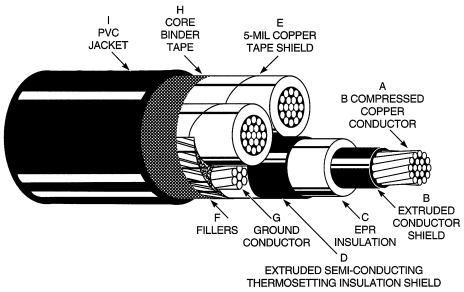
MV-105 POWER CABLE

3/C 5kV EPR/PVC 90 MILS

DESCRIPTION:

- 3 copper conductors
- Thermosetting conductor shield
- EPR insulation
- Thermosetting insulation shield
- Tape shield
- Copper Ground Wire
- PVC Jacket



PWC Catalog #	Size AWG or kcmil	Conductor Diameter inch	Grd. Cond. Size AWG	Extruded Insulation Shield Diameter inch	Jacket Thickness inch	Approx. O.D. inch	Approx. Net Weight lbs./Mft.	Allowable Ampacities+ Duct	Allowable Ampacities+ Conduit in Air
03-0336	8	0.140	8	0.470	0.080	1.170	735	64	66
03-0337	6	0.180	6	0.505	0.080	1.240	915	84	88
03-0338	4	0.230	6	0.555	0.080	1.340	1135	110	115
03-0339	2	0.283	6	0.573	0.080	1.443	1447	145	135
03-0340	1	0.322	4	0.613	0.080	1.529	1730	165	155
03-0341	1/0	0.362	4	0.653	0.110	1.616	1987	190	185
03-0342	2/0	0.405	4	0.693	0.110	1.765	2421	220	210
03-0343	3/0	0.456	3	0.743	0.110	1.873	2869	250	245
03-0344	4/0	0.512	3	0.798	0.110	1.992	3384	285	285
03-0345	250	0.558	3	0.853	0.110	2.123	3868	315	315
03-0346	350	0.661	2	0.958	0.110	2.349	5056	380	390
03-0347	500	0.790	1	1.083	0.140	2.619	6770	460	475
03-0348	750	0.968	1/0	1.270	0.140	3.077	9722	570	585

+ Ampacities are based on the NEC 1999 Edition. Duct ampacities are based on Table 310-79 three conductors within an overall covering in one underground duct, 105°C conductor, 20°C earth ambient temperature. Conduit in air ampacities are based on Table 310-75 three cables within an overall covering in isolated conduit in air, 105°C conductor, 40°C ambient temperature.

5kV Type MV-105 CABLE CONSTRUCTION

Conductor	The conductor shall be Class B compressed concentric stranded bare copper in accordance with ASTM Specs B3 and B8 and ICEA Part 2, Section 2.1 and 2.5.
Conductor Shield	The conductor shall be shielded with an extruded semi-conducting thermosetting polymeric layer, which shall be firmly bonded to the insulation. The thickness shall be in accordance with the referenced standards.
Insulation	The insulation shall be EPR (ethylene propylene rubber) meeting the requirements of the referenced standards. The average thickness shall be 0.090" and the minimum spot thickness shall be not less than 90% of the average thickness.
Insulation Shield	The insulation shall be shielded with an extruded semi-conducting thermosetting polymeric layer which shall be identified as being semi-conducting. Over this layer shall be applied a helically wrapped 5-mil copper tape.
Grounding Conductor	The ground conductor shall be Class B compressed concentric stranded bare copper in accordance with ASTM B3 and B8.
Assembly	The insulated and shielded power conductors shall be cabled round with fillers and with a grounding conductor in one outer interstice and covered with a binder tape.
Jacket	The cable shall be covered with a black PVC jacket conforming to the requirements specified for polyvinyl chloride in ICEA. The average thickness shall be in accordance with the referenced standards and the minimum spot thickness shall be not be less than 80% of the average thickness. The jacket will be sunlight resistant and will meet the requirements of the IEEE 1202.

APPLICATIONS:

- Aerial installations
- Direct buried
- Metal racks
- Open trays
- Troughs or raceway

These cables are capable of operating continuously at a maximum conductor temperature of 105°C for normal operation, 140°C for emergency overload conditions, and 250°C for short circuit conditions, and are rated at 5,000V, 100% (grounded system) and 133% insulation levels (ungrounded system).

SCOPE:

This specification covers three conductor EPR (ethylene propylene rubber) insulated, shielded, thermoplastic jacketed power cables with grounding conductor for use in aerial installations, metal racks, open trays, troughs, or continuous rigid cable supports. These cables are capable of operating continuously at a temperature of 105°C for normal operations, 140°C for emergency overload conditions, and 250°C for short circuit conditions, and are rated at 5,000V, 100% (grounded system) and 133% insulation levels (ungrounded system).

SPECIFICATIONS:

Manufactured and tested in accordance with the latest revisions of ICEA Pub. No. S-68-516, NEMA Pub. No. WC8, AEIC No. 6[1], and UL 1072.

[1] AEIC requires 0.115" insulation wall for 133% insulation level.