

MV-105 TYPE MC-HL COPPER CONDUCTORS 15KV

3C Copper 175 Mils EPR 100% Insulation Level Tape Shield, AIA PVC Jacket

APPLICATIONS & FEATURES

Suited for use in wet and dry areas, conduits, ducts, troughs, trays, direct burial, and where superior electrical properties are desired. These cables are capable of operating continuously at the conductor temperature not in excess of 105°C for normal operation, 140°C for emergency overload, and 250°C for short circuit conditions. Rated at -35°C for cold bend. For uses in Class I and II, Division 2 hazardous locations per NEC Article 501 and 502.Rated for 1000 lbs./FT maximum sidewall pressure

INDUSTRY COMPLIANCES

ASTM B3 Soft or annealed copper ASTM B8 Concentric-lay-standard copper UL 1072 - Medium Voltage Power Cables

UL 1072 - Medium Voltage Power Cables ICEA S-93-639 (NEMA WC 74) 5-46 KV Shielded Power Cable & ICEA S-97-682 5-46 KV Utility

UL 1685/FT4 Vertical-Tray Fire Propagation and Smoke Release Test

IEEE 1202 -Flame Test (70,000) BTU/hr Vertical Tray Test

AEIC CS-8 Specification for extruded dielectric shielded power cables rated for 5

through 46KV

CONSTRUCTION

CONDUCTORS: Class B compressed stranded bare copper per ASTM B3 and ASTM B8

CONDUCTOR SHIELD: Semi-conducting cross-linked copolymer INSULATION: 175 Mils EPR 100% Insulation Level

INSULATION SHIELD: Stripable semi-conducting cross-linked copolymer
CU TAPE SHIELD: Helically wrapped 5 mil copper tape with 25% overlap

GROUND: 1 Class B compressed stranded bare copper ground per ASTM B3 and ASTM B8

FILLER: Wax paper filler
BINDER: Polypropylene tape

ARMOR: Aluminum Interlocked Armor (AIA)

JACKET: Polyvinyl Chloride (PVC)

| AWG/No OF CONDUCTORS | DIAMETER OF CONDUCTOR (INCHES) | DIAMETER OF INSULATION (INCHES) | DIAMETER OF INSUL SHLD (INCHES) | GROUND (AWG) | DIAMETER OF ARMOR (INCHES) | JACKET THICKNESS (MILS) | OVERALL DIAMETER (INCHES) | APPROX WEIGHT (LBS/1000 FT) |
|-------------------------|--------------------------------------|---------------------------------------|---------------------------------------|-----------------|----------------------------------|-------------------------------|---------------------------------|--------------------------------|
| 2/3 | 0.283 | 0.67 | 0.73 | 1 x 6 | 1.842 | 60 | 1.962 | 2045 |
| 1/3 | 0.322 | 0.709 | 0.769 | 1 x 4 | 2.026 | 60 | 2.146 | 2430 |
| 1/0-3 | 0.362 | 0.749 | 0.809 | 1 x 4 | 2.113 | 60 | 2.233 | 2732 |
| 2/0-3 | 0.405 | 0.792 | 0.852 | 1 x 4 | 2.206 | 60 | 2.326 | 3094 |
| 3/0-3 | 0.456 | 0.843 | 0.903 | 1 x 3 | 2.316 | 75 | 2.466 | 3650 |
| 4/0-3 | 0.512 | 0.899 | 0.959 | 1 x 3 | 2.437 | 75 | 2.587 | 4205 |
| 250/3 | 0.558 | 0.954 | 1.014 | 1 x 3 | 2.555 | 75 | 2.705 | 4706 |
| 350/3 | 0.661 | 1.057 | 1.117 | 1 x 2 | 2.778 | 75 | 2.928 | 5961 |
| 500/3 | 0.789 | 1.185 | 1.245 | 1 x 1 | 3.054 | 85 | 3.224 | 7827 |
| 750/3 | 0.968 | 1.373 | 1.433 | 1 x 0 | 3.46 | 85 | 3.63 | 10773 |

All values are nominal and subject to correction