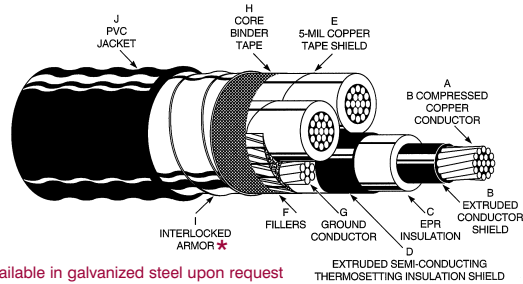


# ARMORED POWER CABLE

# 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 AWG or kcmil	Conductor Diameter inch	0.220" Insulation Diameter inch	Grd. Cond. Size AWG or kcmil	Extruded Insulation Shield Diameter inch	Armored Diameter inch	Jacket Thickness inch	Approx. O.D. inch	Approx. Net Weight lb./Mft.	Allowable Ampacity+	
										Direct Burial	In Air
07-0219	2	0.283	0.785	6	0.865	2.260	0.060	2.405	2506	200	185
07-0220	1	0.322	0.825	4	0.905	2.346	0.075	2.521	2775	225	210
07-0221	1/0	0.362	0.865	4	0.945	2.432	0.075	2.607	3177	255	240
07-0222	2/0	0.406	0.910	4	0.990	2.529	0.075	2.704	3554	290	275
07-0223	3/0	0.456	0.960	3	1.040	2.637	0.075	2.812	4014	330	315
07-0224	4/0	0.512	1.015	3	1.095	2.756	0.075	2.931	4617	375	360
07-0225	250	0.558	1.075	3	1.175	2.928	0.075	3.103	5177	410	400
07-0226	350	0.661	1.175	2	1.275	3.144	0.085	3.339	6590	495	490
07-0227	500	0.789	1.305	1	1.405	3.424	0.085	3.619	8385	590	600
07-0228	750	0.968	1.500	1/0	1.600	3.844	0.085	4.038	11423	720	745

+ 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.

## 15kV Type MV-105 CABLE CONSTRUCTION

<b>Conductor</b>	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.
<b>Conductor Shield</b>	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.
<b>Insulation</b>	The insulation shall be EPR (ethylene propylene rubber) meeting the requirements of the referenced standards. The average thickness shall be 0.220" and the minimum spot thickness shall be not less than 90% of the average thickness.
<b>Insulation Shield</b>	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 helically-wrapped 5-mil copper tape.
<b>Grounding Conductor</b>	The ground conductor shall be Class B compressed concentric stranded bare copper in accordance with ASTM B3 and B8.
<b>Assembly</b>	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.
<b>Armor</b>	A single strip of interlocked armor of aluminum shall be applied over the assembly.
<b>Jacket</b>	The cable shall be covered with a red 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.
<b>Identification</b>	Manufacturer's identification shall be printed on the jacket
<b>Available Alternatives</b>	In order to meet the IEEE 383 vertical tray flame test modified to 210,000 Btu, a special PVC jacket and binder tape beneath the armor are used.

### APPLICATIONS:

- Aerial installations
- Direct burial
- Metal racks
- Open trays
- Troughs or continuous rigid cable supports

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 15,000V, 133% insulation level (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 15,000V, 133% insulation level (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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