

CABLE SPECIFICATION

SPEC: LSCUS-25-CM40085 REV: 00 DATE: 06.20.25

EPR/CN/XLPE Power, Type MV-105, Primary UD, 25kV 133% Single Conductor Filled Aluminum - Silicone Free

DESCRIPTION

The Medium Voltage Underground Distribution (UD) cables consist of an aluminum filled conductor, covered with ethylene propylene rubber (EPR), a concentric neutral of helically applied copper wires, and a cross-linked poly-ethylene (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.
- 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

XLPE Overall Jacket Insulation Shield Conductor Shield Aluminum Stranded Conductor (filled) EPR Insulation Copper Wire Concentric Neutral

CONSTRUCTION

STANDARDS (Compliance)

CONDUCTOR	Aluminum 1350 (filled) Class B compressed strand Extruded thermoset semi-conducting polymer over the conductor	PERFORMANCE	AEIC CS8 ASTM B3 ASTM B230 ASTM B231
INSULATION	Ethylene propylene rubber (EPR)		ICEA S-94-649 UL 1072
INSULATION SHIELD	Extruded thermoset semi-conducting polymer over the insulation	OTHER	OSHA
SHIELD	Helically applied, annealed, solid bare copper wires		
JACKET	Cross-linked polyethylene (XLPE)		
JACKET MARKING	00000 FT LS CABLE XXXKCMIL (or AWG) FS AL 1/C 25KV 133% INSUL LEVEL 320 MILS EPR 'No. of Neutral' X # 'Neutral size' XLPE JKT MV-105 (UL) MADE IN USA MM/DD/YYYY (LIGHTNING BOLT SYMBOL)		
PACKING	Non-returnable wood reels		



CABLE SPECIFICATION

SPEC: LSCUS-25-CM40085 REV: 00 DATE: 06.20.25

EPR/CN/XLPE Power, Type MV-105, Primary UD, 25kV 133% Single Conductor Filled Aluminum - Silicone Free

SPECIFICATIONS									
Part Number	Conductor Size (AWG/kcmil)	Conductor Diameter (in)	Insulation Diameter (in)	Concentric Neutral (No. x AWG)	Jacket Thickness (in)	Approx. O.D (in)	Approx. Weight (Ibs/kft)		
U25BEX-1AFB-1CZ-R3Z-Z	1/0	0.362	1.06	6 x 14 (1/3N)	0.050	1.39	800		

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