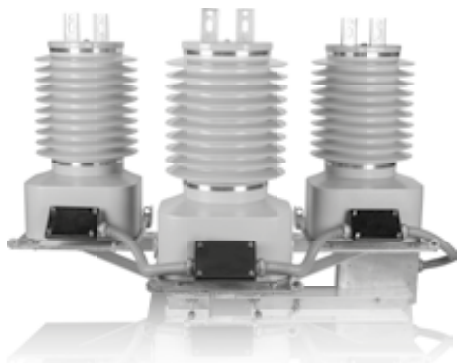


# MK-34

## 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.

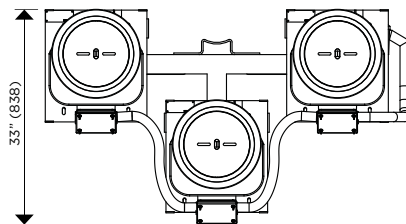
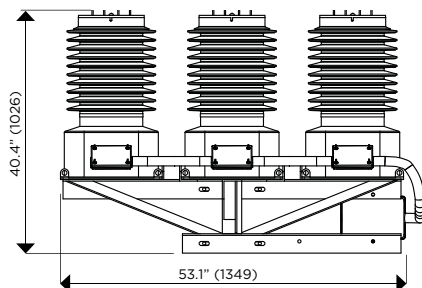
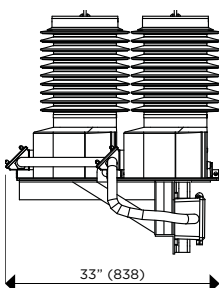
The external layer can be manufactured with Hydrophobic Cycloaliphatic Epoxy Resin (HCEP) which improves service life expectancy due to its improved tracking and erosion resistance. HCEP additionally increases the transformer's weatherability and offers better performance in heavily polluted environments.

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

**CONNECTIONS**

**PRIMARY TERMINAL**

Type: NEMA-2  
Material: Copper

**GROUND CONNECTOR**

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

**SECONDARY TERMINAL**

Type: Quick Connector • Material: Brass

**MARKING**

**CONNECTION PLATE**

Approximate dimensions in inches (mm).  
\*Brown color available upon request.

# MK-34

## 34.5 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 <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> )
770693017	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
770693027	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
770693037	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
770693047	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
770693057	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
770693067	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
770693077	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
770693087	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
770693097	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
770693107	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
770693117	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
770693127	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
770693137	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
770693147	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
770693157	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
770693167	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
770693177	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
770693187	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
<b>High Accuracy Extended Range</b> 1% nominal current to Rating Factor										
770697127	200:5	3.0	20	54	0.15 B-0.5	0.3 W,X,M,Y/0.6Z	34.5	200	70	2.5
770698127	200:5	1.5	20	54	0.15 B-1.8	0.3 W,X,M,Y/0.6Z	34.5	200	70	2.5
770698177	1000:5	1.5	75	127.5	0.15 B-1.8	0.3 W,X,M,Y/0.6Z	34.5	200	70	2.5

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

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

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

### Notes:

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