

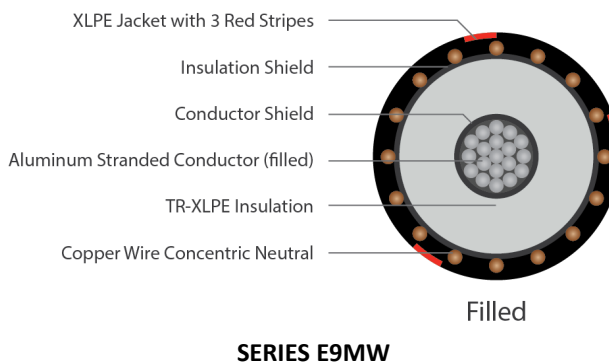
TR-XLPE/CN/XLPE, Type MV-105, Primary UD, 35kV 100%, 345-mils Single Conductor Filled Aluminum—Silicone Free

DESCRIPTION

Medium Voltage Primary Underground Distribution (UD) cables consist of an aluminum (filled) conductor, covered with tree-retardant cross-linked polyethylene (TR- XLPE), a concentric neutral of helically applied copper wires, and a moisture blocked cross-linked polyethylene (XLPE) jacket with 3 extruded red stripes.

APPLICATIONS

- Suitable for underground primary power applications: direct burial or In duct.
- For wet or dry locations
- Jacket is sunlight resistant, meeting the 720-hr exposure test
- Excellent resistance to treeing
- Designed to operate continuously at a conductor temperature not exceeding
 - » 105°C for normal operations
 - » 140°C for emergency overload
 - » 250°C for short circuit



CONSTRUCTION

CONDUCTOR	1350 Aluminum, Class B Strand Compressed (filled)
STRAND SHIELD	Thermoset semi-conducting polymer
INSULATION	Tree-Retardant Cross-Linked Polyethylene (TR-XLPE)
INSULATION SHIELD	Thermoset semi-conducting polymer
SHIELD	Helically applied, annealed solid bare copper wires Reduced wire numbers per ICEA P-45-482 calculations
JACKET	Moisture blocked Cross-Linked Polyethylene (XLPE) jacket with three red stripes
PACKAGING	Non-returnable reels

STANDARDS (Compliance)

PERFORMANCE	AEIC CS8 ASTM B3 ASTM B230 ASTM B231 ICEA P-45-482 ICEA S-94-649 ICEA T-34-664 UL 1072
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SPECIFICATIONS							
Part Number	Conductor Size (AWG or kcmil)	Conductor Diameter (in)	Insulation Diameter (in)	Copper Concentric Neutrals	Jacket Thickness (in)	Approx. Overall Diameter (in)	Approx. Net Weight (lbs / kft)
E9MWT-4A6F01CA20	4/0	0.512	1.23	8 x 14AWG (1/3N)	0.055	1.57	1,010
E9MWJ-A66F01CA20	500	0.789	1.51	9 x 14AWG (1/6N)	0.080	1.90	1,545
E9MWJ-B56F01CA21	1,000	1.117	1.84	12 x 12AWG (1/6N)	0.080	2.29	2,470
E9MWJ-B86F01CA20	1,250	1.250	1.98	23 x 14AWG (1/6N)	0.080	2.40	2,810

The dimensions and weights shown are nominal and subject to industry standards. Other designs available upon request.

METALLIC SHIELD SHORT CIRCUIT CALCULATIONS					
Part Number	Conductor Size (AWG or kcmil)	Concentric Neutrals	Cycles	Time for short circuit (sec)	Short-Circuit Current (kA)
E9MWT-4A6F01CA20	4/0	1/3 Neutral	16	0.27	5.50
E9MWJ-A66F01CA20	500	1/6 Neutral	16	0.27	6.19
E9MWJ-B56F01CA21	1,000	1/6 Neutral	16	0.27	13.11
E9MWJ-B86F01CA20	1,250	1/6 Neutral	16	0.27	15.81
E9MWT-4A6F01CA20	4/0	1/3 Neutral	20	0.33	4.92
E9MWJ-A66F01CA20	500	1/6 Neutral	20	0.33	5.54
E9MWJ-B56F01CA21	1,000	1/6 Neutral	20	0.33	11.73
E9MWJ-B86F01CA20	1,250	1/6 Neutral	20	0.33	14.15
E9MWT-4A6F01CA20	4/0	1/3 Neutral	26	0.43	4.32
E9MWJ-A66F01CA20	500	1/6 Neutral	26	0.43	4.85
E9MWJ-B56F01CA21	1,000	1/6 Neutral	26	0.43	10.28
E9MWJ-B86F01CA20	1,250	1/6 Neutral	26	0.43	12.41

* Calculations are based on ICEA P-45-482