



POWER KABEL INC.

MV-105 TYPE MC-HL COPPER CONDUCTORS 8KV

3C Copper 140 MILS EPR 133% Insulation Level, Tape Shield, AIA CPE 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

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: 140 MILS EPR 133% 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
INNER JACKET: Sunlight Resistant Polyvinyl Chloride (PVC), black
FILLER: Wax paper filler
BINDER: Polypropylene tape
ARMOR: Aluminum Interlocked Armor (AIA)
JACKET: Thermoplastic Chlorinated Polyethylene (CPE) yellowjacket

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	0.600	0.66	1 x 6	1.691	60	1.811	1858
1/3	0.322	0.639	0.699	1 x 4	1.775	60	1.895	2142
1/0-3	0.362	0.679	0.739	1 x 4	1.961	60	2.081	2525
2/0-3	0.405	0.722	0.782	1 x 4	2.054	60	2.174	2879
3/0-3	0.456	0.773	0.833	1 x 3	2.164	60	2.284	3357
4/0-3	0.512	0.829	0.889	1 x 3	2.285	75	2.435	3969
250/3	0.558	0.884	0.944	1 x 3	2.404	75	2.554	4460
350/3	0.661	0.987	1.047	1 x 2	2.627	75	2.777	5695
500/3	0.789	1.115	1.175	1 x 1	2.903	75	3.053	7476
750/3	0.968	1.303	1.363	1 x 0	3.309	85	3.479	10448

All dimensions are nominal and subject to normal manufacturing tolerances