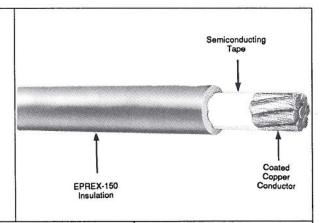


# ROME EPREX-150 MOTOR & APPARATUS LEAD WIRE, 150°C, 3000 VOLTS, 5000 VOLTS, 7500 VOLTS

APPLICATION: For use as leads in motors or other electrical equipment in dry locations at temperatures not exceeding 150°C non-flexing 125°C flexing, at voltages up to 7500 volts ac. Suitable for use as leads where high temperature operation or baking cycles are involved. Also recommended under IEEE Standards for Class 155°C as motor leads. The rubber-like flexibility of the insulation allows easy installation during equipment fabrication while possessing excellent abrasion resistance and overall toughness.

STANDARDS: Conforms to Rome Cable Product Specification.

CONSTRUCTION: Annealed coated flexible stranded copper conductor, semi-conducting tape, black Rome EPREX-150 EPDM insulation, surface printed.



Size AWG or kcmil	Stranding	3000 Volts			5000 Volts			7500 Volts		
		Insul. Thickness Mils	Nom. Diam. Inches	Approx. Net Wt. Lb./1000 Ft.	Insul. Thickness Mils	Nom. Diam. Inches	Approx. Net Wt. Lb/1000 Ft.	Insul. Thickness Mils	Nom. Diam. Inches	Approx. Net Wt. Lb./1000 F
8	84	110	.40	105	155	.50	145	176	.54	172
6	84	125	.48	160	155	.54	185	176	.59	217
4	133	125	.53	220	155	.58	245	176	.63	280
2	259	125	.59	310	155	.66	345	176	.70	380
1	259	125	.63	375	155	.69	410	176	.74	445
1/0	259	125	.68	455	155	.74	505	176	.79	530
2/0	259	125	.72	550	155	.78	590	176	.84	635
3/0	259	125	.81	680	155	.87	725	176	.89	760
4/0	266	125	.86	825	155	.92	870	176	.97	915
250	427	140	.93	985	170	1.00	1040	190	1.04	1070
300	427	140	.99	1155	170	1.06	1235	190	1.11	1255
350	427	140	1.05	1320	170	1.11	1375	190	1.15	1430
500	427	140	1.23	1840	170	1.26	1875	190	1.30	1945

Information on this sheet subject to change without notice.



## Specification

# ROME EPREX-150 MOTOR & APPARATUS LEAD WIRE, 150°C, 3000 VOLTS, 5000 VOLTS, 7500 VOLTS

#### 1. SCOPE

1.1 This specification describes single conductor wire and cable insulated with Rome EPREX-150 EPDM in sizes 8 AWG through 500 kcmil copper conductors. The wire or cable shall be suitable for use as leads in motors or other electrical equipment, in dry locations, at temperatures not exceeding 150°C in non-flexing applications or 125°C in flexing applications and at ac voltages up to 7500 volts.

#### 2. STANDARDS

2.1 The following standard shall form a part of this specification to the extent specified herein:2.1.1 ICEA Pub. No. S-68-516, NEMA Pub. No. WC8 for Ethylene-Propylene-Rubber Insulated Wire and Cable.

#### 3. CONDUCTORS

3.1 Conductors shall be Class H rope-lay stranded tinned copper in accordance with ICEA except size 8 AWG and 6 AWG shall be 84 strands of #27 AWG and #25 AWG, respectively.

#### 4. SEPARATOR

4.1 A suitable semiconducting separator tape shall be applied over the conductor in accordance with Part 2 of ICEA.

#### 5. INSULATION

5.1 Directly over the semiconducting tape separator shall be applied a homogeneous wall of Rome EPREX-150 EPDM insulation. The average thickness shall be as indicated in the data table. The minimum thickness at any point shall be not less than 90% of the specified thickness. The insulation shall meet the following, when tested in accordance with ICEA Part 6:

Phys	ica	s
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Tensile strength, psi minimum	1200
Elongation, % minimum	300
Aging - After 168 Hours in Air Oven @ 180°C	
Tensile Strength, psi minimum	1100
Elongation, % minimum	160

#### 6. IDENTIFICATION

6.1 The surface of the insulation shall be identified by means of surface ink printing indicating - manufacturer, size, insulation type, temperature rating, voltage rating and the designation "Nonshielded".

### 7. TESTS

- 7.1 Insulated wire and cable shall be subjected to an ac Spark Test during the insulating operation at a potential of 15 kV.
- 7.2 Samples of insulated wire and cable shall be tested for compliance with the requirements of this specification.
- 7.3 The insulation on a 12-inch specimen of finished cable shall withstand for one minute an ac voltage of 125 volts/mil applied between a metal foil and the conductor.