



POWER KABEL INC.

MV-105 TYPE MC-HL COPPER CONDUCTORS 5KV 3C Copper 220 Mils EPR 133% Insulation Level 3Grounds 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. The ground is sized to equal 50% of the phase conductor.

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:** 220 Mils No Lead Ethylene Propylene Rubber (NL-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:** Three separate ground wires with a combined circular mil of 50% of the phase conductor Class B compressed stranded bare copper per ASTM B3 and ASTM B8
- FILLER:** Wax paper filler
- BINDER:** Polypropylene tape
- ARMOR:** Aluminum Interlocked Armor (AIA)
- JACKET:** Overall black polyvinyl chloride (PVC) jacket, which is heat, moisture and sunlight resistant

AWG	NUMBER OF CONDUCTORS (INCHES)	DIAMETER OF INSULATION (INCHES)	GROUND WIRES (AWG)	DIAMETER OF ARMOR (INCHES)	JACKET THICKNESS (MILS)	OVERALL DIAMETER (INCHES)	NET WGT (LBS/1000')
1/0-3	0.362	0.839	3 x 6	2.307	75	2.457	3169
2/0-3	0.405	0.882	3 x 6	2.40	75	2.55	3596
3/0-3	0.456	0.933	3 x 5	2.51	75	2.66	4130
4/0-3	0.512	0.989	3 x 4	2.631	75	2.781	4781
250/3	0.558	1.044	3 x 4	2.75	75	2.90	5296
350/3	0.661	1.147	3 x 2	2.972	75	3.122	6766
500/3	0.789	1.275	3 x 1	3.249	85	3.419	8778
750/3	0.968	1.463	3 x 1/0	3.655	85	3.825	12168

All values are nominal and subject to correction.