



## Aluminum Medium Voltage Power Cable



**5 Year Standard Warranty on Full Cable System  
Inquire with Representative**

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# 15kV 1/C EPR MV-105 POWER (Tape Shield)

133% Medium Voltage Commercial & Industrial Cables

### Description

Single conductor cable with stranded aluminum conductor, triple extruded insulation system consisting of a thermosetting semiconducting conductor shield, high dielectric strength EPROTENAX™ EPR insulation, thermosetting semiconducting insulation shield, helically applied bare copper tape shield, and black PVC jacket.

### Specifications

**AEIC**- AEIC CS8  
**ICEA**- ICEA S-93-639  
**ICEA**- ICEA S-97-682  
**UL**- UL-1072

### Ratings

Type MV-105  
 Sunlight Resistant  
 For CT USE (1/0 AWG & Larger)  
 (1/0 AWG and Larger)  
 (250 MCM and Larger)

**IEEE**- IEEE 383 Flame Test  
**IEEE**- IEEE 1202 Flame Test

For 105°C continuous, 140°C emergency,  
 250°C short-circuit operation.

### Design Parameters

**CONDUCTOR:** Class B Compressed concentric strand aluminum alloy 1350

**CONDUCTOR SHIELD:** Extruded thermosetting semiconducting shield which is free stripping from the conductor and bonded to the insulation.

**INSULATION:** Natural high dielectric strength EPROTENAX™ EPR-based insulation, combined with other materials and agents that enhance the electrical and mechanical characteristics assuring extended cable life.

**INSULATION SHIELD:** Extruded thermosetting semiconducting shield with controlled adhesion to the insulation providing the required balance between electrical integrity and ease of stripping.

**METALLIC SHIELD:** Helically applied non-magnetic copper tape(s) over the insulation shield with a nominal overlap of 25%.

**JACKET:** Black, sunlight resistant, polyvinyl chloride (PVC) jacket tightly applied over the copper tape.

Conductor	Insulation Thickness (mil/s)	Conductor Diameter (in)	Insulation Diameter (in)	Insulation Shield Diameter (in)	Jacket Diameter (in)	Cable Weight (lbs/100ft)	Minimum Bending Radius (in)	† Ampacity (Amps)	
								±105°C In Duct	±105°C In Air
<b>15kV 133% Aluminum One Conductor</b>									
* 2 AWG AL	220	0.266	0.74	0.80	0.96	484	12	130	170
1 AWG AL	220	0.299	0.78	0.83	1.00	521	12	145	195
* 1/0 AWG AL	220	0.336	0.81	0.87	1.03	566	13	165	225
* 2/0 AWG AL	220	0.379	0.86	0.91	1.08	620	13	190	260
3/0 AWG AL	220	0.423	0.90	0.96	1.12	683	14	215	300
* 4/0 AWG AL	220	0.479	0.96	1.01	1.18	761	15	245	350
* 250 MCM AL	220	0.522	1.01	1.06	1.23	834	15	270	385
* 350 MCM AL	220	0.622	1.11	1.16	1.33	992	16	330	480
* 500 MCM AL	220	0.742	1.23	1.28	1.45	1216	18	400	600
* 750 MCM AL	220	0.917	1.41	1.47	1.63	1574	20	490	780
1000 MCM AL	220	1.071	1.57	1.62	1.84	2028	23	565	940

\* Denotes Stock Item

† Ampacities are based on the following:  
 Three Phase Operation

**PRODUCT NOTES:**  
 The above dimensions are approximate and subject to normal manufacturing tolerances.

In Duct per 2011 NEC Table 310.60(C)(8): Three-conductor cable in plastic duct, direct-buried, 105°C conductor temperature, 20°C ambient temperature, earth RHO of 90°C-cm/Watt, and 100% load factor, and shields short-circuited.

Isolated in Air per 2011 NEC Table 310.60(C)(9): Three-conductor cable, 105°C conductor temperature, and 40°C ambient temperature, and shields grounded at one point only.

In Cable Tray Per 2011 NEC 312.80(B)(2)(b): Single conductor cables, sizes 1/0 AWG and larger, installed in a single layer in an unapproved cable tray, with a maintained space of not less than one cable diameter between individual conductors, the ampacities shall not exceed the allowable ampacities stated in 2011 NEC Table 310.60(C)(9) (Aluminum). "Isolated in Air" values noted above.

EPROTENAX™ EPR-insulated cables are capable of operating at 105°C. However, the maximum operating temperature of the cable should be based on the maximum operating temperature of the cable accessories to be used.



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### Installation



Conduit in Air



Direct Buried



With Messenger



Wet Locations



In Cable Tray



Underground Duct



Isolated in Air



Dry Locations



Industrial

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