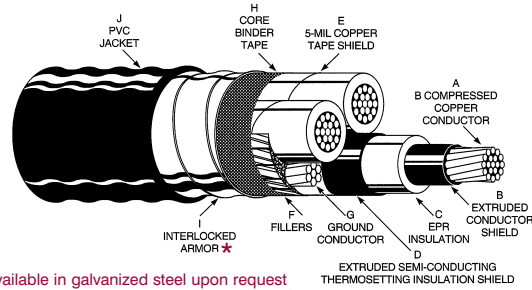


ARMORED POWER CABLE

Interlocked Type MV-105

DESCRIPTION:

- 3 copper conductors
- Thermosetting conductor shield
- EPR insulation
- Thermosetting insulation shield
- Tape shield
- Copper ground wire
- Aluminum armor
- PVC Jacket



*Available in galvanized steel upon request

PWC Catalog#	Size	Conductor Diameter	0.090" Insulation Diameter	Grd. Cond. Size AWG or kcmil	Extruded Insulation Shield Diameter	Armored Diameter	Jacket Thickness	Approx. O.D.	Approx. Net Weight	Allowable Ampacity*	
	AWG or kcmil									inch	inch
07-0165	1	0.322	0.565	4	0.645	1.756	0.060	1.901	1874	215	180
07-0166	1/0	0.362	0.605	4	0.685	1.872	0.060	2.017	2282	245	205
07-0167	2/0	0.406	0.650	4	0.730	1.969	0.060	2.114	2646	280	240
07-0168	3/0	0.456	0.700	3	0.780	2.077	0.060	2.222	3062	320	280
07-0169	4/0	0.512	0.755	3	0.835	2.196	0.060	2.341	3606	360	320
07-0170	250	0.558	0.815	3	0.895	2.324	0.075	2.499	4121	395	355
07-0171	350	0.661	0.915	2	0.995	2.540	0.075	2.715	5362	475	440
07-0172	500	0.789	1.045	1	1.145	2.864	0.075	3.038	7156	570	545
07-0173	750	0.986	1.240	1/0	1.340	3.284	0.085	3.478	10121	700	685

+ Ampacities are based on the NEC 1999 Edition. Direct burial ampacities are based on Table 310-83 three conductors within an overall covering directly buried, 105°C conductor, 20°C earth ambient temperature. In air ampacities are based on Table 310-71 three conductors within an overall covering in free 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 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 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.
Armor	A single strip of interlocked armor of aluminum shall be applied over the assembly.
Jacket	The cable shall be covered with a yellow 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 less than 80% of the average thickness. The jacket will be sunlight resistant and will meet the requirements of the IEEE 1202 (70,000 Btu/hr) and ICEA T-29-520 (210,000 Btu/hr) vertical cable tray flame tests. Optional non-halogen jacket is available.
Identification	Manufacturer's identification shall be printed on the jacket

APPLICATIONS:

- Aerial installations
- Direct burial
- Metal racks
- Open trays
- Troughs or continuous rigid cable supports at 100% insulation level

These cables are capable of operating continuously at 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, interlock armored, 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, and UL 1072. Passes IEEE 1202 (70,000 Btu/hr) and ICEA T-29-520 (210,000 Btu/hr) vertical cable tray flame tests.



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