

ROME-EPR PVC POWER CABLE, 5000 VOLTS

Single Conductor, Nonshielded, Jacketed
MV-90 Dry

<p>APPLICATION: A - Where NEC jurisdiction applies; as 5,000-volt nonshielded power cable, Type MV-90 Dry, for use at conductor temperatures not exceeding 90°C in dry locations. Cables meet requirements of Article 310.6 of the National Electrical Code.</p> <p>B - For other applications, as nonshielded power cables for use at 5000 volts 100% insulation level (common system voltage 4160 volts) or 3000 volts 133% insulation level (common system voltage 2400 volts), under the following conditions:</p> <p>(a) Single conductors mounted on insulators in free air in indoor or outdoor locations. (b) Random lay singles in metal conduit or triplexed singles in nonmetallic conduit, above grade, in dry locations. (c) Single conductors or triplexed singles, aerially, field-spun to grounded messenger in dry, damp or wet locations. (d) Triplexed singles in trays, in spaced block supports or in messenger supported rings, indoors above grade in dry locations.</p>							
				<p>STANDARDS: 1. Listed by Underwriters Laboratories as 5,000 volt nonshielded cable, Type MV-90 Dry, per UL Standard 1072. 2. Conforms to ICEA S-96-659 and NEMA WC71 for Nonshielded Cables Rated 2001-5000 Volts.</p> <p>CONSTRUCTION: Annealed copper conductor, conductor shield, Rome-EPR insulation, discharge and moisture resistant PVC jacket, surface printed.</p>			
Size AWG or kcmil	No. of Strands	Thickness in Mils		Nominal Diameter Inches	COPPER CONDUCTOR		
		Insulation	Jacket		Approx. Net Wt. Lb./1000 Ft.	Ampacity *	
5000 VOLTS, NONSHIELDED							
8	7	90	30	.41	110	55	83
6	7	90	30	.45	150	75	110
4	7	90	45	.52	230	97	145
2	7	90	45	.58	320	130	190
1	19	90	45	.62	375	155	225
1/0	19	90	45	.66	460	180	260
2/0	19	90	45	.70	500	205	300
3/0	19	90	65	.79	710	240	345
4/0	19	90	65	.85	835	280	400
250	37	90	65	.90	1010	315	445
350	37	90	65	1.00	1355	385	550
500	37	90	65	1.13	1860	475	695
750	61	90	65	1.31	2685	600	900
1000	61	90	65	1.46	3510	690	1075

***CONDUIT:** Three cables in isolated conduit in air, 90°C Conductor Temperature, 40°C Ambient. **AIR:** Single conductor isolated in air, 90°C Conductor Temperature, 40°C Ambient. For other installation conditions, refer to the National Electrical Code.

NOTE: 1. Hypalon jacket may also be supplied.

Information on this sheet subject to change without notice.

Specification

ROME-EPR PVC POWER CABLE, 5000 VOLTS

Single Conductor, Nonshielded, Jacketed MV-90 Dry

1. SCOPE

1.1 This specification describes single conductor Rome-EPR insulated, PVC jacketed nonshielded power cable for use in circuits not exceeding 5000 volts phase to phase at conductor temperatures of 90°C continuous normal operation, 130°C for emergency overload conditions and 250°C for short circuit conditions. Cables are intended for use as Type MV-90 Dry in applications meeting the requirements of Article 310.6 of the National Electrical Code. For other applications, they are intended for use as nonshielded power cables rated 5000 volts 100% insulation level or 3000 volts 133% insulation level.

2. STANDARDS

- 2.1 The following standards shall form a part of this specification to the extent specified herein:
- 2.1.1 Underwriters Laboratories Standard 1072 for Medium-Voltage Solid-Dielectric Cable.
 - 2.1.2 ICEA Pub. No. S-96-659 and NEMA Pub. No. WC71 for Nonshielded Cables Rated 2001-5000 Volts.

3. CONDUCTORS

- 3.1 Class B stranded annealed uncoated copper per Part 2 of ICEA.

4. CONDUCTOR SHIELDING

- 4.1 The conductor shall be covered with a layer of semiconducting tape completely covering the conductor and firmly bonded to the cable insulation. The conductor shield shall meet the requirements of Part 3 of ICEA.

5. INSULATION

- 5.1 Directly over the conductor shield shall be applied a homogeneous wall of Rome-EPR insulation. The average thickness of the insulation shall be 90 mils per Table 4-2, Type E-2 of ICEA and Table 310.63 of the National Electrical Code. Minimum thickness at any point shall be not less than 90% of the specified thickness. Physical and electrical properties of the insulation shall be in accordance with Table 4-5, Type E-2 of ICEA.

6. JACKET

- 6.1 A PVC jacket shall be applied directly over the insulation. The jacket shall meet the requirements of Table 5-1 of ICEA for Polyvinyl Chloride. The average thickness of the jacket shall be as specified in Table 4-2 of ICEA and Table 310.63 of the National Electrical Code. The minimum thickness at any point shall be not less than 80% of the specified thickness.

7. IDENTIFICATION

- 7.1 All cable shall be identified by means of surface ink printing indicating manufacturer, size, insulation type, voltage rating, and UL designations.

8. TESTS

- 8.1 Cable shall be tested in accordance with ICEA S-96-659 and UL Standard 1072.