7                         | 75       | 26  | 2.5                                    |
| 757034060                                | 757030095-H | 60:1    | 7200/12470GY | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.5                            | 500                 | 15                          | 110      | 34  | 2.5                                    |
| 757034063                                | 757030096-H | 63.5:1  | 7620/13200GY | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.5                            | 500                 | 15                          | 110      | 34  | 2.5                                    |
| 757034066                                | 757030097-H | 66.4:1  | 7968/13800GY | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.5                            | 500                 | 15                          | 110      | 34  | 2.5                                    |
| 757034067                                | 757030098-H | 66.67:1 | 8000/13856GY | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.5                            | 500                 | 15                          | 110      | 34  | 2.5                                    |
| 757034070                                | 757030099-H | 70:1    | 8400/14550GY | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.5                            | 500                 | 15                          | 110      | 34  | 2.5                                    |
| 757030020                                | 757030111-H | 20:1    | 2400/4160GY  | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 5                           | 60       | 19  | 2.5                                    |
| 757030035                                | 757030112-H | 35:1    | 4200/7280GY  | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 5                           | 60       | 19  | 2.5                                    |
| 757030040                                | 757030113-H | 40:1    | 4200/4200GY  | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 5                           | 60       | 19  | 2.5                                    |
| 757030042                                | 757030114-H | 42:1    | 5040/8730GY  | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 8.7                         | 75       | 26  | 2.5                                    |
| 757030060                                | 757030115-H | 60:1    | 7200/12470GY | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 15                          | 110      | 34  | 2.5                                    |
| 757030063                                | 757030116-H | 63.5:1  | 7620/13200GY | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 15                          | 110      | 34  | 2.5                                    |
| 757030066                                | 757030117-H | 66.4:1  | 7968/13800GY | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 15                          | 110      | 34  | 2.5                                    |
| 757030067                                | 757030118-H | 66.67:1 | 8000/13856GY | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 15                          | 110      | 34  | 2.5                                    |
| 757030070                                | 757030119-H | 70:1    | 8400/14550GY | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 15                          | 110      | 34  | 2.5                                    |

Additional ratings available upon request.

Notes: .....

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# URN-17

# 15 kV VOLTAGE TRANSFORMER



**OUTDOOR  
60 Hertz**

ARTECHE UR/VR series are dry type outdoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

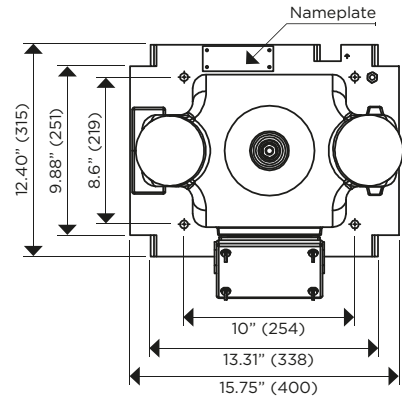
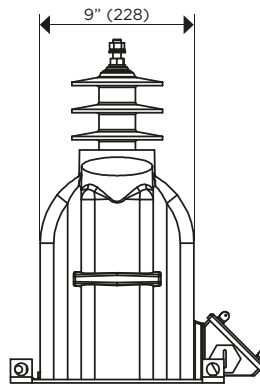
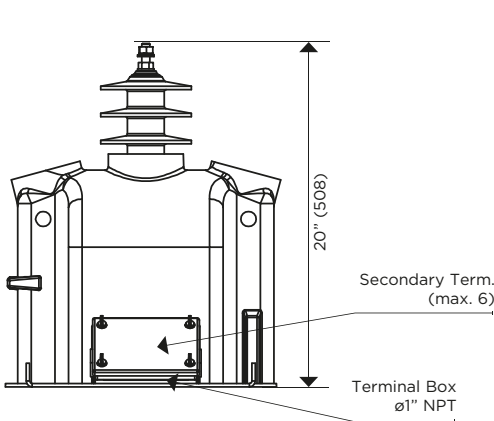
The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|---------------------|--------|---------------|------------------------|----------------------|
| Resin               | Gray   | 132           | 21.6                   | 13.9                 |



Drawing number:  
Fused: 4288939 | Unfused: 4288802

|                                | PRIMARY TERMINAL   | GROUND TERMINAL  | SECONDARY TERMINAL                               |
|--------------------------------|--|--|--|
| CONNECTIONS                    | <p>Type: TE-4T<br/>Material: Copper<br/>Range: 8SOL-4TRE</p> | <p>Type: TE-12-250<br/>Material: Copper<br/>Range: 4TRE-250MCM</p> | <p>Type: Quick Connector<br/>Material: Brass</p> |
| MARKING (Single Primary Ratio) | <p>SINGLE SECONDARY</p> <p>FUSED</p> <p>UNFUSED</p>          | <p>ONE SECONDARY WITH TAP</p> <p>FUSED</p> <p>UNFUSED</p>          |  |

Approximate dimensions in inches (mm).





# VRJR-17

# 15 kV VOLTAGE TRANSFORMER



**OUTDOOR  
60 Hertz**

ARTECHE URJR/VRJR series are dry type outdoor service voltage transformers.

The core and coils are encapsulated with Cycloaliphatic Epoxy Resin (CEP) which provides excellent dielectric properties, mechanical strength, resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life.

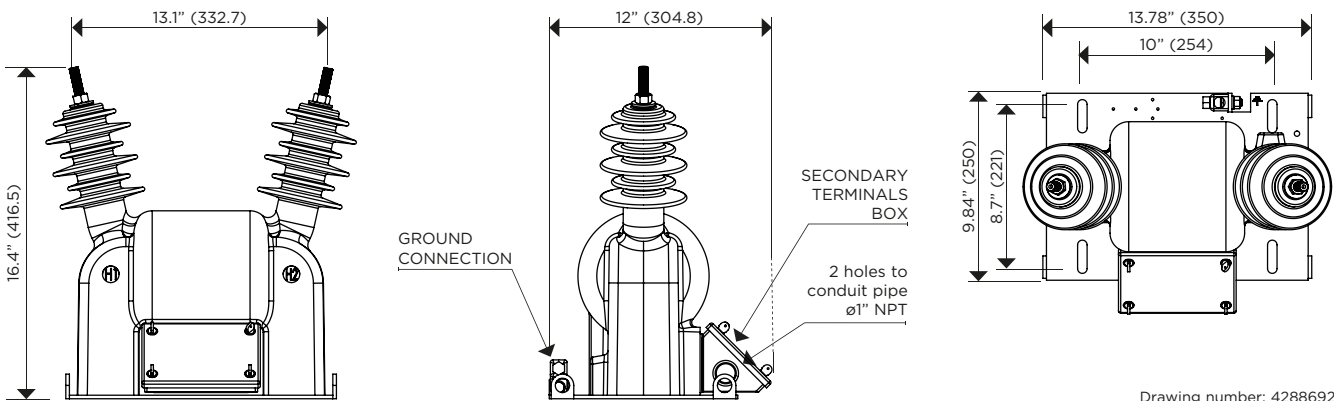
URJR/VRJR family can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which additionally increases the transformer's weatherability and offers better performance in heavily polluted environments. The transformer is maintenance free.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

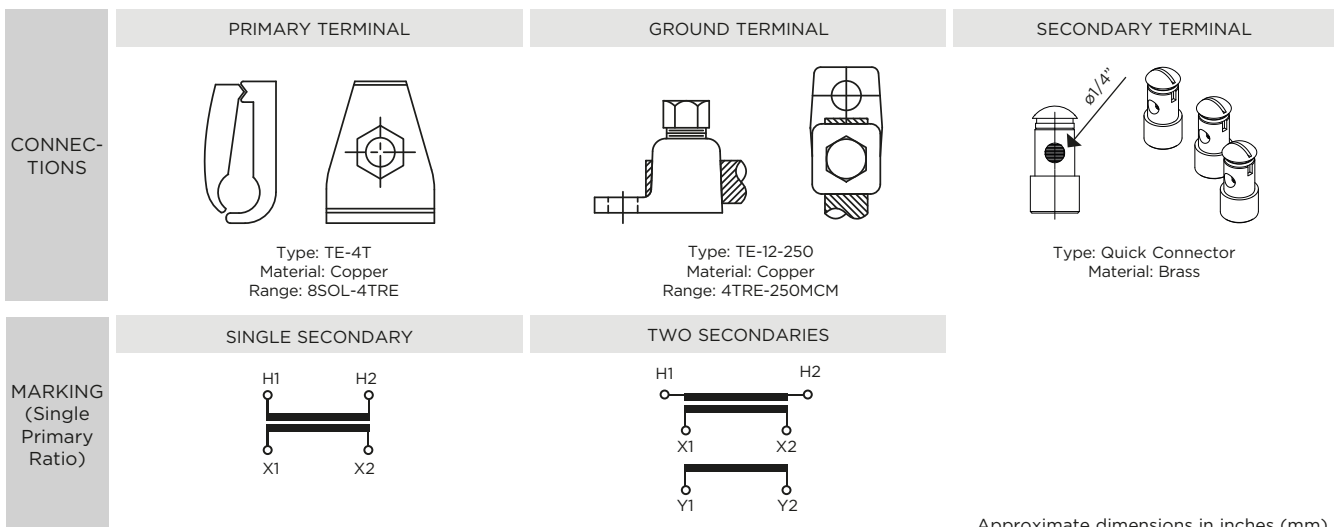
Partial Discharge measurements exceed the IEEE requirements.

This voltage transformer is designed for mounting on poles or substation structures in an upright, underhung or cantilever position.

| Mechanical characteristics |        | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|----------------------------|--------|---------------|------------------------|----------------------|
| Insulation Material        | Colors |               |                        |                      |
| Resin                      | Gray   | 70.5          | 25.7                   | 11.5                 |



Drawing number: 4288692

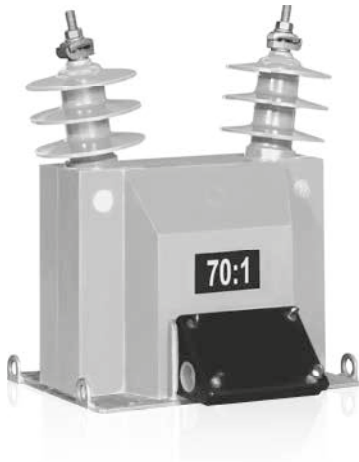


Approximate dimensions in inches (mm).



# VRJ-17

# 15 kV VOLTAGE TRANSFORMER



**OUTDOOR**  
**60 Hertz**

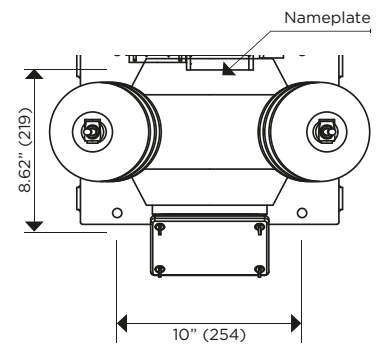
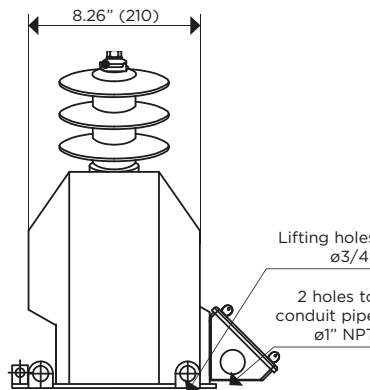
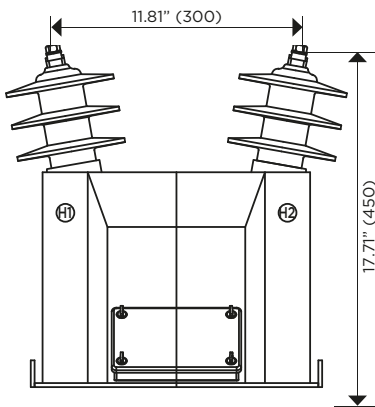
ARTECHE UR/VR series are dry type outdoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

| Mechanical characteristics |        | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|----------------------------|--------|---------------|------------------------|----------------------|
| Insulation Material        | Colors |               |                        |                      |
| Resin                      | Gray   | 97            | 21.2                   | 10.82                |



Drawing number:  
Fused: 4286571  
Unfused: 4286770

|             | PRIMARY TERMINAL                                    | GROUND TERMINAL   | SECONDARY TERMINAL                       |
|-------------|---|---|--|
| CONNECTIONS |   |   |  |
|             | Type: TE-4T<br>Material: Copper<br>Range: 8SOL-4TRE | Type: TE-12-250<br>Material: Copper<br>Range: 4TRE-250MCM | Type: Quick Connector<br>Material: Brass |

|                                   | SINGLE SECONDARY | ONE SECONDARY WITH TAP |
|-----------------------------------|------------------|------------------------|
| MARKING<br>(Single Primary Ratio) |                  |                        |
|                                   | FUSED            | FUSED                  |
|                                   |                  |                        |
|                                   | UNFUSED          | UNFUSED                |

Approximate dimensions in inches (mm).

# VRJ-17

## 15 kV VOLTAGE TRANSFORMER

| Electrical characteristics            |             |             |                            |               |                        |                                      |                                |                     |                             |          |   |  |
|---------------------------------------|-------------|-------------|----------------------------|---------------|------------------------|--------------------------------------|--------------------------------|---------------------|-----------------------------|----------|---|--|
| Code (CEP)                            | Code (HCEP) | Ratio       | Primary (V)                | Secondary (V) | IEEE Metering Accuracy | Continuous Rated Voltage Factor (Un) | Rated Voltage Factor 30 s (Un) | Thermal Burden (VA) | Nominal Voltage System (kV) | BIL (kV) | Power-Frequency Withstand Voltage (1 min) |  |
|                                       |             |             |                            |               |                        |                                      |                                |                     |                             |          | Primary & Secondary (kV <sub>rms</sub> )  | Secondary Winding (kV <sub>rms</sub> ) |
| <b>With FUSE in the secondary box</b> |             |             |                            |               |                        |                                      |                                |                     |                             |          |   |  |
| 757121020                             | 757120080-H | 20:1        | 2400/4160Y                 | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757121030                             | 757120081-H | 30:1        | 3600/3600Y                 | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757121035                             | 757120082-H | 35:1        | 4200/4200Y                 | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757121040                             | 757120083-H | 40:1        | 4800/4800Y                 | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757121060                             | 757120084-H | 60:1        | 7200/12470Y                | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757121063                             | 757120085-H | 63.5:1      | 7620/13200Y                | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757121070                             | 757120086-H | 70:1        | 8400/14550Y                | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757123121                             | 757120130-H | 70/121.21:1 | 8400/14550Y & 14545/14545Y | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757121100                             | 757120087-H | 100:1       | 12000/12000Y               | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757121110                             | 757120088-H | 110:1       | 13200/13200Y               | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757121120                             | 757120089-H | 120:1       | 14400/14400Y               | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757129070                             | 757120190-H | 70:1        | 8400/14550Y                | 120           | 0.15 W,X               | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757129100                             | 757120191-H | 100:1       | 12000/12000Y               | 120           | 0.15 W,X               | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757129110                             | 757120192-H | 110:1       | 13200/13200Y               | 120           | 0.15 W,X               | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757129120                             | 757120193-H | 120:1       | 14400/14400Y               | 120           | 0.15 W,X               | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757125020                             | 757120160-H | 20:1        | 2400/4160Y                 | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757125030                             | 757120161-H | 30:1        | 3600/3600Y                 | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757125035                             | 757120162-H | 35:1        | 4200/4200Y                 | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757125040                             | 757120163-H | 40:1        | 4800/4800Y                 | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757125060                             | 757120164-H | 60:1        | 7200/12470Y                | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757125063                             | 757120165-H | 63.5:1      | 7620/13200Y                | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757125070                             | 757120166-H | 70:1        | 8400/14550Y                | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757126121                             | 757120180-H | 70/121.21:1 | 8400/14550Y & 14545/14545Y | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757125100                             | 757120167-H | 100:1       | 12000/12000Y               | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757125110                             | 757120168-H | 110:1       | 13200/13200Y               | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757125120                             | 757120169-H | 120:1       | 14400/14400Y               | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757126070                             | 757120181-H | 70:1        | 8400/14550Y                | 120           | 0.15 W,X,M,Y           | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757126100                             | 757120182-H | 100:1       | 12000/12000Y               | 120           | 0.15 W,X,M,Y           | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757126110                             | 757120183-H | 110:1       | 13200/13200Y               | 120           | 0.15 W,X,M,Y           | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757126120                             | 757120184-H | 120:1       | 14400/14400Y               | 120           | 0.15 W,X,M,Y           | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |

# VRJ-17

## 15 kV VOLTAGE TRANSFORMER

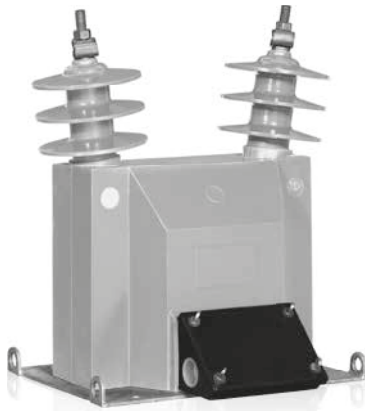
| Electrical characteristics               |             |        |              |               |                        |                                      |                                |                     |                             |          |   |  |
|--|-------------|--------|--------------|---------------|------------------------|--------------------------------------|--------------------------------|---------------------|-----------------------------|----------|---|--|
| Code (CEP)                               | Code (HCEP) | Ratio  | Primary (V)  | Secondary (V) | IEEE Metering Accuracy | Continuous Rated Voltage Factor (Un) | Rated Voltage Factor 30 s (Un) | Thermal Burden (VA) | Nominal Voltage System (kV) | BIL (kV) | Power-Frequency Withstand Voltage (1 min) |  |
|  |             |        |              |               |                        |                                      |                                |                     |                             |          | Primary & Secondary (kV <sub>rms</sub> )  | Secondary Winding (kV <sub>rms</sub> ) |
| <b>Without FUSE in the secondary box</b> |             |        |              |               |                        |                                      |                                |                     |                             |          |   |  |
| 757124020                                | 757120140-H | 20:1   | 2400/4160Y   | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757124030                                | 757120141-H | 30:1   | 3600/3600Y   | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757124035                                | 757120142-H | 35:1   | 4200/4200Y   | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757124040                                | 757120143-H | 40:1   | 4800/4800Y   | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757124060                                | 757120144-H | 60:1   | 7200/12470Y  | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757124063                                | 757120145-H | 63.5:1 | 7620/13200Y  | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757124070                                | 757120146-H | 70:1   | 8400/14550Y  | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757124100                                | 757120147-H | 100:1  | 12000/12000Y | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757124110                                | 757120148-H | 110:1  | 13200/13200Y | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757124120                                | 757120149-H | 120:1  | 14400/14400Y | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757120020                                | 757120000-H | 20:1   | 2400/4160Y   | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757120030                                | 757120001-H | 30:1   | 3600/3600Y   | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757120035                                | 757120002-H | 35:1   | 4200/4200Y   | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757120040                                | 757120003-H | 40:1   | 4800/4800Y   | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757120060                                | 757120004-H | 60:1   | 7200/12470Y  | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757120063                                | 757120005-H | 63.5:1 | 7620/13200Y  | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757120070                                | 757120006-H | 70:1   | 8400/14550Y  | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757120100                                | 757120007-H | 100:1  | 12000/12000Y | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757120110                                | 757120008-H | 110:1  | 13200/13200Y | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757120120                                | 757120009-H | 120:1  | 14400/14400Y | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |

Additional ratings available upon request.



# VRL-17

# 15 kV VOLTAGE TRANSFORMER



**OUTDOOR  
60 Hertz**

ARTECHE UR/VR series are dry type outdoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

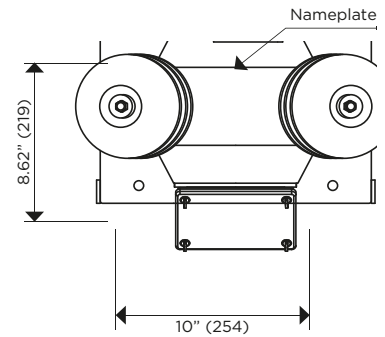
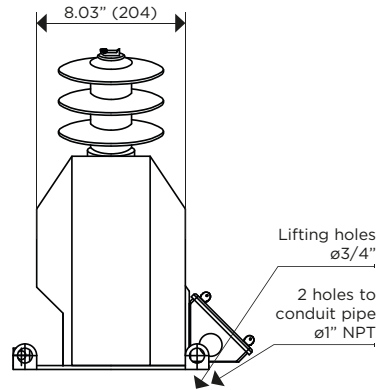
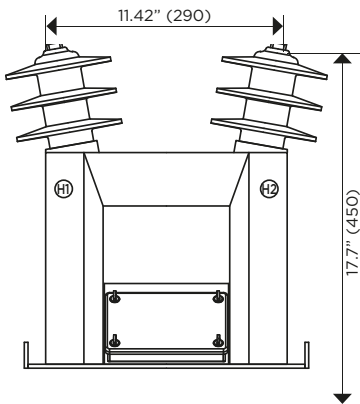
The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|---------------------|--------|---------------|------------------------|----------------------|
| Resin               | Gray   | 83.7          | 21.2                   | 10.23                |



Drawing number:  
Fused: 4286569  
Unfused: 4286774

|             | PRIMARY TERMINAL                                    | GROUND TERMINAL   | SECONDARY TERMINAL                       |
|-------------|---|---|--|
| CONNECTIONS |   |   |  |
|             | Type: TE-4T<br>Material: Copper<br>Range: 8SOL-4TRE | Type: TE-12-250<br>Material: Copper<br>Range: 4TRE-250MCM | Type: Quick Connector<br>Material: Brass |

|                                   | SINGLE SECONDARY |
|-----------------------------------|------------------|
| MARKING<br>(Single Primary Ratio) |                  |
|                                   |                  |

Approximate dimensions in inches (mm).



# VRL-17

## 15 kV VOLTAGE TRANSFORMER

| Electrical characteristics            |             |        |              |               |                        |                                      |                                |                     |                             |          |   |  |
|---------------------------------------|-------------|--------|--------------|---------------|------------------------|--------------------------------------|--------------------------------|---------------------|-----------------------------|----------|---|--|
| Code (CEP)                            | Code (HCEP) | Ratio  | Primary (V)  | Secondary (V) | IEEE Metering Accuracy | Continuous Rated Voltage Factor (Un) | Rated Voltage Factor 30 s (Un) | Thermal Burden (VA) | Nominal Voltage System (kV) | BIL (kV) | Power-Frequency Withstand Voltage (1 min) |  |
|                                       |             |        |              |               |                        |                                      |                                |                     |                             |          | Primary & Secondary (kV <sub>rms</sub> )  | Secondary Winding (kV <sub>rms</sub> ) |
| <b>With FUSE in the secondary box</b> |             |        |              |               |                        |                                      |                                |                     |                             |          |   |  |
| 757021020                             | 757020000-H | 20:1   | 2400/4160Y   | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 15                          | 110      | 34  | 2.5                                    |
| 757021035                             | 757020001-H | 35:1   | 4200/4200Y   | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 15                          | 110      | 34  | 2.5                                    |
| 757021040                             | 757020002-H | 40:1   | 4800/4800Y   | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 15                          | 110      | 34  | 2.5                                    |
| 757021042                             | 757020003-H | 42:1   | 5040/5040Y   | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 15                          | 110      | 34  | 2.5                                    |
| 757021060                             | 757020004-H | 60:1   | 7200/12470Y  | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 15                          | 110      | 34  | 2.5                                    |
| 757021063                             | 757020005-H | 63.5:1 | 7620/13200Y  | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 15                          | 110      | 34  | 2.5                                    |
| 757021066                             | 757020006-H | 66:1   | 7920/13700Y  | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 15                          | 110      | 34  | 2.5                                    |
| 757021070                             | 757020007-H | 70:1   | 8400/14550Y  | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 15                          | 110      | 34  | 2.5                                    |
| 757021100                             | 757020008-H | 100:1  | 12000/12000Y | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 15                          | 110      | 34  | 2.5                                    |
| 757021110                             | 757020009-H | 110:1  | 13200/13200Y | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 15                          | 110      | 34  | 2.5                                    |
| 757021115                             | 757020010-H | 115:1  | 13800/13800Y | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 15                          | 110      | 34  | 2.5                                    |
| 757021120                             | 757020011-H | 120:1  | 14400/14400Y | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 15                          | 110      | 34  | 2.5                                    |
| 757025020                             | 757020130-H | 20:1   | 2400/4160Y   | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757025035                             | 757020131-H | 35:1   | 4200/4200Y   | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757025040                             | 757020132-H | 40:1   | 4800/4800Y   | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757025042                             | 757020133-H | 42:1   | 5040/5040Y   | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757025060                             | 757020134-H | 60:1   | 7200/12470Y  | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757025063                             | 757020135-H | 63.5:1 | 7620/13200Y  | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757025066                             | 757020136-H | 66:1   | 7920/13700Y  | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757025070                             | 757020137-H | 70:1   | 8400/14550Y  | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757025100                             | 757020138-H | 100:1  | 12000/12000Y | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757025110                             | 757020139-H | 110:1  | 13200/13200Y | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757025115                             | 757020140-H | 115:1  | 13800/13800Y | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757025120                             | 757020141-H | 120:1  | 14400/14400Y | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |

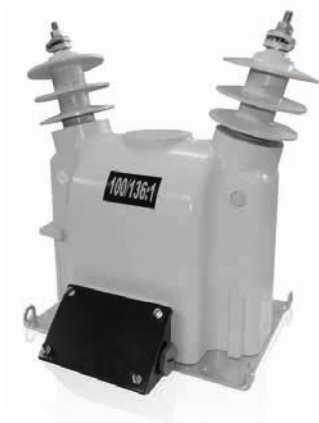
| Electrical characteristics               |             |        |              |               |                        |                                      |                                |                     |                             |          |   |  |
|--|-------------|--------|--------------|---------------|------------------------|--------------------------------------|--------------------------------|---------------------|-----------------------------|----------|---|--|
| Code (CEP)                               | Code (HCEP) | Ratio  | Primary (V)  | Secondary (V) | IEEE Metering Accuracy | Continuous Rated Voltage Factor (Un) | Rated Voltage Factor 30 s (Un) | Thermal Burden (VA) | Nominal Voltage System (kV) | BIL (kV) | Power-Frequency Withstand Voltage (1 min) |  |
|  |             |        |              |               |                        |                                      |                                |                     |                             |          | Primary & Secondary (kV <sub>rms</sub> )  | Secondary Winding (kV <sub>rms</sub> ) |
| <b>Without FUSE</b> in the secondary box |             |        |              |               |                        |                                      |                                |                     |                             |          |   |  |
| 757024020                                | 757020150-H | 20:1   | 2400/4160Y   | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 15                          | 110      | 34  | 2.5                                    |
| 757024035                                | 757020151-H | 35:1   | 4200/4200Y   | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 15                          | 110      | 34  | 2.5                                    |
| 757024040                                | 757020152-H | 40:1   | 4800/4800Y   | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 15                          | 110      | 34  | 2.5                                    |
| 757024042                                | 757020153-H | 42:1   | 5040/5040Y   | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 15                          | 110      | 34  | 2.5                                    |
| 757024060                                | 757020154-H | 60:1   | 7200/12470Y  | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 15                          | 110      | 34  | 2.5                                    |
| 757024063                                | 757020155-H | 63.5:1 | 7620/13200Y  | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 15                          | 110      | 34  | 2.5                                    |
| 757024066                                | 757020156-H | 66:1   | 7920/13700Y  | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 15                          | 110      | 34  | 2.5                                    |
| 757024070                                | 757020157-H | 70:1   | 8400/14550Y  | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 15                          | 110      | 34  | 2.5                                    |
| 757024100                                | 757020158-H | 100:1  | 12000/12000Y | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 15                          | 110      | 34  | 2.5                                    |
| 757024110                                | 757020159-H | 110:1  | 13200/13200Y | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 15                          | 110      | 34  | 2.5                                    |
| 757024115                                | 757020160-H | 115:1  | 13800/13800Y | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 15                          | 110      | 34  | 2.5                                    |
| 757024120                                | 757020161-H | 120:1  | 14400/14400Y | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 750                 | 15                          | 110      | 34  | 2.5                                    |
| 757020020                                | 757020170-H | 20:1   | 2400/4160Y   | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757020035                                | 757020171-H | 35:1   | 4200/4200Y   | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757020040                                | 757020172-H | 40:1   | 4800/4800Y   | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757020042                                | 757020173-H | 42:1   | 5040/5040Y   | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757020060                                | 757020174-H | 60:1   | 7200/12470Y  | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757020063                                | 757020175-H | 63.5:1 | 7620/13200Y  | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757020066                                | 757020176-H | 66:1   | 7920/13700Y  | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757020070                                | 757020177-H | 70:1   | 8400/14550Y  | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757020100                                | 757020178-H | 100:1  | 12000/12000Y | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757020110                                | 757020179-H | 110:1  | 13200/13200Y | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757020115                                | 757020180-H | 115:1  | 13800/13800Y | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757020120                                | 757020181-H | 120:1  | 14400/14400Y | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |

Additional ratings available upon request.



# VRN-17

# 15 kV VOLTAGE TRANSFORMER



**OUTDOOR  
60 Hertz**

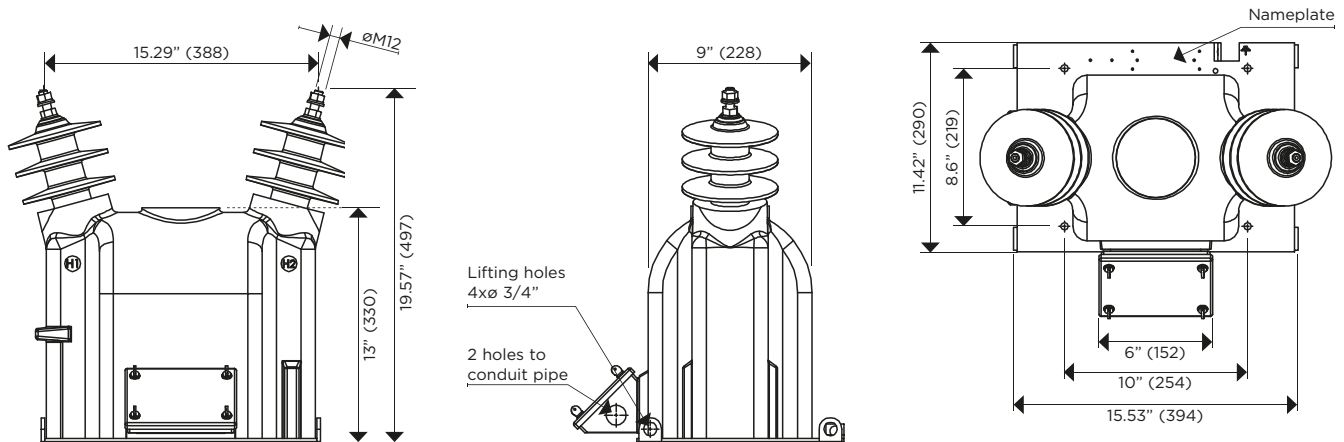
ARTECHE UR/VR series are dry type outdoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

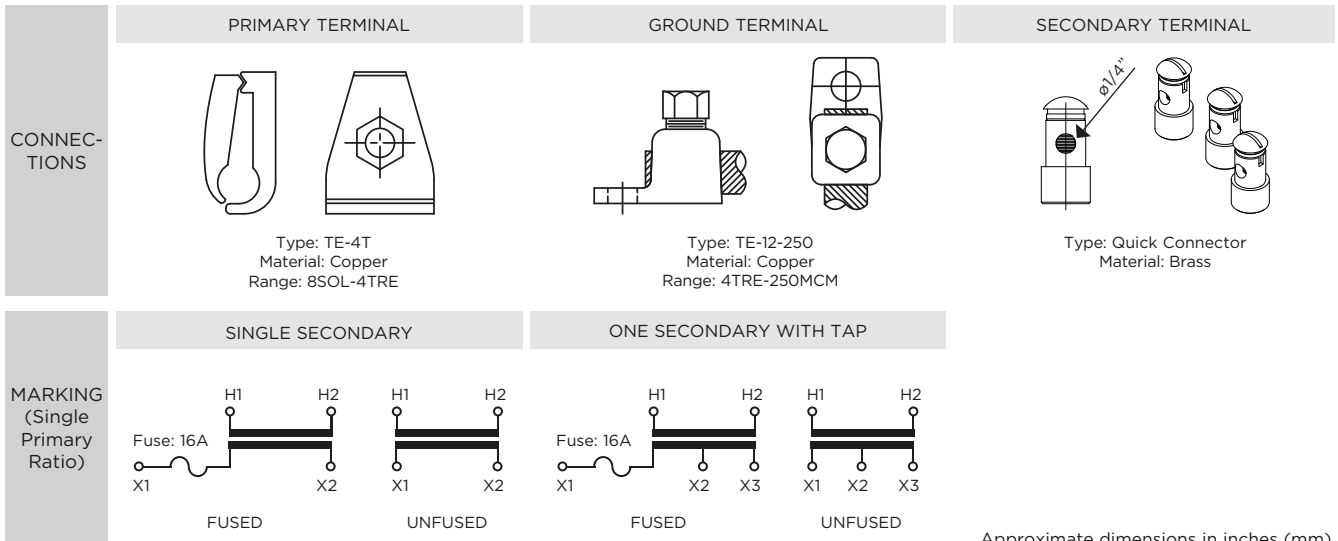
The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

| Mechanical characteristics |        | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|----------------------------|--------|---------------|------------------------|----------------------|
| Insulation Material        | Colors |               |                        |                      |
| Resin                      | Gray   | 136.4         | 21.2                   | 8.8                  |



Drawing number:  
Fused: 4289005 | Unfused: 4288513



Approximate dimensions in inches (mm).

# VRN-17

## 15 kV VOLTAGE TRANSFORMER

| Electrical characteristics               |             |            |                            |               |                        |                                      |                                |                     |                             |          |   |  |
|--|-------------|------------|----------------------------|---------------|------------------------|--------------------------------------|--------------------------------|---------------------|-----------------------------|----------|---|--|
| Code (CEP)                               | Code (HCEP) | Ratio      | Primary (V)                | Secondary (V) | IEEE Metering Accuracy | Continuous Rated Voltage Factor (Un) | Rated Voltage Factor 30 s (Un) | Thermal Burden (VA) | Nominal Voltage System (kV) | BIL (kV) | Power-Frequency Withstand Voltage (1 min) |  |
|  |             |            |                            |               |                        |                                      |                                |                     |                             |          | Primary & Secondary (kV <sub>rms</sub> )  | Secondary Winding (kV <sub>rms</sub> ) |
| <b>With FUSE in the secondary box</b>    |             |            |                            |               |                        |                                      |                                |                     |                             |          |   |  |
| 757101020                                | 757100080-H | 20:1       | 2400/4160Y                 | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757101030                                | 757100081-H | 30:1       | 3600/3600Y                 | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757101035                                | 757100082-H | 35:1       | 4200/4200Y                 | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757101040                                | 757100083-H | 40:1       | 4800/4800Y                 | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757101060                                | 757100084-H | 60:1       | 7200/12470Y                | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757101063                                | 757100085-H | 63.5:1     | 7620/13200Y                | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757101070                                | 757100086-H | 70:1       | 8400/14550Y                | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757103121                                | 757100130-H | 70/121.2:1 | 8400/14550Y & 14545/14545Y | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757101100                                | 757100087-H | 100:1      | 12000/12000Y               | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757101110                                | 757100088-H | 110:1      | 13200/13200Y               | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757101120                                | 757100089-H | 120:1      | 14400/14400Y               | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757105020                                | 757100160-H | 20:1       | 2400/4160Y                 | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757105030                                | 757100161-H | 30:1       | 3600/3600Y                 | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757105035                                | 757100162-H | 35:1       | 4200/4200Y                 | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757105040                                | 757100163-H | 40:1       | 4800/4800Y                 | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757105060                                | 757100164-H | 60:1       | 7200/12470Y                | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757105063                                | 757100165-H | 63.5:1     | 7620/13200Y                | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757105070                                | 757100166-H | 70:1       | 8400/14550Y                | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757106121                                | 757100180-H | 70/121.2:1 | 8400/14550Y & 14545/14545Y | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757105100                                | 757100167-H | 100:1      | 12000/12000Y               | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757105110                                | 757100168-H | 110:1      | 13200/13200Y               | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757105120                                | 757100169-H | 120:1      | 14400/14400Y               | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| <b>Without FUSE in the secondary box</b> |             |            |                            |               |                        |                                      |                                |                     |                             |          |   |  |
| 757104020                                | 757100140-H | 20:1       | 2400/4160Y                 | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757104030                                | 757100141-H | 30:1       | 3600/3600Y                 | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757104035                                | 757100142-H | 35:1       | 4200/4200Y                 | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757104040                                | 757100143-H | 40:1       | 4800/4800Y                 | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757104060                                | 757100144-H | 60:1       | 7200/12470Y                | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757104063                                | 757100145-H | 63.5:1     | 7620/13200Y                | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757104070                                | 757100146-H | 70:1       | 8400/14550Y                | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757104100                                | 757100147-H | 100:1      | 12000/12000Y               | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757104110                                | 757100148-H | 110:1      | 13200/13200Y               | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757104120                                | 757100149-H | 120:1      | 14400/14400Y               | 120           | 0.3 W,X,M,Y            | 1.1                                  | 1.25                           | 1000                | 15                          | 110      | 34  | 2.5                                    |
| 757100020                                | 757100000-H | 20:1       | 2400/4160Y                 | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757100030                                | 757100001-H | 30:1       | 3600/3600Y                 | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757100035                                | 757100002-H | 35:1       | 4200/4200Y                 | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757100040                                | 757100003-H | 40:1       | 4800/4800Y                 | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757100060                                | 757100004-H | 60:1       | 7200/12470Y                | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757100063                                | 757100005-H | 63.5:1     | 7620/13200Y                | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757100070                                | 757100006-H | 70:1       | 8400/14550Y                | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757100100                                | 757100007-H | 100:1      | 12000/12000Y               | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757100110                                | 757100008-H | 110:1      | 13200/13200Y               | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |
| 757100120                                | 757100009-H | 120:1      | 14400/14400Y               | 120           | 0.3 W,X,M,Y,Z          | 1.1                                  | 1.25                           | 1500                | 15                          | 110      | 34  | 2.5                                    |

Additional ratings available upon request.



# URJ-24

# 25 kV VOLTAGE TRANSFORMER



**OUTDOOR  
60 Hertz**

ARTECHE UR/VR series are dry type outdoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

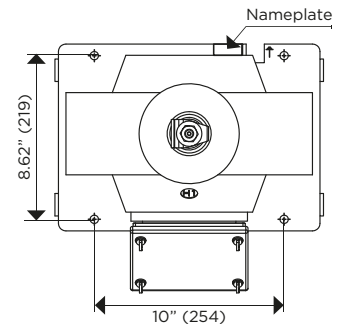
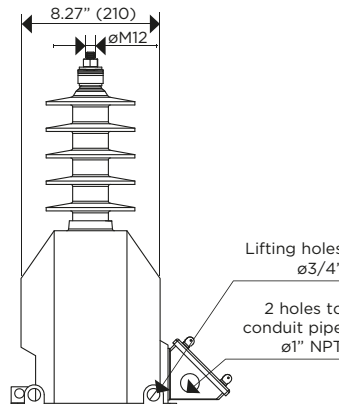
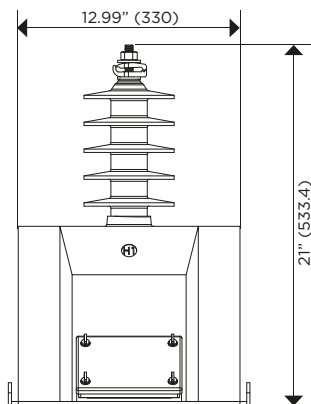
The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) |
|---------------------|--------|---------------|
| Resin               | Gray   | 93            |



Drawing number:  
Fused: 4286593  
Unfused: 4286823

|             | PRIMARY TERMINAL                                    | GROUND TERMINAL   | SECONDARY TERMINAL                       |
|-------------|---|---|--|
| CONNECTIONS |   |   |  |
|             | Type: TE-4T<br>Material: Copper<br>Range: 8SOL-4TRE | Type: TE-12-250<br>Material: Copper<br>Range: 4TRE-250MCM | Type: Quick Connector<br>Material: Brass |

|                                   | SINGLE SECONDARY |
|-----------------------------------|------------------|
| MARKING<br>(Single Primary Ratio) |                  |
|                                   |                  |

Approximate dimensions in inches (mm).





# URN-24

# 25 kV VOLTAGE TRANSFORMER



**OUTDOOR  
60 Hertz**

ARTECHE UR/VR series are dry type outdoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

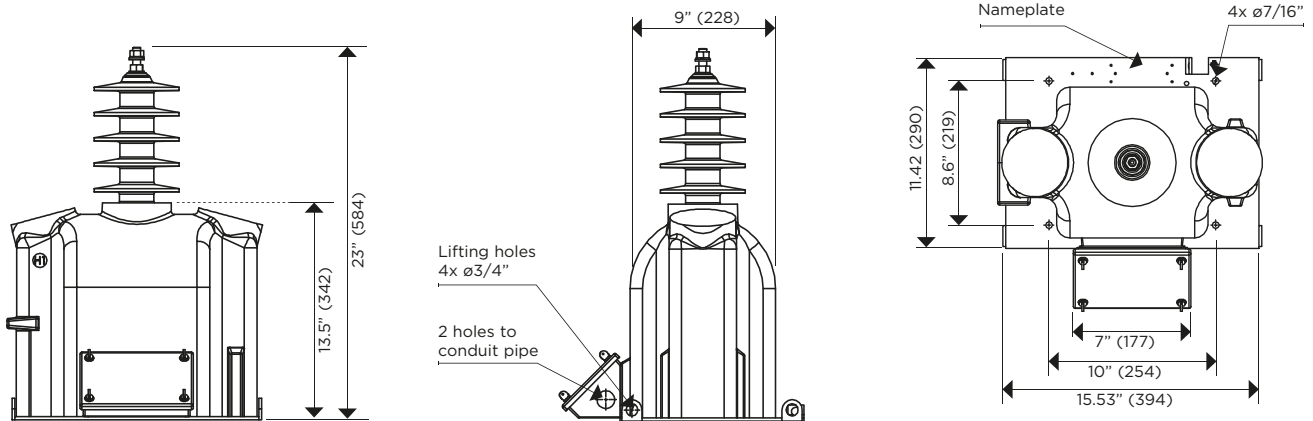
The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

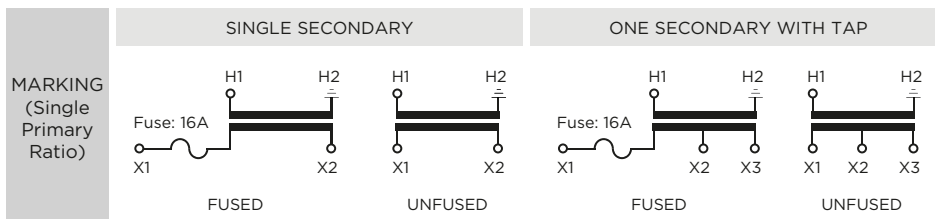
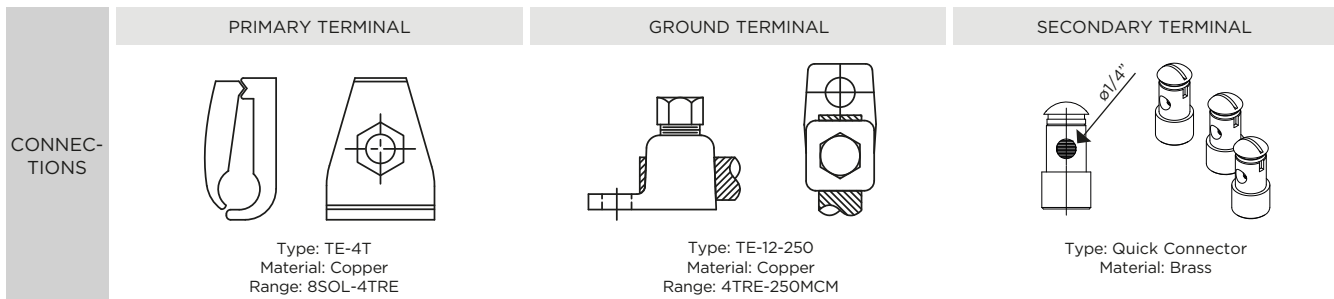
Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|---------------------|--------|---------------|------------------------|----------------------|
| Resin               | Gray   | 136.4         | 27.5                   | 14.69                |



Drawing number:  
Fused: 4289008 | Unfused: 4287740

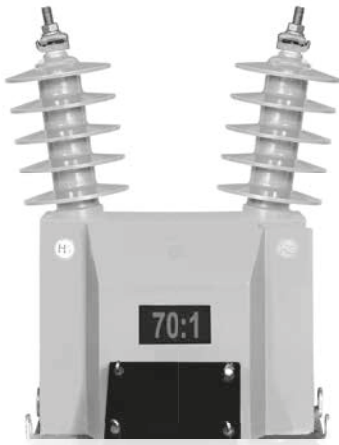


Approximate dimensions in inches (mm).



# VRJ-24

# 25 kV VOLTAGE TRANSFORMER



**OUTDOOR  
60 Hertz**

ARTECHE UR/VR series are dry type outdoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

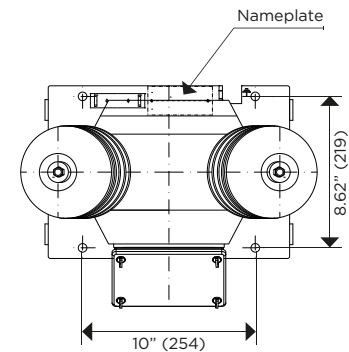
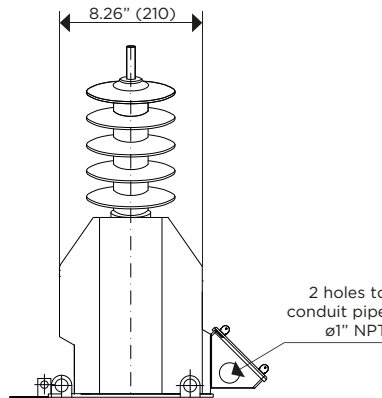
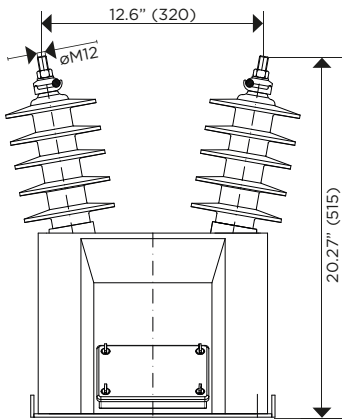
The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|---------------------|--------|---------------|------------------------|----------------------|
| Resin               | Gray   | 99            | 33.46                  | 10.63                |



Drawing number:  
Fused: 4286574  
Unfused: 4286824

|             | PRIMARY TERMINAL                                    | GROUND TERMINAL   | SECONDARY TERMINAL                       |
|-------------|---|---|--|
| CONNECTIONS |   |   |  |
|             | Type: TE-4T<br>Material: Copper<br>Range: 8SOL-4TRE | Type: TE-12-250<br>Material: Copper<br>Range: 4TRE-250MCM | Type: Quick Connector<br>Material: Brass |

|                                   | SINGLE SECONDARY |
|-----------------------------------|------------------|
| MARKING<br>(Single Primary Ratio) |                  |
|                                   | FUSED            |
|                                   |                  |
|                                   | UNFUSED          |

Approximate dimensions in inches (mm).



# VRN-24

## 25 kV VOLTAGE TRANSFORMER



**OUTDOOR  
60 Hertz**

ARTECHE UR/VR series are dry type outdoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

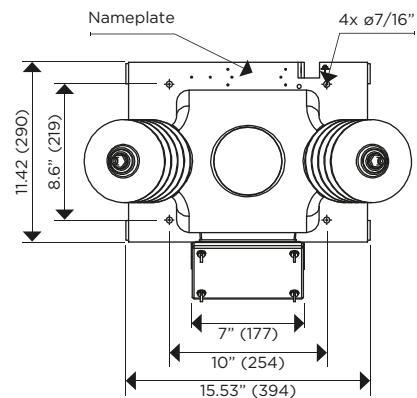
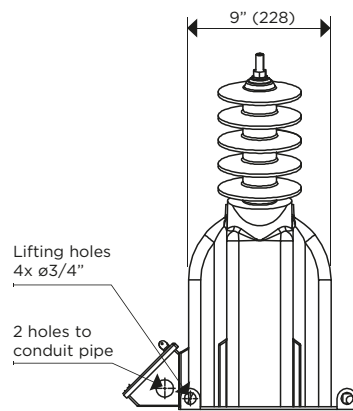
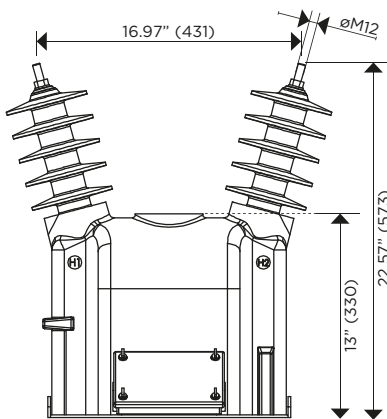
The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|---------------------|--------|---------------|------------------------|----------------------|
| Resin               | Gray   | 140           | 31.88                  | 10.82                |



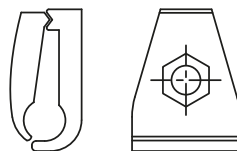
Drawing number:  
Fused: 4289002 | Unfused: 4287757

PRIMARY TERMINAL

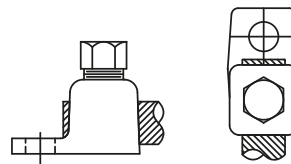
GROUND TERMINAL

SECONDARY TERMINAL

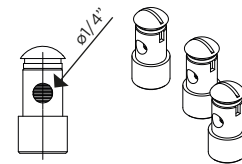
### CONNECTIONS



Type: TE-4T  
Material: Copper  
Range: 8SOL-4TRE



Type: TE-12-250  
Material: Copper  
Range: 4TRE-250MCM

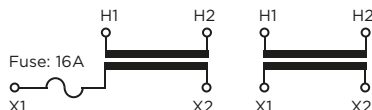


Type: Quick Connector  
Material: Brass

### MARKING (Single Primary Ratio)

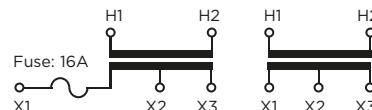
SINGLE SECONDARY

ONE SECONDARY WITH TAP



FUSED

UNFUSED



FUSED

UNFUSED

Approximate dimensions in inches (mm).

# VRN-24

## 25 kV VOLTAGE TRANSFORMER

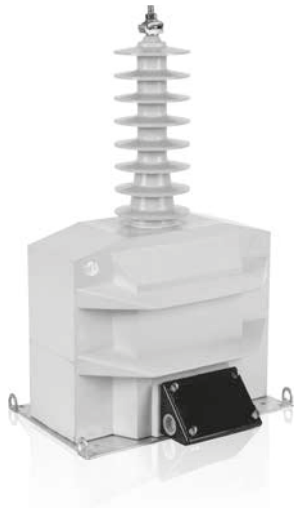
| Electrical characteristics               |             |           |                            |               |                           |                                      |                                |                     |                             |          |   |  |
|--|-------------|-----------|----------------------------|---------------|---------------------------|--------------------------------------|--------------------------------|---------------------|-----------------------------|----------|---|--|
| Code (CEP)                               | Code (HCEP) | Ratio     | Primary (V)                | Secondary (V) | IEEE Metering Accuracy    | Continuous Rated Voltage Factor (Un) | Rated Voltage Factor 30 s (Un) | Thermal Burden (VA) | Nominal Voltage System (kV) | BIL (kV) | Power-Frequency Withstand Voltage (1 min) |  |
|  |             |           |                            |               |                           |                                      |                                |                     |                             |          | Primary & Secondary (kV <sub>rms</sub> )  | Secondary Winding (kV <sub>rms</sub> ) |
| <b>With FUSE in the secondary box</b>    |             |           |                            |               |                           |                                      |                                |                     |                             |          |   |  |
| 757201060                                | 757200010-H | 60:1      | 7200/12470Y                | 120           | 0.3 W,X,M,Y               | 1.1                                  | 1.25                           | 1000                | 25                          | 150      | 50  | 2.5                                    |
| 757203120                                | 757200020-H | 60/120:1  | 7200/12470Y & 14400/24940Y | 120           | 0.3 W,X / 0.3 W,X,M,Y     | 1.1                                  | 1.25                           | 1000                | 25                          | 150      | 50  | 2.5                                    |
| 757201100                                | 757200011-H | 100:1     | 12000/20780Y               | 120           | 0.3 W,X,M,Y               | 1.1                                  | 1.25                           | 1000                | 25                          | 150      | 50  | 2.5                                    |
| 757201110                                | 757200012-H | 110:1     | 13200/22860Y               | 120           | 0.3 W,X,M,Y               | 1.1                                  | 1.25                           | 1000                | 25                          | 150      | 50  | 2.5                                    |
| 757201120                                | 757200013-H | 120:1     | 14400/24940Y               | 120           | 0.3 W,X,M,Y               | 1.1                                  | 1.25                           | 1000                | 25                          | 150      | 50  | 2.5                                    |
| 757203200                                | 757200021-H | 120/200:1 | 14400/24250Y               | 120/72        | 0.3 W,X,M,Y / 0.3 W,X,M,Y | 1.1                                  | 1.25                           | 1000                | 25                          | 150      | 50  | 2.5                                    |
| 757201150                                | 757200014-H | 150:1     | 18000/18000Y               | 120           | 0.3 W,X,M,Y               | 1.1                                  | 1.25                           | 1000                | 25                          | 150      | 50  | 2.5                                    |
| 757201200                                | 757200015-H | 200:1     | 24000 /24000Y              | 120           | 0.3 W,X,M,Y               | 1.1                                  | 1.25                           | 1000                | 25                          | 150      | 50  | 2.5                                    |
| 757209100                                | 757200070-H | 100:1     | 12000/20780Y               | 120           | 0.15 W,X                  | 1.1                                  | 1.25                           | 1000                | 25                          | 150      | 50  | 2.5                                    |
| 757209110                                | 757200071-H | 110:1     | 13200/22860Y               | 120           | 0.15 W,X                  | 1.1                                  | 1.25                           | 1000                | 25                          | 150      | 50  | 2.5                                    |
| 757209120                                | 757200072-H | 120:1     | 14400/24250Y               | 120           | 0.15 W,X                  | 1.1                                  | 1.25                           | 1000                | 25                          | 150      | 50  | 2.5                                    |
| 757209150                                | 757200073-H | 150:1     | 18000/18000Y               | 120           | 0.15 W,X                  | 1.1                                  | 1.25                           | 1000                | 25                          | 150      | 50  | 2.5                                    |
| 757209200                                | 757200074-H | 200:1     | 24000 /24000Y              | 120           | 0.15 W,X                  | 1.1                                  | 1.25                           | 1000                | 25                          | 150      | 50  | 2.5                                    |
| 757205060                                | 757200040-H | 60:1      | 7200/12470Y                | 120           | 0.3 W,X,M,Y               | 1.1                                  | 1.25                           | 1500                | 25                          | 150      | 50  | 2.5                                    |
| 757206120                                | 757200050-H | 60/120:1  | 7200/12470Y & 14400/24940Y | 120           | 0.3 W,X / 0.3 W,X,M,Y     | 1.1                                  | 1.25                           | 1500                | 25                          | 150      | 50  | 2.5                                    |
| 757205100                                | 757200041-H | 100:1     | 12000/20780Y               | 120           | 0.3 W,X,M,Y               | 1.1                                  | 1.25                           | 1500                | 25                          | 150      | 50  | 2.5                                    |
| 757205110                                | 757200042-H | 110:1     | 13200/22860Y               | 120           | 0.3 W,X,M,Y               | 1.1                                  | 1.25                           | 1500                | 25                          | 150      | 50  | 2.5                                    |
| 757205120                                | 757200043-H | 120:1     | 14400/24940Y               | 120           | 0.3 W,X,M,Y               | 1.1                                  | 1.25                           | 1500                | 25                          | 150      | 50  | 2.5                                    |
| 757206200                                | 757200051-H | 120/200:1 | 14400/24250Y               | 120/72        | 0.3 W,X,M,Y / 0.3 W,X,M,Y | 1.1                                  | 1.25                           | 1500                | 25                          | 150      | 50  | 2.5                                    |
| 757205150                                | 757200044-H | 150:1     | 18000/18000Y               | 120           | 0.3 W,X,M,Y               | 1.1                                  | 1.25                           | 1500                | 25                          | 150      | 50  | 2.5                                    |
| 757205200                                | 757200045-H | 200:1     | 24000 /24000Y              | 120           | 0.3 W,X,M,Y               | 1.1                                  | 1.25                           | 1500                | 25                          | 150      | 50  | 2.5                                    |
| 757206100                                | 757200052-H | 100:1     | 12000/20780Y               | 120           | 0.15 W,X                  | 1.1                                  | 1.25                           | 1500                | 25                          | 150      | 50  | 2.5                                    |
| 757206110                                | 757200053-H | 110:1     | 13200/22860Y               | 120           | 0.15 W,X                  | 1.1                                  | 1.25                           | 1500                | 25                          | 150      | 50  | 2.5                                    |
| 757206150                                | 757200054-H | 150:1     | 18000/18000Y               | 120           | 0.15 W,X                  | 1.1                                  | 1.25                           | 1500                | 25                          | 150      | 50  | 2.5                                    |
| <b>Without FUSE in the secondary box</b> |             |           |                            |               |                           |                                      |                                |                     |                             |          |   |  |
| 757204060                                | 757200030-H | 60:1      | 7200/12470Y                | 120           | 0.3 W,X,M,Y               | 1.1                                  | 1.25                           | 1000                | 25                          | 150      | 50  | 2.5                                    |
| 757204100                                | 757200031-H | 100:1     | 12000/20780Y               | 120           | 0.3 W,X,M,Y               | 1.1                                  | 1.25                           | 1000                | 25                          | 150      | 50  | 2.5                                    |
| 757204110                                | 757200032-H | 110:1     | 13200/22860Y               | 120           | 0.3 W,X,M,Y               | 1.1                                  | 1.25                           | 1000                | 25                          | 150      | 50  | 2.5                                    |
| 757204120                                | 757200033-H | 120:1     | 14400/24940Y               | 120           | 0.3 W,X,M,Y               | 1.1                                  | 1.25                           | 1000                | 25                          | 150      | 50  | 2.5                                    |
| 757204150                                | 757200034-H | 150:1     | 18000/18000Y               | 120           | 0.3 W,X,M,Y               | 1.1                                  | 1.25                           | 1000                | 25                          | 150      | 50  | 2.5                                    |
| 757204200                                | 757200035-H | 200:1     | 24000/24000Y               | 120           | 0.3 W,X,M,Y               | 1.1                                  | 1.25                           | 1000                | 25                          | 150      | 50  | 2.5                                    |
| 757200060                                | 757200000-H | 60:1      | 7200/12470Y                | 120           | 0.3 W,X,M,Y               | 1.1                                  | 1.25                           | 1500                | 25                          | 150      | 50  | 2.5                                    |
| 757200100                                | 757200001-H | 100:1     | 12000/20780Y               | 120           | 0.3 W,X,M,Y               | 1.1                                  | 1.25                           | 1500                | 25                          | 150      | 50  | 2.5                                    |
| 757200110                                | 757200002-H | 110:1     | 13200/22860Y               | 120           | 0.3 W,X,M,Y               | 1.1                                  | 1.25                           | 1500                | 25                          | 150      | 50  | 2.5                                    |
| 757200120                                | 757200003-H | 120:1     | 14400/24940Y               | 120           | 0.3 W,X,M,Y               | 1.1                                  | 1.25                           | 1500                | 25                          | 150      | 50  | 2.5                                    |
| 757200150                                | 757200004-H | 150:1     | 18000/18000Y               | 120           | 0.3 W,X,M,Y               | 1.1                                  | 1.25                           | 1500                | 25                          | 150      | 50  | 2.5                                    |
| 757200200                                | 757200005-H | 200:1     | 24000/24000Y               | 120           | 0.3 W,X,M,Y               | 1.1                                  | 1.25                           | 1500                | 25                          | 150      | 50  | 2.5                                    |

Additional ratings available upon request.



# URS-36

# 34.5 kV VOLTAGE TRANSFORMER



**OUTDOOR  
60 Hertz**

ARTECHE UR/VR series are dry type outdoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

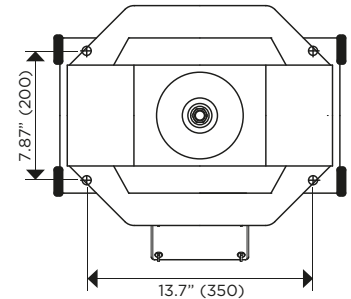
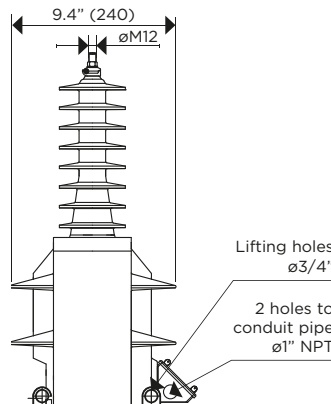
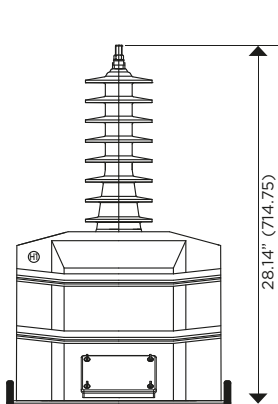
The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|---------------------|--------|---------------|------------------------|----------------------|
| Resin               | Gray   | 174           | 49.6                   | 25.2                 |



Drawing number:  
Fused: 4286578  
Unfused: 4286773

|             | PRIMARY TERMINAL                                    | GROUND TERMINAL   | SECONDARY TERMINAL                       |
|-------------|---|---|--|
| CONNECTIONS |   |   |  |
|             | Type: TE-4T<br>Material: Copper<br>Range: 8SOL-4TRE | Type: TE-12-250<br>Material: Copper<br>Range: 4TRE-250MCM | Type: Quick Connector<br>Material: Brass |

|                                   | SINGLE SECONDARY | ONE SECONDARY WITH TAP |
|-----------------------------------|------------------|------------------------|
| MARKING<br>(Single Primary Ratio) |                  |                        |
|                                   |                  |                        |
|                                   | FUSED            | FUSED                  |
|                                   | UNFUSED          | UNFUSED                |

Approximate dimensions in inches (mm).





# URU-36

# 34.5 kV VOLTAGE TRANSFORMER



**OUTDOOR  
60 Hertz**

ARTECHE UR/VR series are dry type outdoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

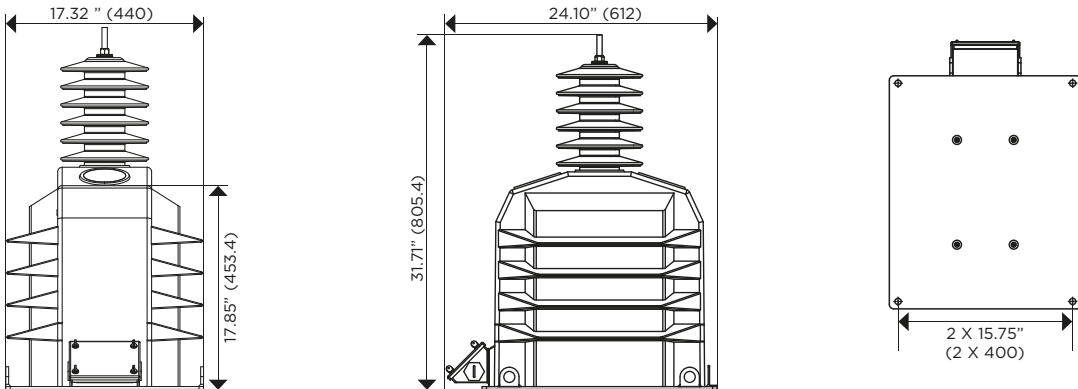
The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|---------------------|--------|---------------|------------------------|----------------------|
| Resin               | Gray   | 273           | 50.5                   | 25.2                 |



Drawing number: 4288115

|                                | PRIMARY TERMINAL  | GROUND TERMINAL   | SECONDARY TERMINAL                           |
|--------------------------------|---|---|--|
| CONNECTIONS                    | <br>Type: TE-4T<br>Material: Copper<br>Range: 8SOL-4TRE | <br>Type: TE-12-250<br>Material: Copper<br>Range: 4TRE-250MCM | <br>Type: Quick Connector<br>Material: Brass |
| MARKING (Single Primary Ratio) | <br>H1 H2<br>X1 X2                                      | <br>H1 H2<br>X1 X2 X3   | <br>H1 H2<br>X1 X2 X3 Y1 Y2 Y3               |

Approximate dimensions in inches (mm).



# VRS-36

# 34.5 kV VOLTAGE TRANSFORMER



**OUTDOOR  
60 Hertz**

ARTECHE UR/VR series are dry type outdoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

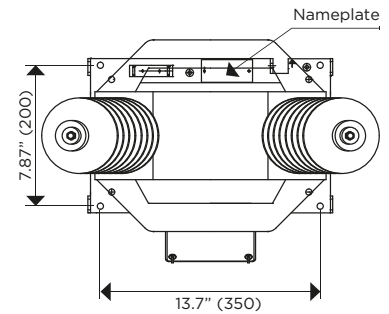
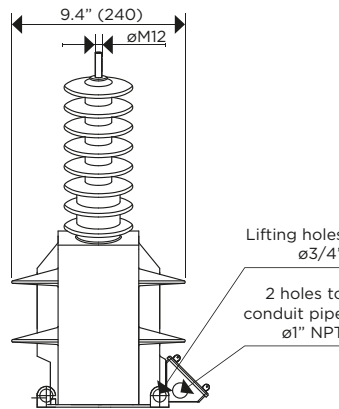
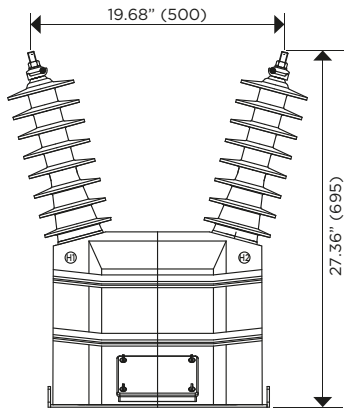
The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|---------------------|--------|---------------|------------------------|----------------------|
| Resin               | Gray   | 183           | 49.2                   | 183                  |



Drawing number:  
Fused: 4286579  
Unfused: 4286825

|             | PRIMARY TERMINAL   | GROUND TERMINAL  | SECONDARY TERMINAL                               |
|-------------|--|--|--|
| CONNECTIONS | <p>Type: TE-4T<br/>Material: Copper<br/>Range: 8SOL-4TRE</p> | <p>Type: TE-12-250<br/>Material: Copper<br/>Range: 4TRE-250MCM</p> | <p>Type: Quick Connector<br/>Material: Brass</p> |

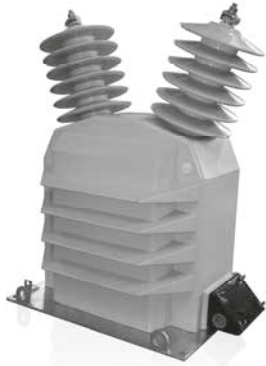
|                                   | SINGLE SECONDARY                      | ONE SECONDARY WITH TAP                |
|-----------------------------------|---------------------------------------|---------------------------------------|
| MARKING<br>(Single Primary Ratio) | <p>FUSE: 16A</p> <p>FUSED UNFUSED</p> | <p>FUSE: 16A</p> <p>FUSED UNFUSED</p> |

Approximate dimensions in inches (mm).



# VRU-36

# 34.5 kV VOLTAGE TRANSFORMER



**OUTDOOR  
60 Hertz**

ARTECHE UR/VR series are dry type outdoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

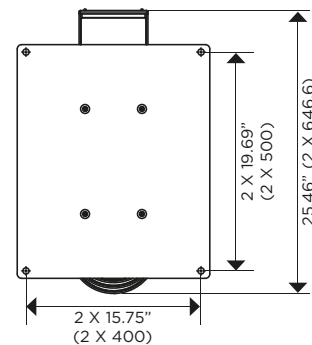
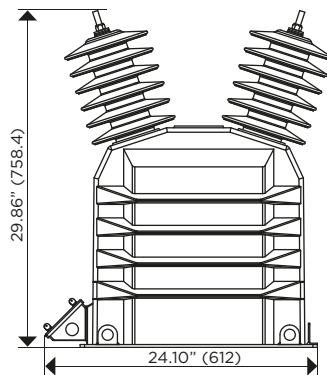
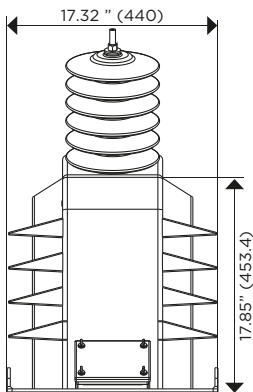
The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|---------------------|--------|---------------|------------------------|----------------------|
| Resin               | Gray   | 284           | 47.5                   | 25.2                 |



Drawing number: 4288071

|             | PRIMARY TERMINAL   | GROUND TERMINAL  | SECONDARY TERMINAL                               |
|-------------|--|--|--|
| CONNECTIONS | <p>Type: TE-4T<br/>Material: Copper<br/>Range: 8SOL-4TRE</p> | <p>Type: TE-12-250<br/>Material: Copper<br/>Range: 4TRE-250MCM</p> | <p>Type: Quick Connector<br/>Material: Brass</p> |

|                                | ONE SECONDARY | TWO SECONDARIES | ONE SECONDARY WITH TAP | TWO SECONDARIES WITH TAP |
|--------------------------------|---------------|-----------------|------------------------|--------------------------|
| MARKING (Single Primary Ratio) |               |                 |                        |                          |

Approximate dimensions in inches (mm).



# URN-36

## 36 kV VOLTAGE TRANSFORMER (INSULATED H2)



**OUTDOOR  
50/60Hz**

ARTECHE UR/VR series are dry type outdoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

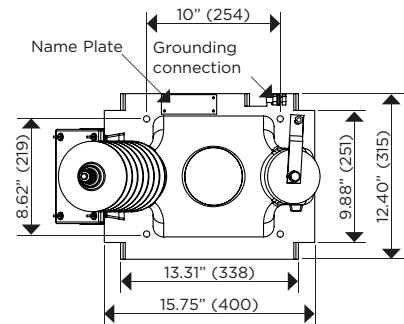
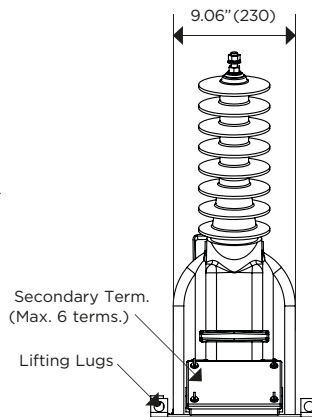
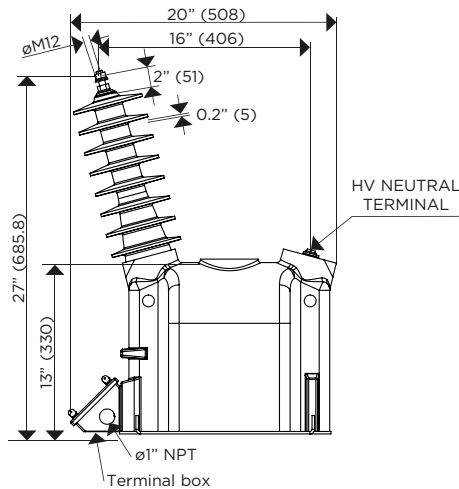
The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions. Partial Discharge measurements exceed the IEEE and CAN/CSA requirements.

This voltage transformer is designed for mounting on poles or substation structures in an upright, underhung or cantilever position.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lb) | Creepage distance (in) | Strike distance (in) |
|---------------------|--------|-------------|------------------------|----------------------|
| Epoxy resin         | Gray   | 136         | 44.09                  | 18                   |



Drawing number: 4289658 Hydrophobic Resin | 4289659 Cycloaliphatic Resin. Approximate dimensions in inches (mm).

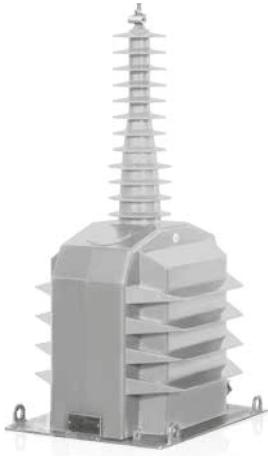
|                                | PRIMARY TERMINAL   | GROUND TERMINAL  | SECONDARY TERMINAL                               |
|--------------------------------|--|--|--|
| CONNECTIONS                    | <p>Type: TE-4T<br/>Material: Cooper<br/>Range: 8SQL-4TRE</p> | <p>Type: TE-12-250<br/>Material: Cooper<br/>Range: 4TRE-250MCM</p> | <p>Type: Quick Connector<br/>Material: Brass</p> |
| MARKING (Single Primary Ratio) |  |  |  |





# URU-52

# 46 kV VOLTAGE TRANSFORMER



**OUTDOOR  
60 Hertz**

ARTECHE UR/VR series are dry type outdoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

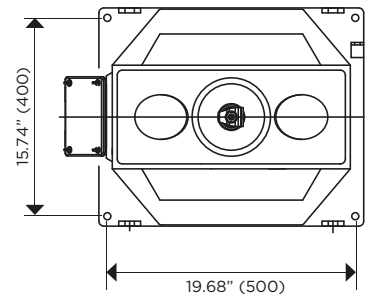
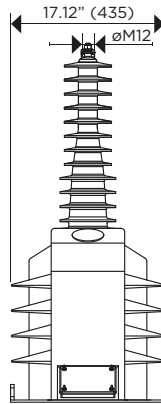
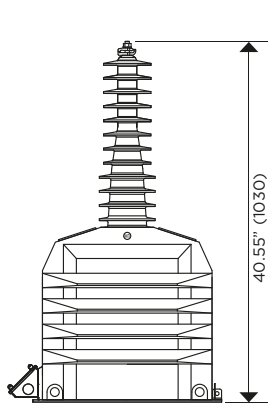
The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|---------------------|--------|---------------|------------------------|----------------------|
| Resin               | Gray   | 374           | 64.56                  | 38.58                |



Drawing number: 9449585

|             | PRIMARY TERMINAL   | GROUND TERMINAL  | SECONDARY TERMINAL                               |
|-------------|--|--|--|
| CONNECTIONS | <p>Type: TE-4T<br/>Material: Copper<br/>Range: 8SOL-4TRE</p> | <p>Type: TE-12-250<br/>Material: Copper<br/>Range: 4TRE-250MCM</p> | <p>Type: Quick Connector<br/>Material: Brass</p> |

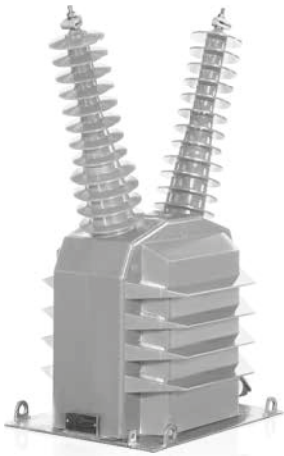
|                                | ONE SECONDARY          | TWO SECONDARIES                  | ONE SECONDARY WITH TAP    | TWO SECONDARIES WITH TAP               |
|--------------------------------|------------------------|----------------------------------|---------------------------|--|
| MARKING (Single Primary Ratio) | <p>H1 H2<br/>X1 X2</p> | <p>H1 H2<br/>X1 X2<br/>Y1 Y2</p> | <p>H1 H2<br/>X1 X2 X3</p> | <p>H1 H2<br/>X1 X2 X3<br/>Y1 Y2 Y3</p> |

Approximate dimensions in inches (mm).



# VRU-52

# 46 kV VOLTAGE TRANSFORMER



**OUTDOOR  
60 Hertz**

ARTECHE UR/VR series are dry type outdoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

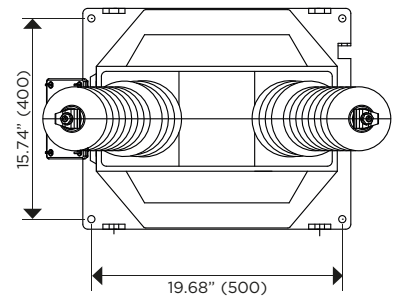
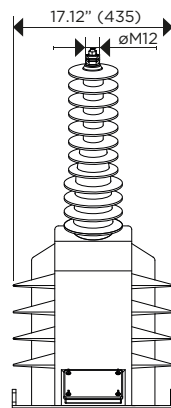
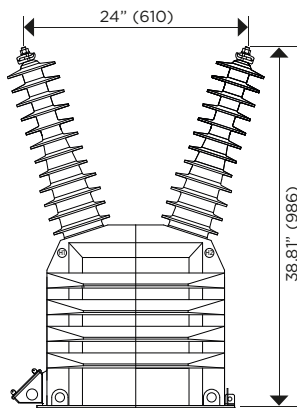
The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|---------------------|--------|---------------|------------------------|----------------------|
| Resin               | Gray   | 394           | 61.41                  | 24                   |



Drawing number: 9449540

|             | PRIMARY TERMINAL                                    | GROUND TERMINAL   | SECONDARY TERMINAL                       |
|-------------|---|---|--|
| CONNECTIONS |   |   |  |
|             | Type: TE-4T<br>Material: Copper<br>Range: 8SOL-4TRE | Type: TE-12-250<br>Material: Copper<br>Range: 4TRE-250MCM | Type: Quick Connector<br>Material: Brass |

|                                | ONE SECONDARY  | TWO SECONDARIES        | ONE SECONDARY WITH TAP | TWO SECONDARIES WITH TAP       |
|--------------------------------|----------------|------------------------|------------------------|--------------------------------|
| MARKING (Single Primary Ratio) |                |                        |                        |                                |
|                                | H1, H2, X1, X2 | H1, H2, X1, X2, Y1, Y2 | H1, H2, X1, X2, X3     | H1, H2, X1, X2, X3, Y1, Y2, Y3 |

Approximate dimensions in inches (mm).



# URU-72

# 69 kV VOLTAGE TRANSFORMER



**OUTDOOR  
60 Hertz**

ARTECHE UR/VR series are dry type outdoor service voltage transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

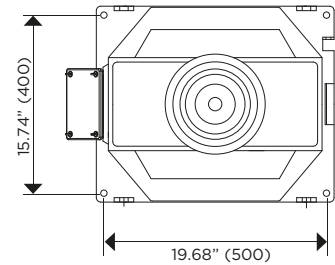
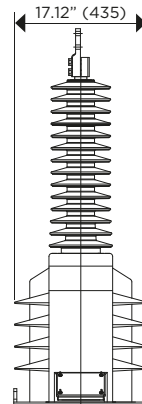
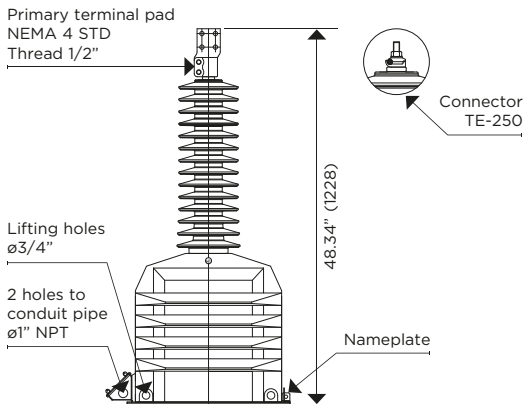
The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|---------------------|--------|---------------|------------------------|----------------------|
| Resin               | Gray   | 381.4         | 92.91                  | 43.3                 |



Drawing number: 9449551

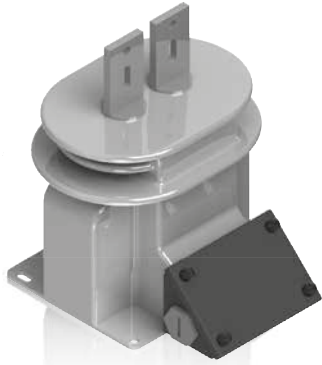
| CONNECTIONS                                      | PRIMARY TERMINAL   |  |  | GROUND TERMINAL  |  |
|--|--|--|--|--|--|
|  | <p>Type: TE-250<br/>Material: Copper<br/>Range: 2/0 TRE-250MCM</p> | <p>Type: NEMA-2<br/>Material: Copper</p> | <p>Type: NEMA-4<br/>Material: Copper</p> | <p>Type: TE-12-250<br/>Material: Copper<br/>Range: 4TRE-250MCM</p> |  |
|  | SECONDARY TERMINAL   | ONE SECONDARY                            | TWO SECONDARIES                          | ONE SECONDARY WITH TAP   | TWO SECONDARIES WITH TAP               |
| <p>Type: Quick Connector<br/>Material: Brass</p> | <p>MARKING<br/>(Single Primary Ratio)</p>                          | <p>H1 H2<br/>X1 X2</p>                   | <p>H1 H2<br/>X1 X2<br/>Y1 Y2</p>         | <p>H1 H2<br/>X1 X2 X3</p>  | <p>H1 H2<br/>X1 X2 X3<br/>Y1 Y2 Y3</p> |

Approximate dimensions in inches (mm).



# CRE-7

# 5 kV CURRENT TRANSFORMER



**OUTDOOR  
60 Hertz**

ARTECHE CRE-7 model are dry type outdoor service current transformers.

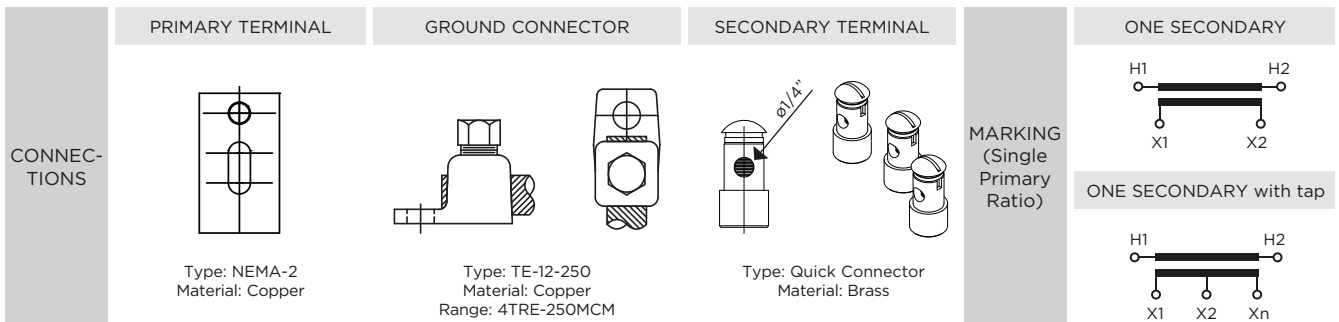
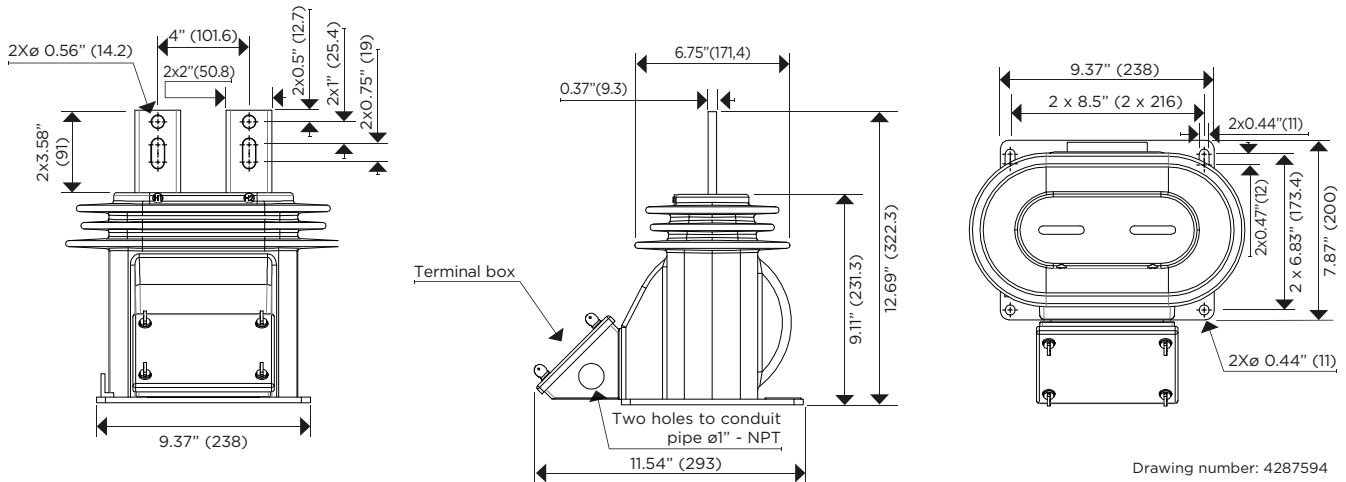
The core and coils are encapsulated with Cycloaliphatic Epoxy Resin (CEP) which provides excellent dielectric properties, mechanical strength, resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. CRE-7 can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which additionally increases the transformers weatherability and offers better performance in heavily polluted environments.

The transformer is maintenance free. The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copperplate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE C57.13 2016 requirements.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|---------------------|--------|---------------|------------------------|----------------------|
| Resin               | Gray   | 43            | 13.3                   | 3                    |



Approximate dimensions in inches (mm).





# CRB-17

# 15 kV CURRENT TRANSFORMER



**OUTDOOR  
60 Hertz**

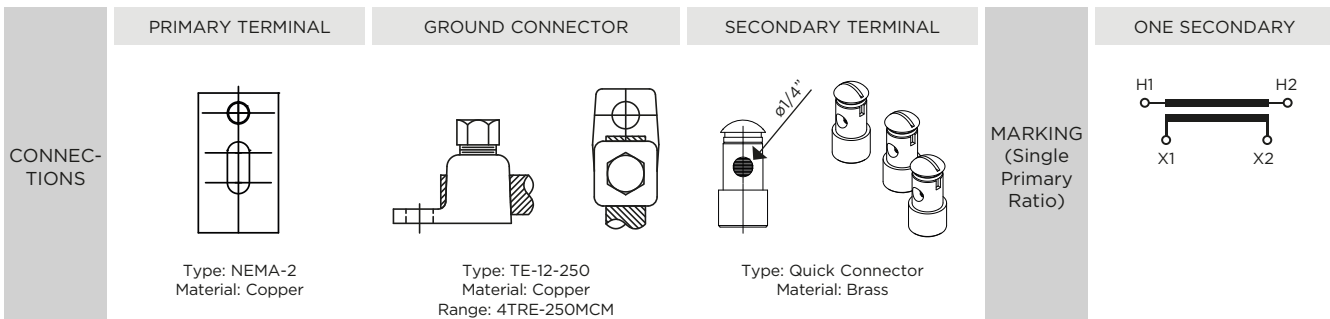
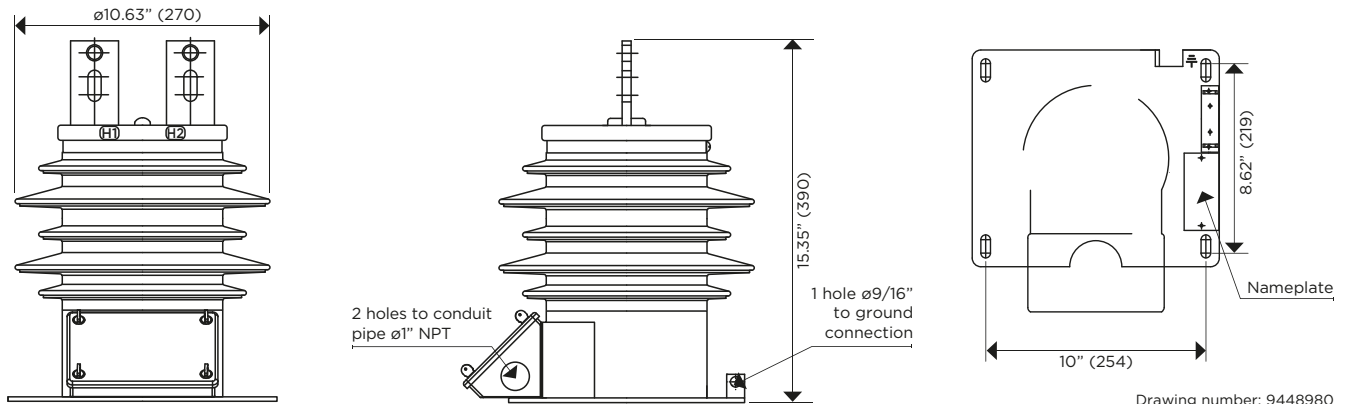
ARTECHE CR series are dry type outdoor service current transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

| Mechanical characteristics |        |               |                        |                      |
|----------------------------|--------|---------------|------------------------|----------------------|
| Insulation Material        | Colors | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
| Resin                      | Gray   | 48.5          | 16.5                   | 8                    |



Approximate dimensions in inches (mm).

# CRB-17

## 15 kV CURRENT TRANSFORMER

| Electrical characteristics |             |  |   |                                    |   |                        |                |                             |          |   |  |
|----------------------------|-------------|--|---|------------------------------------|---|------------------------|----------------|-----------------------------|----------|---|--|
| Code (CEP)                 | Code (HCEP) | Current Ratio (Primary: Secondary) (A) | Continuous Thermal Current Rating Factor @ 30°C | Short-time Thermal Current (kA/1s) | Short-time Mechanical Current (kA <sub>peak</sub> ) | IEEE Metering Accuracy | Relay Accuracy | Nominal Voltage System (kV) | BIL (kV) | Power-Frequency Withstand Voltage (1 min) |  |
|                            |             |  |   |                                    |   |                        |                |                             |          | Primary & Secondary (kV <sub>rms</sub> )  | Secondary Winding (kV <sub>rms</sub> ) |
| 756203001                  | 756200000-H | 5:5                                    | 3.0   | 0.5                                | 1.25  | 0.3 B-0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756203002                  | 756200001-H | 10:5                                   | 3.0   | 1                                  | 2.5   | 0.3 B-0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756203003                  | 756200002-H | 15:5                                   | 3.0   | 1.5                                | 3.75  | 0.3 B-0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756203004                  | 756200003-H | 20:5                                   | 3.0   | 2                                  | 5   | 0.3 B-0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756203005                  | 756200004-H | 25:5                                   | 3.0   | 2.5                                | 6.25  | 0.3 B-0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756203006                  | 756200005-H | 30:5                                   | 3.0   | 3                                  | 7.5   | 0.3 B-0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756203008                  | 756200006-H | 40:5                                   | 3.0   | 4                                  | 10  | 0.3 B-0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756203010                  | 756200007-H | 50:5                                   | 3.0   | 5                                  | 12.5  | 0.3 B-0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756203015                  | 756200008-H | 75:5                                   | 3.0   | 7.5                                | 18.75   | 0.3 B-0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756203020                  | 756200009-H | 100:5                                  | 3.0   | 10                                 | 25  | 0.3 B-0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756203030                  | 756200010-H | 150:5                                  | 3.0   | 15                                 | 37.5  | 0.3 B-0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756203040                  | 756200011-H | 200:5                                  | 3.0   | 20                                 | 50  | 0.3 B-0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756203060                  | 756200012-H | 300:5                                  | 3.0   | 30                                 | 75  | 0.3 B-0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756203080                  | 756200013-H | 400:5                                  | 3.0   | 40                                 | 100   | 0.3 B-0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756203120                  | 756200014-H | 600:5                                  | 2.0   | 60                                 | 150   | 0.3 B-0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756203160                  | 756200015-H | 800:5                                  | 1.5   | 60                                 | 150   | 0.3 B-0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756203200                  | 756200016-H | 1000:5                                 | 1.0   | 75                                 | 127.5   | 0.3 B-0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756203240                  | 756200017-H | 1200:5                                 | 1.0   | 90                                 | 162   | 0.3 B-0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| Shorting Link              |             |  |   |                                    |   |                        |                |                             |          |   |  |
| 756204001                  | 756200030-H | 5:5                                    | 3.0   | 0.5                                | 1.25  | 0.3 B-0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756204002                  | 756200031-H | 10:5                                   | 3.0   | 1                                  | 2.5   | 0.3 B-0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756204003                  | 756200032-H | 15:5                                   | 3.0   | 1.5                                | 3.75  | 0.3 B-0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756204004                  | 756200033-H | 20:5                                   | 3.0   | 2                                  | 5   | 0.3 B-0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756204005                  | 756200034-H | 25:5                                   | 3.0   | 2.5                                | 6.25  | 0.3 B-0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756204006                  | 756200035-H | 30:5                                   | 3.0   | 3                                  | 7.5   | 0.3 B-0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756204008                  | 756200036-H | 40:5                                   | 3.0   | 4                                  | 10  | 0.3 B-0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756204010                  | 756200037-H | 50:5                                   | 3.0   | 5                                  | 12.5  | 0.3 B-0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756204015                  | 756200038-H | 75:5                                   | 3.0   | 7.5                                | 18.75   | 0.3 B-0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756204020                  | 756200039-H | 100:5                                  | 3.0   | 10                                 | 25  | 0.3 B-0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756204030                  | 756200040-H | 150:5                                  | 3.0   | 15                                 | 37.5  | 0.3 B-0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756204040                  | 756200041-H | 200:5                                  | 3.0   | 20                                 | 50  | 0.3 B-0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756204060                  | 756200042-H | 300:5                                  | 3.0   | 30                                 | 75  | 0.3 B-0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756204080                  | 756200043-H | 400:5                                  | 3.0   | 40                                 | 100   | 0.3 B-0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756204120                  | 756200044-H | 600:5                                  | 2.0   | 60                                 | 150   | 0.3 B-0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756204160                  | 756200045-H | 800:5                                  | 1.5   | 60                                 | 150   | 0.3 B-0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756204200                  | 756200046-H | 1000:5                                 | 1.0   | 75                                 | 127.5   | 0.3 B-0.5              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756204240                  | 756200047-H | 1200:5                                 | 1.0   | 90                                 | 162   | 0.3 B-0.5              | -              | 15                          | 110      | 34  | 2.5                                    |

Additional ratings available upon request.

# CRB-17

## 15 kV CURRENT TRANSFORMER

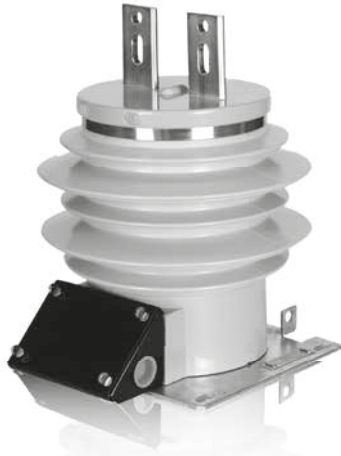
| Electrical characteristics  |             |  |   |                                    |   |                        |                |                             |          |   |  |
|---|-------------|--|---|------------------------------------|---|------------------------|----------------|-----------------------------|----------|---|--|
| Code (CEP)  | Code (HCEP) | Current Ratio (Primary: Secondary) (A) | Continuous Thermal Current Rating Factor @ 30°C | Short-time Thermal Current (kA/1s) | Short-time Mechanical Current (kA <sub>peak</sub> ) | IEEE Metering Accuracy | Relay Accuracy | Nominal Voltage System (kV) | BIL (kV) | Power-Frequency Withstand Voltage (1 min) |  |
|   |             |  |   |                                    |   |                        |                |                             |          | Primary & Secondary (kV <sub>rms</sub> )  | Secondary Winding (kV <sub>rms</sub> ) |
| <b>High Accuracy Extended Range 5% nominal current to Rating Factor</b> |             |  |   |                                    |   |                        |                |                             |          |   |  |
| 756207001   | 756200060-H | 5:5                                    | 1.5   | 0.5                                | 1.25  | 0.15S B-0.5            | -              | 15                          | 110      | 34  | 2.5                                    |
| 756207002   | 756200061-H | 10:5                                   | 1.5   | 1                                  | 2.5   | 0.15S B-0.5            | -              | 15                          | 110      | 34  | 2.5                                    |
| 756207003   | 756200062-H | 15:5                                   | 1.5   | 1.5                                | 3.75  | 0.15S B-0.5            | -              | 15                          | 110      | 34  | 2.5                                    |
| 756207004   | 756200063-H | 20:5                                   | 1.5   | 2                                  | 5   | 0.15S B-0.5            | -              | 15                          | 110      | 34  | 2.5                                    |
| 756207005   | 756200064-H | 25:5                                   | 1.5   | 2.5                                | 6.25  | 0.15S B-0.5            | -              | 15                          | 110      | 34  | 2.5                                    |
| 756207006   | 756200065-H | 30:5                                   | 1.5   | 3                                  | 7.5   | 0.15S B-0.5            | -              | 15                          | 110      | 34  | 2.5                                    |
| 756207008   | 756200066-H | 40:5                                   | 1.5   | 4                                  | 10  | 0.15S B-0.5            | -              | 15                          | 110      | 34  | 2.5                                    |
| 756207010   | 756200067-H | 50:5                                   | 1.5   | 5                                  | 12.5  | 0.15S B-0.5            | -              | 15                          | 110      | 34  | 2.5                                    |
| 756207015   | 756200068-H | 75:5                                   | 1.5   | 7.5                                | 18.75   | 0.15S B-0.5            | -              | 15                          | 110      | 34  | 2.5                                    |
| 756207020   | 756200069-H | 100:5                                  | 1.5   | 10                                 | 25  | 0.15S B-0.5            | -              | 15                          | 110      | 34  | 2.5                                    |
| 756207030   | 756200070-H | 150:5                                  | 1.5   | 15                                 | 37.5  | 0.15S B-0.5            | -              | 15                          | 110      | 34  | 2.5                                    |
| 756207040   | 756200071-H | 200:5                                  | 1.5   | 20                                 | 50  | 0.15S B-0.5            | -              | 15                          | 110      | 34  | 2.5                                    |
| 756207060   | 756200072-H | 300:5                                  | 1.5   | 30                                 | 75  | 0.15S B-0.5            | -              | 15                          | 110      | 34  | 2.5                                    |
| 756207080   | 756200073-H | 400:5                                  | 1.5   | 40                                 | 100   | 0.15S B-0.5            | -              | 15                          | 110      | 34  | 2.5                                    |
| 756207120   | 756200074-H | 600:5                                  | 1.5   | 60                                 | 150   | 0.15S B-0.5            | -              | 15                          | 110      | 34  | 2.5                                    |
| 756207160   | 756200075-H | 800:5                                  | 1.2   | 60                                 | 150   | 0.15S B-0.5            | -              | 15                          | 110      | 34  | 2.5                                    |
| 756207200   | 756200076-H | 1000:5                                 | 1.0   | 75                                 | 127.5   | 0.15S B-0.5            | -              | 15                          | 110      | 34  | 2.5                                    |
| 756207240   | 756200077-H | 1200:5                                 | 1.0   | 90                                 | 162   | 0.15S B-0.5            | -              | 15                          | 110      | 34  | 2.5                                    |
| <b>High Accuracy Extended Range 1% nominal current to Rating Factor</b> |             |  |   |                                    |   |                        |                |                             |          |   |  |
| 756206040   | 756200090-H | 200:5                                  | 2.0   | 20                                 | 50  | 0.15 B-0.5             | -              | 15                          | 110      | 34  | 2.5                                    |
| 756206120   | 756200091-H | 600:5                                  | 1.5   | 60                                 | 150   | 0.15 B-0.5             | -              | 15                          | 110      | 34  | 2.5                                    |
| 756206200   | 756200092-H | 1000:5                                 | 1.5   | 75                                 | 127.5   | 0.15 B-0.5             | -              | 15                          | 110      | 34  | 2.5                                    |
| 756206240   | 756200093-H | 1200:5                                 | 1.2   | 90                                 | 162   | 0.15 B-0.5             | -              | 15                          | 110      | 34  | 2.5                                    |

Additional ratings available upon request.



# CRE-17

# 15 kV CURRENT TRANSFORMER



**OUTDOOR  
60 Hertz**

ARTECHE CR series are dry type outdoor service current transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

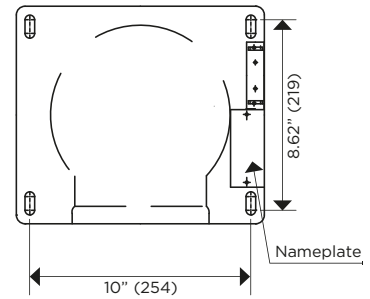
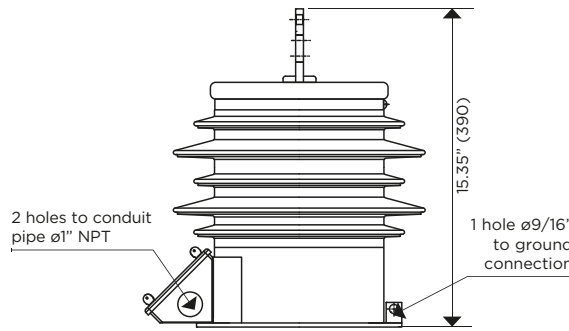
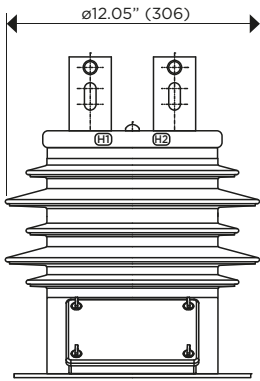
The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|---------------------|--------|---------------|------------------------|----------------------|
| Resin               | Gray   | 68.3          | 16.5                   | 8                    |



Drawing number: 9448985

|             | PRIMARY TERMINAL                 | GROUND CONNECTOR  | SECONDARY TERMINAL                       | MARKING<br>(Single Primary Ratio) | ONE SECONDARY |
|-------------|----------------------------------|---|--|-----------------------------------|---------------|
| CONNECTIONS |                                  |   |  |                                   |               |
|             | Type: NEMA-2<br>Material: Copper | Type: TE-12-250<br>Material: Copper<br>Range: 4TRE-250MCM | Type: Quick Connector<br>Material: Brass |                                   |               |

| NEMA 2 THICKNESS | 3/8"      | 1/2"         | 3/4"         |
|------------------|-----------|--------------|--------------|
| AMPERES          | 0 TO 1200 | 1201 TO 1500 | 1501 TO 2000 |

Approximate dimensions in inches (mm).

# CRE-17

## 15 kV CURRENT TRANSFORMER

| Electrical characteristics |             |  |   |                                    |   |                        |                |                             |          |   |  |
|----------------------------|-------------|--|---|------------------------------------|---|------------------------|----------------|-----------------------------|----------|---|--|
| Code (CEP)                 | Code (HCEP) | Current Ratio (Primary: Secondary) (A) | Continuous Thermal Current Rating Factor @ 30°C | Short-time Thermal Current (kA/1s) | Short-time Mechanical Current (kA <sub>peak</sub> ) | IEEE Metering Accuracy | Relay Accuracy | Nominal Voltage System (kV) | BIL (kV) | Power-Frequency Withstand Voltage (1 min) |  |
|                            |             |  |   |                                    |   |                        |                |                             |          | Primary & Secondary (kV <sub>rms</sub> )  | Secondary Winding (kV <sub>rms</sub> ) |
| 756231001                  | 756230000-H | 5:5                                    | 1.5   | 0.5                                | 0.95  | 0.3 B-1.8              | T150           | 15                          | 110      | 34  | 2.5                                    |
| 756231002                  | 756230001-H | 10:5                                   | 1.5   | 1                                  | 1.9   | 0.3 B-1.8              | T150           | 15                          | 110      | 34  | 2.5                                    |
| 756231003                  | 756230002-H | 15:5                                   | 1.5   | 1.5                                | 2.85  | 0.3 B-1.8              | T150           | 15                          | 110      | 34  | 2.5                                    |
| 756231004                  | 756230003-H | 20:5                                   | 1.5   | 2                                  | 3.8   | 0.3 B-1.8              | T150           | 15                          | 110      | 34  | 2.5                                    |
| 756231005                  | 756230004-H | 25:5                                   | 1.5   | 2.5                                | 4.75  | 0.3 B-1.8              | T150           | 15                          | 110      | 34  | 2.5                                    |
| 756231006                  | 756230005-H | 30:5                                   | 1.5   | 3                                  | 5.7   | 0.3 B-1.8              | T150           | 15                          | 110      | 34  | 2.5                                    |
| 756231008                  | 756230006-H | 40:5                                   | 1.5   | 4                                  | 7.6   | 0.3 B-1.8              | T150           | 15                          | 110      | 34  | 2.5                                    |
| 756231010                  | 756230007-H | 50:5                                   | 1.5   | 5                                  | 9.5   | 0.3 B-1.8              | T150           | 15                          | 110      | 34  | 2.5                                    |
| 756231012                  | 756230008-H | 60:5                                   | 1.5   | 6                                  | 11.4  | 0.3 B-1.8              | T150           | 15                          | 110      | 34  | 2.5                                    |
| 756231015                  | 756230009-H | 75:5                                   | 1.5   | 7.5                                | 14.25   | 0.3 B-1.8              | T150           | 15                          | 110      | 34  | 2.5                                    |
| 756231020                  | 756230010-H | 100:5                                  | 1.5   | 10                                 | 19  | 0.3 B-1.8              | T150           | 15                          | 110      | 34  | 2.5                                    |
| 756231030                  | 756230011-H | 150:5                                  | 1.5   | 15                                 | 28.5  | 0.3 B-1.8              | T150           | 15                          | 110      | 34  | 2.5                                    |
| 756231040                  | 756230012-H | 200:5                                  | 1.5   | 20                                 | 38  | 0.3 B-1.8              | T150           | 15                          | 110      | 34  | 2.5                                    |
| 756231060                  | 756230013-H | 300:5                                  | 1.5   | 30                                 | 57  | 0.3 B-1.8              | T150           | 15                          | 110      | 34  | 2.5                                    |
| 756231080                  | 756230014-H | 400:5                                  | 1.5   | 40                                 | 76  | 0.3 B-1.8              | T150           | 15                          | 110      | 34  | 2.5                                    |
| 756231120                  | 756230015-H | 600:5                                  | 1.5   | 60                                 | 86.7  | 0.3 B-1.8              | T150           | 15                          | 110      | 34  | 2.5                                    |
| 756231160                  | 756230016-H | 800:5                                  | 1.5   | 60                                 | 114   | 0.3 B-1.8              | T150           | 15                          | 110      | 34  | 2.5                                    |
| 756231200                  | 756230017-H | 1000:5                                 | 1.2   | 75                                 | 142.5   | 0.3 B-1.8              | T150           | 15                          | 110      | 34  | 2.5                                    |
| 756231240                  | 756230018-H | 1200:5                                 | 1.0   | 90                                 | 171   | 0.3 B-1.8              | T150           | 15                          | 110      | 34  | 2.5                                    |
| 756232002                  | 756230030-H | 10/20:5                                | 2.0/1.5   | 2                                  | 3.8   | 0.3B-0.5/0.3B-1.8      | T75/T150       | 15                          | 110      | 34  | 2.5                                    |
| 756232005                  | 756230031-H | 25/50:5                                | 2.0/1.5   | 5                                  | 9.5   | 0.3B-0.5/0.3B-1.8      | T75/T150       | 15                          | 110      | 34  | 2.5                                    |
| 756232006                  | 756230032-H | 30/60:5                                | 2.0/1.5   | 6                                  | 11.4  | 0.3B-0.5/0.3B-1.8      | T75/T150       | 15                          | 110      | 34  | 2.5                                    |
| 756232010                  | 756230033-H | 50/100:5                               | 2.0/1.5   | 10                                 | 19  | 0.3B-0.5/0.3B-1.8      | T75/T150       | 15                          | 110      | 34  | 2.5                                    |
| 756232015                  | 756230034-H | 75/150:5                               | 2.0/1.5   | 15                                 | 28.5  | 0.3B-0.5/0.3B-1.8      | T75/T150       | 15                          | 110      | 34  | 2.5                                    |
| 756232020                  | 756230035-H | 100/200:5                              | 2.0/1.5   | 20                                 | 38  | 0.3B-0.5/0.3B-1.8      | T75/T150       | 15                          | 110      | 34  | 2.5                                    |
| 756232030                  | 756230036-H | 150/300:5                              | 2.0/1.5   | 30                                 | 57  | 0.3B-0.5/0.3B-1.8      | T75/T150       | 15                          | 110      | 34  | 2.5                                    |
| 756232040                  | 756230037-H | 200/400:5                              | 2.0/1.5   | 40                                 | 76  | 0.3B-0.5/0.3B-1.8      | T75/T150       | 15                          | 110      | 34  | 2.5                                    |
| 756232060                  | 756230038-H | 300/600:5                              | 2.0/1.5   | 60                                 | 86.7  | 0.3B-0.5/0.3B-1.8      | T75/T150       | 15                          | 110      | 34  | 2.5                                    |
| 756232080                  | 756230039-H | 400/800:5                              | 1.2/1.2   | 60                                 | 114   | 0.3B-0.5/0.3B-1.8      | T75/T150       | 15                          | 110      | 34  | 2.5                                    |
| 756232100                  | 756230040-H | 500/1000:5                             | 1.0/1.0   | 75                                 | 142.5   | 0.3B-0.5/0.3B-1.8      | T75/T150       | 15                          | 110      | 34  | 2.5                                    |
| 756232120                  | 756230041-H | 600/1200:5                             | 1.0/1.0   | 90                                 | 171   | 0.3B-0.5/0.3B-1.8      | T75/T150       | 15                          | 110      | 34  | 2.5                                    |
| 756239001                  | 756230080-H | 5:5                                    | 1.5   | 0.5                                | 0.95  | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756239002                  | 756230081-H | 10:5                                   | 1.5   | 1                                  | 1.9   | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756239010                  | 756230082-H | 50:5                                   | 1.5   | 5                                  | 9.5   | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756239015                  | 756230083-H | 75:5                                   | 1.5   | 7.5                                | 14.25   | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756239020                  | 756230084-H | 100:5                                  | 1.5   | 10                                 | 19  | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756239040                  | 756230085-H | 200:5                                  | 1.5   | 20                                 | 38  | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756239060                  | 756230086-H | 300:5                                  | 1.5   | 30                                 | 57  | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756239120                  | 756230087-H | 600:5                                  | 1.5   | 60                                 | 86.7  | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756239160                  | 756230088-H | 800:5                                  | 1.5   | 60                                 | 114   | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756239200                  | 756230089-H | 1000:5                                 | 1.2   | 75                                 | 142.5   | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756239240                  | 756230090-H | 1200:5                                 | 1.0   | 90                                 | 171   | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756238001                  | 756230100-H | 5/10:5                                 | 2.0/1.5   | 1                                  | 1.9   | 0.15B-0.5/0.15B0.09    | -              | 15                          | 110      | 34  | 2.5                                    |
| 756238002                  | 756230101-H | 10/20:5                                | 2.0/1.5   | 2                                  | 3.8   | 0.15B-0.5/0.15B0.09    | -              | 15                          | 110      | 34  | 2.5                                    |
| 756238060                  | 756230102-H | 300/600:5                              | 2.0/1.5   | 60                                 | 86.7  | 0.15B-0.5/0.15B0.09    | -              | 15                          | 110      | 34  | 2.5                                    |
| 756238080                  | 756230103-H | 400/800:5                              | 1.2/1.2   | 60                                 | 114   | 0.15B-0.5/0.15B0.09    | -              | 15                          | 110      | 34  | 2.5                                    |
| 756238100                  | 756230104-H | 500/1000:5                             | 1.0/1.0   | 75                                 | 142.5   | 0.15B-0.5/0.15B0.09    | -              | 15                          | 110      | 34  | 2.5                                    |
| 756238120                  | 756230105-H | 600/1200:5                             | 1.0/1.0   | 90                                 | 171   | 0.15B-0.5/0.15B0.09    | -              | 15                          | 110      | 34  | 2.5                                    |

| Electrical characteristics  |             |  |   |                                    |   |                        |                |                             |          |   |  |
|---|-------------|--|---|------------------------------------|---|------------------------|----------------|-----------------------------|----------|---|--|
| Code (CEP)  | Code (HCEP) | Current Ratio (Primary: Secondary) (A) | Continuous Thermal Current Rating Factor @ 30°C | Short-time Thermal Current (kA/1s) | Short-time Mechanical Current (kA <sub>peak</sub> ) | IEEE Metering Accuracy | Relay Accuracy | Nominal Voltage System (kV) | BIL (kV) | Power-Frequency Withstand Voltage (1 min) |  |
|   |             |  |   |                                    |   |                        |                |                             |          | Primary & Secondary (kV <sub>rms</sub> )  | Secondary Winding (kV <sub>rms</sub> ) |
| <b>Shorting Link</b>  |             |  |   |                                    |   |                        |                |                             |          |   |  |
| 756234001   | 756230050-H | 5:5                                    | 1.5   | 0.5                                | 0.95  | 0.3 B-1.8              | T150           | 15                          | 110      | 34  | 2.5                                    |
| 756234002   | 756230051-H | 10:5                                   | 1.5   | 1                                  | 1.9   | 0.3 B-1.8              | T150           | 15                          | 110      | 34  | 2.5                                    |
| 756234003   | 756230052-H | 15:5                                   | 1.5   | 1.5                                | 2.85  | 0.3 B-1.8              | T150           | 15                          | 110      | 34  | 2.5                                    |
| 756234004   | 756230053-H | 20:5                                   | 1.5   | 2                                  | 3.8   | 0.3 B-1.8              | T150           | 15                          | 110      | 34  | 2.5                                    |
| 756234005   | 756230054-H | 25:5                                   | 1.5   | 2.5                                | 4.75  | 0.3 B-1.8              | T150           | 15                          | 110      | 34  | 2.5                                    |
| 756234006   | 756230055-H | 30:5                                   | 1.5   | 3                                  | 5.7   | 0.3 B-1.8              | T150           | 15                          | 110      | 34  | 2.5                                    |
| 756234008   | 756230056-H | 40:5                                   | 1.5   | 4                                  | 7.6   | 0.3 B-1.8              | T150           | 15                          | 110      | 34  | 2.5                                    |
| 756234010   | 756230057-H | 50:5                                   | 1.5   | 5                                  | 9.5   | 0.3 B-1.8              | T150           | 15                          | 110      | 34  | 2.5                                    |
| 756234012   | 756230058-H | 60:5                                   | 1.5   | 6                                  | 11.4  | 0.3 B-1.8              | T150           | 15                          | 110      | 34  | 2.5                                    |
| 756234015   | 756230059-H | 75:5                                   | 1.5   | 7.5                                | 14.25   | 0.3 B-1.8              | T150           | 15                          | 110      | 34  | 2.5                                    |
| 756234020   | 756230060-H | 100:5                                  | 1.5   | 10                                 | 19  | 0.3 B-1.8              | T150           | 15                          | 110      | 34  | 2.5                                    |
| 756234030   | 756230061-H | 150:5                                  | 1.5   | 15                                 | 28.5  | 0.3 B-1.8              | T150           | 15                          | 110      | 34  | 2.5                                    |
| 756234040   | 756230062-H | 200:5                                  | 1.5   | 20                                 | 38  | 0.3 B-1.8              | T150           | 15                          | 110      | 34  | 2.5                                    |
| 756234060   | 756230063-H | 300:5                                  | 1.5   | 30                                 | 57  | 0.3 B-1.8              | T150           | 15                          | 110      | 34  | 2.5                                    |
| 756234080   | 756230064-H | 400:5                                  | 1.5   | 40                                 | 76  | 0.3 B-1.8              | T150           | 15                          | 110      | 34  | 2.5                                    |
| 756234120   | 756230065-H | 600:5                                  | 1.5   | 60                                 | 86.7  | 0.3 B-1.8              | T150           | 15                          | 110      | 34  | 2.5                                    |
| 756234160   | 756230066-H | 800:5                                  | 1.5   | 60                                 | 114   | 0.3 B-1.8              | T150           | 15                          | 110      | 34  | 2.5                                    |
| 756234200   | 756230067-H | 1000:5                                 | 1.2   | 75                                 | 142.5   | 0.3 B-1.8              | T150           | 15                          | 110      | 34  | 2.5                                    |
| 756234240   | 756230068-H | 1200:5                                 | 1.0   | 90                                 | 171   | 0.3 B-1.8              | T150           | 15                          | 110      | 34  | 2.5                                    |
| <b>High Accuracy Extended Range 5% nominal current to Rating Factor</b> |             |  |   |                                    |   |                        |                |                             |          |   |  |
| 756237001   | 756230130-H | 5:5                                    | 1.5   | 0.5                                | 0.95  | 0.15S B-0.9            | -              | 15                          | 110      | 34  | 2.5                                    |
| 756237002   | 756230131-H | 10:5                                   | 1.5   | 1                                  | 1.9   | 0.15S B-0.9            | -              | 15                          | 110      | 34  | 2.5                                    |
| 756237010   | 756230132-H | 50:5                                   | 1.5   | 5                                  | 9.5   | 0.15S B-0.9            | -              | 15                          | 110      | 34  | 2.5                                    |
| 756237015   | 756230133-H | 75:5                                   | 1.5   | 7.5                                | 14.25   | 0.15S B-0.9            | -              | 15                          | 110      | 34  | 2.5                                    |
| 756237020   | 756230134-H | 100:5                                  | 1.5   | 10                                 | 19  | 0.15S B-0.9            | -              | 15                          | 110      | 34  | 2.5                                    |
| 756237040   | 756230135-H | 200:5                                  | 1.5   | 20                                 | 38  | 0.15S B-0.9            | -              | 15                          | 110      | 34  | 2.5                                    |
| 756237060   | 756230136-H | 300:5                                  | 1.5   | 30                                 | 57  | 0.15S B-0.9            | -              | 15                          | 110      | 34  | 2.5                                    |
| 756237120   | 756230137-H | 600:5                                  | 1.5   | 60                                 | 86.7  | 0.15S B-0.9            | -              | 15                          | 110      | 34  | 2.5                                    |
| 756237160   | 756230138-H | 800:5                                  | 1.5   | 60                                 | 114   | 0.15S B-0.9            | -              | 15                          | 110      | 34  | 2.5                                    |
| 756237200   | 756230139-H | 1000:5                                 | 1.2   | 75                                 | 142.5   | 0.15S B-0.9            | -              | 15                          | 110      | 34  | 2.5                                    |
| 756237240   | 756230140-H | 1200:5                                 | 1.0   | 90                                 | 171   | 0.15S B-0.9            | -              | 15                          | 110      | 34  | 2.5                                    |
| <b>High Accuracy Extended Range 1% nominal current to Rating Factor</b> |             |  |   |                                    |   |                        |                |                             |          |   |  |
| 756236040   | 756230160-H | 200:5                                  | 2.0   | 20                                 | 38  | 0.15 B-1.8             | -              | 15                          | 110      | 34  | 2.5                                    |
| 756236120   | 756230161-H | 600:5                                  | 1.5   | 60                                 | 86.7  | 0.15 B-1.8             | -              | 15                          | 110      | 34  | 2.5                                    |
| 756236200   | 756230162-H | 1000:5                                 | 1.5   | 75                                 | 142.5   | 0.15 B-1.8             | -              | 15                          | 110      | 34  | 2.5                                    |
| 756236240   | 756230163-H | 1200:5                                 | 1.2   | 90                                 | 171   | 0.15 B-1.8             | -              | 15                          | 110      | 34  | 2.5                                    |

Additional ratings available upon request.





# CRFR-17

# 15 kV CURRENT TRANSFORMER



**OUTDOOR  
60 Hertz**

ARTECHE CRFR series are dry type outdoor service voltage transformers.

The core and coils are encapsulated with Cycloaliphatic Epoxy Resin (CEP) which provides excellent dielectric properties, mechanical strength, resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life.

CRFR family can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which additionally increases the transformer's weatherability and offers better performance in heavily polluted environments. The transformer is maintenance free.

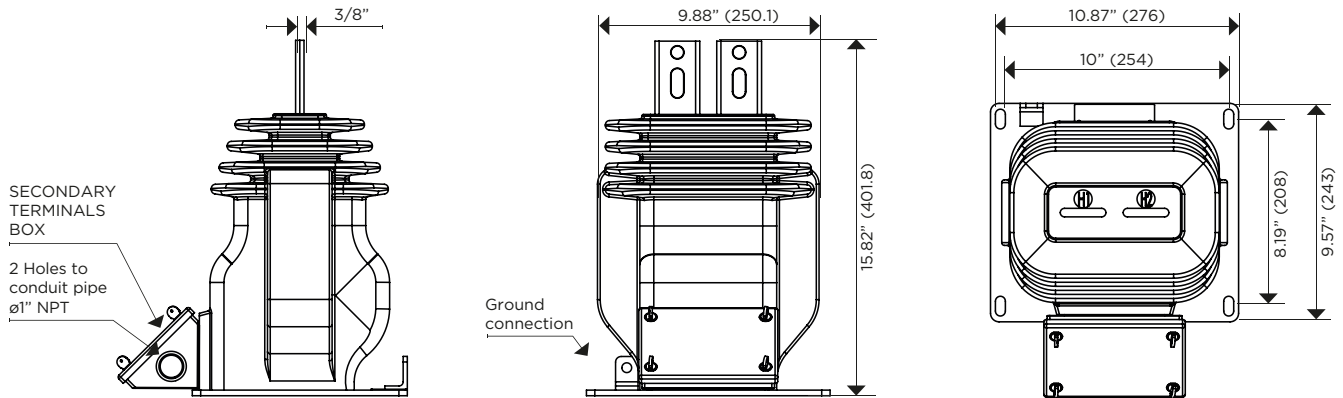
The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE requirements.

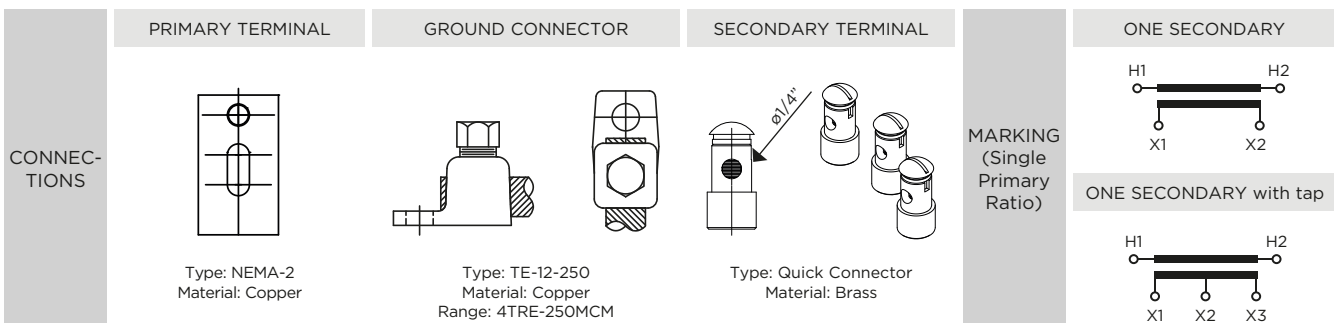
This current transformer is designed for mounting on poles or substation structures in an upright, underhung or cantilever position.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|---------------------|--------|---------------|------------------------|----------------------|
| Resin               | Gray   | 66            | 20.6                   | 8.5                  |



Drawing number: 4288894



Approximate dimensions in inches (mm).

# CRFR-17

## 15 kV CURRENT TRANSFORMER

| Electrical characteristics |             |  |   |                                    |   |                        |                |                             |          |   |  |
|----------------------------|-------------|--|---|------------------------------------|---|------------------------|----------------|-----------------------------|----------|---|--|
| Code (CEP)                 | Code (HCEP) | Current Ratio (Primary: Secondary) (A) | Continuous Thermal Current Rating Factor @ 30°C | Short-time Thermal Current (kA/1s) | Short-time Mechanical Current (kA <sub>peak</sub> ) | IEEE Metering Accuracy | Relay Accuracy | Nominal Voltage System (kV) | BIL (kV) | Power-Frequency Withstand Voltage (1 min) |  |
|                            |             |  |   |                                    |   |                        |                |                             |          | Primary & Secondary (kV <sub>rms</sub> )  | Secondary Winding (kV <sub>rms</sub> ) |
| 756330001                  | 756330090-H | 5:5                                    | 1.5   | 0.5                                | 0.95  | 0.3B-1.8               | T200           | 15                          | 110      | 34  | 2.5                                    |
| 756330002                  | 756330091-H | 10:5                                   | 1.5   | 1                                  | 1.9   | 0.3B-1.8               | T200           | 15                          | 110      | 34  | 2.5                                    |
| 756330003                  | 756330092-H | 15:5                                   | 1.5   | 1.5                                | 2.85  | 0.3B-1.8               | T200           | 15                          | 110      | 34  | 2.5                                    |
| 756330004                  | 756330093-H | 20:5                                   | 1.5   | 2                                  | 3.8   | 0.3B-1.8               | T200           | 15                          | 110      | 34  | 2.5                                    |
| 756330005                  | 756330094-H | 25:5                                   | 1.5   | 2.5                                | 4.75  | 0.3B-1.8               | T200           | 15                          | 110      | 34  | 2.5                                    |
| 756330006                  | 756330095-H | 30:5                                   | 1.5   | 3                                  | 5.7   | 0.3B-1.8               | T200           | 15                          | 110      | 34  | 2.5                                    |
| 756330007                  | 756330096-H | 40:5                                   | 1.5   | 4                                  | 7.6   | 0.3B-1.8               | T200           | 15                          | 110      | 34  | 2.5                                    |
| 756330008                  | 756330097-H | 50:5                                   | 1.5   | 5                                  | 9.5   | 0.3B-1.8               | T200           | 15                          | 110      | 34  | 2.5                                    |
| 756330009                  | 756330098-H | 60:5                                   | 1.5   | 6                                  | 11.4  | 0.3B-1.8               | T200           | 15                          | 110      | 34  | 2.5                                    |
| 756330010                  | 756330099-H | 75:5                                   | 1.5   | 7.5                                | 14.25   | 0.3B-1.8               | T200           | 15                          | 110      | 34  | 2.5                                    |
| 756330011                  | 756330100-H | 100:5                                  | 1.5   | 10                                 | 19  | 0.3B-1.8               | T200           | 15                          | 110      | 34  | 2.5                                    |
| 756330012                  | 756330101-H | 150:5                                  | 1.5   | 15                                 | 37.5  | 0.3B-1.8               | T200           | 15                          | 110      | 34  | 2.5                                    |
| 756330013                  | 756330102-H | 200:5                                  | 1.5   | 20                                 | 50  | 0.3B-1.8               | T200           | 15                          | 110      | 34  | 2.5                                    |
| 756330014                  | 756330103-H | 300:5                                  | 1.5   | 30                                 | 75  | 0.3B-1.8               | T200           | 15                          | 110      | 34  | 2.5                                    |
| 756330015                  | 756330104-H | 400:5                                  | 1.5   | 40                                 | 100   | 0.3B-1.8               | T200           | 15                          | 110      | 34  | 2.5                                    |
| 756330016                  | 756330105-H | 600:5                                  | 1.5   | 60                                 | 86.7  | 0.3B-1.8               | T200           | 15                          | 110      | 34  | 2.5                                    |
| 756330017                  | 756330106-H | 800:5                                  | 1.5   | 60                                 | 114   | 0.3B-1.8               | T200           | 15                          | 110      | 34  | 2.5                                    |
| 756330018                  | 756330107-H | 1000:5                                 | 1.5   | 75                                 | 142.5   | 0.3B-1.8               | T200           | 15                          | 110      | 34  | 2.5                                    |
| 756330019                  | 756330108-H | 1200:5                                 | 1.5   | 90                                 | 171   | 0.3B-1.8               | T200           | 15                          | 110      | 34  | 2.5                                    |
| 756330020                  | 756330109-H | 5/10:5                                 | 2.0/1.5   | 1                                  | 1.9   | 0.3B-0.9/0.3B-1.8      | T100/200       | 15                          | 110      | 34  | 2.5                                    |
| 756330021                  | 756330110-H | 10/20:5                                | 2.0/1.5   | 2                                  | 3.8   | 0.3B-0.9/0.3B-1.8      | T100/200       | 15                          | 110      | 34  | 2.5                                    |
| 756330022                  | 756330111-H | 20/40:5                                | 2.0/1.5   | 4                                  | 7.6   | 0.3B-0.9/0.3B-1.8      | T100/200       | 15                          | 110      | 34  | 2.5                                    |
| 756330023                  | 756330112-H | 25/50:5                                | 2.0/1.5   | 5                                  | 9.5   | 0.3B-0.9/0.3B-1.8      | T100/200       | 15                          | 110      | 34  | 2.5                                    |
| 756330024                  | 756330113-H | 30/60:5                                | 2.0/1.5   | 6                                  | 11.4  | 0.3B-0.9/0.3B-1.8      | T100/200       | 15                          | 110      | 34  | 2.5                                    |
| 756330025                  | 756330114-H | 50/100:5                               | 2.0/1.5   | 10                                 | 19  | 0.3B-0.9/0.3B-1.8      | T100/200       | 15                          | 110      | 34  | 2.5                                    |
| 756330026                  | 756330115-H | 75/150:5                               | 2.0/1.5   | 15                                 | 28.5  | 0.3B-0.9/0.3B-1.8      | T100/200       | 15                          | 110      | 34  | 2.5                                    |
| 756330027                  | 756330116-H | 100/200:5                              | 2.0/1.5   | 20                                 | 38  | 0.3B-0.9/0.3B-1.8      | T100/200       | 15                          | 110      | 34  | 2.5                                    |
| 756330028                  | 756330117-H | 150/300:5                              | 2.0/1.5   | 30                                 | 57  | 0.3B-0.9/0.3B-1.8      | T100/200       | 15                          | 110      | 34  | 2.5                                    |
| 756330029                  | 756330118-H | 200/400:5                              | 2.0/1.5   | 40                                 | 76  | 0.3B-0.9/0.3B-1.8      | T100/200       | 15                          | 110      | 34  | 2.5                                    |
| 756330030                  | 756330119-H | 300/600:5                              | 2.0/1.5   | 60                                 | 86.7  | 0.3B-0.9/0.3B-1.8      | T100/200       | 15                          | 110      | 34  | 2.5                                    |
| 756330031                  | 756330120-H | 400/800:5                              | 2.0/1.5   | 60                                 | 114   | 0.3B-0.9/0.3B-1.8      | T100/200       | 15                          | 110      | 34  | 2.5                                    |
| 756330032                  | 756330121-H | 500/1000:5                             | 2.0/1.5   | 75                                 | 142.5   | 0.3B-0.9/0.3B-1.8      | T100/200       | 15                          | 110      | 34  | 2.5                                    |
| 756330033                  | 756330122-H | 600/1200:5                             | 2.0/1.5   | 90                                 | 171   | 0.3B-0.9/0.3B-1.8      | T100/200       | 15                          | 110      | 34  | 2.5                                    |
| 756330034                  | 756330123-H | 5:5                                    | 1.5   | 0.5                                | 0.95  | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330035                  | 756330124-H | 10:5                                   | 1.5   | 1                                  | 1.9   | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330036                  | 756330125-H | 15:5                                   | 1.5   | 1.5                                | 2.85  | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330037                  | 756330126-H | 20:5                                   | 1.5   | 2                                  | 3.8   | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330038                  | 756330127-H | 25:5                                   | 1.5   | 2.5                                | 4.75  | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330039                  | 756330128-H | 30:5                                   | 1.5   | 3                                  | 5.7   | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330040                  | 756330129-H | 40:5                                   | 1.5   | 4                                  | 7.6   | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330041                  | 756330130-H | 50:5                                   | 1.5   | 5                                  | 9.5   | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330042                  | 756330131-H | 60:5                                   | 1.5   | 6                                  | 11.4  | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330043                  | 756330132-H | 75:5                                   | 1.5   | 7.5                                | 14.25   | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330044                  | 756330133-H | 100:5                                  | 1.5   | 10                                 | 19  | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330045                  | 756330134-H | 150:5                                  | 1.5   | 15                                 | 37.5  | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330046                  | 756330135-H | 200:5                                  | 1.5   | 20                                 | 50  | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330047                  | 756330136-H | 300:5                                  | 1.5   | 30                                 | 75  | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330048                  | 756330137-H | 400:5                                  | 1.5   | 40                                 | 100   | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |

| Electrical characteristics  |             |  |   |                                    |   |                        |                |                             |          |   |  |
|---|-------------|--|---|------------------------------------|---|------------------------|----------------|-----------------------------|----------|---|--|
| Code (CEP)  | Code (HCEP) | Current Ratio (Primary: Secondary) (A) | Continuous Thermal Current Rating Factor @ 30°C | Short-time Thermal Current (kA/1s) | Short-time Mechanical Current (kA <sub>peak</sub> ) | IEEE Metering Accuracy | Relay Accuracy | Nominal Voltage System (kV) | BIL (kV) | Power-Frequency Withstand Voltage (1 min) |  |
|   |             |  |   |                                    |   |                        |                |                             |          | Primary & Secondary (kV <sub>rms</sub> )  | Secondary Winding (kV <sub>rms</sub> ) |
| 756330049   | 756330138-H | 600:5                                  | 1.5   | 60                                 | 86.7  | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330050   | 756330139-H | 800:5                                  | 1.33  | 60                                 | 114   | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330051   | 756330140-H | 1000:5                                 | 1.5   | 75                                 | 142.5   | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330052   | 756330141-H | 1200:5                                 | 1.5   | 90                                 | 171   | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330053   | 756330142-H | 5/10:5                                 | 2.0/1.5   | 1                                  | 1.9   | 0.15B-0.5/0.15B-0.9    | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330054   | 756330143-H | 10/20:5                                | 2.0/1.5   | 2                                  | 3.8   | 0.15B-0.5/0.15B-0.9    | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330055   | 756330144-H | 20/40:5                                | 2.0/1.5   | 4                                  | 7.6   | 0.15B-0.5/0.15B-0.9    | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330056   | 756330145-H | 25/50:5                                | 2.0/1.5   | 5                                  | 9.5   | 0.15B-0.5/0.15B-0.9    | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330057   | 756330146-H | 30/60:5                                | 2.0/1.5   | 6                                  | 11.4  | 0.15B-0.5/0.15B-0.9    | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330058   | 756330147-H | 50/100:5                               | 2.0/1.5   | 10                                 | 19  | 0.15B-0.5/0.15B-0.9    | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330059   | 756330148-H | 75/150:5                               | 2.0/1.5   | 15                                 | 28.5  | 0.15B-0.5/0.15B-0.9    | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330060   | 756330149-H | 100/200:5                              | 2.0/1.5   | 20                                 | 38  | 0.15B-0.5/0.15B-0.9    | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330061   | 756330150-H | 150/300:5                              | 2.0/1.5   | 30                                 | 57  | 0.15B-0.5/0.15B-0.9    | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330062   | 756330151-H | 200/400:5                              | 2.0/1.5   | 40                                 | 76  | 0.15B-0.5/0.15B-0.9    | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330063   | 756330152-H | 300/600:5                              | 2.0/1.5   | 60                                 | 86.7  | 0.15B-0.5/0.15B-0.9    | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330064   | 756330153-H | 400/800:5                              | 2.0/1.5   | 60                                 | 114   | 0.15B-0.5/0.15B-0.9    | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330065   | 756330154-H | 500/1000:5                             | 2.0/1.5   | 75                                 | 142.5   | 0.15B-0.5/0.15B-0.9    | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330066   | 756330155-H | 600/1200:5                             | 2.0/1.5   | 90                                 | 171   | 0.15B-0.5/0.15B-0.9    | -              | 15                          | 110      | 34  | 2.5                                    |
| <b>High Accuracy Extended Range 5% nominal current to Rating Factor</b> |             |  |   |                                    |   |                        |                |                             |          |   |  |
| 756330067   | 756330156-H | 5:5                                    | 1.5   | 0.5                                | 0.95  | 0.15SB-0.9             | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330068   | 756330157-H | 10:5                                   | 1.5   | 1                                  | 1.9   | 0.15SB-0.9             | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330069   | 756330158-H | 15:5                                   | 1.5   | 1.5                                | 2.85  | 0.15SB-0.9             | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330070   | 756330159-H | 20:5                                   | 1.5   | 2                                  | 3.8   | 0.15SB-0.9             | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330071   | 756330160-H | 25:5                                   | 1.5   | 2.5                                | 4.75  | 0.15SB-0.9             | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330072   | 756330161-H | 30:5                                   | 1.5   | 3                                  | 5.7   | 0.15SB-0.9             | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330073   | 756330162-H | 40:5                                   | 1.5   | 4                                  | 7.6   | 0.15SB-0.9             | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330074   | 756330163-H | 50:5                                   | 1.5   | 5                                  | 9.5   | 0.15SB-0.9             | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330075   | 756330164-H | 60:5                                   | 1.5   | 6                                  | 11.4  | 0.15SB-0.9             | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330076   | 756330165-H | 75:5                                   | 1.5   | 7.5                                | 14.25   | 0.15SB-0.9             | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330077   | 756330166-H | 100:5                                  | 1.5   | 10                                 | 19  | 0.15SB-0.9             | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330078   | 756330167-H | 150:5                                  | 1.5   | 15                                 | 37.5  | 0.15SB-0.9             | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330079   | 756330168-H | 200:5                                  | 1.5   | 20                                 | 50  | 0.15SB-0.9             | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330080   | 756330169-H | 300:5                                  | 1.5   | 30                                 | 75  | 0.15SB-0.9             | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330081   | 756330170-H | 400:5                                  | 1.5   | 40                                 | 100   | 0.15SB-0.9             | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330082   | 756330171-H | 600:5                                  | 1.5   | 60                                 | 86.7  | 0.15SB-0.9             | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330083   | 756330172-H | 800:5                                  | 1.33  | 60                                 | 114   | 0.15SB-0.9             | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330084   | 756330173-H | 1000:5                                 | 1.5   | 75                                 | 142.5   | 0.15SB-0.9             | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330085   | 756330174-H | 1200:5                                 | 1.5   | 90                                 | 171   | 0.15SB-0.9             | -              | 15                          | 110      | 34  | 2.5                                    |
| <b>High Accuracy Extended Range 1% nominal current to Rating Factor</b> |             |  |   |                                    |   |                        |                |                             |          |   |  |
| 756330086   | 756330175-H | 200:5                                  | 1.5   | 10                                 | 19  | 0.15 B-1.8             | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330087   | 756330176-H | 600:5                                  | 1.5   | 10                                 | 19  | 0.15 B-1.8             | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330088   | 756330177-H | 1000:5                                 | 1.5   | 60                                 | 114   | 0.15 B-1.8             | -              | 15                          | 110      | 34  | 2.5                                    |
| 756330089   | 756330178-H | 1200:5                                 | 1.5   | 90                                 | 171   | 0.15 B-1.8             | -              | 15                          | 110      | 34  | 2.5                                    |

Additional ratings available upon request.



# CRF-17

# 15 kV CURRENT TRANSFORMER



**OUTDOOR  
60 Hertz**

ARTECHE CR series are dry type outdoor service current transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

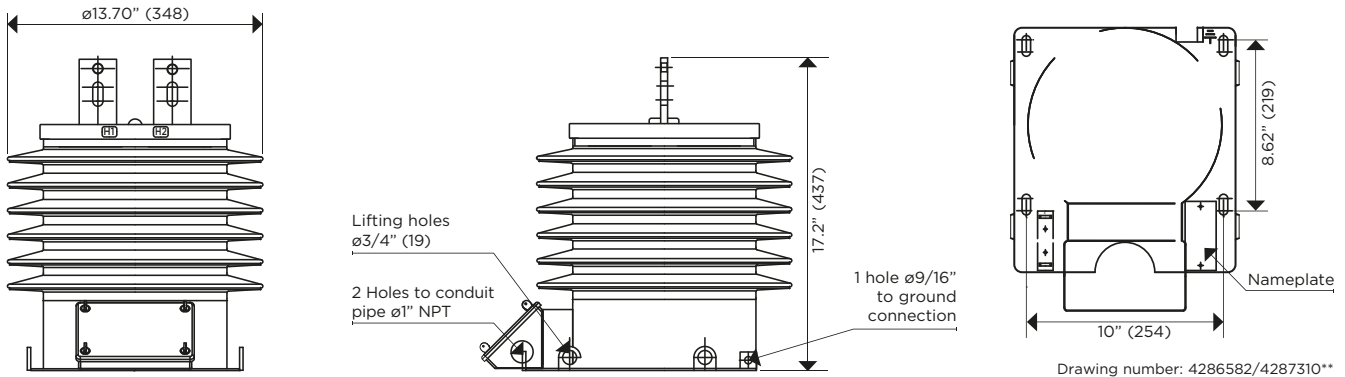
The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|---------------------|--------|---------------|------------------------|----------------------|
| Resin               | Gray   | 112.4         | 27.55                  | 12                   |



|             | PRIMARY TERMINAL                 | GROUND CONNECTOR                       | SECONDARY TERMINAL  |                                   | ONE SECONDARY                            |
|-------------|----------------------------------|--|---|-----------------------------------|--|
| CONNECTIONS |                                  |  |   | MARKING<br>(Single Primary Ratio) |  |
|             | Type: NEMA-2<br>Material: Copper | Type: NEMA-4<br>Material: Copper<br>** | Type: TE-12-250<br>Material: Copper<br>Range: 4TRE-250MCM |                                   | Type: Quick Connector<br>Material: Brass |

|                  |           |              |              |
|------------------|-----------|--------------|--------------|
| NEMA 2 THICKNESS | 3/8"      | 1/2"         | 3/4"         |
| AMPERES          | 0 TO 1200 | 1201 TO 1500 | 1501 TO 2000 |

Approximate dimensions in inches (mm).

# CRF-17

## 15 kV CURRENT TRANSFORMER

| Electrical characteristics |             |  |   |                                    |   |                        |                |                             |          |   |  |
|----------------------------|-------------|--|---|------------------------------------|---|------------------------|----------------|-----------------------------|----------|---|--|
| Code (CEP)                 | Code (HCEP) | Current Ratio (Primary: Secondary) (A) | Continuous Thermal Current Rating Factor @ 30°C | Short-time Thermal Current (kA/1s) | Short-time Mechanical Current (kA <sub>peak</sub> ) | IEEE Metering Accuracy | Relay Accuracy | Nominal Voltage System (kV) | BIL (kV) | Power-Frequency Withstand Voltage (1 min) |  |
|                            |             |  |   |                                    |   |                        |                |                             |          | Primary & Secondary (kV <sub>rms</sub> )  | Secondary Winding (kV <sub>rms</sub> ) |
| 756191001                  | 756190000-H | 5:5                                    | 1.5   | 0.5                                | 0.95  | 0.3B-1.8               | T200           | 15                          | 110      | 34  | 2.5                                    |
| 756191002                  | 756190001-H | 10:5                                   | 1.5   | 1                                  | 1.9   | 0.3B-1.8               | T200           | 15                          | 110      | 34  | 2.5                                    |
| 756191003                  | 756190002-H | 15:5                                   | 1.5   | 1.5                                | 2.85  | 0.3B-1.8               | T200           | 15                          | 110      | 34  | 2.5                                    |
| 756191004                  | 756190003-H | 20:5                                   | 1.5   | 2                                  | 3.8   | 0.3B-1.8               | T200           | 15                          | 110      | 34  | 2.5                                    |
| 756191005                  | 756190004-H | 25:5                                   | 1.5   | 2.5                                | 4.75  | 0.3B-1.8               | T200           | 15                          | 110      | 34  | 2.5                                    |
| 756191006                  | 756190005-H | 30:5                                   | 1.5   | 3                                  | 5.7   | 0.3B-1.8               | T200           | 15                          | 110      | 34  | 2.5                                    |
| 756191008                  | 756190006-H | 40:5                                   | 1.5   | 4                                  | 7.6   | 0.3B-1.8               | T200           | 15                          | 110      | 34  | 2.5                                    |
| 756191010                  | 756190007-H | 50:5                                   | 1.5   | 5                                  | 9.5   | 0.3B-1.8               | T200           | 15                          | 110      | 34  | 2.5                                    |
| 756191012                  | 756190008-H | 60:5                                   | 1.5   | 6                                  | 11.4  | 0.3B-1.8               | T200           | 15                          | 110      | 34  | 2.5                                    |
| 756191015                  | 756190009-H | 75:5                                   | 1.5   | 7.5                                | 14.25   | 0.3B-1.8               | T200           | 15                          | 110      | 34  | 2.5                                    |
| 756191020                  | 756190010-H | 100:5                                  | 1.5   | 10                                 | 19  | 0.3B-1.8               | T200           | 15                          | 110      | 34  | 2.5                                    |
| 756191030                  | 756190011-H | 150:5                                  | 1.5   | 15                                 | 37.5  | 0.3B-1.8               | T200           | 15                          | 110      | 34  | 2.5                                    |
| 756191040                  | 756190012-H | 200:5                                  | 1.5   | 20                                 | 50  | 0.3B-1.8               | T200           | 15                          | 110      | 34  | 2.5                                    |
| 756191060                  | 756190013-H | 300:5                                  | 1.5   | 30                                 | 75  | 0.3B-1.8               | T200           | 15                          | 110      | 34  | 2.5                                    |
| 756191080                  | 756190014-H | 400:5                                  | 1.5   | 40                                 | 100   | 0.3B-1.8               | T200           | 15                          | 110      | 34  | 2.5                                    |
| 756191120                  | 756190015-H | 600:5                                  | 1.5   | 60                                 | 86.7  | 0.3B-1.8               | T200           | 15                          | 110      | 34  | 2.5                                    |
| 756191160                  | 756190016-H | 800:5                                  | 1.2   | 60                                 | 114   | 0.3B-1.8               | T200           | 15                          | 110      | 34  | 2.5                                    |
| 756191200                  | 756190017-H | 1000:5                                 | 1.0   | 75                                 | 142.5   | 0.3B-1.8               | T200           | 15                          | 110      | 34  | 2.5                                    |
| 756191240                  | 756190018-H | 1200:5                                 | 1.0   | 90                                 | 171   | 0.3B-1.8               | T200           | 15                          | 110      | 34  | 2.5                                    |
| 756192001                  | 756190030-H | 5/10:5                                 | 2.0/1.5   | 1                                  | 1.9   | 0.3B-0.9/0.3B-1.8      | T100/200       | 15                          | 110      | 34  | 2.5                                    |
| 756192002                  | 756190031-H | 10/20:5                                | 2.0/1.5   | 2                                  | 3.8   | 0.3B-0.9/0.3B-1.8      | T100/200       | 15                          | 110      | 34  | 2.5                                    |
| 756192005                  | 756190032-H | 25/50:5                                | 2.0/1.5   | 5                                  | 9.5   | 0.3B-0.9/0.3B-1.8      | T100/200       | 15                          | 110      | 34  | 2.5                                    |
| 756192006                  | 756190033-H | 30/60:5                                | 2.0/1.5   | 6                                  | 11.4  | 0.3B-0.9/0.3B-1.8      | T100/200       | 15                          | 110      | 34  | 2.5                                    |
| 756192010                  | 756190034-H | 50/100:5                               | 2.0/1.5   | 10                                 | 19  | 0.3B-0.9/0.3B-1.8      | T100/200       | 15                          | 110      | 34  | 2.5                                    |
| 756192015                  | 756190035-H | 75/150:5                               | 2.0/1.5   | 15                                 | 28.5  | 0.3B-0.9/0.3B-1.8      | T100/200       | 15                          | 110      | 34  | 2.5                                    |
| 756192020                  | 756190036-H | 100/200:5                              | 2.0/1.5   | 20                                 | 38  | 0.3B-0.9/0.3B-1.8      | T100/200       | 15                          | 110      | 34  | 2.5                                    |
| 756192030                  | 756190037-H | 150/300:5                              | 2.0/1.5   | 30                                 | 57  | 0.3B-0.9/0.3B-1.8      | T100/200       | 15                          | 110      | 34  | 2.5                                    |
| 756192040                  | 756190038-H | 200/400:5                              | 2.0/1.5   | 40                                 | 76  | 0.3B-0.9/0.3B-1.8      | T100/200       | 15                          | 110      | 34  | 2.5                                    |
| 756192060                  | 756190039-H | 300/600:5                              | 2.0/1.5   | 60                                 | 86.7  | 0.3B-0.9/0.3B-1.8      | T100/200       | 15                          | 110      | 34  | 2.5                                    |
| 756192080                  | 756190040-H | 400/800:5                              | 1.2/1.2   | 60                                 | 114   | 0.3B-0.9/0.3B-1.8      | T100/200       | 15                          | 110      | 34  | 2.5                                    |
| 756192100                  | 756190041-H | 500/1000:5                             | 1.0/1.0   | 75                                 | 142.5   | 0.3B-0.9/0.3B-1.8      | T100/200       | 15                          | 110      | 34  | 2.5                                    |
| 756192120                  | 756190042-H | 600/1200:5                             | 1.0/1.0   | 90                                 | 171   | 0.3B-0.9/0.3B-1.8      | T100/200       | 15                          | 110      | 34  | 2.5                                    |
| 756199001                  | 756190043-H | 5:5                                    | 1.5   | 0.5                                | 0.95  | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756199002                  | 756190044-H | 10:5                                   | 1.5   | 1                                  | 1.9   | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756199010                  | 756190045-H | 50:5                                   | 1.5   | 5                                  | 9.5   | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756199015                  | 756190046-H | 75:5                                   | 1.5   | 7.5                                | 14.25   | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756199040                  | 756190047-H | 100:5                                  | 1.5   | 10                                 | 19  | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756199120                  | 756190048-H | 600:5                                  | 1.5   | 10                                 | 19  | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756199160                  | 756190049-H | 800:5                                  | 1.2   | 60                                 | 86.7  | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756199200                  | 756190050-H | 1000:5                                 | 1.0   | 60                                 | 114   | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756199240                  | 756190051-H | 1200:5                                 | 1.0   | 90                                 | 171   | 0.15B-0.9              | -              | 15                          | 110      | 34  | 2.5                                    |
| 756198001                  | 756190052-H | 5/10:5                                 | 2.0/1.5   | 1                                  | 1.9   | 0.15B-0.5/0.15B-0.9    | -              | 15                          | 110      | 34  | 2.5                                    |
| 756198002                  | 756190053-H | 10/20:5                                | 2.0/1.5   | 2                                  | 3.8   | 0.15B-0.5/0.15B-0.9    | -              | 15                          | 110      | 34  | 2.5                                    |
| 756198060                  | 756190054-H | 300/600:5                              | 2.0/1.5   | 60                                 | 86.7  | 0.15B-0.5/0.15B-0.9    | -              | 15                          | 110      | 34  | 2.5                                    |
| 756198080                  | 756190055-H | 400/800:5                              | 1.2/1.2   | 60                                 | 114   | 0.15B-0.5/0.15B-0.9    | -              | 15                          | 110      | 34  | 2.5                                    |
| 756198100                  | 756190056-H | 500/1000:5                             | 1.0/1.0   | 75                                 | 142.5   | 0.15B-0.5/0.15B-0.9    | -              | 15                          | 110      | 34  | 2.5                                    |
| 756198120                  | 756190057-H | 600/1200:5                             | 1.0/1.0   | 90                                 | 171   | 0.15B-0.5/0.15B-0.9    | -              | 15                          | 110      | 34  | 2.5                                    |





# CPE-15

## 15 kV CURRENT TRANSFORMER



OUTDOOR  
60 Hertz

ARTECHE CPE series are dry type outdoor service window type current transformers.

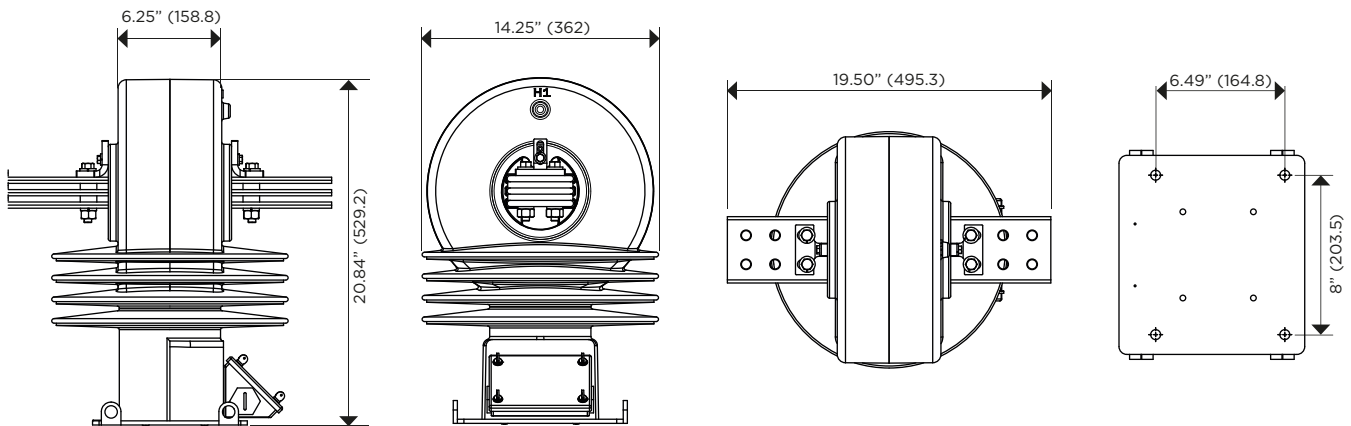
The core and coils are encapsulated with Cycloaliphatic Epoxy Resin (CEP) which provides excellent dielectric properties, mechanical strength, resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. CPE family can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which additionally increases the transformers weatherability and offers better performance in heavily polluted environments. The transformer is maintenance free.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copperplate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

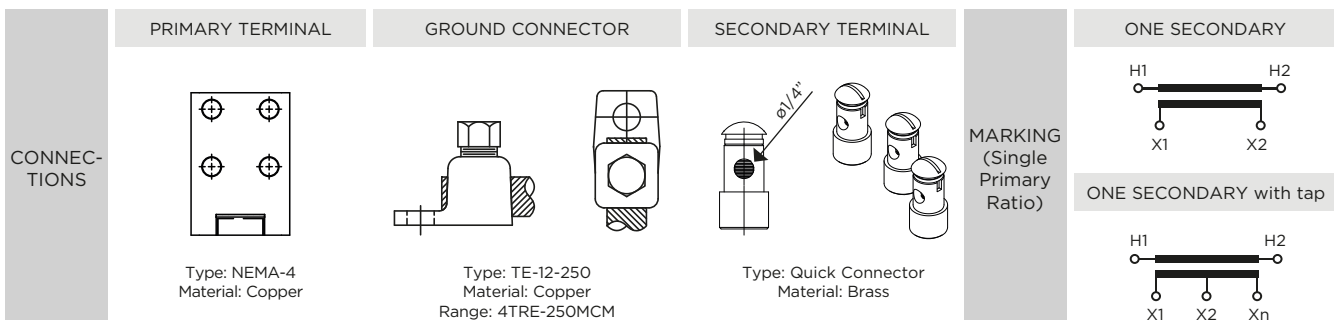
Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|---------------------|--------|---------------|------------------------|----------------------|
| Resin               | Gray   | 178.5         | 35.43                  | 8.39                 |



Drawing number: 4288550



Approximate dimensions in inches (mm).

| Electrical characteristics |             |                                    |   |                                    |   |                        |                |                                     |          |   |   |                                      |   |         |
|----------------------------|-------------|------------------------------------|---|------------------------------------|---|------------------------|----------------|-------------------------------------|----------|---|---|--------------------------------------|---|---------|
| Code (CEP)                 | Code (HCEP) | Current Ratio (Primary: Secondary) | Continuous Thermal Current Rating Factor @ 30°C | Short-time Thermal Current (kA/1s) | Short-time Mechanical Current (kA <sub>peak</sub> ) | IEEE Metering Accuracy | Relay Accuracy | Highest Nominal Voltage System (kV) | BIL (kV) | Power-Frequency Withstand Voltage (1 min)                 |   | Dimensional Drawing Number CEP resin | Dimensional Drawing number for HCEP resin | Type    |
|                            |             |                                    |   |                                    |   |                        |                |                                     |          | Power frequency applied voltage test (kV <sub>rms</sub> ) | Power frequency secondary applied voltage test (kV <sub>rms</sub> ) |                                      |   |         |
| 756520001                  | 756520052-H | 200:5                              | 3.0   | 16                                 | 43.2  | 0.3B0.2                | C50            | 15                                  | 110      | 34  | 2.5   | 4288550                              | 4288980                                   | Bar (1) |
| 756520002                  | 756520053-H | 300:5                              | 2.0   | 24                                 | 64.8  | 0.3B0.5                | C100           | 15                                  | 110      | 34  | 2.5   | 4288550                              | 4288980                                   | Bar (1) |
| 756520003                  | 756520054-H | 400:5                              | 2.0   | 32                                 | 86.4  | 0.3B0.9                | C100           | 15                                  | 110      | 34  | 2.5   | 4288550                              | 4288980                                   | Bar (1) |
| 756520004                  | 756520055-H | 500:5                              | 2.0   | 40                                 | 108   | 0.3B1.8                | C150           | 15                                  | 110      | 34  | 2.5   | 4288550                              | 4288980                                   | Bar (1) |
| 756520005                  | 756520056-H | 600:5                              | 2.0   | 48                                 | 129.6   | 0.3B1.8                | C200           | 15                                  | 110      | 34  | 2.5   | 4288550                              | 4288980                                   | Bar (1) |
| 756520006                  | 756520057-H | 800:5                              | 2.0   | 64                                 | 172.8   | 0.3B1.8                | C200           | 15                                  | 110      | 34  | 2.5   | 4288550                              | 4288980                                   | Bar (2) |
| 756520007                  | 756520058-H | 1000:5                             | 2.0   | 80                                 | 216   | 0.3B1.8                | C250           | 15                                  | 110      | 34  | 2.5   | 4288550                              | 4288980                                   | Bar (2) |
| 756520008                  | 756520059-H | 1200:5                             | 2.0   | 96                                 | 259.2   | 0.3B1.8                | C250           | 15                                  | 110      | 34  | 2.5   | 4288550                              | 4288980                                   | Bar (2) |
| 756520009                  | 756520060-H | 1500:5                             | 2.0   | 120                                | 324   | 0.3B1.8                | C300           | 15                                  | 110      | 34  | 2.5   | 4288550                              | 4288980                                   | Bar (3) |
| 756520010                  | 756520061-H | 2000:5                             | 2.0   | 160                                | 432   | 0.3B1.8                | C400           | 15                                  | 110      | 34  | 2.5   | 4288550                              | 4288980                                   | Bar (3) |
| 756520011                  | 756520062-H | 2500:5                             | 2.0   | 200                                | 540   | 0.3B1.8                | C400           | 15                                  | 110      | 34  | 2.5   | 4288550                              | 4288980                                   | Bar (3) |
| 756520012                  | 756520063-H | 3000:5                             | 2.0   | 240                                | 648   | 0.3B1.8                | C400           | 15                                  | 110      | 34  | 2.5   | 4288866                              | 4289801                                   | Bar (4) |
| 756520013                  | 756520064-H | 4000:5                             | 1.5   | 320                                | 864   | 0.3B1.8                | C800           | 15                                  | 110      | 34  | 2.5   | 4288866                              | 4289801                                   | Bar (4) |
| 756520014                  | 756520065-H | 5000:5                             | 1.5   | 400                                | 1080  | 0.3B1.8                | C800           | 15                                  | 110      | 34  | 2.5   | 4288866                              | 4289801                                   | Bar (4) |
| 756520015                  | 756520066-H | 200/400:5                          | 3.0/3.0   | 32                                 | 86.4  | 0.3B0.2/B0.9           | C50/<br>C100   | 15                                  | 110      | 34  | 2.5   | 4288550                              | 4288980                                   | Bar (1) |
| 756520016                  | 756520067-H | 300/600:5                          | 2.0/2.0   | 48                                 | 129.6   | 0.3B0.5/B1.8           | C100/<br>C200  | 15                                  | 110      | 34  | 2.5   | 4288550                              | 4288980                                   | Bar (1) |
| 756520017                  | 756520068-H | 400/800:5                          | 2.0/2.0   | 64                                 | 172.8   | 0.3B0.9/B1.8           | C100/<br>C200  | 15                                  | 110      | 34  | 2.5   | 4288550                              | 4288980                                   | Bar (2) |
| 756520018                  | 756520069-H | 500/1000:5                         | 2.0/2.0   | 8                                  | 21.6  | 0.3B0.9/B1.8           | C100/<br>C200  | 15                                  | 110      | 34  | 2.5   | 4288550                              | 4288980                                   | Bar (2) |
| 756520019                  | 756520070-H | 600/1200:5                         | 2.0/2.0   | 96                                 | 259.2   | 0.3B1.8/B1.8           | C150/<br>C300  | 15                                  | 110      | 34  | 2.5   | 4288550                              | 4288980                                   | Bar (2) |
| 756520020                  | 756520071-H | 750/1500:5                         | 2.0/2.0   | 120                                | 324   | 0.3B1.8/B1.8           | C200/<br>C400  | 15                                  | 110      | 34  | 2.5   | 4288550                              | 4288980                                   | Bar (3) |
| 756520021                  | 756520072-H | 800/1600:5                         | 2.0/2.0   | 128                                | 345.6   | 0.3B1.8/B1.8           | C200/<br>C400  | 15                                  | 110      | 34  | 2.5   | 4288550                              | 4288980                                   | Bar (3) |
| 756520022                  | 756520073-H | 1000/2000:5                        | 2.0/2.0   | 160                                | 432   | 0.3B1.8/B1.8           | C200/<br>C400  | 15                                  | 110      | 34  | 2.5   | 4288550                              | 4288980                                   | Bar (3) |
| 756520023                  | 756520074-H | 1500/3000:5                        | 2.0/2.0   | 240                                | 648   | 0.3B1.8/B1.8           | C300/<br>C600  | 15                                  | 110      | 34  | 2.5   | 4288866                              | 4289801                                   | Bar (4) |
| 756520024                  | 756520075-H | 2000/4000:5                        | 2.0/1.5   | 320                                | 864   | 0.3B1.8/B1.8           | C400/<br>C800  | 15                                  | 110      | 34  | 2.5   | 4288866                              | 4289801                                   | Bar (4) |
| 756520025                  | 756520076-H | 2500/5000:5                        | 2.0/1.5   | 400                                | 1080  | 0.3B1.8/B1.8           | C400/<br>C800  | 15                                  | 110      | 34  | 2.5   | 4288866                              | 4289801                                   | Bar (4) |
| 756520029                  | 756520080-H | 200:5                              | 4.0   | 16                                 | 43.2  | 0.15S<br>B0.1/0.3B0.2  | --             | 15                                  | 110      | 34  | 2.5   | 4288550                              | 4288980                                   | Bar (1) |
| 756520030                  | 756520081-H | 300:5                              | 4.0   | 24                                 | 64.8  | 0.15S<br>B0.5/0.3B0.9  | --             | 15                                  | 110      | 34  | 2.5   | 4288550                              | 4288980                                   | Bar (1) |
| 756520031                  | 756520082-H | 400:5                              | 4.0   | 32                                 | 86.4  | 0.15S<br>B0.9/0.3B1.8  | --             | 15                                  | 110      | 34  | 2.5   | 4288550                              | 4288980                                   | Bar (2) |
| 756520032                  | 756520083-H | 500:5                              | 4.0   | 40                                 | 108   | 0.15S<br>B0.9/0.3B1.8  | --             | 15                                  | 110      | 34  | 2.5   | 4288550                              | 4288980                                   | Bar (2) |
| 756520033                  | 756520084-H | 600:5                              | 4.0   | 48                                 | 129.6   | 0.15S<br>B0.9/0.3B1.8  | --             | 15                                  | 110      | 34  | 2.5   | 4288550                              | 4288980                                   | Bar (2) |
| 756520034                  | 756520085-H | 800:5                              | 4.0   | 64                                 | 172.8   | 0.15S<br>B0.9/0.3B1.8  | --             | 15                                  | 110      | 34  | 2.5   | 4288550                              | 4288980                                   | Bar (3) |
| 756520035                  | 756520086-H | 1000:5                             | 4.0   | 80                                 | 216   | 0.15S<br>B1.8/0.15B1.8 | --             | 15                                  | 110      | 34  | 2.5   | 4288550                              | 4288980                                   | Bar (3) |
| 756520036                  | 756520087-H | 1200:5                             | 4.0   | 96                                 | 259.2   | 0.15S<br>B1.8/0.15B1.8 | --             | 15                                  | 110      | 34  | 2.5   | 4288550                              | 4288980                                   | Bar (3) |

# CPE-15

## 15 kV CURRENT TRANSFORMER

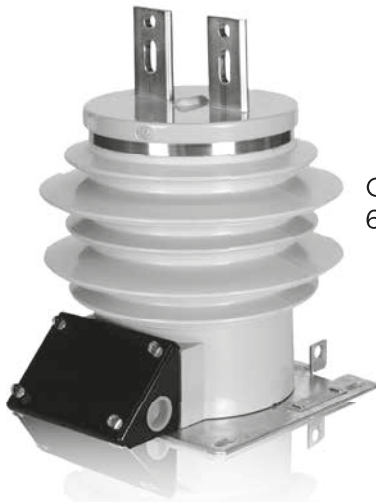
| Electrical characteristics |             |                                    |   |                                    |   |                        |                |                                     |          |   |   |                                      |   |         |
|----------------------------|-------------|------------------------------------|---|------------------------------------|---|------------------------|----------------|-------------------------------------|----------|---|---|--------------------------------------|---|---------|
| Code (CEP)                 | Code (HCEP) | Current Ratio (Primary: Secondary) | Continuous Thermal Current Rating Factor @ 30°C | Short-time Thermal Current (kA/1s) | Short-time Mechanical Current (kA <sub>peak</sub> ) | IEEE Metering Accuracy | Relay Accuracy | Highest Nominal Voltage System (kV) | BIL (kV) | Power-Frequency Withstand Voltage (1 min)                 |   | Dimensional Drawing Number CEP resin | Dimensional Drawing number for HCEP resin | Type    |
|                            |             |                                    |   |                                    |   |                        |                |                                     |          | Power frequency applied voltage test (kV <sub>rms</sub> ) | Power frequency secondary applied voltage test (kV <sub>rms</sub> ) |                                      |   |         |
| 756520037                  | 756520088-H | 1500:5                             | 3.0   | 120                                | 324   | 0.15S<br>B1.8/0.15B1.8 | --             | 15                                  | 110      | 34  | 2.5   | 4288550                              | 4288980                                   | Bar (3) |
| 756520038                  | 756520089-H | 2000:5                             | 2.0   | 160                                | 432   | 0.15S<br>B1.8/0.15B1.8 | --             | 15                                  | 110      | 34  | 2.5   | 4288550                              | 4288980                                   | Bar (3) |
| 756520042                  | 756520093-H | 500:5                              | 4.0   | 40                                 | 108   | 0.15<br>B0.9/0.3B1.8*  | --             | 15                                  | 110      | 34  | 2.5   | 4288550                              | 4288980                                   | Bar (2) |
| 756520043                  | 756520094-H | 600:5                              | 4.0   | 48                                 | 129.6   | 0.15<br>B0.9/0.3B1.8*  | --             | 15                                  | 110      | 34  | 2.5   | 4288550                              | 4288980                                   | Bar (2) |
| 756520044                  | 756520095-H | 800:5                              | 4.0   | 64                                 | 172.8   | 0.15<br>B1.8/0.3B1.8*  | --             | 15                                  | 110      | 34  | 2.5   | 4288550                              | 4288980                                   | Bar (3) |
| 756520045                  | 756520096-H | 1000:5                             | 4.0   | 80                                 | 216   | 0.15<br>B1.8/0.3B1.8*  | --             | 15                                  | 110      | 34  | 2.5   | 4288550                              | 4288980                                   | Bar (3) |
| 756520046                  | 756520097-H | 1200:5                             | 4.0   | 96                                 | 259.2   | 0.15<br>B1.8/0.3B1.8*  | --             | 15                                  | 110      | 34  | 2.5   | 4288550                              | 4288980                                   | Bar (3) |
| 756520047                  | 756520098-H | 1500:5                             | 3.0   | 120                                | 324   | 0.15<br>B1.8/0.3B1.8*  | --             | 15                                  | 110      | 34  | 2.5   | 4288550                              | 4288980                                   | Bar (3) |
| 756520048                  | 756520099-H | 2000:5                             | 2.0   | 160                                | 432   | 0.15<br>B1.8/0.3B1.8*  | --             | 15                                  | 110      | 34  | 2.5   | 4288550                              | 4288980                                   | Bar (3) |
| 756520109                  | 756520154-H | 200:5                              | 3.0   | 16                                 | 43.2  | 0.3B0.2                | C50            | 15                                  | 110      | 34  | 2.5   | 4288951                              | 4288979                                   | Window  |
| 756520110                  | 756520155-H | 300:5                              | 2.0   | 24                                 | 64.8  | 0.3B0.5                | C100           | 15                                  | 110      | 34  | 2.5   | 4288951                              | 4288979                                   | Window  |
| 756520111                  | 756520156-H | 400:5                              | 2.0   | 32                                 | 86.4  | 0.3B0.9                | C100           | 15                                  | 110      | 34  | 2.5   | 4288951                              | 4288979                                   | Window  |
| 756520112                  | 756520157-H | 500:5                              | 2.0   | 40                                 | 108   | 0.3B1.8                | C150           | 15                                  | 110      | 34  | 2.5   | 4288951                              | 4288979                                   | Window  |
| 756520113                  | 756520158-H | 600:5                              | 2.0   | 48                                 | 129.6   | 0.3B1.8                | C200           | 15                                  | 110      | 34  | 2.5   | 4288951                              | 4288979                                   | Window  |
| 756520114                  | 756520159-H | 800:5                              | 2.0   | 64                                 | 172.8   | 0.3B1.8                | C200           | 15                                  | 110      | 34  | 2.5   | 4288951                              | 4288979                                   | Window  |
| 756520115                  | 756520160-H | 1000:5                             | 2.0   | 80                                 | 216   | 0.3B1.8                | C250           | 15                                  | 110      | 34  | 2.5   | 4288951                              | 4288979                                   | Window  |
| 756520116                  | 756520161-H | 1200:5                             | 2.0   | 96                                 | 259.2   | 0.3B1.8                | C250           | 15                                  | 110      | 34  | 2.5   | 4288951                              | 4288979                                   | Window  |
| 756520117                  | 756520162-H | 1500:5                             | 2.0   | 120                                | 324   | 0.3B1.8                | C300           | 15                                  | 110      | 34  | 2.5   | 4288951                              | 4288979                                   | Window  |
| 756520118                  | 756520163-H | 2000:5                             | 2.0   | 160                                | 432   | 0.3B1.8                | C400           | 15                                  | 110      | 34  | 2.5   | 4288951                              | 4288979                                   | Window  |
| 756520119                  | 756520164-H | 2500:5                             | 2.0   | 200                                | 540   | 0.3B1.8                | C400           | 15                                  | 110      | 34  | 2.5   | 4288951                              | 4288979                                   | Window  |
| 756520120                  | 756520165-H | 3000:5                             | 2.0   | 240                                | 648   | 0.3B1.8                | C400           | 15                                  | 110      | 34  | 2.5   | 4288951                              | 4288979                                   | Window  |
| 756520121                  | 756520166-H | 4000:5                             | 1.5   | 320                                | 864   | 0.3B1.8                | C800           | 15                                  | 110      | 34  | 2.5   | 4288951                              | 4288979                                   | Window  |
| 756520122                  | 756520167-H | 5000:5                             | 1.5   | 400                                | 1080  | 0.3B1.8                | C800           | 15                                  | 110      | 34  | 2.5   | 4288951                              | 4288979                                   | Window  |
| 756520123                  | 756520168-H | 200/400:5                          | 3.0/3.0   | 32                                 | 86.4  | 0.3B0.2/B0.9           | C50/<br>C100   | 15                                  | 110      | 34  | 2.5   | 4288951                              | 4288979                                   | Window  |
| 756520124                  | 756520169-H | 300/600:5                          | 2.0/2.0   | 48                                 | 129.6   | 0.3B0.5/B1.8           | C100/<br>C200  | 15                                  | 110      | 34  | 2.5   | 4288951                              | 4288979                                   | Window  |
| 756520125                  | 756520170-H | 400/800:5                          | 2.0/2.0   | 64                                 | 172.8   | 0.3B0.9/B1.8           | C100/<br>C200  | 15                                  | 110      | 34  | 2.5   | 4288951                              | 4288979                                   | Window  |
| 756520126                  | 756520171-H | 500/1000:5                         | 2.0/2.0   | 8                                  | 21.6  | 0.3B0.9/B1.8           | C100/<br>C200  | 15                                  | 110      | 34  | 2.5   | 4288951                              | 4288979                                   | Window  |
| 756520127                  | 756520172-H | 600/1200:5                         | 2.0/2.0   | 96                                 | 259.2   | 0.3B1.8/B1.8           | C150/<br>C300  | 15                                  | 110      | 34  | 2.5   | 4288951                              | 4288979                                   | Window  |
| 756520128                  | 756520173-H | 750/1500:5                         | 2.0/2.0   | 120                                | 324   | 0.3B1.8/B1.8           | C200/<br>C400  | 15                                  | 110      | 34  | 2.5   | 4288951                              | 4288979                                   | Window  |
| 756520129                  | 756520174-H | 800/1600:5                         | 2.0/2.0   | 128                                | 345.6   | 0.3B1.8/B1.8           | C200/<br>C400  | 15                                  | 110      | 34  | 2.5   | 4288951                              | 4288979                                   | Window  |
| 756520130                  | 756520175H- | 1000/2000:5                        | 2.0/2.0   | 160                                | 432   | 0.3B1.8/B1.8           | C200/<br>C400  | 15                                  | 110      | 34  | 2.5   | 4288951                              | 4288979                                   | Window  |
| 756520131                  | 756520176-H | 1500/3000:5                        | 2.0/2.0   | 240                                | 648   | 0.3B1.8/B1.8           | C300/<br>C600  | 15                                  | 110      | 34  | 2.5   | 4288951                              | 4288979                                   | Window  |
| 756520132                  | 756520177-H | 2000/4000:5                        | 2.0/1.5   | 320                                | 864   | 0.3B1.8/B1.8           | C400/<br>C800  | 15                                  | 110      | 34  | 2.5   | 4288951                              | 4288979                                   | Window  |

\* Accuracy range: 1% to RF HAER



# CRE-24

## 25 kV CURRENT TRANSFORMER



**OUTDOOR  
60 Hertz**

ARTECHE CR series are dry type outdoor service current transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

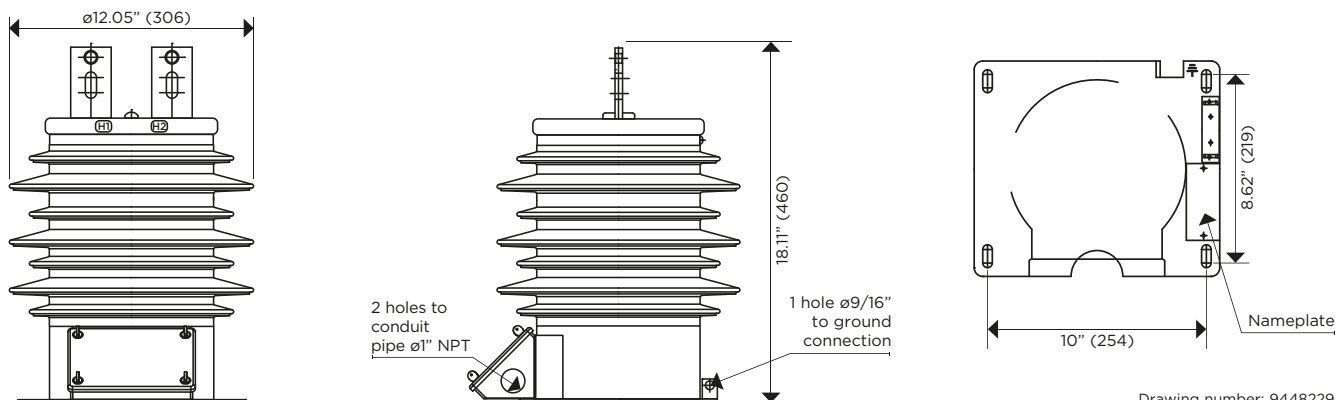
The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|---------------------|--------|---------------|------------------------|----------------------|
| Resin               | Gray   | 78.2          | 24.4                   | 10                   |



Drawing number: 9448229

|             | PRIMARY TERMINAL                 | GROUND CONNECTOR  | SECONDARY TERMINAL                       |                                   | ONE SECONDARY |
|-------------|----------------------------------|---|--|-----------------------------------|---------------|
| CONNECTIONS |                                  |   |  | MARKING<br>(Single Primary Ratio) |               |
|             | Type: NEMA-2<br>Material: Copper | Type: TE-12-250<br>Material: Copper<br>Range: 4TRE-250MCM | Type: Quick Connector<br>Material: Brass |                                   |               |

|                  |           |              |              |
|------------------|-----------|--------------|--------------|
| NEMA 2 THICKNESS | 3/8"      | 1/2"         | 3/4"         |
| AMPERES          | 0 TO 1200 | 1201 TO 1500 | 1501 TO 2000 |

Approximate dimensions in inches (mm).



# CRF-24

## 25 kV CURRENT TRANSFORMER



**OUTDOOR  
60 Hertz**

ARTECHE CR series are dry type outdoor service current transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

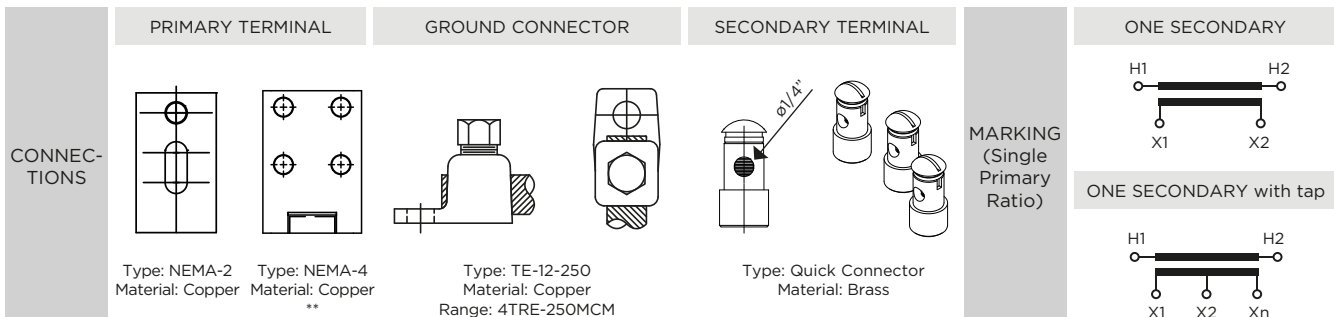
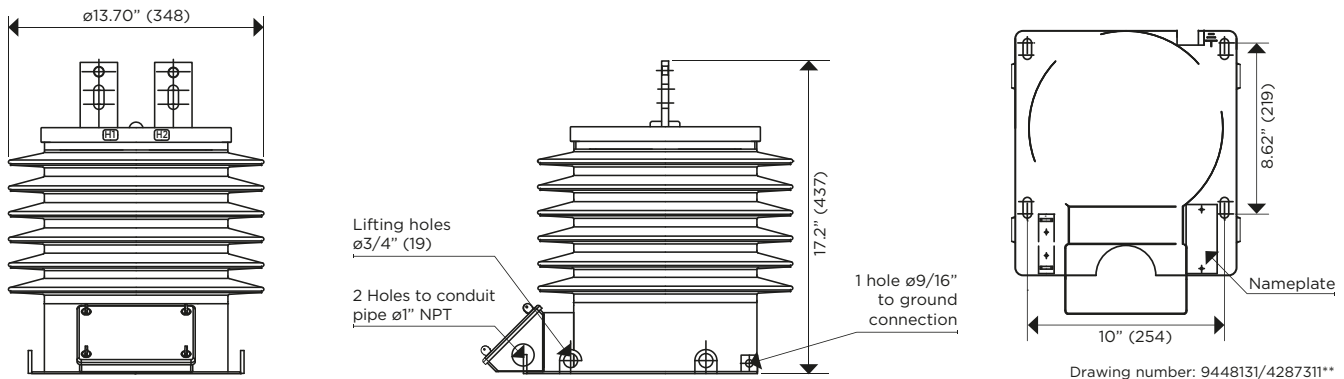
The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|---------------------|--------|---------------|------------------------|----------------------|
| Resin               | Gray   | 112.4         | 27.55                  | 12                   |



| NEMA 2 THICKNESS | 3/8"      | 1/2"         | 3/4"         |
|------------------|-----------|--------------|--------------|
| AMPERES          | 0 TO 1200 | 1201 TO 1500 | 1501 TO 2000 |

Approximate dimensions in inches (mm).



# CRF-24

## 25 kV CURRENT TRANSFORMER

| Electrical characteristics |             |  |   |                                    |   |                        |                |                             |          |   |  |
|----------------------------|-------------|--|---|------------------------------------|---|------------------------|----------------|-----------------------------|----------|---|--|
| Code (CEP)                 | Code (HCEP) | Current Ratio (Primary: Secondary) (A) | Continuous Thermal Current Rating Factor @ 30°C | Short-time Thermal Current (kA/1s) | Short-time Mechanical Current (kA <sub>peak</sub> ) | IEEE Metering Accuracy | Relay Accuracy | Nominal Voltage System (kV) | BIL (kV) | Power-Frequency Withstand Voltage (1 min) |  |
|                            |             |  |   |                                    |   |                        |                |                             |          | Primary & Secondary (kV <sub>rms</sub> )  | Secondary Winding (kV <sub>rms</sub> ) |
| 756261001                  | 756260000-H | 5:5                                    | 1.5   | 0.5                                | 0.95  | 0.3B-1.8               | T200           | 25                          | 150      | 50  | 2.5                                    |
| 756261002                  | 756260001-H | 10:5                                   | 1.5   | 1                                  | 1.9   | 0.3B-1.8               | T200           | 25                          | 150      | 50  | 2.5                                    |
| 756261003                  | 756260002-H | 15:5                                   | 1.5   | 1.5                                | 2.85  | 0.3B-1.8               | T200           | 25                          | 150      | 50  | 2.5                                    |
| 756261004                  | 756260003-H | 20:5                                   | 1.5   | 2                                  | 3.8   | 0.3B-1.8               | T200           | 25                          | 150      | 50  | 2.5                                    |
| 756261005                  | 756260004-H | 25:5                                   | 1.5   | 2.5                                | 4.75  | 0.3B-1.8               | T200           | 25                          | 150      | 50  | 2.5                                    |
| 756261006                  | 756260005-H | 30:5                                   | 1.5   | 3                                  | 5.7   | 0.3B-1.8               | T200           | 25                          | 150      | 50  | 2.5                                    |
| 756261008                  | 756260006-H | 40:5                                   | 1.5   | 4                                  | 7.6   | 0.3B-1.8               | T200           | 25                          | 150      | 50  | 2.5                                    |
| 756261010                  | 756260007-H | 50:5                                   | 1.5   | 5                                  | 9.5   | 0.3B-1.8               | T200           | 25                          | 150      | 50  | 2.5                                    |
| 756261012                  | 756260008-H | 60:5                                   | 1.5   | 6                                  | 11.4  | 0.3B-1.8               | T200           | 25                          | 150      | 50  | 2.5                                    |
| 756261015                  | 756260009-H | 75:5                                   | 1.5   | 7.5                                | 14.25   | 0.3B-1.8               | T200           | 25                          | 150      | 50  | 2.5                                    |
| 756261020                  | 756260010-H | 100:5                                  | 1.5   | 10                                 | 19  | 0.3B-1.8               | T200           | 25                          | 150      | 50  | 2.5                                    |
| 756261030                  | 756260011-H | 150:5                                  | 1.5   | 15                                 | 37.5  | 0.3B-1.8               | T200           | 25                          | 150      | 50  | 2.5                                    |
| 756261040                  | 756260012-H | 200:5                                  | 1.5   | 20                                 | 50  | 0.3B-1.8               | T200           | 25                          | 150      | 50  | 2.5                                    |
| 756261060                  | 756260013-H | 300:5                                  | 1.5   | 30                                 | 75  | 0.3B-1.8               | T200           | 25                          | 150      | 50  | 2.5                                    |
| 756261080                  | 756260014-H | 400:5                                  | 1.5   | 40                                 | 100   | 0.3B-1.8               | T200           | 25                          | 150      | 50  | 2.5                                    |
| 756261120                  | 756260015-H | 600:5                                  | 1.5   | 60                                 | 86.7  | 0.3B-1.8               | T200           | 25                          | 150      | 50  | 2.5                                    |
| 756261160                  | 756260016-H | 800:5                                  | 1.2   | 60                                 | 114   | 0.3B-1.8               | T200           | 25                          | 150      | 50  | 2.5                                    |
| 756261200                  | 756260017-H | 1000:5                                 | 1.0   | 75                                 | 142.5   | 0.3B-1.8               | T200           | 25                          | 150      | 50  | 2.5                                    |
| 756261240                  | 756260018-H | 1200:5                                 | 1.0   | 90                                 | 171   | 0.3B-1.8               | T200           | 25                          | 150      | 50  | 2.5                                    |
| 756262001                  | 756260030-H | 5/10:5                                 | 2.0/1.5   | 1                                  | 1.9   | 0.3B-0.9/0.3B-1.8      | T100/200       | 25                          | 150      | 50  | 2.5                                    |
| 756262002                  | 756260031-H | 10/20:5                                | 2.0/1.5   | 2                                  | 3.8   | 0.3B-0.9/0.3B-1.8      | T100/200       | 25                          | 150      | 50  | 2.5                                    |
| 756262005                  | 756260032-H | 25/50:5                                | 2.0/1.5   | 5                                  | 9.5   | 0.3B-0.9/0.3B-1.8      | T100/200       | 25                          | 150      | 50  | 2.5                                    |
| 756262006                  | 756260033-H | 30/60:5                                | 2.0/1.5   | 6                                  | 11.4  | 0.3B-0.9/0.3B-1.8      | T100/200       | 25                          | 150      | 50  | 2.5                                    |
| 756262010                  | 756260034-H | 50/100:5                               | 2.0/1.5   | 10                                 | 19  | 0.3B-0.9/0.3B-1.8      | T100/200       | 25                          | 150      | 50  | 2.5                                    |
| 756262015                  | 756260035-H | 75/150:5                               | 2.0/1.5   | 15                                 | 28.5  | 0.3B-0.9/0.3B-1.8      | T100/200       | 25                          | 150      | 50  | 2.5                                    |
| 756262020                  | 756260036-H | 100/200:5                              | 2.0/1.5   | 20                                 | 38  | 0.3B-0.9/0.3B-1.8      | T100/200       | 25                          | 150      | 50  | 2.5                                    |
| 756262030                  | 756260037-H | 150/300:5                              | 2.0/1.5   | 30                                 | 57  | 0.3B-0.9/0.3B-1.8      | T100/200       | 25                          | 150      | 50  | 2.5                                    |
| 756262040                  | 756260038-H | 200/400:5                              | 2.0/1.5   | 40                                 | 76  | 0.3B-0.9/0.3B-1.8      | T100/200       | 25                          | 150      | 50  | 2.5                                    |
| 756262060                  | 756260039-H | 300/600:5                              | 2.0/1.5   | 60                                 | 86.7  | 0.3B-0.9/0.3B-1.8      | T100/200       | 25                          | 150      | 50  | 2.5                                    |
| 756262080                  | 756260040-H | 400/800:5                              | 1.2/1.2   | 60                                 | 114   | 0.3B-0.9/0.3B-1.8      | T100/200       | 25                          | 150      | 50  | 2.5                                    |
| 756262100                  | 756260041-H | 500/1000:5                             | 1.0/1.0   | 75                                 | 142.5   | 0.3B-0.9/0.3B-1.8      | T100/200       | 25                          | 150      | 50  | 2.5                                    |
| 756262120                  | 756260042-H | 600/1200:5                             | 1.0/1.0   | 90                                 | 171   | 0.3B-0.9/0.3B-1.8      | T100/200       | 25                          | 150      | 50  | 2.5                                    |
| 756269001                  | 756260060-H | 5:5                                    | 1.5   | 0.5                                | 0.95  | 0.15B-0.9              | -              | 25                          | 150      | 50  | 2.5                                    |
| 756269002                  | 756260061-H | 10:5                                   | 1.5   | 1                                  | 1.9   | 0.15B-0.9              | -              | 25                          | 150      | 50  | 2.5                                    |
| 756269010                  | 756260062-H | 50:5                                   | 1.5   | 5                                  | 9.5   | 0.15B-0.9              | -              | 25                          | 150      | 50  | 2.5                                    |
| 756269015                  | 756260063-H | 75:5                                   | 1.5   | 7.5                                | 14.25   | 0.15B-0.9              | -              | 25                          | 150      | 50  | 2.5                                    |
| 756269020                  | 756260064-H | 100:5                                  | 1.5   | 10                                 | 19  | 0.15B-0.9              | -              | 25                          | 150      | 50  | 2.5                                    |
| 756269120                  | 756260065-H | 600:5                                  | 1.5   | 10                                 | 19  | 0.15B-0.9              | -              | 25                          | 150      | 50  | 2.5                                    |
| 756269160                  | 756260066-H | 800:5                                  | 1.2   | 60                                 | 86.7  | 0.15B-0.9              | -              | 25                          | 150      | 50  | 2.5                                    |
| 756269200                  | 756260067-H | 1000:5                                 | 1.0   | 60                                 | 114   | 0.15B-0.9              | -              | 25                          | 150      | 50  | 2.5                                    |
| 756269240                  | 756260068-H | 1200:5                                 | 1.0   | 90                                 | 171   | 0.15B-0.9              | -              | 25                          | 150      | 50  | 2.5                                    |
| 756268001                  | 756260090-H | 5/10:5                                 | 2.0/1.5   | 1                                  | 1.9   | 0.15B-0.5/B-0.9        | -              | 25                          | 150      | 50  | 2.5                                    |
| 756268002                  | 756260091-H | 10/20:5                                | 2.0/1.5   | 2                                  | 3.8   | 0.15B-0.5/B-0.9        | -              | 25                          | 150      | 50  | 2.5                                    |
| 756268060                  | 756260092-H | 300/600:5                              | 2.0/1.5   | 60                                 | 86.7  | 0.15B-0.5/B-0.9        | -              | 25                          | 150      | 50  | 2.5                                    |
| 756268080                  | 756260093-H | 400/800:5                              | 1.2/1.2   | 60                                 | 114   | 0.15B-0.5/B-0.9        | -              | 25                          | 150      | 50  | 2.5                                    |
| 756268100                  | 756260094-H | 500/1000:5                             | 1.0/1.0   | 75                                 | 142.5   | 0.15B-0.5/B-0.9        | -              | 25                          | 150      | 50  | 2.5                                    |
| 756268120                  | 756260095-H | 600/1200:5                             | 1.0/1.0   | 90                                 | 171   | 0.15B-0.5/B-0.9        | -              | 25                          | 150      | 50  | 2.5                                    |





# CPE-25

# 25 kV CURRENT TRANSFORMER



OUTDOOR  
60 Hertz

ARTECHE CPE series are dry type outdoor service window type current transformers.

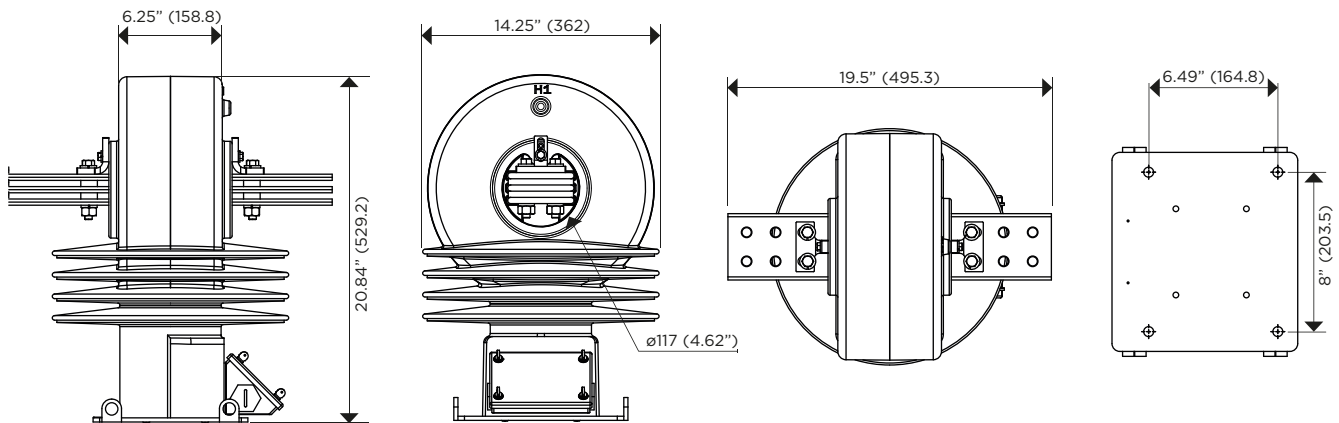
The core and coils are encapsulated with Cycloaliphatic Epoxy Resin (CEP) which provides excellent dielectric properties, mechanical strength, resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. CPE family can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which additionally increases the transformers weatherability and offers better performance in heavily polluted environments. The transformer is maintenance free.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copperplate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

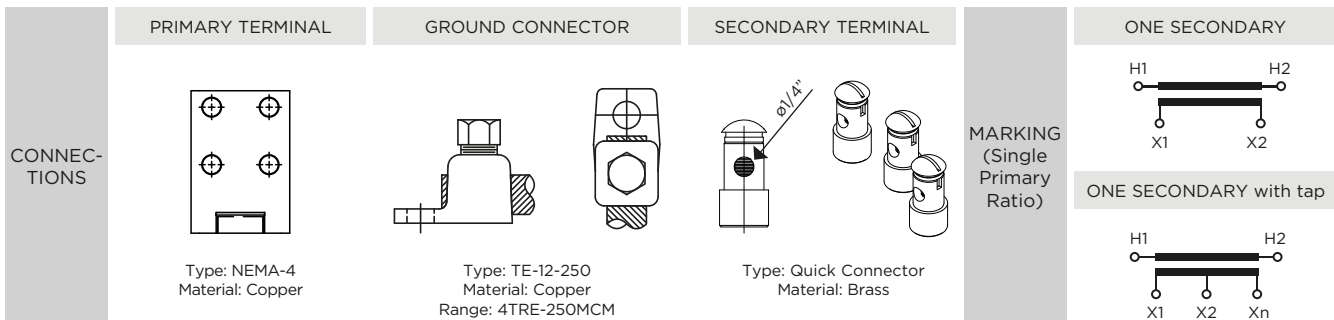
Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|---------------------|--------|---------------|------------------------|----------------------|
| Resin               | Gray   | 178.5         | 35.43                  | 8.93                 |



Drawing number: 4288187



Approximate dimensions in inches (mm).

# CPE-25

## 25 kV CURRENT TRANSFORMER

| Electrical characteristics |             |                                      |   |                                    |   |                        |                |                                     |          |   |   |                                      |   |         |
|----------------------------|-------------|--------------------------------------|---|------------------------------------|---|------------------------|----------------|-------------------------------------|----------|---|---|--------------------------------------|---|---------|
| Code (CEP)                 | Code (HCEP) | Current Ratio (Primary: Secondary) A | Continuous Thermal Current Rating Factor @ 30°C | Short-time Thermal Current (kA/1s) | Short-time Mechanical Current (kA <sub>peak</sub> ) | IEEE Metering Accuracy | Relay Accuracy | Highest Nominal Voltage System (kV) | BIL (kV) | Power-Frequency Withstand Voltage (1 min)                 |   | Dimensional Drawing Number CEP resin | Dimensional Drawing number for HCEP resin | Type    |
|                            |             |                                      |   |                                    |   |                        |                |                                     |          | Power frequency applied voltage test (kV <sub>rms</sub> ) | Power frequency secondary applied voltage test (kV <sub>rms</sub> ) |                                      |   |         |
| 756510001                  | 756510052-H | 200:5                                | 3.0   | 16                                 | 43.2  | 0.3B0.2                | C50            | 25                                  | 150      | 50  | 2.5   | 4288187                              | 4288709                                   | Bar (1) |
| 756510002                  | 756510053-H | 300:5                                | 2.0   | 24                                 | 64.8  | 0.3B0.5                | C100           | 25                                  | 150      | 50  | 2.5   | 4288187                              | 4288709                                   | Bar (1) |
| 756510003                  | 756510054-H | 400:5                                | 2.0   | 32                                 | 86.4  | 0.3B0.9                | C100           | 25                                  | 150      | 50  | 2.5   | 4288187                              | 4288709                                   | Bar (1) |
| 756510004                  | 756510055-H | 500:5                                | 2.0   | 40                                 | 108   | 0.3B1.8                | C150           | 25                                  | 150      | 50  | 2.5   | 4288187                              | 4288709                                   | Bar (1) |
| 756510005                  | 756510056-H | 600:5                                | 2.0   | 48                                 | 129.6   | 0.3B1.8                | C200           | 25                                  | 150      | 50  | 2.5   | 4288187                              | 4288709                                   | Bar (1) |
| 756510006                  | 756510057-H | 800:5                                | 2.0   | 64                                 | 172.8   | 0.3B1.8                | C200           | 25                                  | 150      | 50  | 2.5   | 4288187                              | 4288709                                   | Bar (2) |
| 756510007                  | 756510058-H | 1000:5                               | 2.0   | 80                                 | 216   | 0.3B1.8                | C250           | 25                                  | 150      | 50  | 2.5   | 4288187                              | 4288709                                   | Bar (2) |
| 756510008                  | 756510059-H | 1200:5                               | 2.0   | 96                                 | 259.2   | 0.3B1.8                | C250           | 25                                  | 150      | 50  | 2.5   | 4288187                              | 4288709                                   | Bar (2) |
| 756510009                  | 756510060-H | 1500:5                               | 2.0   | 120                                | 324   | 0.3B1.8                | C300           | 25                                  | 150      | 50  | 2.5   | 4288187                              | 4288709                                   | Bar (3) |
| 756510010                  | 756510061-H | 2000:5                               | 2.0   | 160                                | 432   | 0.3B1.8                | C400           | 25                                  | 150      | 50  | 2.5   | 4288187                              | 4288709                                   | Bar (3) |
| 756510011                  | 756510062-H | 2500:5                               | 2.0   | 200                                | 540   | 0.3B1.8                | C400           | 25                                  | 150      | 50  | 2.5   | 4288187                              | 4288709                                   | Bar (3) |
| 756510012                  | 756510063-H | 3000:5                               | 2.0   | 240                                | 648   | 0.3B1.8                | C400           | 25                                  | 150      | 50  | 2.5   | 4288866                              | 4289801                                   | Bar (4) |
| 756510013                  | 756510064-H | 4000:5                               | 1.5   | 320                                | 864   | 0.3B1.8                | C800           | 25                                  | 150      | 50  | 2.5   | 4288866                              | 4289801                                   | Bar (4) |
| 756510014                  | 756510065-H | 5000:5                               | 1.5   | 400                                | 1080  | 0.3B1.8                | C800           | 25                                  | 150      | 50  | 2.5   | 4288866                              | 4289801                                   | Bar (4) |
| 756510015                  | 756510066-H | 200/400:5                            | 3.0/3.0   | 32                                 | 86.4  | 0.3B0.2/B0.9           | C50/C100       | 25                                  | 150      | 50  | 2.5   | 4288187                              | 4288709                                   | Bar (1) |
| 756510016                  | 756510067-H | 300/600:5                            | 2.0/2.0   | 48                                 | 129.6   | 0.3B0.5/B1.8           | C100/C200      | 25                                  | 150      | 50  | 2.5   | 4288187                              | 4288709                                   | Bar (1) |
| 756510017                  | 756510068-H | 400/800:5                            | 2.0/2.0   | 64                                 | 172.8   | 0.3B0.9/B1.8           | C100/C200      | 25                                  | 150      | 50  | 2.5   | 4288187                              | 4288709                                   | Bar (2) |
| 756510018                  | 756510069-H | 500/1000:5                           | 2.0/2.0   | 80                                 | 216   | 0.3B0.9/B1.8           | C100/C200      | 25                                  | 150      | 50  | 2.5   | 4288187                              | 4288709                                   | Bar (2) |
| 756510019                  | 756510070-H | 600/1200:5                           | 2.0/2.0   | 96                                 | 259.2   | 0.3B1.8/B1.8           | C150/C300      | 25                                  | 150      | 50  | 2.5   | 4288187                              | 4288709                                   | Bar (2) |
| 756510020                  | 756510071-H | 750/1500:5                           | 2.0/2.0   | 120                                | 324   | 0.3B1.8/B1.8           | C200/C400      | 25                                  | 150      | 50  | 2.5   | 4288187                              | 4288709                                   | Bar (3) |
| 756510021                  | 756510072-H | 800/1600:5                           | 2.0/2.0   | 128                                | 345.6   | 0.3B1.8/B1.8           | C200/C400      | 25                                  | 150      | 50  | 2.5   | 4288187                              | 4288709                                   | Bar (3) |
| 756510022                  | 756510073-H | 1000/2000:5                          | 2.0/2.0   | 160                                | 432   | 0.3B1.8/B1.8           | C200/C400      | 25                                  | 150      | 50  | 2.5   | 4288187                              | 4288709                                   | Bar (3) |
| 756510023                  | 756510074-H | 1500/3000:5                          | 2.0/2.0   | 240                                | 648   | 0.3B1.8/B1.8           | C300/C600      | 25                                  | 150      | 50  | 2.5   | 4288866                              | 4289801                                   | Bar (4) |
| 756510024                  | 756510075-H | 2000/4000:5                          | 2.0/1.5   | 320                                | 864   | 0.3B1.8/B1.8           | C400/C800      | 25                                  | 150      | 50  | 2.5   | 4288866                              | 4289801                                   | Bar (4) |
| 756510025                  | 756510076-H | 2500/5000:5                          | 2.0/1.5   | 400                                | 1080  | 0.3B1.8/B1.8           | C400/C800      | 25                                  | 150      | 50  | 2.5   | 4288866                              | 4289801                                   | Bar (4) |
| 756510029                  | 756510080-H | 200:5                                | 4.0   | 16                                 | 43.2  | 0.15S B0.1/0.3B0.2     | --             | 25                                  | 150      | 50  | 2.5   | 4288187                              | 4288709                                   | Bar (1) |
| 756510030                  | 756510081-H | 300:5                                | 4.0   | 24                                 | 64.8  | 0.15S B0.5/0.3B0.9     | --             | 25                                  | 150      | 50  | 2.5   | 4288187                              | 4288709                                   | Bar (1) |

| Electrical characteristics |             |                                      |   |                                    |   |                        |                |                                     |          |   |   |                                      |   |         |
|----------------------------|-------------|--------------------------------------|---|------------------------------------|---|------------------------|----------------|-------------------------------------|----------|---|---|--------------------------------------|---|---------|
| Code (CEP)                 | Code (HCEP) | Current Ratio (Primary: Secondary) A | Continuous Thermal Current Rating Factor @ 30°C | Short-time Thermal Current (kA/1s) | Short-time Mechanical Current (kA <sub>peak</sub> ) | IEEE Metering Accuracy | Relay Accuracy | Highest Nominal Voltage System (kV) | BIL (kV) | Power-Frequency Withstand Voltage (1 min)                 |   | Dimensional Drawing Number CEP resin | Dimensional Drawing number for HCEP resin | Type    |
|                            |             |                                      |   |                                    |   |                        |                |                                     |          | Power frequency applied voltage test (kV <sub>rms</sub> ) | Power frequency secondary applied voltage test (kV <sub>rms</sub> ) |                                      |   |         |
| 756510031                  | 756510082-H | 400:5                                | 4.0   | 32                                 | 86.4  | 0.15S B0.9/0.3B1.8     | --             | 25                                  | 150      | 50  | 2.5   | 4288187                              | 4288709                                   | Bar (2) |
| 756510032                  | 756510083-H | 500:5                                | 4.0   | 40                                 | 108   | 0.15S B0.9/0.3B1.8     | --             | 25                                  | 150      | 50  | 2.5   | 4288187                              | 4288709                                   | Bar (2) |
| 756510033                  | 756510084-H | 600:5                                | 4.0   | 48                                 | 129.6   | 0.15S B0.9/0.3B1.8     | --             | 25                                  | 150      | 50  | 2.5   | 4288187                              | 4288709                                   | Bar (2) |
| 756510034                  | 756510085-H | 800:5                                | 4.0   | 64                                 | 172.8   | 0.15S B0.9/0.3B1.8     | --             | 25                                  | 150      | 50  | 2.5   | 4288187                              | 4288709                                   | Bar (3) |
| 756510035                  | 756510086-H | 1000:5                               | 4.0   | 80                                 | 216   | 0.15S B1.8/0.15B1.8    | --             | 25                                  | 150      | 50  | 2.5   | 4288187                              | 4288709                                   | Bar (3) |
| 756510036                  | 756510087-H | 1200:5                               | 4.0   | 96                                 | 259.2   | 0.15S B1.8/0.15B1.8    | --             | 25                                  | 150      | 50  | 2.5   | 4288187                              | 4288709                                   | Bar (3) |
| 756510037                  | 756510088-H | 1500:5                               | 3.0   | 120                                | 324   | 0.15S B1.8/0.15B1.8    | --             | 25                                  | 150      | 50  | 2.5   | 4288187                              | 4288709                                   | Bar (3) |
| 756510038                  | 756510089-H | 2000:5                               | 2.0   | 160                                | 432   | 0.15S B1.8/0.15B1.8    | --             | 25                                  | 150      | 50  | 2.5   | 4288187                              | 4288709                                   | Bar (3) |
| 756510042                  | 756510093-H | 500:5                                | 4.0   | 40                                 | 108   | 0.15 B0.9/0.3B1.8*     | --             | 25                                  | 150      | 50  | 2.5   | 4288187                              | 4288709                                   | Bar (2) |
| 756510043                  | 756510094-H | 600:5                                | 4.0   | 48                                 | 129.6   | 0.15 B0.9/0.3B1.8*     | --             | 25                                  | 150      | 50  | 2.5   | 4288187                              | 4288709                                   | Bar (2) |
| 756510044                  | 756510095-H | 800:5                                | 4.0   | 64                                 | 172.8   | 0.15 B1.8/0.3B1.8*     | --             | 25                                  | 150      | 50  | 2.5   | 4288187                              | 4288709                                   | Bar (3) |
| 756510045                  | 756510096-H | 1000:5                               | 4.0   | 80                                 | 216   | 0.15 B1.8/0.3B1.8*     | --             | 25                                  | 150      | 50  | 2.5   | 4288187                              | 4288709                                   | Bar (3) |
| 756510046                  | 756510097-H | 1200:5                               | 4.0   | 96                                 | 259.2   | 0.15 B1.8/0.3B1.8*     | --             | 25                                  | 150      | 50  | 2.5   | 4288187                              | 4288709                                   | Bar (3) |
| 756510047                  | 756510098-H | 1500:5                               | 3.0   | 120                                | 324   | 0.15 B1.8/0.3B1.8*     | --             | 25                                  | 150      | 50  | 2.5   | 4288187                              | 4288709                                   | Bar (3) |
| 756510048                  | 756510099-H | 2000:5                               | 2.0   | 160                                | 432   | 0.15 B1.8/0.3B1.8*     | --             | 25                                  | 150      | 50  | 2.5   | 4288187                              | 4288709                                   | Bar (3) |
| 756510109                  | 756510154-H | 200:5                                | 3.0   | 16                                 | 43.2  | 0.3B0.2                | C50            | 25                                  | 150      | 50  | 2.5   | 4288801                              | 4288520                                   | Window  |
| 756510110                  | 756510155-H | 300:5                                | 2.0   | 24                                 | 64.8  | 0.3B0.5                | C100           | 25                                  | 150      | 50  | 2.5   | 4288801                              | 4288520                                   | Window  |
| 756510111                  | 756510156-H | 400:5                                | 2.0   | 32                                 | 86.4  | 0.3B0.9                | C100           | 25                                  | 150      | 50  | 2.5   | 4288801                              | 4288520                                   | Window  |
| 756510112                  | 756510157-H | 500:5                                | 2.0   | 40                                 | 108   | 0.3B1.8                | C150           | 25                                  | 150      | 50  | 2.5   | 4288801                              | 4288520                                   | Window  |
| 756510113                  | 756510158-H | 600:5                                | 2.0   | 48                                 | 129.6   | 0.3B1.8                | C200           | 25                                  | 150      | 50  | 2.5   | 4288801                              | 4288520                                   | Window  |
| 756510114                  | 756510159-H | 800:5                                | 2.0   | 64                                 | 172.8   | 0.3B1.8                | C200           | 25                                  | 150      | 50  | 2.5   | 4288801                              | 4288520                                   | Window  |
| 756510115                  | 756510160-H | 1000:5                               | 2.0   | 80                                 | 216   | 0.3B1.8                | C250           | 25                                  | 150      | 50  | 2.5   | 4288801                              | 4288520                                   | Window  |
| 756510116                  | 756510161-H | 1200:5                               | 2.0   | 96                                 | 259.2   | 0.3B1.8                | C250           | 25                                  | 150      | 50  | 2.5   | 4288801                              | 4288520                                   | Window  |
| 756510117                  | 756510162-H | 1500:5                               | 2.0   | 120                                | 324   | 0.3B1.8                | C300           | 25                                  | 150      | 50  | 2.5   | 4288801                              | 4288520                                   | Window  |
| 756510118                  | 756510163-H | 2000:5                               | 2.0   | 160                                | 432   | 0.3B1.8                | C400           | 25                                  | 150      | 50  | 2.5   | 4288801                              | 4288520                                   | Window  |
| 756510119                  | 756510164-H | 2500:5                               | 2.0   | 200                                | 540   | 0.3B1.8                | C400           | 25                                  | 150      | 50  | 2.5   | 4288801                              | 4288520                                   | Window  |
| 756510120                  | 756510165-H | 3000:5                               | 2.0   | 240                                | 648   | 0.3B1.8                | C400           | 25                                  | 150      | 50  | 2.5   | 4288801                              | 4288520                                   | Window  |
| 756510121                  | 756510166-H | 4000:5                               | 1.5   | 320                                | 864   | 0.3B1.8                | C800           | 25                                  | 150      | 50  | 2.5   | 4288801                              | 4288520                                   | Window  |
| 756510122                  | 756510167-H | 5000:5                               | 1.5   | 400                                | 1080  | 0.3B1.8                | C800           | 25                                  | 150      | 50  | 2.5   | 4288801                              | 4288520                                   | Window  |
| 756510123                  | 756510168-H | 200/400:5                            | 3.0/3.0   | 32                                 | 86.4  | 0.3B0.2/B0.9           | C50/C100       | 25                                  | 150      | 50  | 2.5   | 4288801                              | 4288520                                   | Window  |
| 756510124                  | 756510169-H | 300/600:5                            | 2.0/2.0   | 48                                 | 129.6   | 0.3B0.5/B1.8           | C100/C200      | 25                                  | 150      | 50  | 2.5   | 4288801                              | 4288520                                   | Window  |
| 756510125                  | 756510170-H | 400/800:5                            | 2.0/2.0   | 64                                 | 172.8   | 0.3B0.9/B1.8           | C100/C200      | 25                                  | 150      | 50  | 2.5   | 4288801                              | 4288520                                   | Window  |
| 756510126                  | 756510171-H | 500/1000:5                           | 2.0/2.0   | 80                                 | 216   | 0.3B0.9/B1.8           | C100/C200      | 25                                  | 150      | 50  | 2.5   | 4288801                              | 4288520                                   | Window  |

\* Accuracy range: 1% to RF HAER



# CE-034

# 34.5 kV CURRENT TRANSFORMER



**OUTDOOR  
60 Hertz**

ARTECHE CE series are dry type outdoor service top-core current transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

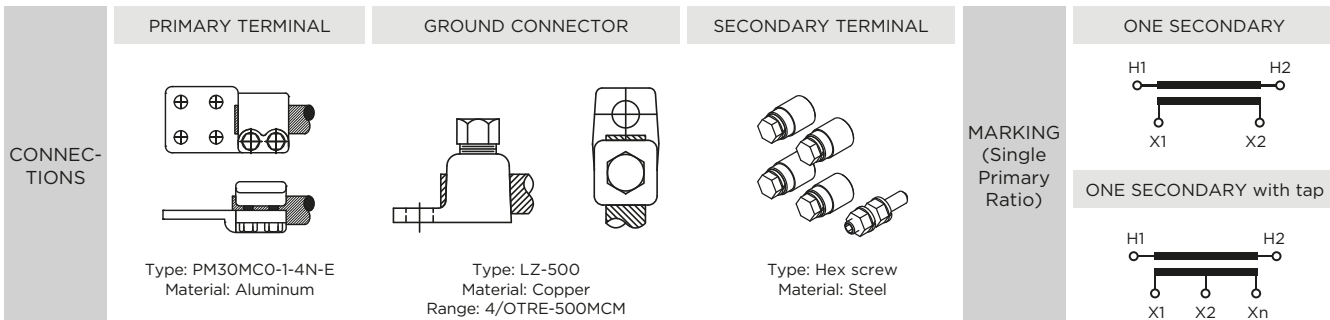
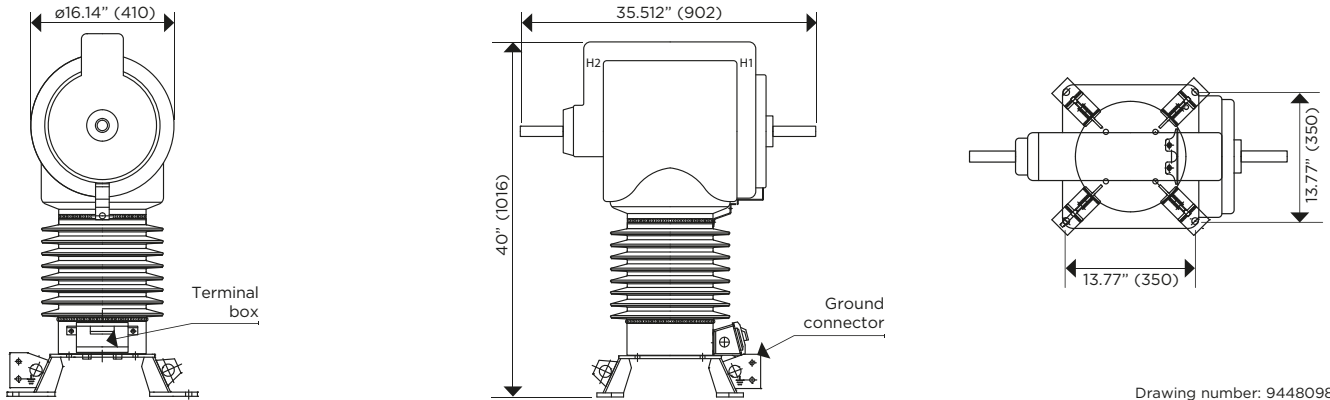
The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions. The cores and windings are located in the upper part of the transformer. This head is coated with a conductive layer, which provides an adequate electric field control.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|---------------------|--------|---------------|------------------------|----------------------|
| Resin               | Gray   | 550           | 37.6                   | 11                   |



Approximate dimensions in inches (mm).

# CE-034

## 34.5 kV CURRENT TRANSFORMER

| Electrical characteristics |             |  |   |                                    |   |                        |                |                             |          |   |  |
|----------------------------|-------------|--|---|------------------------------------|---|------------------------|----------------|-----------------------------|----------|---|--|
| Code (CEP)                 | Code (HCEP) | Current Ratio (Primary: Secondary) (A) | Continuous Thermal Current Rating Factor @ 30°C | Short-time Thermal Current (kA/1s) | Short-time Mechanical Current (kA <sub>peak</sub> ) | IEEE Metering Accuracy | Relay Accuracy | Nominal Voltage System (kV) | BIL (kV) | Power-Frequency Withstand Voltage (1 min) |  |
|                            |             |  |   |                                    |   |                        |                |                             |          | Primary & Secondary (kV <sub>rms</sub> )  | Secondary Winding (kV <sub>rms</sub> ) |
| 756151001                  | 756150000-H | 5:5                                    | 2.0   | 0.5                                | 0.95  | 0.3B-1.8               | T-400          | 34.5                        | 200      | 70  | 2.5                                    |
| 756151002                  | 756150001-H | 10:5                                   | 2.0   | 1                                  | 1.9   | 0.3B-1.8               | T-400          | 34.5                        | 200      | 70  | 2.5                                    |
| 756151003                  | 756150002-H | 15:5                                   | 2.0   | 1.5                                | 2.85  | 0.3B-1.8               | T-400          | 34.5                        | 200      | 70  | 2.5                                    |
| 756151004                  | 756150003-H | 20:5                                   | 2.0   | 2                                  | 3.8   | 0.3B-1.8               | T-400          | 34.5                        | 200      | 70  | 2.5                                    |
| 756151005                  | 756150004-H | 25:5                                   | 2.0   | 2.5                                | 4.75  | 0.3B-1.8               | T-400          | 34.5                        | 200      | 70  | 2.5                                    |
| 756151006                  | 756150005-H | 30:5                                   | 2.0   | 3                                  | 5.7   | 0.3B-1.8               | T-400          | 34.5                        | 200      | 70  | 2.5                                    |
| 756151008                  | 756150006-H | 40:5                                   | 2.0   | 4                                  | 7.6   | 0.3B-1.8               | T-400          | 34.5                        | 200      | 70  | 2.5                                    |
| 756151010                  | 756150007-H | 50:5                                   | 2.0   | 5                                  | 9.5   | 0.3B-1.8               | T-400          | 34.5                        | 200      | 70  | 2.5                                    |
| 756151015                  | 756150008-H | 75:5                                   | 2.0   | 6                                  | 11.4  | 0.3B-1.8               | T-400          | 34.5                        | 200      | 70  | 2.5                                    |
| 756151020                  | 756150009-H | 100:5                                  | 2.0   | 7.5                                | 14.25   | 0.3B-1.8               | T-400          | 34.5                        | 200      | 70  | 2.5                                    |
| 756151030                  | 756150010-H | 150:5                                  | 2.0   | 10                                 | 19  | 0.3B-1.8               | T-400          | 34.5                        | 200      | 70  | 2.5                                    |
| 756151040                  | 756150011-H | 200:5                                  | 2.0   | 20                                 | 38  | 0.3B-1.8               | T-400          | 34.5                        | 200      | 70  | 2.5                                    |
| 756151060                  | 756150012-H | 300:5                                  | 2.0   | 30                                 | 57  | 0.3B-1.8               | T-400          | 34.5                        | 200      | 70  | 2.5                                    |
| 756151080                  | 756150013-H | 400:5                                  | 2.0   | 40                                 | 76  | 0.3B-1.8               | T-400          | 34.5                        | 200      | 70  | 2.5                                    |
| 756151120                  | 756150014-H | 600:5                                  | 2.0   | 50                                 | 9.5   | 0.3B-1.8               | T-400          | 34.5                        | 200      | 70  | 2.5                                    |
| 756151160                  | 756150015-H | 800:5                                  | 2.0   | 60                                 | 86.7  | 0.3B-1.8               | T-400          | 34.5                        | 200      | 70  | 2.5                                    |
| 756151200                  | 756150016-H | 1000:5                                 | 1.5   | 60                                 | 114   | 0.3B-1.8               | T-400          | 34.5                        | 200      | 70  | 2.5                                    |
| 756151240                  | 756150017-H | 1200:5                                 | 1.5   | 75                                 | 142.5   | 0.3B-1.8               | T-400          | 34.5                        | 200      | 70  | 2.5                                    |
| 756151400                  | 756150018-H | 2000:5                                 | 1.2   | 90                                 | 171   | 0.3B-1.8               | T-800          | 34.5                        | 200      | 70  | 2.5                                    |
| 756152001                  | 756150030-H | 10/20:5                                | 3.0/2.0   | 2                                  | 3.8   | 0.3B-1.8/0.3B1.8       | T200/T400      | 34.5                        | 200      | 70  | 2.5                                    |
| 756152005                  | 756150031-H | 25/50:5                                | 3.0/2.0   | 5                                  | 9.5   | 0.3B-1.8/0.3B1.8       | T200/T400      | 34.5                        | 200      | 70  | 2.5                                    |
| 756152006                  | 756150032-H | 30/60:5                                | 3.0/2.0   | 6                                  | 11.4  | 0.3B-1.8/0.3B1.8       | T200/T400      | 34.5                        | 200      | 70  | 2.5                                    |
| 756152010                  | 756150033-H | 50/100:5                               | 3.0/2.0   | 10                                 | 19  | 0.3B-1.8/0.3B1.8       | T200/T400      | 34.5                        | 200      | 70  | 2.5                                    |
| 756152015                  | 756150034-H | 75/150:5                               | 3.0/2.0   | 15                                 | 28.5  | 0.3B-1.8/0.3B1.8       | T200/T400      | 34.5                        | 200      | 70  | 2.5                                    |
| 756152020                  | 756150035-H | 100/200:5                              | 3.0/2.0   | 20                                 | 38  | 0.3B-1.8/0.3B1.8       | T200/T400      | 34.5                        | 200      | 70  | 2.5                                    |
| 756152030                  | 756150036-H | 150/300:5                              | 3.0/2.0   | 30                                 | 57  | 0.3B-1.8/0.3B1.8       | T200/T400      | 34.5                        | 200      | 70  | 2.5                                    |
| 756152040                  | 756150037-H | 200/400:5                              | 3.0/2.0   | 40                                 | 76  | 0.3B-1.8/0.3B1.8       | T200/T400      | 34.5                        | 200      | 70  | 2.5                                    |
| 756152060                  | 756150038-H | 300/600:5                              | 3.0/2.0   | 60                                 | 86.7  | 0.3B-1.8/0.3B1.8       | T200/T400      | 34.5                        | 200      | 70  | 2.5                                    |
| 756152080                  | 756150039-H | 400/800:5                              | 3.0/2.0   | 60                                 | 114   | 0.3B-1.8/0.3B1.8       | T200/T400      | 34.5                        | 200      | 70  | 2.5                                    |
| 756152100                  | 756150040-H | 500/1000:5                             | 3.0/1.5   | 75                                 | 142.5   | 0.3B-1.8/0.3B1.8       | T200/T400      | 34.5                        | 200      | 70  | 2.5                                    |
| 756152120                  | 756150041-H | 600/1200:5                             | 3.0/1.5   | 90                                 | 171   | 0.3B-1.8/0.3B1.8       | T200/T400      | 34.5                        | 200      | 70  | 2.5                                    |
| 756152150                  | 756150042-H | 750/1500:5                             | 3.0/1.5   | 90                                 | 171   | 0.3B-1.8/0.3B1.8       | T200/T400      | 34.5                        | 200      | 70  | 2.5                                    |

Additional ratings available upon request.





# CRF-36

## 34.5 kV CURRENT TRANSFORMER



**OUTDOOR  
60 Hertz**

ARTECHE CR series are dry type outdoor service current transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

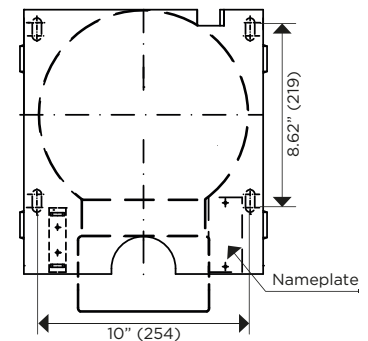
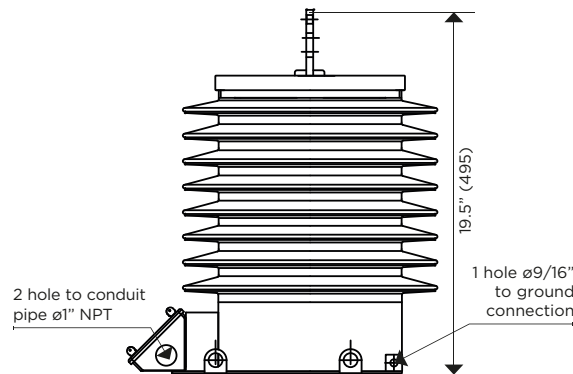
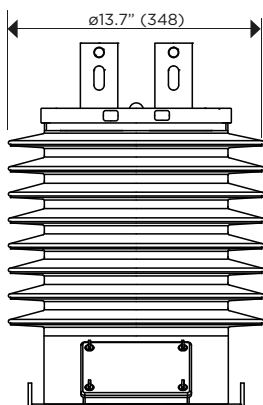
The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|---------------------|--------|---------------|------------------------|----------------------|
| Resin               | Gray   | 134.4         | 36.2                   | 15                   |



Drawing number: 9448132

|             | PRIMARY TERMINAL                 | GROUND CONNECTOR  | SECONDARY TERMINAL                       |                                   | ONE SECONDARY |
|-------------|----------------------------------|---|--|-----------------------------------|---------------|
| CONNECTIONS |                                  |   |  | MARKING<br>(Single Primary Ratio) |               |
|             | Type: NEMA-2<br>Material: Copper | Type: TE-12-250<br>Material: Copper<br>Range: 4TRE-250MCM | Type: Quick Connector<br>Material: Brass |                                   |               |

|                  |           |              |              |
|------------------|-----------|--------------|--------------|
| NEMA 2 THICKNESS | 3/8"      | 1/2"         | 3/4"         |
| AMPERES          | 0 TO 1200 | 1201 TO 1500 | 1501 TO 2000 |

Approximate dimensions in inches (mm).

# CRF-36

## 34.5 kV CURRENT TRANSFORMER

| Electrical characteristics |             |  |   |                                    |   |                        |                |                             |          |   |  |
|----------------------------|-------------|--|---|------------------------------------|---|------------------------|----------------|-----------------------------|----------|---|--|
| Code (CEP)                 | Code (HCEP) | Current Ratio (Primary: Secondary) (A) | Continuous Thermal Current Rating Factor @ 30°C | Short-time Thermal Current (kA/1s) | Short-time Mechanical Current (kA <sub>peak</sub> ) | IEEE Metering Accuracy | Relay Accuracy | Nominal Voltage System (kV) | BIL (kV) | Power-Frequency Withstand Voltage (1 min) |  |
|                            |             |  |   |                                    |   |                        |                |                             |          | Primary & Secondary (kV <sub>rms</sub> )  | Secondary Winding (kV <sub>rms</sub> ) |
| 756273001                  | 756270000-H | 5:5                                    | 3.0   | 0.5                                | 1.25  | 0.3B-1.8               | T100           | 34.5                        | 200      | 70  | 2.5                                    |
| 756273002                  | 756270001-H | 10:5                                   | 3.0   | 1                                  | 2.5   | 0.3B-1.8               | T100           | 34.5                        | 200      | 70  | 2.5                                    |
| 756273003                  | 756270002-H | 15:5                                   | 3.0   | 1.5                                | 3.75  | 0.3B-1.8               | T100           | 34.5                        | 200      | 70  | 2.5                                    |
| 756273004                  | 756270003-H | 20:5                                   | 3.0   | 2                                  | 5   | 0.3B-1.8               | T100           | 34.5                        | 200      | 70  | 2.5                                    |
| 756273005                  | 756270004-H | 25:5                                   | 3.0   | 2.5                                | 6.25  | 0.3B-1.8               | T100           | 34.5                        | 200      | 70  | 2.5                                    |
| 756273006                  | 756270005-H | 30:5                                   | 3.0   | 3                                  | 7.5   | 0.3B-1.8               | T100           | 34.5                        | 200      | 70  | 2.5                                    |
| 756273008                  | 756270006-H | 40:5                                   | 3.0   | 4                                  | 10  | 0.3B-1.8               | T100           | 34.5                        | 200      | 70  | 2.5                                    |
| 756273010                  | 756270007-H | 50:5                                   | 3.0   | 5                                  | 12.5  | 0.3B-1.8               | T100           | 34.5                        | 200      | 70  | 2.5                                    |
| 756273015                  | 756270008-H | 75:5                                   | 3.0   | 7.5                                | 18.75   | 0.3B-1.8               | T100           | 34.5                        | 200      | 70  | 2.5                                    |
| 756273020                  | 756270009-H | 100:5                                  | 3.0   | 10                                 | 25  | 0.3B-1.8               | T100           | 34.5                        | 200      | 70  | 2.5                                    |
| 756273030                  | 756270010-H | 150:5                                  | 3.0   | 15                                 | 37.5  | 0.3B-1.8               | T100           | 34.5                        | 200      | 70  | 2.5                                    |
| 756273040                  | 756270011-H | 200:5                                  | 3.0   | 20                                 | 50  | 0.3B-1.8               | T100           | 34.5                        | 200      | 70  | 2.5                                    |
| 756273060                  | 756270012-H | 300:5                                  | 3.0   | 30                                 | 75  | 0.3B-1.8               | T100           | 34.5                        | 200      | 70  | 2.5                                    |
| 756273080                  | 756270013-H | 400:5                                  | 3.0   | 40                                 | 100   | 0.3B-1.8               | T100           | 34.5                        | 200      | 70  | 2.5                                    |
| 756273120                  | 756270014-H | 600:5                                  | 2.0   | 60                                 | 150   | 0.3B-1.8               | T100           | 34.5                        | 200      | 70  | 2.5                                    |
| 756273160                  | 756270015-H | 800:5                                  | 1.5   | 60                                 | 150   | 0.3B-1.8               | T100           | 34.5                        | 200      | 70  | 2.5                                    |
| 756273200                  | 756270016-H | 1000:5                                 | 1.0   | 75                                 | 127.5   | 0.3B-1.8               | T100           | 34.5                        | 200      | 70  | 2.5                                    |
| 756273240                  | 756270017-H | 1200:5                                 | 1.0   | 90                                 | 162   | 0.3B-1.8               | T100           | 34.5                        | 200      | 70  | 2.5                                    |
| 756271001                  | 756270030-H | 5:5                                    | 1.5   | 0.5                                | 0.95  | 0.3B-1.8               | T200           | 34.5                        | 200      | 70  | 2.5                                    |
| 756271002                  | 756270031-H | 10:5                                   | 1.5   | 1                                  | 1.9   | 0.3B-1.8               | T200           | 34.5                        | 200      | 70  | 2.5                                    |
| 756271003                  | 756270032-H | 15:5                                   | 1.5   | 1.5                                | 2.85  | 0.3B-1.8               | T200           | 34.5                        | 200      | 70  | 2.5                                    |
| 756271004                  | 756270033-H | 20:5                                   | 1.5   | 2                                  | 3.8   | 0.3B-1.8               | T200           | 34.5                        | 200      | 70  | 2.5                                    |
| 756271005                  | 756270034-H | 25:5                                   | 1.5   | 2.5                                | 4.75  | 0.3B-1.8               | T200           | 34.5                        | 200      | 70  | 2.5                                    |
| 756271006                  | 756270035-H | 30:5                                   | 1.5   | 3                                  | 5.7   | 0.3B-1.8               | T200           | 34.5                        | 200      | 70  | 2.5                                    |
| 756271008                  | 756270036-H | 40:5                                   | 1.5   | 4                                  | 7.6   | 0.3B-1.8               | T200           | 34.5                        | 200      | 70  | 2.5                                    |
| 756271010                  | 756270037-H | 50:5                                   | 1.5   | 5                                  | 9.5   | 0.3B-1.8               | T200           | 34.5                        | 200      | 70  | 2.5                                    |
| 756271012                  | 756270038-H | 60:5                                   | 1.5   | 6                                  | 11.4  | 0.3B-1.8               | T200           | 34.5                        | 200      | 70  | 2.5                                    |
| 756271015                  | 756270039-H | 75:5                                   | 1.5   | 7.5                                | 14.25   | 0.3B-1.8               | T200           | 34.5                        | 200      | 70  | 2.5                                    |
| 756271020                  | 756270040-H | 100:5                                  | 1.5   | 10                                 | 19  | 0.3B-1.8               | T200           | 34.5                        | 200      | 70  | 2.5                                    |
| 756271040                  | 756270041-H | 200:5                                  | 1.5   | 20                                 | 38  | 0.3B-1.8               | T200           | 34.5                        | 200      | 70  | 2.5                                    |
| 756271060                  | 756270042-H | 300:5                                  | 1.5   | 30                                 | 57  | 0.3B-1.8               | T200           | 34.5                        | 200      | 70  | 2.5                                    |
| 756271080                  | 756270043-H | 400:5                                  | 1.5   | 40                                 | 76  | 0.3B-1.8               | T200           | 34.5                        | 200      | 70  | 2.5                                    |
| 756271100                  | 756270044-H | 500:5                                  | 1.5   | 50                                 | 9.5   | 0.3B-1.8               | T200           | 34.5                        | 200      | 70  | 2.5                                    |
| 756271120                  | 756270045-H | 600:5                                  | 1.2   | 60                                 | 86.7  | 0.3B-1.8               | T200           | 34.5                        | 200      | 70  | 2.5                                    |
| 756271160                  | 756270046-H | 800:5                                  | 1.0   | 60                                 | 114   | 0.3B-1.8               | T200           | 34.5                        | 200      | 70  | 2.5                                    |
| 756271200                  | 756270047-H | 1000:5                                 | 1.0   | 75                                 | 142.5   | 0.3B-1.8               | T200           | 34.5                        | 200      | 70  | 2.5                                    |
| 756271240                  | 756270048-H | 1200:5                                 | 1.0   | 90                                 | 171   | 0.3B-1.8               | T200           | 34.5                        | 200      | 70  | 2.5                                    |
| 756272002                  | 756270060-H | 10/20:5                                | 2.0/1.5   | 2                                  | 3.8   | 0.3B-0.9/0.3B-1.8      | T100/T200      | 34.5                        | 200      | 70  | 2.5                                    |
| 756272005                  | 756270061-H | 25/50:5                                | 2.0/1.5   | 5                                  | 9.5   | 0.3B-0.9/0.3B-1.8      | T100/T200      | 34.5                        | 200      | 70  | 2.5                                    |
| 756272006                  | 756270062-H | 30/60:5                                | 2.0/1.5   | 6                                  | 11.4  | 0.3B-0.9/0.3B-1.8      | T100/T200      | 34.5                        | 200      | 70  | 2.5                                    |
| 756272010                  | 756270063-H | 50/100:5                               | 2.0/1.5   | 10                                 | 19  | 0.3B-0.9/0.3B-1.8      | T100/T200      | 34.5                        | 200      | 70  | 2.5                                    |
| 756272015                  | 756270064-H | 75/150:5                               | 2.0/1.5   | 15                                 | 28.5  | 0.3B-0.9/0.3B-1.8      | T100/T200      | 34.5                        | 200      | 70  | 2.5                                    |
| 756272020                  | 756270065-H | 100/200:5                              | 2.0/1.5   | 20                                 | 38  | 0.3B-0.9/0.3B-1.8      | T100/T200      | 34.5                        | 200      | 70  | 2.5                                    |



# CRH-36

# 34.5 kV CURRENT TRANSFORMER



**OUTDOOR  
60 Hertz**

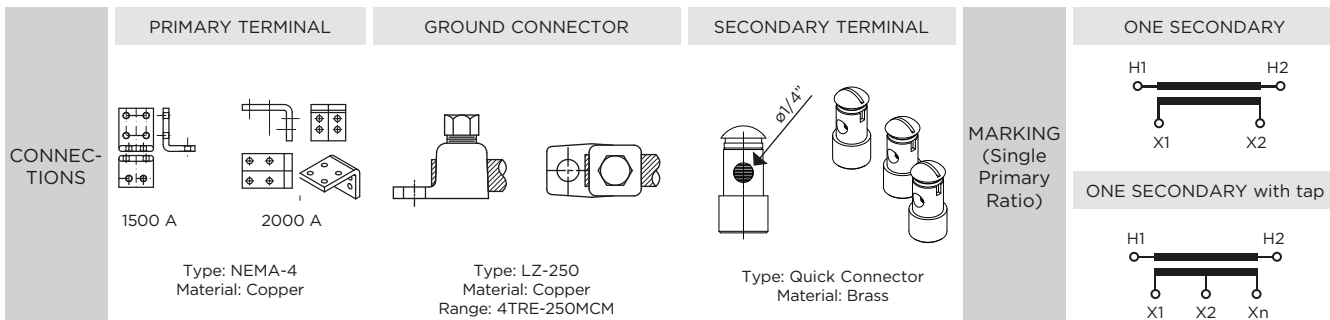
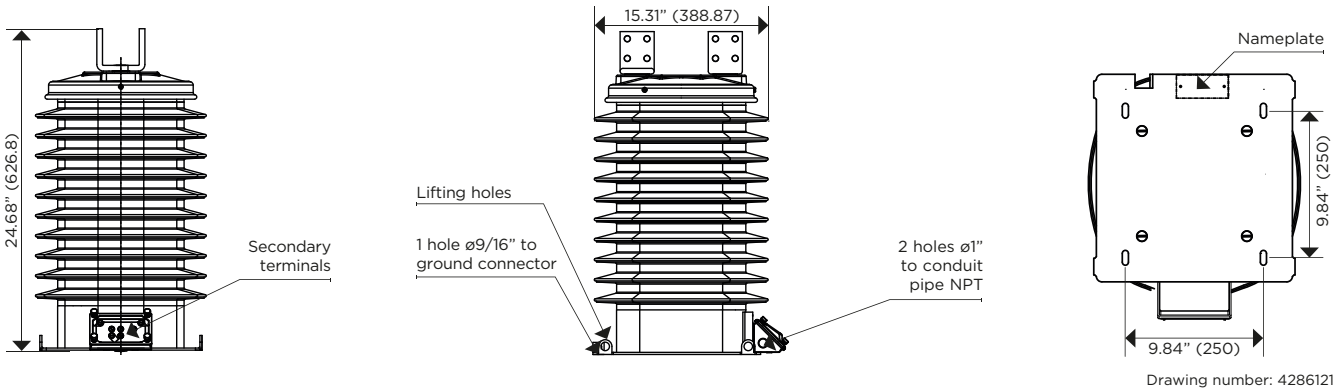
ARTECHE CR series are dry type outdoor service current transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

| Mechanical characteristics |        |               |                        |                      |
|----------------------------|--------|---------------|------------------------|----------------------|
| Insulation Material        | Colors | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
| Resin                      | Gray   | 253.5         | 47.83                  | 19.3                 |



Approximate dimensions in inches (mm).

# CRH-36

## 34.5 kV CURRENT TRANSFORMER

| Electrical characteristics  |             |  |   |                                    |   |                        |                |                             |          |   |  |
|---|-------------|--|---|------------------------------------|---|------------------------|----------------|-----------------------------|----------|---|--|
| Code (CEP)  | Code (HCEP) | Current Ratio (Primary: Secondary) (A) | Continuous Thermal Current Rating Factor @ 30°C | Short-time Thermal Current (kA/1s) | Short-time Mechanical Current (kA <sub>peak</sub> ) | IEEE Metering Accuracy | Relay Accuracy | Nominal Voltage System (kV) | BIL (kV) | Power-Frequency Withstand Voltage (1 min) |  |
|   |             |  |   |                                    |   |                        |                |                             |          | Primary & Secondary (kV <sub>rms</sub> )  | Secondary Winding (kV <sub>rms</sub> ) |
| 756861001   | 756860000-H | 5:5                                    | 2.0   | 0.5                                | 0.95  | 0.3B-1.8               | T200           | 34.5                        | 200      | 70  | 2.5                                    |
| 756861002   | 756860001-H | 10:5                                   | 2.0   | 1                                  | 1.9   | 0.3B-1.8               | T200           | 34.5                        | 200      | 70  | 2.5                                    |
| 756861003   | 756860002-H | 15:5                                   | 2.0   | 1.5                                | 2.85  | 0.3B-1.8               | T200           | 34.5                        | 200      | 70  | 2.5                                    |
| 756861004   | 756860003-H | 20:5                                   | 2.0   | 2                                  | 3.8   | 0.3B-1.8               | T200           | 34.5                        | 200      | 70  | 2.5                                    |
| 756861005   | 756860004-H | 25:5                                   | 2.0   | 2.5                                | 4.75  | 0.3B-1.8               | T200           | 34.5                        | 200      | 70  | 2.5                                    |
| 756861006   | 756860005-H | 30:5                                   | 2.0   | 3                                  | 5.7   | 0.3B-1.8               | T200           | 34.5                        | 200      | 70  | 2.5                                    |
| 756861008   | 756860006-H | 40:5                                   | 2.0   | 4                                  | 7.6   | 0.3B-1.8               | T200           | 34.5                        | 200      | 70  | 2.5                                    |
| 756861010   | 756860007-H | 50:5                                   | 2.0   | 5                                  | 9.5   | 0.3B-1.8               | T200           | 34.5                        | 200      | 70  | 2.5                                    |
| 756861015   | 756860008-H | 75:5                                   | 2.0   | 6                                  | 11.4  | 0.3B-1.8               | T200           | 34.5                        | 200      | 70  | 2.5                                    |
| 756861020   | 756860009-H | 100:5                                  | 2.0   | 7.5                                | 14.25   | 0.3B-1.8               | T200           | 34.5                        | 200      | 70  | 2.5                                    |
| 756861030   | 756860010-H | 150:5                                  | 2.0   | 10                                 | 19  | 0.3B-1.8               | T200           | 34.5                        | 200      | 70  | 2.5                                    |
| 756861040   | 756860011-H | 200:5                                  | 2.0   | 20                                 | 38  | 0.3B-1.8               | T200           | 34.5                        | 200      | 70  | 2.5                                    |
| 756861060   | 756860012-H | 300:5                                  | 2.0   | 30                                 | 57  | 0.3B-1.8               | T200           | 34.5                        | 200      | 70  | 2.5                                    |
| 756861080   | 756860013-H | 400:5                                  | 2.0   | 40                                 | 76  | 0.3B-1.8               | T200           | 34.5                        | 200      | 70  | 2.5                                    |
| 756861100   | 756860014-H | 500:5                                  | 2.0   | 50                                 | 9.5   | 0.3B-1.8               | T200           | 34.5                        | 200      | 70  | 2.5                                    |
| 756861120   | 756860015-H | 600:5                                  | 2.0   | 60                                 | 86.7  | 0.3B-1.8               | T200           | 34.5                        | 200      | 70  | 2.5                                    |
| 756861160   | 756860016-H | 800:5                                  | 2.0   | 60                                 | 114   | 0.3B-1.8               | T200           | 34.5                        | 200      | 70  | 2.5                                    |
| 756861200   | 756860017-H | 1000:5                                 | 1.5   | 75                                 | 142.5   | 0.3B-1.8               | T200           | 34.5                        | 200      | 70  | 2.5                                    |
| 756861240   | 756860018-H | 1200:5                                 | 1.5   | 90                                 | 171   | 0.3B-1.8               | T200           | 34.5                        | 200      | 70  | 2.5                                    |
| 756862002   | 756860030-H | 10/20:5                                | 3.0/2.0   | 2                                  | 3.8   | 0.3B-1.8/0.3B1.8       | T100/T200      | 34.5                        | 200      | 70  | 2.5                                    |
| 756862005   | 756860031-H | 25/50:5                                | 3.0/2.0   | 5                                  | 9.5   | 0.3B-1.8/0.3B1.8       | T100/T200      | 34.5                        | 200      | 70  | 2.5                                    |
| 756862006   | 756860032-H | 30/60:5                                | 3.0/2.0   | 6                                  | 11.4  | 0.3B-1.8/0.3B1.8       | T100/T200      | 34.5                        | 200      | 70  | 2.5                                    |
| 756862010   | 756860033-H | 50/100:5                               | 3.0/2.0   | 10                                 | 19  | 0.3B-1.8/0.3B1.8       | T100/T200      | 34.5                        | 200      | 70  | 2.5                                    |
| 756862015   | 756860034-H | 75/150:5                               | 3.0/2.0   | 15                                 | 28.5  | 0.3B-1.8/0.3B1.8       | T100/T200      | 34.5                        | 200      | 70  | 2.5                                    |
| 756862020   | 756860035-H | 100/200:5                              | 3.0/2.0   | 20                                 | 38  | 0.3B-1.8/0.3B1.8       | T100/T200      | 34.5                        | 200      | 70  | 2.5                                    |
| 756862030   | 756860036-H | 150/300:5                              | 3.0/2.0   | 30                                 | 57  | 0.3B-1.8/0.3B1.8       | T100/T200      | 34.5                        | 200      | 70  | 2.5                                    |
| 756862040   | 756860037-H | 200/400:5                              | 3.0/2.0   | 40                                 | 76  | 0.3B-1.8/0.3B1.8       | T100/T200      | 34.5                        | 200      | 70  | 2.5                                    |
| 756862030   | 756860038-H | 300/600:5                              | 3.0/2.0   | 60                                 | 86.7  | 0.3B-1.8/0.3B1.8       | T100/T200      | 34.5                        | 200      | 70  | 2.5                                    |
| 756862030   | 756860039-H | 400/800:5                              | 3.0/2.0   | 60                                 | 114   | 0.3B-1.8/0.3B1.8       | T100/T200      | 34.5                        | 200      | 70  | 2.5                                    |
| 756862030   | 756860040-H | 500/1000:5                             | 3.0/1.5   | 75                                 | 142.5   | 0.3B-1.8/0.3B1.8       | T100/T200      | 34.5                        | 200      | 70  | 2.5                                    |
| 756862030   | 756860041-H | 600/1200:5                             | 3.0/1.5   | 90                                 | 171   | 0.3B-1.8/0.3B1.8       | T100/T200      | 34.5                        | 200      | 70  | 2.5                                    |
| <b>High Accuracy Extended Range</b> 1% nominal current to Rating Factor |             |  |   |                                    |   |                        |                |                             |          |   |  |
| 756868040   | 756860060-H | 200:5                                  | 4.0   | 20                                 | 38  | 0.15 B-1.8             | -              | 34.5                        | 200      | 70  | 2.5                                    |
| 756868120   | 756860061-H | 600:5                                  | 3.0   | 60                                 | 86.7  | 0.15 B-1.8             | -              | 34.5                        | 200      | 70  | 2.5                                    |
| 756868200   | 756860062-H | 1000:5                                 | 2.0   | 75                                 | 142.5   | 0.15 B-1.8             | -              | 34.5                        | 200      | 70  | 2.5                                    |
| 756868240   | 756860063-H | 1200:5                                 | 1.5   | 90                                 | 171   | 0.15 B-1.8             | -              | 34.5                        | 200      | 70  | 2.5                                    |

Additional ratings available upon request.



# CRK-36

# 34.5 kV CURRENT TRANSFORMER



**OUTDOOR  
60 Hertz**

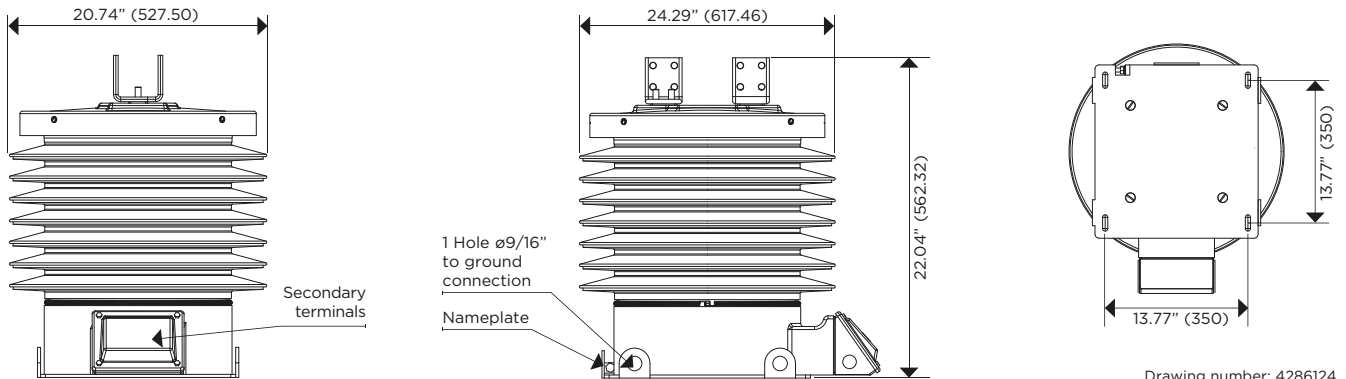
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The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

| Mechanical characteristics |        |               |                        |                      |
|----------------------------|--------|---------------|------------------------|----------------------|
| Insulation Material        | Colors | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
| Resin                      | Gray   | 322           | 44.68                  | 13.8                 |



| CONNECTIONS | PRIMARY TERMINAL   | GROUND CONNECTOR  | SECONDARY TERMINAL                         | MARKING<br>(Single Primary Ratio) |
|-------------|--|---|--|-----------------------------------|
|             | <p>1500 A      2000 A</p> <p>Type: NEMA-4<br/>Material: Copper</p> | <p>Type: LZ-250<br/>Material: Copper<br/>Range: 4TRE-250MCM</p> | <p>Type: Hex screw<br/>Material: Steel</p> |                                   |

Approximate dimensions in inches (mm).

# CRK-36

## 34.5 kV CURRENT TRANSFORMER

| Electrical characteristics |             |  |   |                                    |   |                        |                |                             |          |   |  |
|----------------------------|-------------|--|---|------------------------------------|---|------------------------|----------------|-----------------------------|----------|---|--|
| Code (CEP)                 | Code (HCEP) | Current Ratio (Primary: Secondary) (A) | Continuous Thermal Current Rating Factor @ 30°C | Short-time Thermal Current (kA/1s) | Short-time Mechanical Current (kA <sub>peak</sub> ) | IEEE Metering Accuracy | Relay Accuracy | Nominal Voltage System (kV) | BIL (kV) | Power-Frequency Withstand Voltage (1 min) |  |
|                            |             |  |   |                                    |   |                        |                |                             |          | Primary & Secondary (kV <sub>rms</sub> )  | Secondary Winding (kV <sub>rms</sub> ) |
| 756911001                  | 756910000-H | 5:5                                    | 1.5   | 0.5                                | 0.95  | 0.3B-1.8               | T400           | 34.5                        | 200      | 70  | 2.5                                    |
| 756911002                  | 756910001-H | 10:5                                   | 1.5   | 1                                  | 1.9   | 0.3B-1.8               | T400           | 34.5                        | 200      | 70  | 2.5                                    |
| 756911003                  | 756910002-H | 15:5                                   | 1.5   | 1.5                                | 2.85  | 0.3B-1.8               | T400           | 34.5                        | 200      | 70  | 2.5                                    |
| 756911004                  | 756910003-H | 20:5                                   | 1.5   | 2                                  | 3.8   | 0.3B-1.8               | T400           | 34.5                        | 200      | 70  | 2.5                                    |
| 756911005                  | 756910004-H | 25:5                                   | 1.5   | 2.5                                | 4.75  | 0.3B-1.8               | T400           | 34.5                        | 200      | 70  | 2.5                                    |
| 756911006                  | 756910005-H | 30:5                                   | 1.5   | 3                                  | 5.7   | 0.3B-1.8               | T400           | 34.5                        | 200      | 70  | 2.5                                    |
| 756911008                  | 756910006-H | 40:5                                   | 1.5   | 4                                  | 7.6   | 0.3B-1.8               | T400           | 34.5                        | 200      | 70  | 2.5                                    |
| 756911010                  | 756910007-H | 50:5                                   | 1.5   | 5                                  | 9.5   | 0.3B-1.8               | T400           | 34.5                        | 200      | 70  | 2.5                                    |
| 756911015                  | 756910008-H | 75:5                                   | 1.5   | 6                                  | 11.4  | 0.3B-1.8               | T400           | 34.5                        | 200      | 70  | 2.5                                    |
| 756911020                  | 756910009-H | 100:5                                  | 1.5   | 7.5                                | 14.25   | 0.3B-1.8               | T400           | 34.5                        | 200      | 70  | 2.5                                    |
| 756911030                  | 756910010-H | 150:5                                  | 1.5   | 10                                 | 19  | 0.3B-1.8               | T400           | 34.5                        | 200      | 70  | 2.5                                    |
| 756911040                  | 756910011-H | 200:5                                  | 1.5   | 20                                 | 38  | 0.3B-1.8               | T400           | 34.5                        | 200      | 70  | 2.5                                    |
| 756911060                  | 756910012-H | 300:5                                  | 1.5   | 30                                 | 57  | 0.3B-1.8               | T400           | 34.5                        | 200      | 70  | 2.5                                    |
| 756911080                  | 756910013-H | 400:5                                  | 1.5   | 40                                 | 76  | 0.3B-1.8               | T400           | 34.5                        | 200      | 70  | 2.5                                    |
| 756911100                  | 756910014-H | 500:5                                  | 1.5   | 50                                 | 9.5   | 0.3B-1.8               | T400           | 34.5                        | 200      | 70  | 2.5                                    |
| 756911120                  | 756910015-H | 600:5                                  | 1.5   | 60                                 | 86.7  | 0.3B-1.8               | T400           | 34.5                        | 200      | 70  | 2.5                                    |
| 756911160                  | 756910016-H | 800:5                                  | 1.5   | 60                                 | 114   | 0.3B-1.8               | T400           | 34.5                        | 200      | 70  | 2.5                                    |
| 756911200                  | 756910017-H | 1000:5                                 | 1.5   | 75                                 | 142.5   | 0.3B-1.8               | T400           | 34.5                        | 200      | 70  | 2.5                                    |
| 756911240                  | 756910018-H | 1200:5                                 | 1.5   | 90                                 | 171   | 0.3B-1.8               | T400           | 34.5                        | 200      | 70  | 2.5                                    |
| 756911400                  | 756910019-H | 2000:5                                 | 1.2   | 90                                 | 171   | 0.3B-1.8               | T400           | 34.5                        | 200      | 70  | 2.5                                    |
| 756911500                  | 756910020-H | 2500:5                                 | 1.2   | 90                                 | 171   | 0.3B-1.8               | T400           | 34.5                        | 200      | 70  | 2.5                                    |
| 756912002                  | 756910030-H | 10/20:5                                | 3.0/1.5   | 2                                  | 3.8   | 0.3B-1.8/0.3B1.8       | T200/T400      | 34.5                        | 200      | 70  | 2.5                                    |
| 756912005                  | 756910031-H | 25/50:5                                | 3.0/1.5   | 5                                  | 9.5   | 0.3B-1.8/0.3B1.8       | T200/T400      | 34.5                        | 200      | 70  | 2.5                                    |
| 756912006                  | 756910032-H | 30/60:5                                | 3.0/1.5   | 6                                  | 11.4  | 0.3B-1.8/0.3B1.8       | T200/T400      | 34.5                        | 200      | 70  | 2.5                                    |
| 756912010                  | 756910033-H | 50/100:5                               | 3.0/1.5   | 10                                 | 19  | 0.3B-1.8/0.3B1.8       | T200/T400      | 34.5                        | 200      | 70  | 2.5                                    |
| 756912015                  | 756910034-H | 75/150:5                               | 3.0/1.5   | 15                                 | 28.5  | 0.3B-1.8/0.3B1.8       | T200/T400      | 34.5                        | 200      | 70  | 2.5                                    |
| 756912020                  | 756910035-H | 100/200:5                              | 3.0/1.5   | 20                                 | 38  | 0.3B-1.8/0.3B1.8       | T200/T400      | 34.5                        | 200      | 70  | 2.5                                    |
| 756912030                  | 756910036-H | 150/300:5                              | 3.0/1.5   | 30                                 | 57  | 0.3B-1.8/0.3B1.8       | T200/T400      | 34.5                        | 200      | 70  | 2.5                                    |
| 756912040                  | 756910037-H | 200/400:5                              | 3.0/1.5   | 40                                 | 76  | 0.3B-1.8/0.3B1.8       | T200/T400      | 34.5                        | 200      | 70  | 2.5                                    |
| 756912060                  | 756910038-H | 300/600:5                              | 3.0/1.5   | 60                                 | 86.7  | 0.3B-1.8/0.3B1.8       | T200/T400      | 34.5                        | 200      | 70  | 2.5                                    |
| 756912080                  | 756910039-H | 400/800:5                              | 3.0/1.5   | 60                                 | 114   | 0.3B-1.8/0.3B1.8       | T200/T400      | 34.5                        | 200      | 70  | 2.5                                    |
| 756912100                  | 756910040-H | 500/1000:5                             | 3.0/1.5   | 75                                 | 142.5   | 0.3B-1.8/0.3B1.8       | T200/T400      | 34.5                        | 200      | 70  | 2.5                                    |
| 756912120                  | 756910041-H | 600/1200:5                             | 3.0/1.5   | 90                                 | 171   | 0.3B-1.8/0.3B1.8       | T200/T400      | 34.5                        | 200      | 70  | 2.5                                    |
| 756912150                  | 756910042-H | 750/1500:5                             | 3.0/1.5   | 90                                 | 171   | 0.3B-1.8/0.3B1.8       | T200/T400      | 34.5                        | 200      | 70  | 2.5                                    |
| 756912200                  | 756910043-H | 1000/2000:5                            | 2.4/1.2   | 90                                 | 171   | 0.3B-1.8/0.3B1.8       | T200/T400      | 34.5                        | 200      | 70  | 2.5                                    |

Additional ratings available upon request.





# CE-046

## 46 kV CURRENT TRANSFORMER



**OUTDOOR  
60 Hertz**

ARTECHE CE series are dry type outdoor service top-core current transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

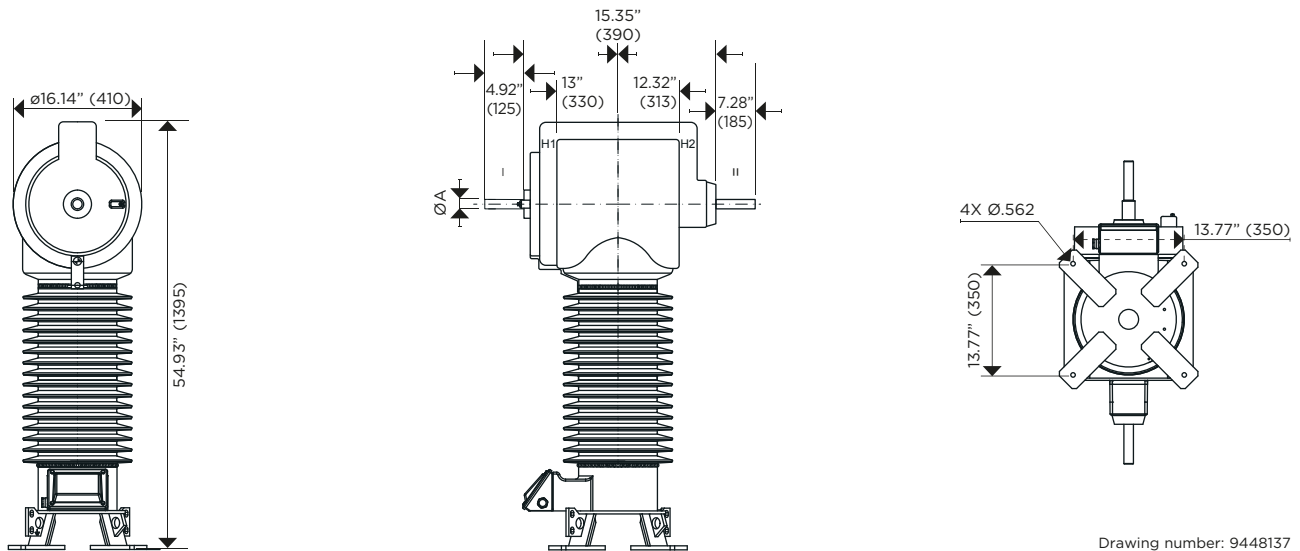
The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions. The cores and windings are located in the upper part of the transformer. This head is coated with a conductive layer, which provides an adequate electric field control.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|---------------------|--------|---------------|------------------------|----------------------|
| Resin               | Gray   | 595           | 75.2                   | 22                   |



Drawing number: 9448137

| CONNECTIONS | PRIMARY TERMINAL                                   | GROUND CONNECTOR  | SECONDARY TERMINAL                         | MARKING<br>(Single Primary Ratio) | ONE SECONDARY |
|-------------|--|---|--|-----------------------------------|---------------|
|             | <p>Type: PM30MCO-1-4N-E<br/>Material: Aluminum</p> | <p>Type: LZ-500<br/>Material: Copper<br/>Range: 4/OTRE-500MCM</p> | <p>Type: Hex screw<br/>Material: Steel</p> |                                   |               |

Approximate dimensions in inches (mm).



# CRH-52

## 46 kV CURRENT TRANSFORMER



**OUTDOOR**  
60 Hertz

ARTECHE CR series are dry type outdoor service current transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

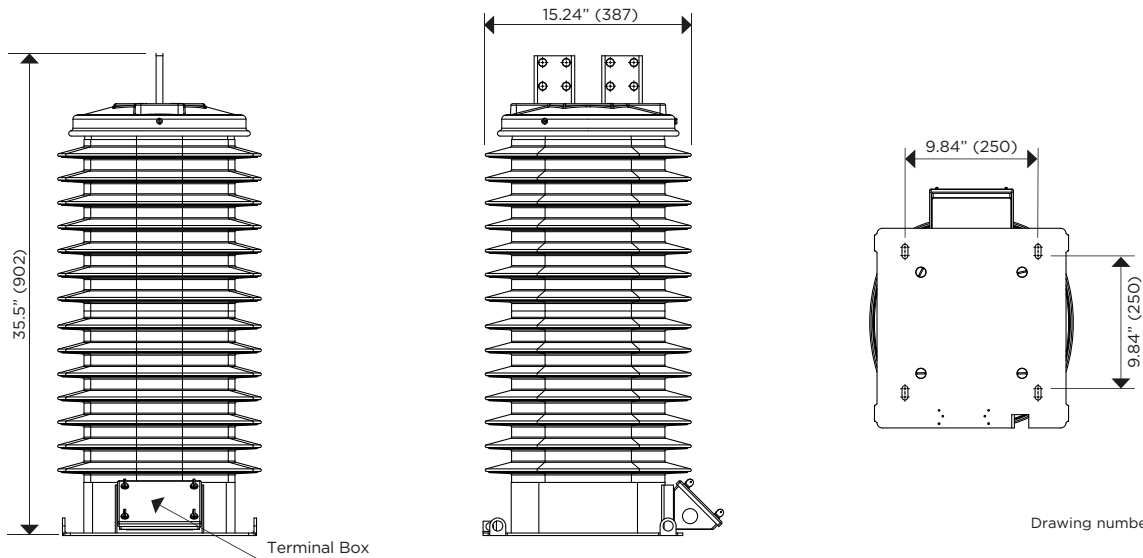
The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|---------------------|--------|---------------|------------------------|----------------------|
| Resin               | Gray   | 253.53        | 47.83                  | 23                   |



|                    |                                      |  |  |   |                               |
|--------------------|--------------------------------------|--|--|---|-------------------------------|
| <b>CONNECTIONS</b> | <b>PRIMARY TERMINAL</b>              | <b>GROUND CONNECTOR</b>                                    | <b>SECONDARY TERMINAL</b>              | <b>MARKING<br/>(Single Primary Ratio)</b> | <b>ONE SECONDARY</b>          |
|                    | <br>Type: NEMA-4<br>Material: Copper | <br>Type: LZ-250<br>Material: Copper<br>Range: 4TRE-250MCM | <br>Type: Hex screw<br>Material: Steel |   |                               |
|                    |                                      |  |  |   | <b>ONE SECONDARY with tap</b> |
|                    |                                      |  |  |   |                               |

Approximate dimensions in inches (mm).



# CRK-52

## 46 kV CURRENT TRANSFORMER



**OUTDOOR  
60 Hertz**

ARTECHE CR series are dry type outdoor service current transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

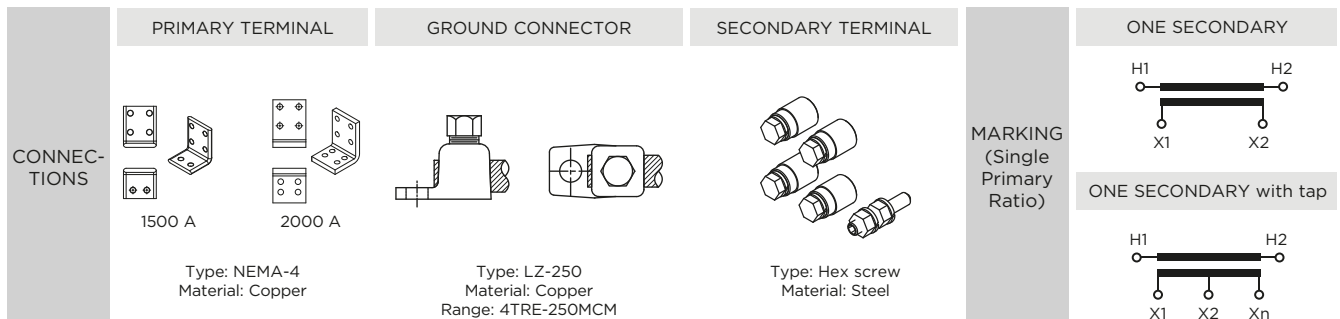
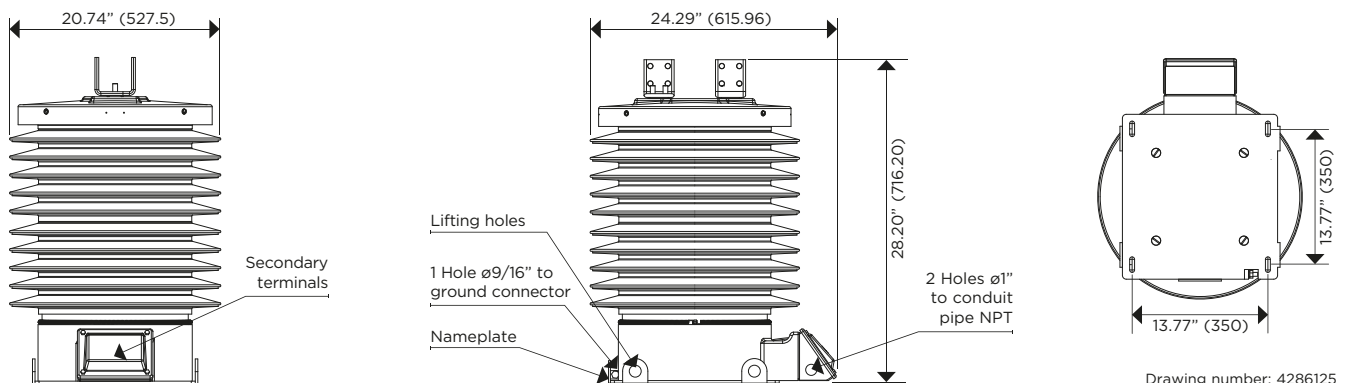
The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|---------------------|--------|---------------|------------------------|----------------------|
| Resin               | Gray   | 458           | 63.62                  | 19.7                 |



Approximate dimensions in inches (mm).



# CE-069

## 69 kV CURRENT TRANSFORMER



**OUTDOOR  
60 Hertz**

ARTECHE CE series are dry type outdoor service top-core current transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

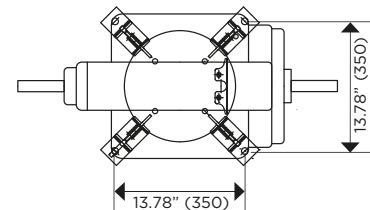
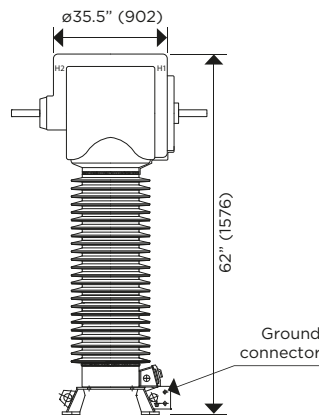
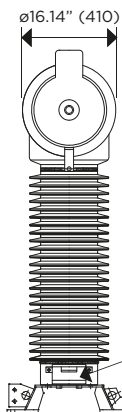
The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions. The cores and windings are located in the upper part of the transformer. This head is coated with a conductive layer, which provides an adequate electric field control.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|---------------------|--------|---------------|------------------------|----------------------|
| Resin               | Gray   | 771           | 109.4                  | 33                   |



Drawing number: 9448138

|                    |  |   |  |   |                                      |
|--------------------|--|---|--|---|--------------------------------------|
| <b>CONNECTIONS</b> | <b>PRIMARY TERMINAL</b>                            | <b>GROUND CONNECTOR</b>   | <b>SECONDARY TERMINAL</b>                  | <b>MARKING<br/>(Single Primary Ratio)</b> | <b>ONE SECONDARY</b>                 |
|                    | <p>Type: PM30MCO-1-4N-E<br/>Material: Aluminum</p> | <p>Type: LZ-500<br/>Material: Copper<br/>Range: 4/OTRE-500MCM</p> | <p>Type: Hex screw<br/>Material: Steel</p> |   | <p><b>ONE SECONDARY with tap</b></p> |

Approximate dimensions in inches (mm).





# CRH-72

## 69 kV CURRENT TRANSFORMER



**OUTDOOR  
60 Hertz**

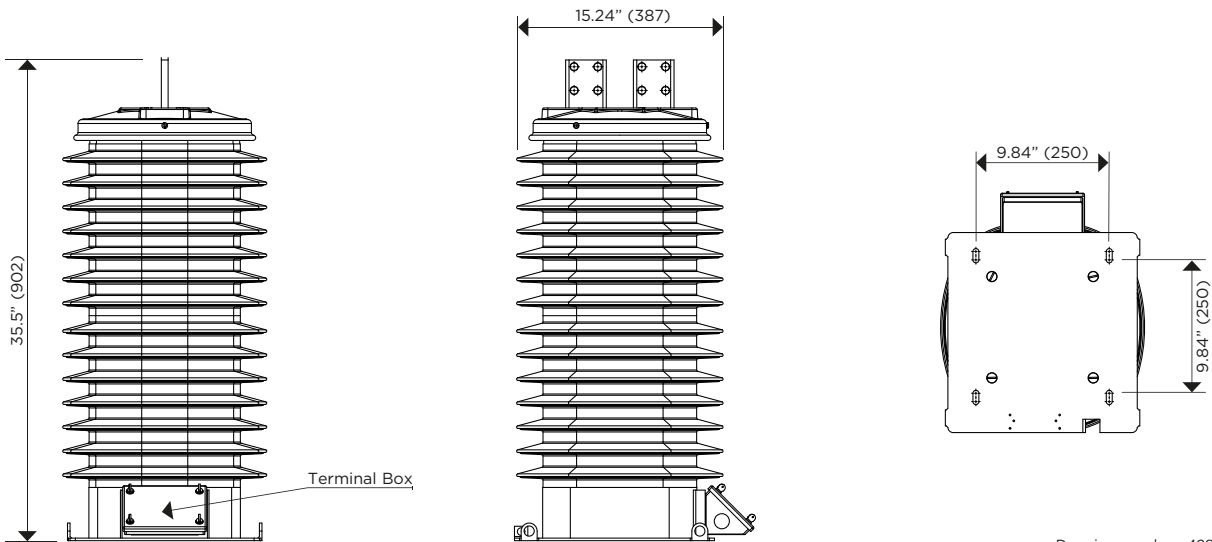
ARTECHE CR series are dry type outdoor service current transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

| Mechanical characteristics |        | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|----------------------------|--------|---------------|------------------------|----------------------|
| Insulation Material        | Colors | 298           | 74.8                   | 26                   |
| Resin                      | Gray   |               |                        |                      |



Drawing number: 4286123

|                    |                                      |  |  |   |                            |
|--------------------|--------------------------------------|--|--|---|----------------------------|
| <b>CONNECTIONS</b> | <b>PRIMARY TERMINAL</b>              | <b>GROUND CONNECTOR</b>                                    | <b>SECONDARY TERMINAL</b>              | <b>MARKING<br/>(Single Primary Ratio)</b> | <b>ONE SECONDARY</b>       |
|                    | <br>Type: NEMA-4<br>Material: Copper | <br>Type: LZ-250<br>Material: Copper<br>Range: 4TRE-250MCM | <br>Type: Hex screw<br>Material: Steel |   | <br>ONE SECONDARY with tap |
|                    |                                      |  |  |   | <br>ONE SECONDARY with tap |

Approximate dimensions in inches (mm).



# CRK-72

## 69 kV CURRENT TRANSFORMER



**OUTDOOR  
60 Hertz**

ARTECHE CR series are dry type outdoor service current transformers. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

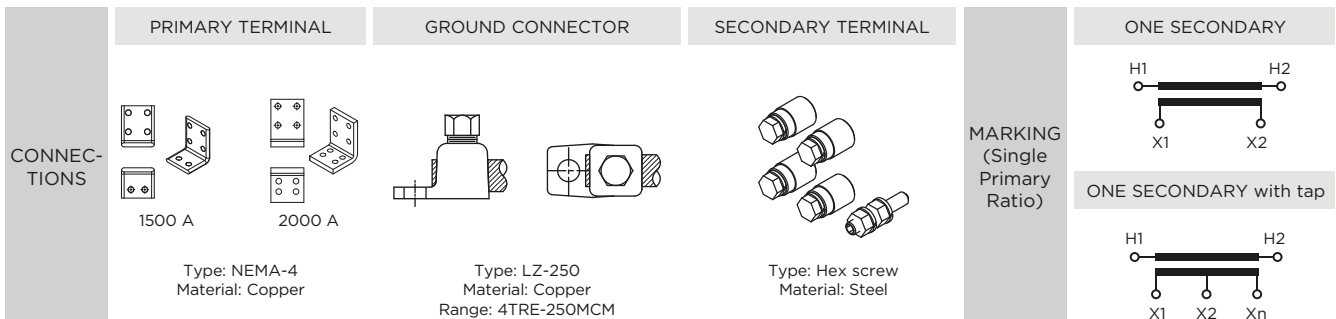
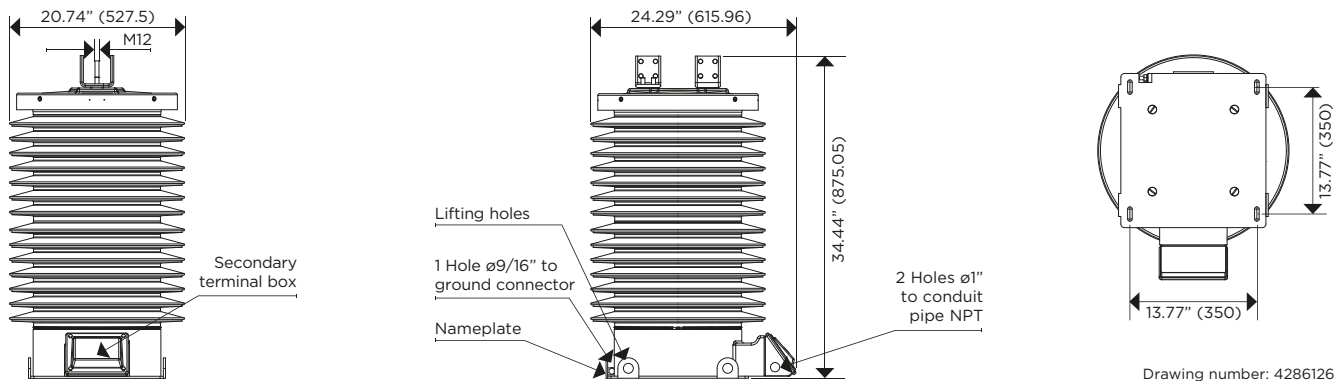
The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|---------------------|--------|---------------|------------------------|----------------------|
| Resin               | Gray   | 518           | 91.2                   | 26.2                 |

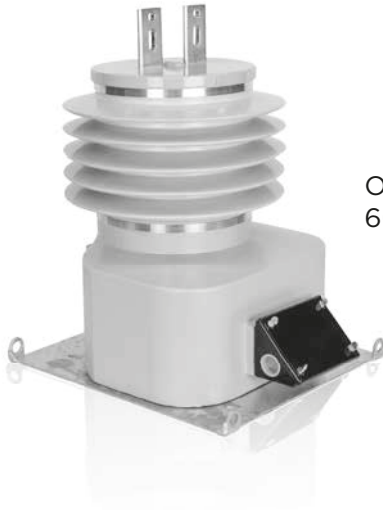


Approximate dimensions in inches (mm).



# KM-15

# 15 kV COMBINED TRANSFORMER



**OUTDOOR  
60 Hertz**

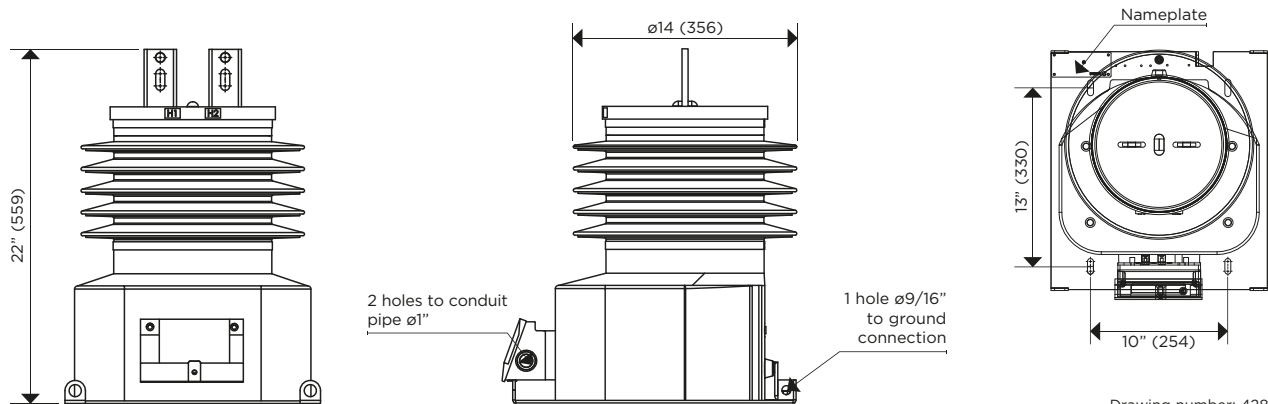
ARTECHE KM series are dry type outdoor service combination CT-PT. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

| Mechanical characteristics |        | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|----------------------------|--------|---------------|------------------------|----------------------|
| Insulation Material        | Colors |               |                        |                      |
| Resin                      | Gray   | 209           | 23.7                   | 13                   |



Drawing number: 4286236

| CONNECTIONS | PRIMARY TERMINAL                     | GROUND CONNECTOR  | SECONDARY TERMINAL                           | MARKING<br>(Single Primary Ratio) | ONE SECONDARY |
|-------------|--------------------------------------|---|--|-----------------------------------|---------------|
|             | <br>Type: NEMA-2<br>Material: Copper | <br>Type: TE-12 250<br>Material: Copper<br>Range: 4TRE-250MCM | <br>Type: Quick Connector<br>Material: Brass |                                   |               |
|             |                                      |   |  |                                   |               |

Approximate dimensions in inches (mm).

| Electrical characteristics  |             |                                    |   |                                    |   |  |  |                             |          |   |  |
|---|-------------|------------------------------------|---|------------------------------------|---|--|--|-----------------------------|----------|---|--|
| Code (CEP)  | Code (HCEP) | Current Ratio (Primary: Secondary) | Continuous Thermal Current Rating Factor @ 30°C | Short-time Thermal Current (kA/1s) | Short-time Mechanical Current (kA <sub>peak</sub> ) | IEEE Metering Accuracy [Current Transformer] | IEEE Metering Accuracy [Voltage Transformer] | Nominal Voltage System (kV) | BIL (kV) | Power-Frequency Withstand Voltage (1 min) |  |
|   |             |                                    |   |                                    |   |  |  |                             |          | Primary & Secondary (kV <sub>rms</sub> )  | Secondary Winding (kV <sub>rms</sub> ) |
| 770083011   | 770086026-H | 5:5                                | 3.0   | 0.5                                | 1.4   | 0.3 B-0.5                                    | 0.3 W,X,M,Y/0.6Z                             | 15                          | 110      | 34  | 2.5                                    |
| 770083021   | 770086025-H | 10:5                               | 3.0   | 1                                  | 2.7   | 0.3 B-0.5                                    | 0.3 W,X,M,Y/0.6Z                             | 15                          | 110      | 34  | 2.5                                    |
| 770083031   | 770086024-H | 15:5                               | 3.0   | 1.5                                | 4.1   | 0.3 B-0.5                                    | 0.3 W,X,M,Y/0.6Z                             | 15                          | 110      | 34  | 2.5                                    |
| 770083041   | 770086023-H | 20:5                               | 3.0   | 2                                  | 5.4   | 0.3 B-0.5                                    | 0.3 W,X,M,Y/0.6Z                             | 15                          | 110      | 34  | 2.5                                    |
| 770083051   | 770086022-H | 25:5                               | 3.0   | 2.5                                | 6.8   | 0.3 B-0.5                                    | 0.3 W,X,M,Y/0.6Z                             | 15                          | 110      | 34  | 2.5                                    |
| 770083061   | 770086021-H | 30:5                               | 3.0   | 3                                  | 8.1   | 0.3 B-0.5                                    | 0.3 W,X,M,Y/0.6Z                             | 15                          | 110      | 34  | 2.5                                    |
| 770083071   | 770086020-H | 40:5                               | 3.0   | 4                                  | 10.8  | 0.3 B-0.5                                    | 0.3 W,X,M,Y/0.6Z                             | 15                          | 110      | 34  | 2.5                                    |
| 770083081   | 770086019-H | 50:5                               | 3.0   | 5                                  | 13.5  | 0.3 B-0.5                                    | 0.3 W,X,M,Y/0.6Z                             | 15                          | 110      | 34  | 2.5                                    |
| 770083091   | 770086018-H | 75:5                               | 3.0   | 7.5                                | 20.3  | 0.3 B-0.5                                    | 0.3 W,X,M,Y/0.6Z                             | 15                          | 110      | 34  | 2.5                                    |
| 770083101   | 770086017-H | 100:5                              | 3.0   | 10                                 | 27  | 0.3 B-0.5                                    | 0.3 W,X,M,Y/0.6Z                             | 15                          | 110      | 34  | 2.5                                    |
| 770083111   | 770086016-H | 150:5                              | 3.0   | 15                                 | 40.5  | 0.3 B-0.5                                    | 0.3 W,X,M,Y/0.6Z                             | 15                          | 110      | 34  | 2.5                                    |
| 770083121   | 770086015-H | 200:5                              | 3.0   | 20                                 | 54  | 0.3 B-0.5                                    | 0.3 W,X,M,Y/0.6Z                             | 15                          | 110      | 34  | 2.5                                    |
| 770083131   | 770086014-H | 300:5                              | 3.0   | 30                                 | 81  | 0.3 B-0.5                                    | 0.3 W,X,M,Y/0.6Z                             | 15                          | 110      | 34  | 2.5                                    |
| 770083141   | 770086013-H | 400:5                              | 3.0   | 40                                 | 108   | 0.3 B-0.5                                    | 0.3 W,X,M,Y/0.6Z                             | 15                          | 110      | 34  | 2.5                                    |
| 770083151   | 770086012-H | 600:5                              | 2.0   | 60                                 | 162   | 0.3 B-0.5                                    | 0.3 W,X,M,Y/0.6Z                             | 15                          | 110      | 34  | 2.5                                    |
| 770081161   | 770086029-H | 800:5                              | 1.5   | 60                                 | 162   | 0.3 B-0.5                                    | 0.3 W,X,M,Y/0.6Z                             | 15                          | 110      | 34  | 2.5                                    |
| 770081171   | 770086028-H | 1000:5                             | 1.2   | 60                                 | 162   | 0.3 B-0.5                                    | 0.3 W,X,M,Y/0.6Z                             | 15                          | 110      | 34  | 2.5                                    |
| 770081181   | 770086027-H | 1200:5                             | 1.0   | 60                                 | 162   | 0.3 B-0.5                                    | 0.3 W,X,M,Y/0.6Z                             | 15                          | 110      | 34  | 2.5                                    |
| 770084041   | 770086010-H | 10/20:5                            | 2.0/1.5   | 2                                  | 5   | 0.3 B0.2/B-0.5                               | 0.3 W,X,M,Y/0.6Z                             | 15                          | 110      | 34  | 2.5                                    |
| 770084081   | 770086009-H | 25/50:5                            | 2.0/1.5   | 5                                  | 12.5  | 0.3 B0.2/B-0.5                               | 0.3 W,X,M,Y/0.6Z                             | 15                          | 110      | 34  | 2.5                                    |
| 770084121   | 770086008-H | 100/200:5                          | 2.0/1.5   | 20                                 | 50  | 0.3 B0.2/B-0.5                               | 0.3 W,X,M,Y/0.6Z                             | 15                          | 110      | 34  | 2.5                                    |
| 770084151   | 770086007-H | 300/600:5                          | 2.0/1.5   | 60                                 | 150   | 0.3 B0.2/B-0.5                               | 0.3 W,X,M,Y/0.6Z                             | 15                          | 110      | 34  | 2.5                                    |
| 770084161   | 770086006-H | 400/800:5                          | 2.0/1.5   | 60                                 | 150   | 0.3 B0.2/B-0.5                               | 0.3 W,X,M,Y/0.6Z                             | 15                          | 110      | 34  | 2.5                                    |
| 770083161   | 770086011-H | 400/800:5                          | 3.0/1.5   | 60                                 | 150   | 0.3 B0.2/B-0.5                               | 0.3 W,X,M,Y/0.6Z                             | 15                          | 110      | 34  | 2.5                                    |
| 770084171   | 770086005-H | 500/1000:5                         | 2.0/1.2   | 75                                 | 127.5   | 0.3 B0.2/B-0.5                               | 0.3 W,X,M,Y/0.6Z                             | 15                          | 110      | 34  | 2.5                                    |
| 770084181   | 770086004-H | 600/1200:5                         | 2.0/1.0   | 90                                 | 162   | 0.3 B0.2/B-0.5                               | 0.3 W,X,M,Y/0.6 Z                            | 15                          | 110      | 34  | 2.5                                    |
| <b>High Accuracy Extended Range</b> 1% nominal current to Rating Factor |             |                                    |   |                                    |   |  |  |                             |          |   |  |
| 770087121   | 770086003-H | 200:5                              | 3.0   | 20                                 | 50  | 0.15 B-0.5                                   | 0.3 W,X,M,Y/0.6Z                             | 15                          | 110      | 34  | 2.5                                    |
| 770088121   | 770086002-H | 200:5                              | 1.5   | 20                                 | 50  | 0.15 B-1.8                                   | 0.3 W,X,M,Y/0.6Z                             | 15                          | 110      | 34  | 2.5                                    |
| 770088171   | 770086001-H | 1000:5                             | 1.5   | 75                                 | 127.5   | 0.15 B-1.8                                   | 0.3 W,X,M,Y/0.6Z                             | 15                          | 110      | 34  | 2.5                                    |

Additional ratings available upon request.

| Voltage Ratings |              |               |                     |                                      |                               |
|-----------------|--------------|---------------|---------------------|--------------------------------------|-------------------------------|
| VT Ratio        | Primary (V)  | Secondary (V) | Thermal Burden (VA) | Continuous Rated Voltage Factor (Un) | Rated Voltage Factor 30s (Un) |
| 60:1            | 7200/12470GY | 120           | 750                 | 1.25                                 | 1.5                           |

NOTE: Line-to-Ground Connection Only.

Additional VT ratios are available. Please contact Arteché for details.

## Notes:

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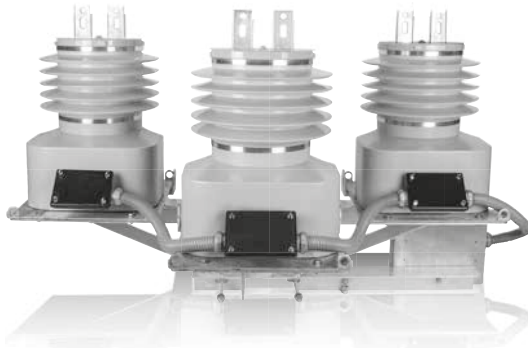
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# MK-15

## 15 kV METERING UNIT



OUTDOOR  
60 Hertz

ARTECHE ME/MK series metering units are outdoor, three-phase, pole-mounted metering racks.

The rack is made of lightweight aluminium designed to mount on poles in an upright position. It includes two galvanized steel mounting bolts for attaching the metering unit to the pole, with pole diameters available from 8" to 14". Optional galvanized steel structures and/or other pole diameters are available upon request.

MK series incorporate 3 combined transformers mounted vertically. Their core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

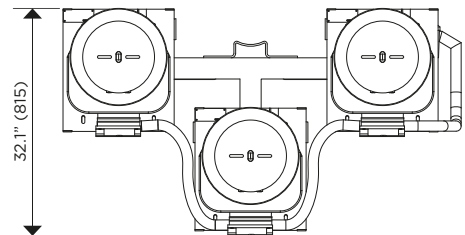
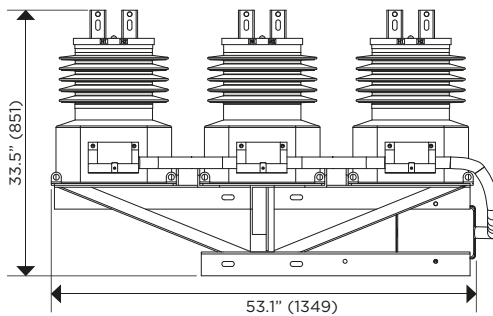
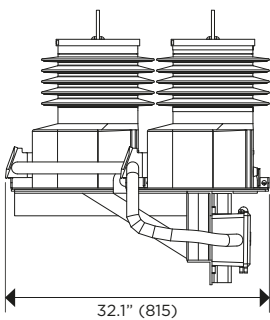
The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

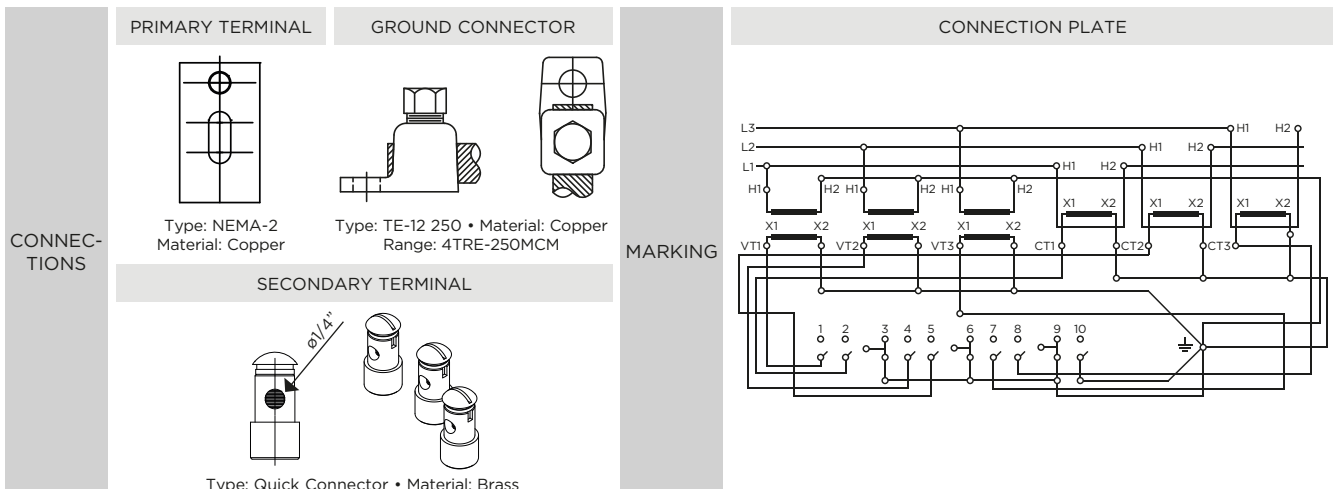
Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|---------------------|--------|---------------|------------------------|----------------------|
| Resin               | Gray   | 692           | 23.7                   | 13                   |



Drawing number: 4286285



Approximate dimensions in inches (mm).





# ME-015

## 15 kV METERING UNIT

ARTECHE ME/MK series metering units are outdoor, three-phase, pole-mounted metering racks.

The rack is made of lightweight aluminium designed to mount on poles in an upright position. It includes two galvanized steel mounting bolts for attaching the metering unit to the pole, with pole diameters available from 8" to 14". Optional galvanized steel structures and/or other pole diameters are available upon request.

ME series incorporate 3 current transformers mounted vertically and 3 voltage transformers mounted horizontally. Their core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

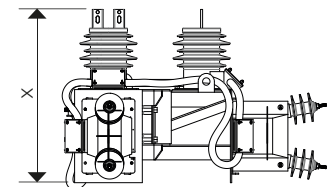
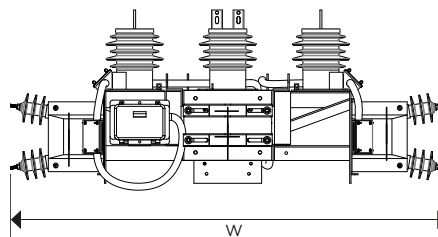
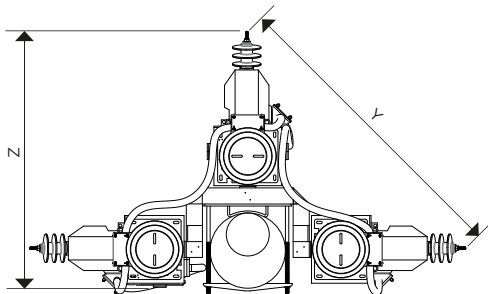
The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.



OUTDOOR  
60 Hertz



Drawing number: 4287215

|             | PRIMARY TERMINAL CT              | PRIMARY TERMINAL VT                                 | GROUND CONNECTOR  | SECONDARY TERMINAL                       |
|-------------|----------------------------------|---|---|--|
| CONNECTIONS |                                  |   |   |  |
|             | Type: NEMA-2<br>Material: Copper | Type: TE-4T<br>Material: Copper<br>Range: 8SOL-4TRE | Type: TE-12-250<br>Material: Copper<br>Range: 4TRE-250MCM | Type: Quick Connector<br>Material: Brass |



# MI-015

## 15 kV METERING UNIT



OUTDOOR  
60 Hertz

ARTECHE MI series metering units are outdoor, three-phase, pad-mounted cabinets.

The cabinet is made of #12 caliber stainless steel lamination (2.7 mm or 0.105 in) with Munsell Green #7GY 3.29/1.5 powder finish. The doors are pad-lockable with a three point latch and a penta-head bolt.

MI series incorporate 3 combined transformers. Their core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

The entire surface of the transformer is coated with a conductive layer that is intended to be solidly grounded when energized. This allows for compact mounting inside switchgear or enclosures.

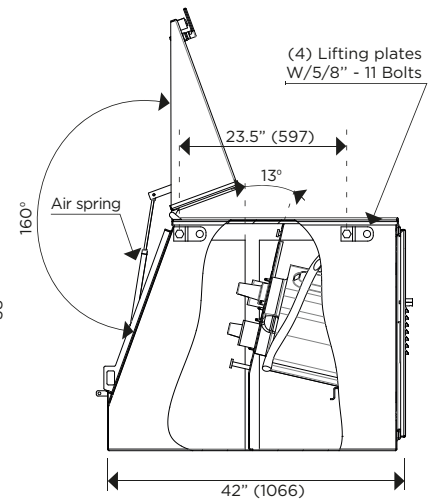
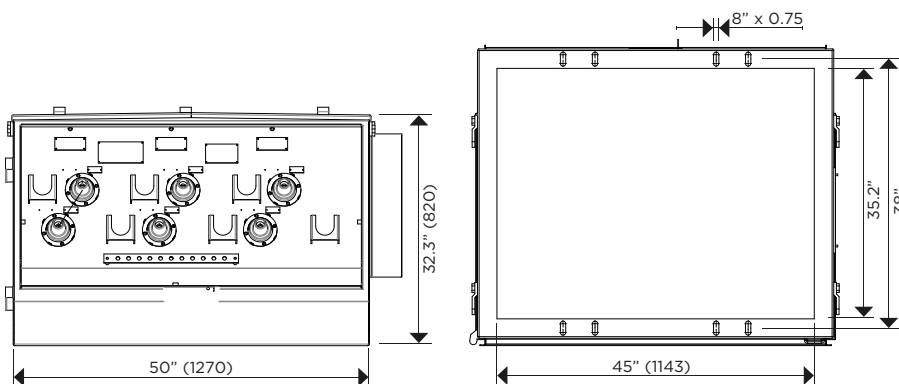
The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

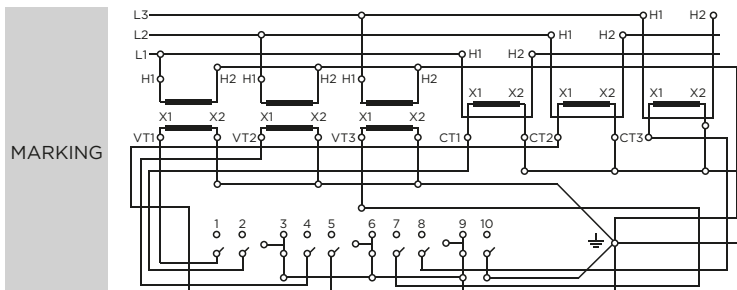
The primary bushing well connections are IEEE 386 compliant, rated 200 A loadbreak or 600 A non load-break.. The secondary terminals are pre-wired to a 10 position test switch and 9S meter socket in standard red/black colors.

### Mechanical characteristics

| Material        | Colors        | Weight (lbs.) |
|-----------------|---------------|---------------|
| Stainless steel | Munsell Green | 992           |



Drawing number: 4287010



Approximate dimensions in inches (mm).



# KM-25

## 25 kV COMBINED TRANSFORMER



**OUTDOOR**  
60 Hertz

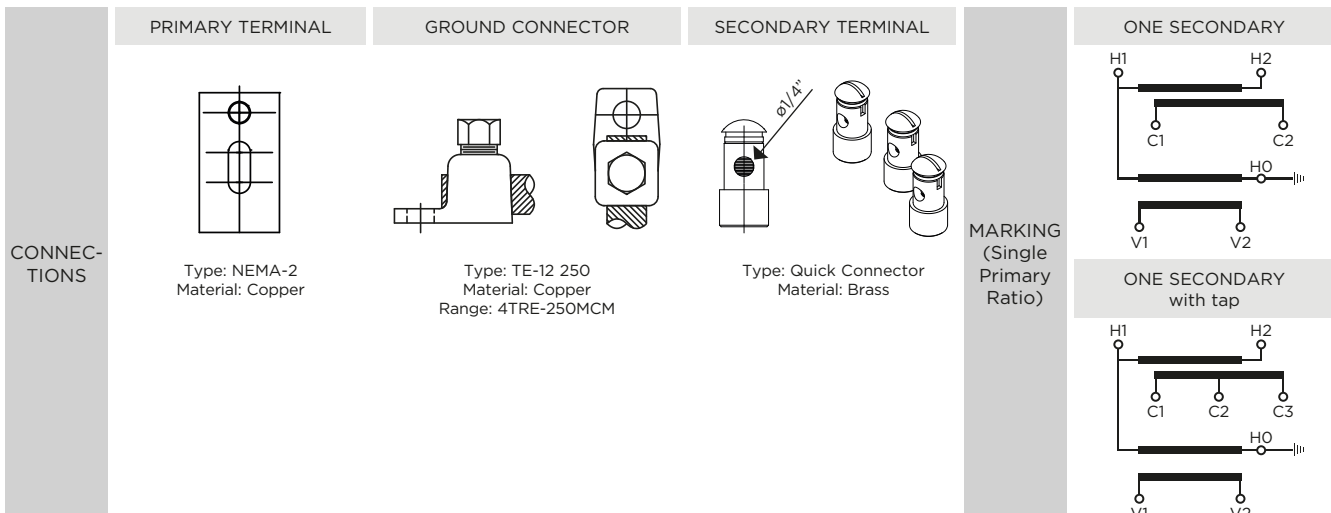
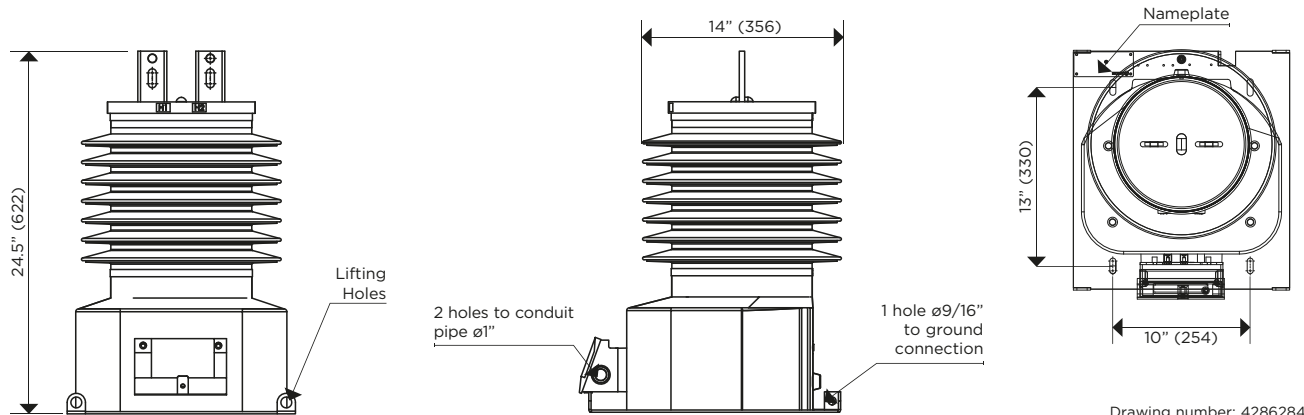
ARTECHE KM series are dry type outdoor service combination CT-PT. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed IEEE C57.13 2016 requirements

| Mechanical characteristics |        | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|----------------------------|--------|---------------|------------------------|----------------------|
| Insulation Material        | Colors |               |                        |                      |
| Resin                      | Gray   | 230           | 32.6                   | 16                   |



Approximate dimensions in inches (mm).

# KM-25

# 25 kV COMBINED TRANSFORMER

| Electrical characteristics  |             |                                    |   |                                    |   |  |  |                             |          |   |  |
|---|-------------|------------------------------------|---|------------------------------------|---|--|--|-----------------------------|----------|---|--|
| Code (CEP)  | Code (HCEP) | Current Ratio (Primary: Secondary) | Continuous Thermal Current Rating Factor @ 30°C | Short-time Thermal Current (kA/1s) | Short-time Mechanical Current (kA <sub>peak</sub> ) | IEEE Metering Accuracy [Current Transformer] | IEEE Metering Accuracy [Voltage Transformer] | Nominal Voltage System (kV) | BIL (kV) | Power-Frequency Withstand Voltage (1 min) |  |
|   |             |                                    |   |                                    |   |  |  |                             |          | Primary & Secondary (kV <sub>rms</sub> )  | Secondary Winding (kV <sub>rms</sub> ) |
| 770061016   | 770066029-H | 5:5                                | 1.5   | 0.5                                | 1.4   | 0.3 B-0.5                                    | 0.3 W,X,M,Y/0.6Z                             | 25                          | 150      | 50  | 2.5                                    |
| 770061026   | 770066028-H | 10:5                               | 1.5   | 1                                  | 2.7   | 0.3 B-0.5                                    | 0.3 W,X,M,Y/0.6Z                             | 25                          | 150      | 50  | 2.5                                    |
| 770061036   | 770066027-H | 15:5                               | 1.5   | 1.5                                | 4.1   | 0.3 B-0.5                                    | 0.3 W,X,M,Y/0.6Z                             | 25                          | 150      | 50  | 2.5                                    |
| 770061046   | 770066026-H | 20:5                               | 1.5   | 2                                  | 5.4   | 0.3 B-0.5                                    | 0.3 W,X,M,Y/0.6Z                             | 25                          | 150      | 50  | 2.5                                    |
| 770061056   | 770066025-H | 25:5                               | 1.5   | 2.5                                | 6.8   | 0.3 B-0.5                                    | 0.3 W,X,M,Y/0.6Z                             | 25                          | 150      | 50  | 2.5                                    |
| 770061066   | 770066024-H | 30:5                               | 1.5   | 3                                  | 8.1   | 0.3 B-0.5                                    | 0.3 W,X,M,Y/0.6Z                             | 25                          | 150      | 50  | 2.5                                    |
| 770061076   | 770066023-H | 40:5                               | 1.5   | 4                                  | 10.8  | 0.3 B-0.5                                    | 0.3 W,X,M,Y/0.6Z                             | 25                          | 150      | 50  | 2.5                                    |
| 770061086   | 770066022-H | 50:5                               | 1.5   | 5                                  | 13.5  | 0.3 B-0.5                                    | 0.3 W,X,M,Y/0.6Z                             | 25                          | 150      | 50  | 2.5                                    |
| 770061096   | 770066021-H | 75:5                               | 1.5   | 7.5                                | 20.3  | 0.3 B-0.5                                    | 0.3 W,X,M,Y/0.6Z                             | 25                          | 150      | 50  | 2.5                                    |
| 770061106   | 770066020-H | 100:5                              | 1.5   | 10                                 | 27  | 0.3 B-0.5                                    | 0.3 W,X,M,Y/0.6Z                             | 25                          | 150      | 50  | 2.5                                    |
| 770061116   | 770066019-H | 150:5                              | 1.5   | 15                                 | 40.5  | 0.3 B-0.5                                    | 0.3 W,X,M,Y/0.6Z                             | 25                          | 150      | 50  | 2.5                                    |
| 770061126   | 770066018-H | 200:5                              | 1.5   | 20                                 | 54  | 0.3 B-0.5                                    | 0.3 W,X,M,Y/0.6Z                             | 25                          | 150      | 50  | 2.5                                    |
| 770061136   | 770066017-H | 300:5                              | 1.5   | 30                                 | 81  | 0.3 B-0.5                                    | 0.3 W,X,M,Y/0.6Z                             | 25                          | 150      | 50  | 2.5                                    |
| 770061146   | 770066016-H | 400:5                              | 1.5   | 40                                 | 108   | 0.3 B-0.5                                    | 0.3 W,X,M,Y/0.6Z                             | 25                          | 150      | 50  | 2.5                                    |
| 770061156   | 770066015-H | 600:5                              | 1.0   | 60                                 | 162   | 0.3 B-0.5                                    | 0.3 W,X,M,Y/0.6Z                             | 25                          | 150      | 50  | 2.5                                    |
| 770061166   | 770066014-H | 800:5                              | 1.0   | 60                                 | 162   | 0.3 B-0.5                                    | 0.3 W,X,M,Y/0.6Z                             | 25                          | 150      | 50  | 2.5                                    |
| 770061176   | 770066013-H | 1000:5                             | 1.0   | 60                                 | 162   | 0.3 B-0.5                                    | 0.3 W,X,M,Y/0.6Z                             | 25                          | 150      | 50  | 2.5                                    |
| 770061186   | 770066012-H | 1200:5                             | 1.0   | 60                                 | 162   | 0.3 B-0.5                                    | 0.3 W,X,M,Y/0.6Z                             | 25                          | 150      | 50  | 2.5                                    |
| 770064046   | 770066011-H | 10/20:5                            | 2.0/1.5   | 2                                  | 5   | 0.3 B0.2/B-0.5                               | 0.3 W,X,M,Y/0.6Z                             | 25                          | 150      | 50  | 2.5                                    |
| 770064086   | 770066010-H | 25/50:5                            | 2.0/1.5   | 5                                  | 12.5  | 0.3 B0.2/B-0.5                               | 0.3 W,X,M,Y/0.6Z                             | 25                          | 150      | 50  | 2.5                                    |
| 770064126   | 770066009-H | 100/200:5                          | 2.0/1.5   | 20                                 | 50  | 0.3 B0.2/B-0.5                               | 0.3 W,X,M,Y/0.6Z                             | 25                          | 150      | 50  | 2.5                                    |
| 770064136   | 770066008-H | 150/300:5                          | 2.0/1.5   | 30                                 | 75  | 0.3 B0.2/B-0.5                               | 0.3 W,X,M,Y/0.6Z                             | 25                          | 150      | 50  | 2.5                                    |
| 770066136   | 770066004-H | 150/300:5                          | 4.0/2.0   | 30                                 | 75  | 0.3 B0.2/B-0.5                               | 0.3 W,X,M,Y/0.6Z                             | 25                          | 150      | 50  | 2.5                                    |
| 770064156   | 770066007-H | 300/600:5                          | 2.0/1.5   | 60                                 | 150   | 0.3 B0.2/B-0.5                               | 0.3 W,X,M,Y/0.6Z                             | 25                          | 150      | 50  | 2.5                                    |
| 770064176   | 770066006-H | 500/1000:5                         | 2.0/1.2   | 75                                 | 127.5   | 0.3 B0.2/B-0.5                               | 0.3 W,X,M,Y/0.6Z                             | 25                          | 150      | 50  | 2.5                                    |
| 770064186   | 770066005-H | 600/1200:5                         | 2.0/1.0   | 90                                 | 162   | 0.3 B0.2/B-0.5                               | 0.3 W,X,M,Y/0.6Z                             | 25                          | 150      | 50  | 2.5                                    |
| <b>High Accuracy Extended Range</b> 1% nominal current to Rating Factor |             |                                    |   |                                    |   |  |  |                             |          |   |  |
| 770067126   | 770066003-H | 200:5                              | 3.0   | 20                                 | 50  | 0.15 B-0.5                                   | 0.3 W,X,M,Y/0.6Z                             | 25                          | 150      | 50  | 2.5                                    |
| 770068126   | 770066002-H | 200:5                              | 1.5   | 20                                 | 50  | 0.15 B-1.8                                   | 0.3 W,X,M,Y/0.6Z                             | 25                          | 150      | 50  | 2.5                                    |
| 770068176   | 770066001-H | 1000:5                             | 1.5   | 75                                 | 127.5   | 0.15 B-1.8                                   | 0.3 W,X,M,Y/0.6Z                             | 25                          | 150      | 50  | 2.5                                    |

Approximate dimensions in inches.

| Voltage Ratings |               |               |                     |                                      |                               |
|-----------------|---------------|---------------|---------------------|--------------------------------------|-------------------------------|
| VT Ratio        | Primary (V)   | Secondary (V) | Thermal Burden (VA) | Continuous Rated Voltage Factor (Un) | Rated Voltage Factor 30s (Un) |
| 120:1           | 14400/24940GY | 120           | 750                 | 1.25                                 | 1.5                           |

NOTE: Line-to-Ground Connection Only.

Additional VT ratios are available. Please contact Arteche for details.

## Notes:

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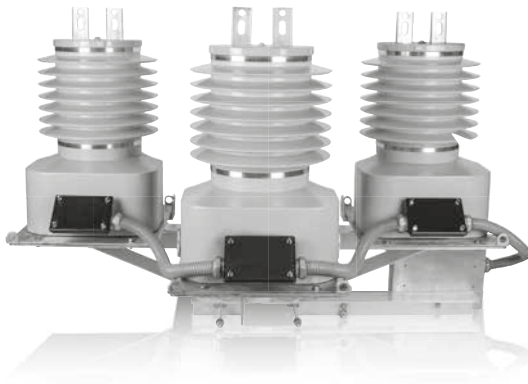
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# MK-25

## 25 kV METERING UNIT



**OUTDOOR  
60 Hertz**

ARTECHE ME/MK series metering units are outdoor, three-phase, pole-mounted metering racks.

The rack is made of lightweight aluminium designed to mount on poles in an upright position. It includes two galvanized steel mounting bolts for attaching the metering unit to the pole, with pole diameters available from 8" to 14". Optional galvanized steel structures and/or other pole diameters are available upon request.

MK series incorporate 3 combined transformers mounted vertically. Their core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

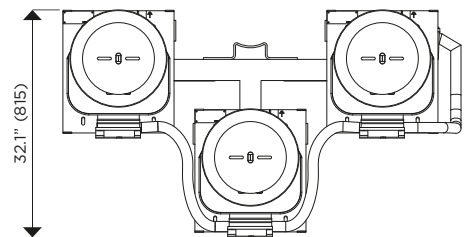
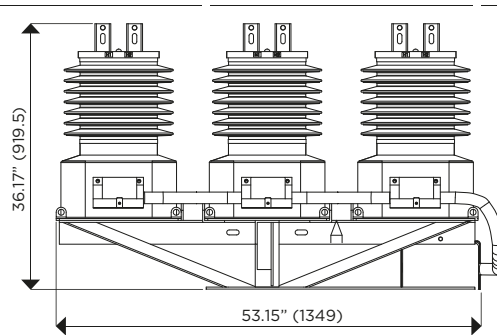
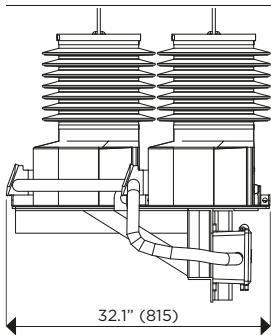
The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

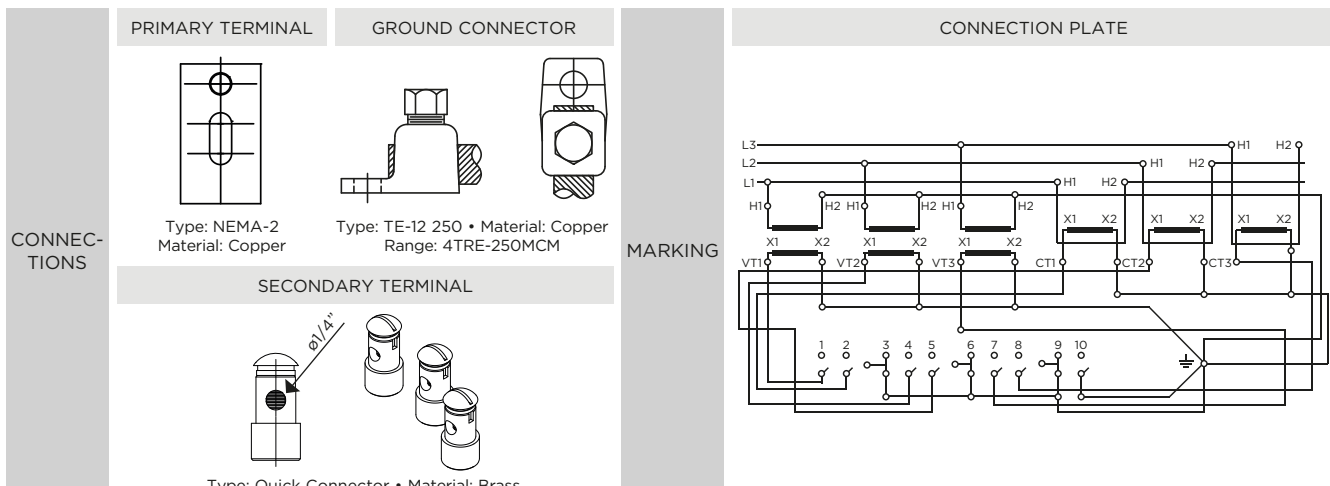
Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|---------------------|--------|---------------|------------------------|----------------------|
| Resin               | Gray   | 755           | 32.6                   | 16                   |



Drawing number: 4286286



Approximate dimensions in inches (mm).





# ME-025

## 25 kV METERING UNIT

ARTECHE ME/MK series metering units are outdoor, three-phase, pole-mounted metering racks.

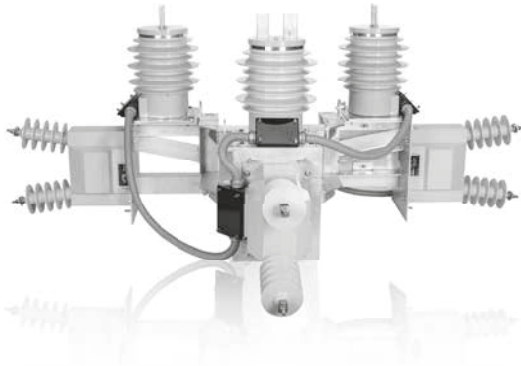
The rack is made of lightweight aluminium designed to mount on poles in an upright position. It includes two galvanized steel mounting bolts for attaching the metering unit to the pole, with pole diameters available from 8" to 14". Optional galvanized steel structures and/or other pole diameters are available upon request.

ME series incorporate 3 current transformers mounted vertically and 3 voltage transformers mounted horizontally. Their core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

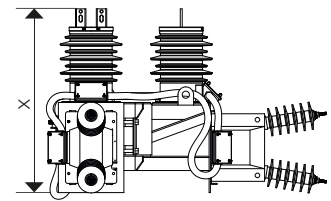
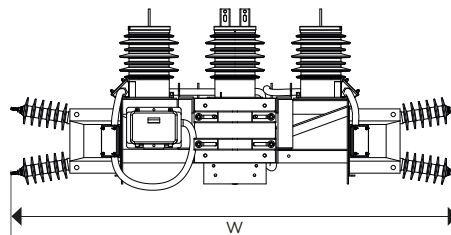
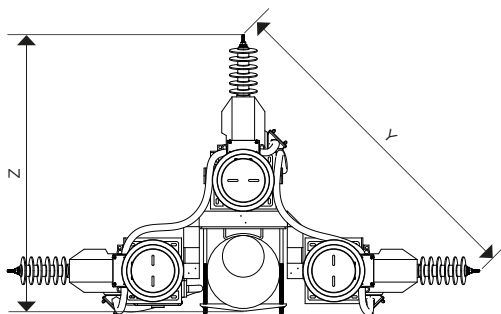
The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

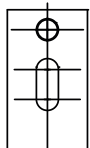


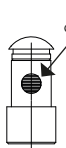
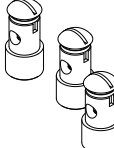
Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.



OUTDOOR  
60 Hertz



Drawing number: 4287228

|             | PRIMARY TERMINAL CT   | PRIMARY TERMINAL VT   | GROUND CONNECTOR  | SECONDARY TERMINAL  |
|-------------|---|---|---|---|
| CONNECTIONS |  |  |  |  |
|             | Type: NEMA-2<br>Material: Copper  | Type: TE-4T<br>Material: Copper<br>Range: 8SOL-4TRE                                 | Type: TE-12-250<br>Material: Copper<br>Range: 4TRE-250MCM                           | Type: Quick Connector<br>Material: Brass  |
|             |   |   |   |  |
|             |   |   |   |   |



# MI-025

## 25 kV METERING UNIT



OUTDOOR  
60 Hertz

ARTECHE MI series metering units are outdoor, three-phase, pad-mounted cabinets.

The cabinet is made of #12 caliber stainless steel lamination (2.7 mm or 0.105 in) with Munsell Green #7GY 3.29/1.5 powder finish. The doors are pad-lockable with a three point latch and a penta-head bolt.

MI series incorporate 3 combined transformers. Their core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength, ensuring a long mechanical and electrical life. The transformer is maintenance free.

The entire surface of the transformer is coated with a conductive layer that is intended to be solidly grounded when energized. This allows for compact mounting inside switchgear or enclosures.

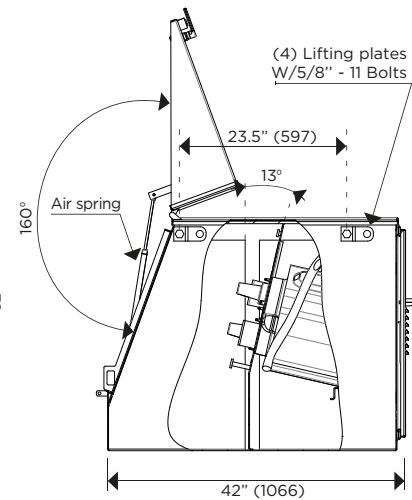
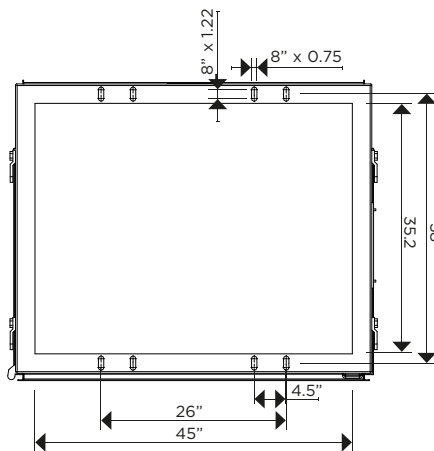
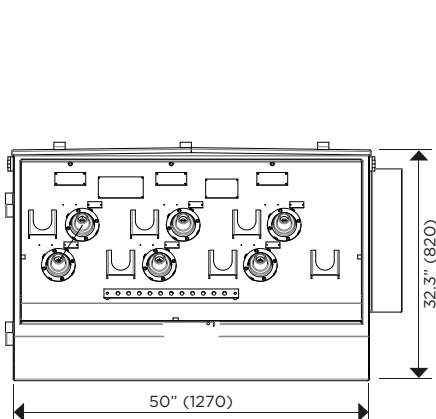
The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

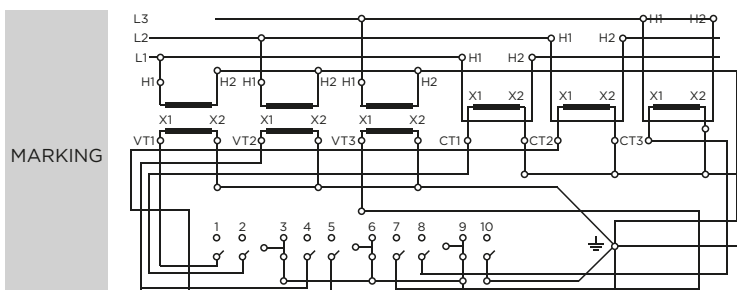
The primary bushing well connections are IEEE 386 compliant, rated 200 A loadbreak or 600 A non load-break. The secondary terminals are pre-wired to a 10 position test switch and 9S meter socket in standard red/black colors.

### Mechanical characteristics

| Material        | Colors        | Weight (lbs.) |
|-----------------|---------------|---------------|
| Stainless steel | Munsell Green | 992           |



Drawing number: 4287251



Approximate dimensions in inches (mm).

# MI-025

## 25 kV METERING UNIT

| Electrical characteristics |                                       |   |                                    |   |  |  |                             |          |   |  |                                   |
|----------------------------|---------------------------------------|---|------------------------------------|---|--|--|-----------------------------|----------|---|--|-----------------------------------|
| Code                       | Current Ratio<br>(Primary: Secondary) | Continuous Thermal Current Rating Factor @ 30°C | Short-time Thermal Current (kA/1s) | Short-time Mechanical Current (kA <sub>peak</sub> ) | IEEE Metering Accuracy [Current Transformer] | IEEE Metering Accuracy [Voltage Transformer] | Nominal Voltage System (kV) | BIL (kV) | Power-Frequency Withstand Voltage (1 min) |  | Primary                           |
|                            |                                       |   |                                    |   |  |  |                             |          | Primary & Secondary (kV <sub>rms</sub> )  | Secondary Winding (kV <sub>rms</sub> ) |                                   |
| 770584016                  | 5:5                                   | 2.0   | 0.5                                | 1.25  | 0.3 B-0.5                                    | 0.3 W,X,M,Y/1.2Z                             | 25                          | 125      | 50  | 2.5                                    | 200 A Bushing Well Interface      |
| 770584026                  | 10:5                                  | 2.0   | 1                                  | 2.5   | 0.3 B-0.5                                    | 0.3 W,X,M,Y/1.2Z                             | 25                          | 125      | 50  | 2.5                                    | 200 A Bushing Well Interface      |
| 770584036                  | 15:5                                  | 2.0   | 1.5                                | 3.75  | 0.3 B-0.5                                    | 0.3 W,X,M,Y/1.2Z                             | 25                          | 125      | 50  | 2.5                                    | 200 A Bushing Well Interface      |
| 770584046                  | 20:5                                  | 2.0   | 2                                  | 5   | 0.3 B-0.5                                    | 0.3 W,X,M,Y/1.2Z                             | 25                          | 125      | 50  | 2.5                                    | 200 A Bushing Well Interface      |
| 770584056                  | 25:5                                  | 2.0   | 2.5                                | 6.25  | 0.3 B-0.5                                    | 0.3 W,X,M,Y/1.2Z                             | 25                          | 125      | 50  | 2.5                                    | 200 A Bushing Well Interface      |
| 770584066                  | 30:5                                  | 2.0   | 3                                  | 7.5   | 0.3 B-0.5                                    | 0.3 W,X,M,Y/1.2Z                             | 25                          | 125      | 50  | 2.5                                    | 200 A Bushing Well Interface      |
| 770584086                  | 40:5                                  | 2.0   | 4                                  | 10  | 0.3 B-0.5                                    | 0.3 W,X,M,Y/1.2Z                             | 25                          | 125      | 50  | 2.5                                    | 200 A Bushing Well Interface      |
| 770584106                  | 50:5                                  | 2.0   | 5                                  | 12.5  | 0.3 B-0.5                                    | 0.3 W,X,M,Y/1.2Z                             | 25                          | 125      | 50  | 2.5                                    | 200 A Bushing Well Interface      |
| 770584156                  | 75:5                                  | 2.0   | 7.5                                | 18.75   | 0.3 B-0.5                                    | 0.3 W,X,M,Y/1.2Z                             | 25                          | 125      | 50  | 2.5                                    | 200 A Bushing Well Interface      |
| 770584206                  | 100:5                                 | 2.0   | 10                                 | 25  | 0.3 B-0.5                                    | 0.3 W,X,M,Y/1.2Z                             | 25                          | 125      | 50  | 2.5                                    | 200 A Bushing Well Interface      |
| 770585306                  | 150:5                                 | 1.33  | 10                                 | 25  | 0.3 B-0.5                                    | 0.3 W,X,M,Y/1.2Z                             | 25                          | 125      | 50  | 2.5                                    | 200 A Bushing Well Interface      |
| 770585406                  | 200:5                                 | 1.0   | 10                                 | 25  | 0.3 B-0.5                                    | 0.3 W,X,M,Y/1.2Z                             | 25                          | 125      | 50  | 2.5                                    | 200 A Bushing Well Interface      |
| 770581136                  | 300:5                                 | 1.5   | 30                                 | 75  | 0.3 B-0.5                                    | 0.3 W,X,M,Y/1.2Z                             | 25                          | 125      | 50  | 2.5                                    | 600 A Dead break Interface 21.1kV |
| 770581146                  | 400:5                                 | 1.5   | 40                                 | 100   | 0.3 B-0.5                                    | 0.3 W,X,M,Y/1.2Z                             | 25                          | 125      | 50  | 2.5                                    | 600 A Dead break Interface 21.1kV |
| 770581166                  | 600:5                                 | 1.0   | 60                                 | 150   | 0.3 B-0.5                                    | 0.3 W,X,M,Y/1.2Z                             | 25                          | 125      | 50  | 2.5                                    | 600 A Dead break Interface 21.1kV |
| 770581106                  | 100:5                                 | 2.0   | 10                                 | 25  | 0.15 B-0.5*                                  | 0.3 W,X,M,Y/1.2Z                             | 25                          | 125      | 50  | 2.5                                    | 200 A Bushing Well Interface      |
| 770581126                  | 200:5                                 | 2.0   | 20                                 | 50  | 0.15 B-0.5*                                  | 0.3 W,X,M,Y/1.2Z                             | 25                          | 125      | 50  | 2.5                                    | 600 A Dead break Interface 21.1kV |
| 770581156                  | 600:5                                 | 1.0   | 48                                 | 120   | 0.15 B-0.5*                                  | 0.3 W,X,M,Y/1.2Z                             | 25                          | 125      | 50  | 2.5                                    | 600 A Dead break Interface 21.1kV |

\* Accuracy range: 1% to RF

| Voltage Ratings |               |               |                     |                                      |                               |
|-----------------|---------------|---------------|---------------------|--------------------------------------|-------------------------------|
| VT Ratio        | Primary (V)   | Secondary (V) | Thermal Burden (VA) | Continuous Rated Voltage Factor (Un) | Rated Voltage Factor 30s (Un) |
| 120:1           | 14400/24940GY | 120           | 750                 | 1.1                                  | 1.25                          |

Additional VT ratios are available. Please contact Artech for details.

### Notes:

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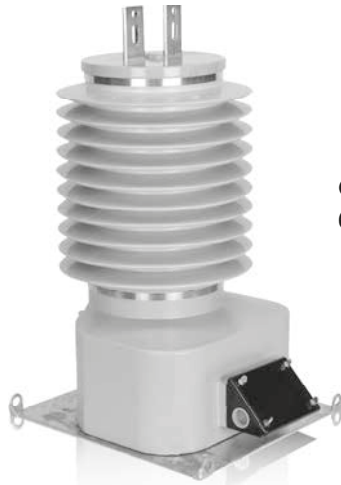
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# KM-34

## 34.5 kV COMBINED TRANSFORMER



**OUTDOOR  
60 Hertz**

ARTECHE KM series are dry type outdoor service combination CT-PT. The core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

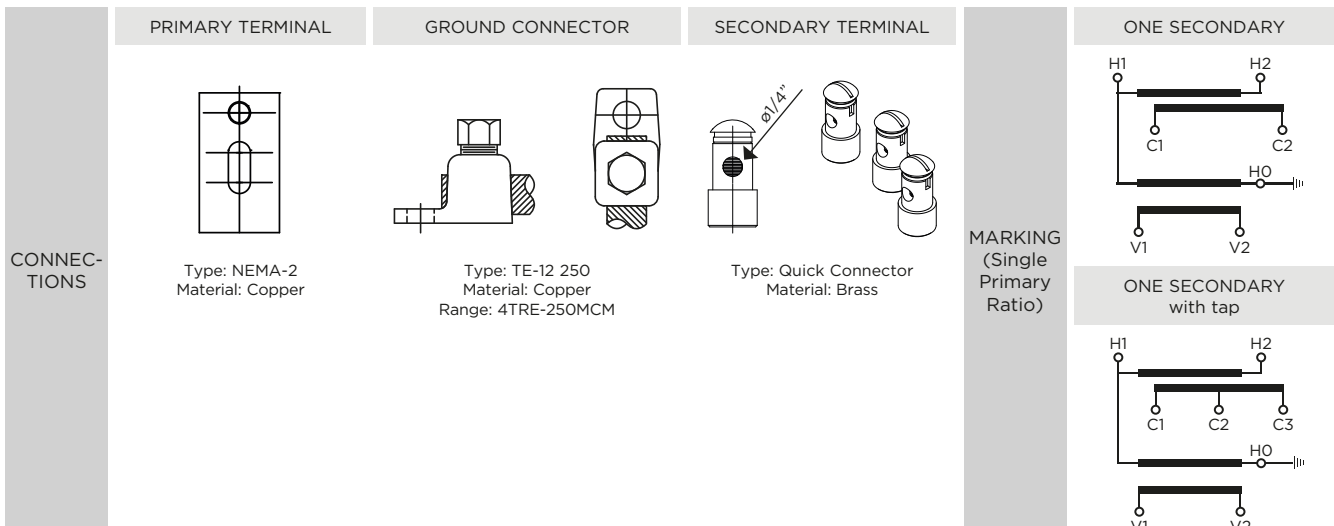
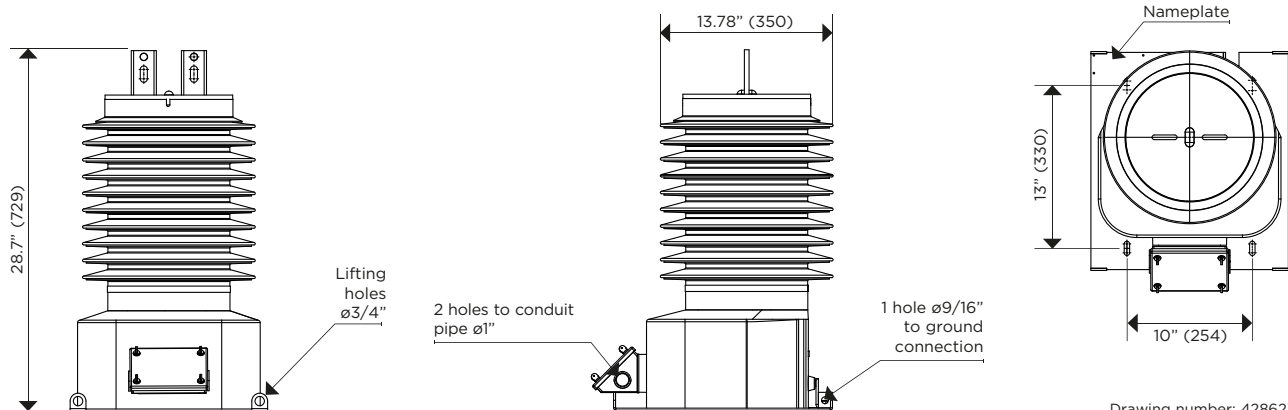
The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed IEEE C57.13 2016 requirements

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|---------------------|--------|---------------|------------------------|----------------------|
| Resin               | Gray   | 264           | 46                     | 21                   |



Approximate dimensions in inches (mm).

| Electrical characteristics                                       |             |                                    |   |                                    |   |  |  |                             |          |   |  |
|--|-------------|------------------------------------|---|------------------------------------|---|--|--|-----------------------------|----------|---|--|
| Code (CEP)   | Code (HCEP) | Current Ratio (Primary: Secondary) | Continuous Thermal Current Rating Factor @ 30°C | Short-time Thermal Current (kA/1s) | Short-time Mechanical Current (kA <sub>peak</sub> ) | IEEE Metering Accuracy [Current Transformer] | IEEE Metering Accuracy [Voltage Transformer] | Nominal Voltage System (kV) | BIL (kV) | Power-Frequency Withstand Voltage (1 min) |  |
|  |             |                                    |   |                                    |   |  |  |                             |          | Primary & Secondary (kV <sub>rms</sub> )  | Secondary Winding (kV <sub>rms</sub> ) |
| 770073017  | 770076026-H | 5:5                                | 3.0   | 0.5                                | 1.4   | 0.3 B-1.8                                    | 0.3 W,X,M,Y/1.2Z                             | 34.5                        | 200      | 70  | 2.5                                    |
| 770073027  | 770076025-H | 10:5                               | 3.0   | 1                                  | 2.7   | 0.3 B-1.8                                    | 0.3 W,X,M,Y/1.2Z                             | 34.5                        | 200      | 70  | 2.5                                    |
| 770073037  | 770076024-H | 15:5                               | 3.0   | 1.5                                | 4.1   | 0.3 B-1.8                                    | 0.3 W,X,M,Y/1.2Z                             | 34.5                        | 200      | 70  | 2.5                                    |
| 770073047  | 770076023-H | 20:5                               | 3.0   | 2                                  | 5.4   | 0.3 B-1.8                                    | 0.3 W,X,M,Y/1.2Z                             | 34.5                        | 200      | 70  | 2.5                                    |
| 770073057  | 770076022-H | 25:5                               | 3.0   | 2.5                                | 6.8   | 0.3 B-1.8                                    | 0.3 W,X,M,Y/1.2Z                             | 34.5                        | 200      | 70  | 2.5                                    |
| 770073067  | 770076021-H | 30:5                               | 3.0   | 3                                  | 8.1   | 0.3 B-1.8                                    | 0.3 W,X,M,Y/1.2Z                             | 34.5                        | 200      | 70  | 2.5                                    |
| 770073077  | 770076020-H | 40:5                               | 3.0   | 4                                  | 10.8  | 0.3 B-1.8                                    | 0.3 W,X,M,Y/1.2Z                             | 34.5                        | 200      | 70  | 2.5                                    |
| 770073089  | 770073088-H | 50:5                               | 3.0   | 5                                  | 13.5  | 0.3 B-1.8                                    | 0.3 W,X,M,Y/1.2Z                             | 34.5                        | 200      | 70  | 2.5                                    |
| 770073097  | 770076018-H | 75:5                               | 3.0   | 7.5                                | 20.3  | 0.3 B-1.8                                    | 0.3 W,X,M,Y/1.2Z                             | 34.5                        | 200      | 70  | 2.5                                    |
| 770073107  | 770076017-H | 100:5                              | 3.0   | 10                                 | 27  | 0.3 B-1.8                                    | 0.3 W,X,M,Y/1.2Z                             | 34.5                        | 200      | 70  | 2.5                                    |
| 770073117  | 770076016-H | 150:5                              | 3.0   | 15                                 | 40.5  | 0.3 B-1.8                                    | 0.3 W,X,M,Y/1.2Z                             | 34.5                        | 200      | 70  | 2.5                                    |
| 770073127  | 770076015-H | 200:5                              | 3.0   | 20                                 | 54  | 0.3 B-1.8                                    | 0.3 W,X,M,Y/1.2Z                             | 34.5                        | 200      | 70  | 2.5                                    |
| 770073137  | 770076014-H | 300:5                              | 3.0   | 30                                 | 81  | 0.3 B-1.8                                    | 0.3 W,X,M,Y/1.2Z                             | 34.5                        | 200      | 70  | 2.5                                    |
| 770073147  | 770076013-H | 400:5                              | 3.0   | 40                                 | 108   | 0.3 B-1.8                                    | 0.3 W,X,M,Y/1.2Z                             | 34.5                        | 200      | 70  | 2.5                                    |
| 770073157  | 770076012-H | 600:5                              | 2.0   | 60                                 | 162   | 0.3 B-1.8                                    | 0.3 W,X,M,Y/1.2Z                             | 34.5                        | 200      | 70  | 2.5                                    |
| 770071167  | 770076029-H | 800:5                              | 1.5   | 60                                 | 162   | 0.3 B-1.8                                    | 0.3 W,X,M,Y/1.2Z                             | 34.5                        | 200      | 70  | 2.5                                    |
| 770071177  | 770076028-H | 1000:5                             | 1.2   | 60                                 | 162   | 0.3 B-1.8                                    | 0.3 W,X,M,Y/1.2Z                             | 34.5                        | 200      | 70  | 2.5                                    |
| 770071187  | 770076027-H | 1200:5                             | 1.0   | 60                                 | 162   | 0.3 B-1.8                                    | 0.3 W,X,M,Y/1.2Z                             | 34.5                        | 200      | 70  | 2.5                                    |
| 770074047  | 770076010-H | 10/20:5                            | 2.0/1.5   | 2                                  | 5.4   | 0.3B-0.5/B-1.8                               | 0.3 W,X,M,Y/1.2Z                             | 34.5                        | 200      | 70  | 2.5                                    |
| 770074087  | 770076009-H | 25/50:5                            | 2.0/1.5   | 5                                  | 13.5  | 0.3B-0.5/B-1.8                               | 0.3 W,X,M,Y/1.2Z                             | 34.5                        | 200      | 70  | 2.5                                    |
| 770074127  | 770076008-H | 100/200:5                          | 2.0/1.5   | 20                                 | 54  | 0.3B-0.5/B-1.8                               | 0.3 W,X,M,Y/1.2Z                             | 34.5                        | 200      | 70  | 2.5                                    |
| 770074157  | 770076007-H | 300/600:5                          | 2.0/1.5   | 60                                 | 162   | 0.3B-0.5/B-1.8                               | 0.3 W,X,M,Y/1.2Z                             | 34.5                        | 200      | 70  | 2.5                                    |
| 770074167  | 770076006-H | 400/800:5                          | 2.0/1.5   | 60                                 | 162   | 0.3B-0.5/B-1.8                               | 0.3 W,X,M,Y/1.2Z                             | 34.5                        | 200      | 70  | 2.5                                    |
| 770073167  | 770076011-H | 400/800:5                          | 3.0/1.5   | 60                                 | 162   | 0.3B-0.5/B-1.8                               | 0.3 W,X,M,Y/1.2Z                             | 34.5                        | 200      | 70  | 2.5                                    |
| 770074177  | 770076005-H | 500/1000:5                         | 2.0/1.2   | 60                                 | 162   | 0.3B-0.5/B-1.8                               | 0.3 W,X,M,Y/1.2Z                             | 34.5                        | 200      | 70  | 2.5                                    |
| 770074187  | 770076004-H | 600/1200:5                         | 2.0/1.0   | 60                                 | 162   | 0.3B-0.5/B-1.8                               | 0.3 W,X,M,Y/1.2Z                             | 34.5                        | 200      | 70  | 2.5                                    |
| High Accuracy Extended Range 1% nominal current to Rating Factor |             |                                    |   |                                    |   |  |  |                             |          |   |  |
| 770077127  | 770076003-H | 200:5                              | 3.0   | 20                                 | 50  | 0.15 B-0.5                                   | 0.3 W,X,M,Y/1.2Z                             | 34.5                        | 200      | 70  | 2.5                                    |
| 770078127  | 770076002-H | 200:5                              | 1.5   | 20                                 | 50  | 0.15 B-1.8                                   | 0.3 W,X,M,Y/1.2Z                             | 34.5                        | 200      | 70  | 2.5                                    |
| 770078177  | 770076001-H | 1000:5                             | 1.5   | 75                                 | 127.5   | 0.15 B-1.8                                   | 0.3 W,X,M,Y/1.2Z                             | 34.5                        | 200      | 70  | 2.5                                    |

Approximate dimensions in inches.

| Voltage Ratings |               |               |                     |                                      |                               |
|-----------------|---------------|---------------|---------------------|--------------------------------------|-------------------------------|
| VT Ratio        | Primary (V)   | Secondary (V) | Thermal Burden (VA) | Continuous Rated Voltage Factor (Un) | Rated Voltage Factor 30s (Un) |
| 175:1           | 20125/34500GY | 115           | 750                 | 1.25                                 | 1.5                           |

NOTE: Line-to-Ground Connection Only.

Additional VT ratios are available. Please contact Arteche for details.

### Notes:

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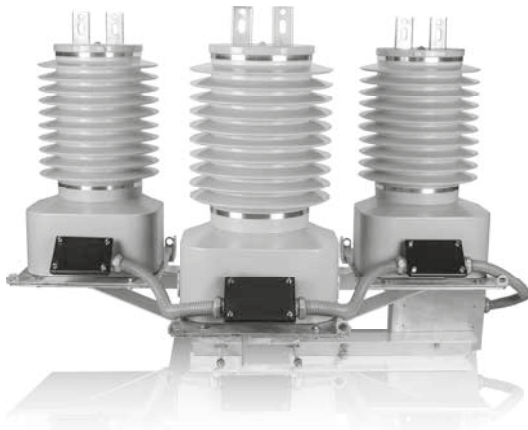
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# MK-34

## 34.5 kV METERING UNIT



OUTDOOR  
60 Hertz

ARTECHE ME/MK series metering units are outdoor, three-phase, pole-mounted metering racks.

The rack is made of lightweight aluminium designed to mount on poles in an upright position. It includes two galvanized steel mounting bolts for attaching the metering unit to the pole, with pole diameters available from 8" to 14". Optional galvanized steel structures and/or other pole diameters are available upon request.

MK series incorporate 3 combined transformers mounted vertically. Their core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

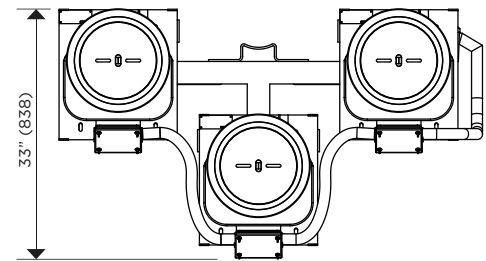
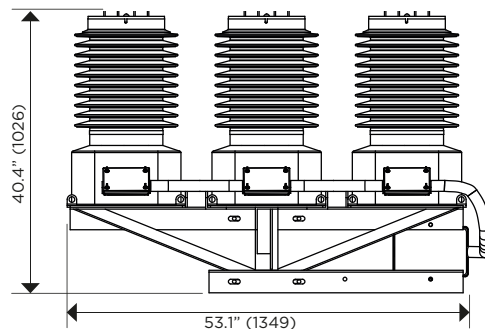
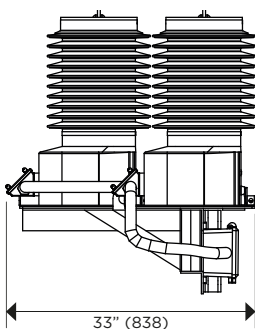
The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

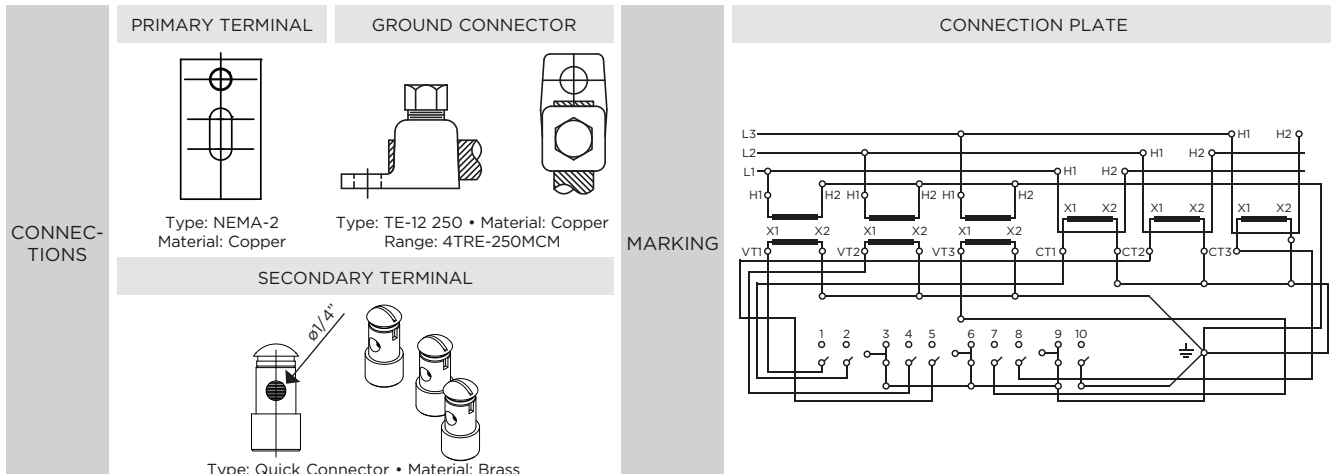
Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.

### Mechanical characteristics

| Insulation Material | Colors | Weight (lbs.) | Creepage distance (in) | Strike distance (in) |
|---------------------|--------|---------------|------------------------|----------------------|
| Resin               | Gray   | 857           | 46                     | 21                   |



Drawing number: 4286287



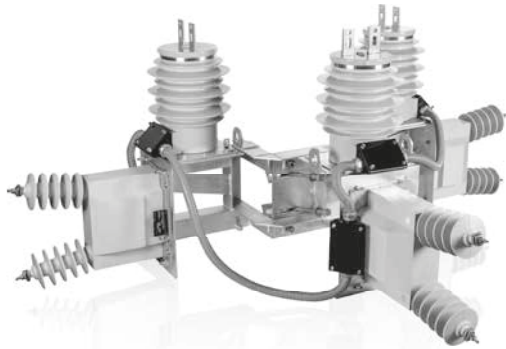
Approximate dimensions in inches (mm).





# ME-036

## 34.5 kV METERING UNIT



OUTDOOR  
60 Hertz

ARTECHE ME/MK series metering units are outdoor, three-phase, pole-mounted metering racks.

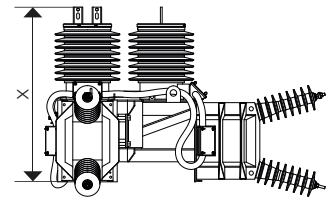
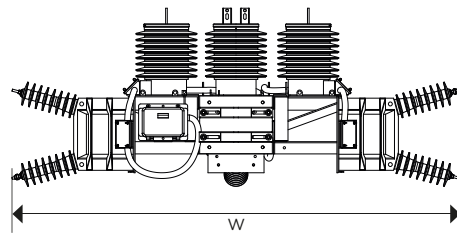
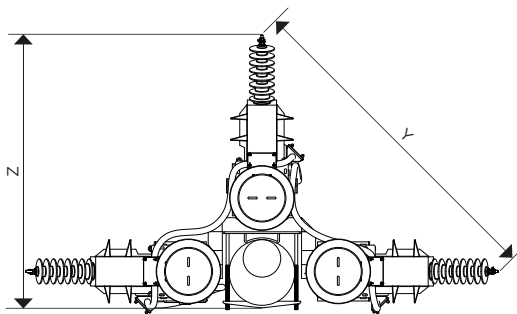
The rack is made of lightweight aluminium designed to mount on poles in an upright position. It includes two galvanized steel mounting bolts for attaching the metering unit to the pole, with pole diameters available from 8" to 14". Optional galvanized steel structures and/or other pole diameters are available upon request.

ME series incorporate 3 current transformers mounted vertically and 3 voltage transformers mounted horizontally. Their core is encapsulated with Type B epoxy resin which provides excellent internal dielectric properties and mechanical strength. The external layer of Cycloaliphatic Epoxy Resin (CEP) provides resistance to ultraviolet rays and the effects of tracking and erosion on the exterior of the transformer ensuring a long mechanical and electrical life. The transformer is maintenance free.

The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

The core is built with high permeability grain oriented silicon steel laminations for low losses. The windings are copper wire with copper plate double isolation. The concentric distribution of the coils prevents magnetic flux leakage, achieving greater accuracy and higher capacity to withstand mechanical stresses in adverse operating conditions.

Partial Discharge measurements exceed the IEEE, CAN/CSA and IEC requirements.



Drawing number: 4287229

|             | PRIMARY TERMINAL CT              | PRIMARY TERMINAL VT                                 | GROUND CONNECTOR  | SECONDARY TERMINAL                       |
|-------------|----------------------------------|---|---|--|
| CONNECTIONS |                                  |   |   |  |
|             | Type: NEMA-2<br>Material: Copper | Type: TE-4T<br>Material: Copper<br>Range: 8SOL-4TRE | Type: TE-12-250<br>Material: Copper<br>Range: 4TRE-250MCM | Type: Quick Connector<br>Material: Brass |





› ARTECHE MV IT factory.



› ARTECHE USA Inc.

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Updates: ARTECHE\_DS\_trfMVGuide\_EN  
Version: E3

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