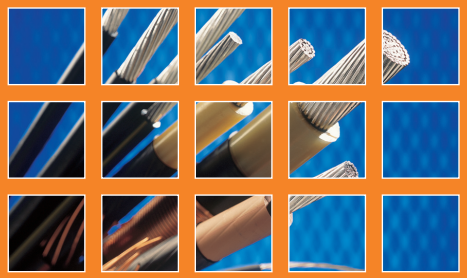
PRYSMIAN CABLES & SYSTEMS

2.4kV NONSHIELDED 3/C EPR MV-105



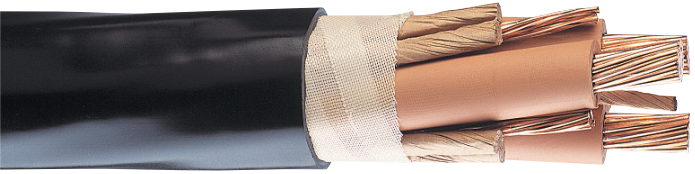
August 2006

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	Ratings
ICEA ICEA S-96-659	
UL UL 1072	Type MV-105 Sunlight Resistant

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



Design Parameters

Conductor

- Class B Compact 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.

Options

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

Installations

- Conduit in Air
- Direct Buried
- Underground Duct
- Isolated in Air
- Wet Locations
- Dry Locations
- With Messenger
- Industrial

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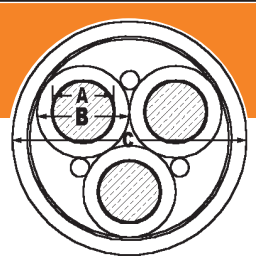

NONSHIELDED 3/C EPR MV-105 Power

2.4kV 133%

Product Number	Conductor	Insulation Thickness (mils)	Ground Wires		Conductor Diameter (in.)	Insulation Diameter (in.)	Jacket Diameter (in.)	Cable Weight (lbs/kft)	Minimum Bending Radius (in.)	†Ampacity (Amps)	
			No.	Size	(A)	(B)	(C)			‡105°C In Duct	‡105°C In Air
2.4kV 133% Copper Three Conductor											
QI242ØA	4 AWG CU	115	3	10 AWG	0.215	0.50	1.26	977	5	110	115
QI442ØA	2 AWG CU	115	3	10 AWG	0.266	0.55	1.37	1273	6	145	154
QI642ØA	1 AWG CU	115	3	8 AWG	0.299	0.58	1.44	1470	7	165	180
QI842ØA	1/0 AWG CU	115	3	8 AWG	0.341	0.62	1.53	1730	7	190	205
QI942ØA	2/0 AWG CU	115	3	8 AWG	0.376	0.66	1.61	2090	8	220	240
QIA42ØA	3/0 AWG CU	115	3	7 AWG	0.423	0.71	1.77	2572	8	250	280
QIB42ØA	4/0 AWG CU	115	3	7 AWG	0.479	0.76	1.89	3054	9	285	320
QIC42ØA	250 MCM CU	115	3	7 AWG	0.522	0.81	2.00	3486	9	315	355
QID42ØA	350 MCM CU	115	3	6 AWG	0.622	0.91	2.20	4593	10	380	440
QIE42ØA	500 MCM CU	115	3	5 AWG	0.742	1.03	2.47	6230	14	460	545
QIF42ØA	750 MCM CU	115	3	4 AWG	0.917	1.21	2.92	9149	16	570	685
QIG42ØA	1000 MCM CU	115	3	4 AWG	1.071	1.37	3.26	11783	18	645	790

†Ampacities are based on the following:

Information Subject to Change without Notice.

PRODUCT NOTES:

▲ Items are Prysmian authorized stock.

The above dimensions are approximate and subject to normal manufacturing tolerances.

Three Phase Operation

In Duct (NEC Table 310-79): 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 (NEC Table 310-71): Three-conductor cable, 105°C conductor temperature, and 40°C ambient temperature.

In Cable Tray: Per NEC Article 318-13, 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 allowable ampacities stated in Table 310-71 (Copper), "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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