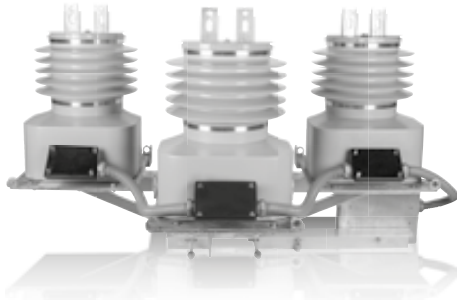


MK-15

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.

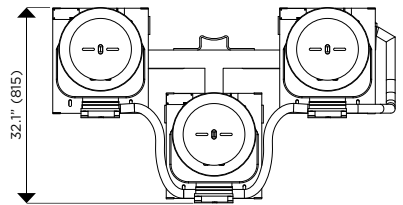
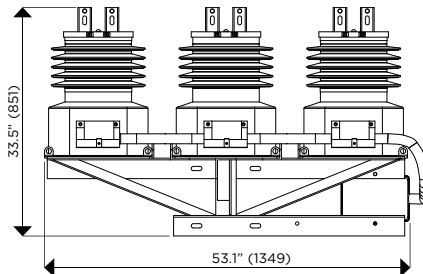
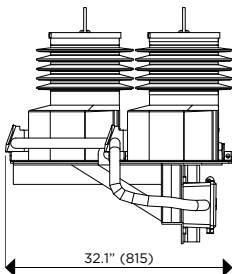
The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

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

| PRIMARY TERMINAL | | GROUND CONNECTOR | | CONNECTION PLATE | |
|------------------|---|--|--|--|--|
| CONNECTIONS | | | | | |
| | Type: NEMA-2 Material: Copper | Type: TE-12 250 • Material: Copper Range: 4TRE-250MCM | | | |
| | SECONDARY TERMINAL | | | | |
| | | | | <p>Approximate dimensions in inches (mm). *Brown color available upon request.</p> | |
| | Type: Quick Connector • Material: Brass | | | | |
| | | | | MARKING | |

MK-15

15 kV METERING UNIT

Electrical characteristics

| Code * (CEP) | Current Ratio (Primary: Secondary) | Continuous Thermal Current Rating Factor @ 30°C | Short- time Thermal Current (kA/1s) | Short- time Mechanical Current (kA _{peak}) | 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 _{rms}) | Secondary Winding (kV _{rms}) |
| 770663011 | 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 |
| 770663021 | 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 |
| 770663031 | 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 |
| 770663041 | 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 |
| 770663051 | 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 |
| 770663061 | 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 |
| 770663071 | 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 |
| 770663081 | 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 |
| 770663091 | 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 |
| 770663101 | 100:5 | 3.0 | 10 | 27 | 0.3 B-0.5 | 0.3 W,X,M,Y/0.6Z | 15 | 110 | 34 | 2.5 |
| 770663111 | 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 |
| 770663121 | 200:5 | 3.0 | 20 | 54 | 0.3 B-0.5 | 0.3 W,X,M,Y/0.6Z | 15 | 110 | 34 | 2.5 |
| 770663131 | 300:5 | 3.0 | 30 | 81 | 0.3 B-0.5 | 0.3 W,X,M,Y/0.6Z | 15 | 110 | 34 | 2.5 |
| 770663141 | 400:5 | 3.0 | 40 | 108 | 0.3 B-0.5 | 0.3 W,X,M,Y/0.6Z | 15 | 110 | 34 | 2.5 |
| 770663151 | 600:5 | 2.0 | 60 | 162 | 0.3 B-0.5 | 0.3 W,X,M,Y/0.6Z | 15 | 110 | 34 | 2.5 |
| 770663161 | 800:5 | 1.5 | 60 | 162 | 0.3 B-0.5 | 0.3 W,X,M,Y/0.6Z | 15 | 110 | 34 | 2.5 |
| 770663171 | 1000:5 | 1.2 | 60 | 162 | 0.3 B-0.5 | 0.3 W,X,M,Y/0.6Z | 15 | 110 | 34 | 2.5 |
| 770663181 | 1200:5 | 1.0 | 60 | 162 | 0.3 B-0.5 | 0.3 W,X,M,Y/0.6Z | 15 | 110 | 34 | 2.5 |
| High Accuracy Extended Range 1% nominal current to Rating Factor | | | | | | | | | | |
| 770667121 | 200:5 | 3.0 | 20 | 50 | 0.15 B-0.5 | 0.3 W,X,M,Y/0.6Z | 15 | 110 | 34 | 2.5 |
| 770668121 | 200:5 | 1.5 | 20 | 50 | 0.15 B-1.8 | 0.3 W,X,M,Y/0.6Z | 15 | 110 | 34 | 2.5 |
| 770668171 | 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 |

* For HCEP Option add (-H) to the end of the code number.

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 |

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

Notes:

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....