

2.4kV Nonshielded 3/C EPR MV-105 POWER

Medium Voltage Commercial & Industrial Cables



Description

Three conductor cable with stranded copper conductors, thermosetting semiconducting conductor shield, high dielectric strength EPROTENAX™ EPR insulation, cabled with fillers and grounding conductor(s), overall binder tape, and overall black PVC jacket.

Specifications

ICEA- ICEA S-96-659

UL- UL-1072

Ratings

Type MV-105

Sunlight Resistant

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

Options

- Aluminum conductors
- Strandseal®
- Compact stranded conductors
- Oil Resistant Jacket
- Colored Jacket
- LLDPE, CPE or LSOH Jacket
- Zero or One grounding conductor
- For CT USE ratings per UL

Design Parameters

CONDUCTOR: Class B Compressed concentric strand soft drawn annealed copper per ASTM.

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.

GROUNDING CONDUCTORS: Bare stranded copper conductor, one in each interstice, per UL, ICEA, and ASTM.

ASSEMBLY: Insulated conductors cabled with fillers and grounding conductors (as specified), forming a firm and cylindrical cable core. A binder tape is applied to maintain core symmetry and mechanical stability.

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

Installation



Conduit in Air



Direct Buried



Underground Duct



Isolated in Air



Wet Locations



Dry Locations



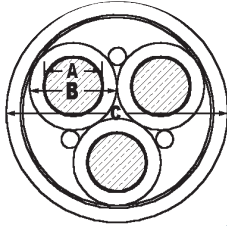
With Messenger



Industrial

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Product Number	Conductor	Insulation Thickness (mils)	Ground Wires	Conductor Diameter (in)	Insulation Diameter (in)	Jacket Diameter (in)	Cable Weight (lbs/100ft)	Minimum Bending Radius (in)	† Ampacity (Amps)	† Ampacity (Amps)	
										±105°C In Duct	±105°C In Air
2.4kV 100% Copper Three Conductor											
QI2420A	4 AWG CU	90	3	10 AWG	0.226	0.45	1.15	891	5	110	115
QI4420A	2 AWG CU	90	3	10 AWG	0.284	0.50	1.28	1185	6	145	154
QI6420A	1 AWG CU	90	3	8 AWG	0.324	0.55	1.38	1452	6	165	180
QI8420A	1/0 AWG CU	90	3	8 AWG	0.364	0.58	1.44	1664	6	190	205
QI9420A	2/0 AWG CU	90	3	8 AWG	0.408	0.63	1.56	2010	7	220	240
QIA420A	3/0 AWG CU	90	3	7 AWG	0.458	0.68	1.72	2500	7	250	28
QIB420A	4/0 AWG CU	90	3	7 AWG	0.515	0.74	1.85	3022	8	285	320
QIC420A	250 MCM CU	90	3	7 AWG	0.561	0.79	1.95	3434	8	315	355
QID420A	350 MCM CU	90	3	6 AWG	0.664	0.89	2.17	4564	9	380	440
QIE420A	500 MCM CU	90	3	5 AWG	0.794	1.02	2.44	6170	13	460	545
QIF420A	750 MCM CU	90	3	4 AWG	0.974	1.21	2.92	9098	15	570	685
QIG420A	1000 MCM CU	90	3	4 AWG	1.124	1.36	3.25	11700	17	645	790

† Ampacities are based on the following:

PRODUCT NOTES:

⁵ Items are Prysmian authorized stock. The above dimensions are approximate and subject to normal manufacturing tolerances.

Three Phase Operation

In Duct (2011 NEC Table 310.60(C)(79): 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.

Isolated in Air (2011 NEC Table 310.60(C)(71): Three-conductor cable, 105°C conductor temperature, and 40°C ambient temperature.

In Cable Tray: Per 2011 NEC Article 380.92(B)(1)(b), for multi-conductor cables installed in a single layer in an uncovered cable tray, with maintained spacing of not less than one cable diameter between cables, the ampacities shall not exceed the "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.