Rome Cable
CORPORATION

SPEC 7457

January 1, 2003

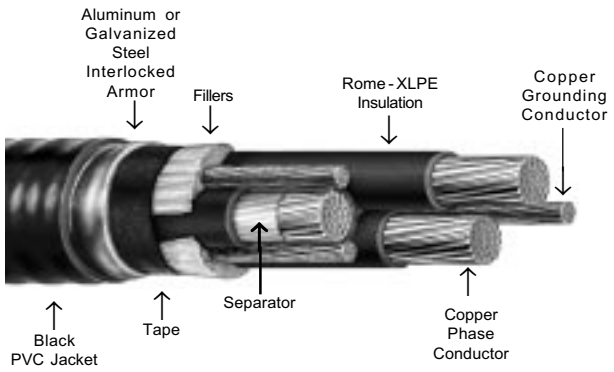
ROME INTERLOCKED ARMOR POWER CABLE, 600 VOLTS

3 Conductor, Rome-XLPE Insulated, Aluminum or Steel Armor, 50% Grounds Type MC

APPLICATION:
As 600 volt Type MC cable rated 90°C in wet or dry locations; for installation aerially or in metal rack, tray, trough, cable trays, or direct buried; for power circuits not exceeding 600 volts in manufacturing and processing plants, substations and generating stations. May be used in NEC Class I and II, Division 2 and Class III, Division 1 and 2 hazardous locations. Cables have grounding conductors equal to 50% of phase conductor area.

STANDARDS:
1. Listed by UL as Type MC cable per Standard 1569.
2. Individual conductors UL listed as Type XHHW-2 (90°C wet or dry) per UL Standard 44.
3. Overall jacket UL listed as Sunlight Resistant.
4. Cables pass UL and IEEE-383 ribbon burner tests and are UL listed For CT Use.
5. Cables pass IEEE-1202/CSA FT4 (70,000 BTU/hr) cable tray flame test.
6. Cables pass ICEA 210,000 BTU/hr. ribbon burner flame test.
7. Cables UL listed for Direct Burial.
8. Cables conform to ICEA S-95-658, NEMA WC70 for Nonshielded Power Cables Rated 2000 Volts or Less.

CONSTRUCTION: Three conductors of stranded copper, Rome-XLPE (crosslinked polyethylene) insulation, surface print phase identification. Three conductors twisted together with one uncoated copper grounding conductor in each valley, suitable fillers, binder tape, aluminum or galvanized steel interlocked armor, black sunlight resistant PVC jacket overall.



Size kcmil	No. of Strands	Insul. Thick. Mils	Nom. Diam. Over Armor Inches	PVC Jkt. Thick. Mils	Nom. Diam. Over PVC Jkt. Inches	COPPER PHASE CONDUCTORS				
						Grounding Conductor in Each Valley AWG	Approx. Net Wt. Lb./1000 Ft.		Ampacity of Each Cable	
							Alum. Armor	Steel Armor	90°C	75°C
350	37	65	1.96	60	2.10	2	4900	5355	350	310
500	37	65	2.24	60	2.37	1	6633	7170	430	380
750	61	80	2.68	75	2.84	2/0	9870	10500	535	475

*AMPACITY in accordance with the National Electrical Code for cables installed in uncovered cable tray without maintained spacing at the conductor temperature indicated in wet or dry locations, 30°C ambient temperature.

Information on this sheet subject to change without notice.

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1-1-03

Specification

ROME INTERLOCKED ARMOR POWER CABLE, 600 VOLTS

3 Conductor, Rome-XLPE Insulated, Aluminum or Steel Armor, 50% Grounds Type MC

1. SCOPE

1.1 This specification describes three conductor Rome-XLPE (thermosetting crosslinked polyethylene) insulated, aluminum or galvanized steel interlocked armor Type MC power cable for use in circuits not exceeding 600 volts phase-to-phase at conductor temperatures of 90°C in wet or dry locations for normal operation, 130°C for emergency overload conditions and 250°C for short circuit conditions. Cables are intended for installation indoors or outdoors, aerially, in metal rack, trough or cable trays, or for direct burial. Cables have grounding conductors equal to 50% of the phase conductor area.

2. STANDARDS

2.1 The following standards shall form a part of this specification to the extent specified herein:

2.1.1 UL Standard 1569 for Type MC cable.

2.1.2 UL Standard 44 for Type XHHW-2 conductors.

2.1.3 ICEA Pub. No. S-95-658 and NEMA Pub. No. WC70 for Nonshielded Power Cables Rated 2000 Volts or Less.

3. CONDUCTORS

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

4. SEPARATOR

4.1 A suitable separator over the conductor may be used at the option of the manufacturer.

5. INSULATION

5.1 A homogeneous wall of Rome-XLPE insulation shall be extruded over the conductor. The average thickness of insulation shall be as specified in UL Standard 44 for Type XHHW-2 conductors and in Table 3-4, Column B of ICEA. Minimum thickness at any point shall be not less than 90% of the specified thickness. Physical and electrical properties shall be in accordance with Table 3-7, Type X-2 of ICEA and Type XHHW-2 requirements of UL Standard 44.

6. PHASE IDENTIFICATION

6.1 The insulated phase conductors shall be printed with the numerals “1”, “2” and “3” on the surface of the insulation.

7. ASSEMBLY

7.1 Three phase conductors shall be cabled together with a Class B stranded, uncoated copper grounding conductor and suitable nonhygroscopic fillers in each valley. Total area of the grounds shall be not less than 50% of the area of one phase conductor. Length of lay shall not exceed 35 times the phase conductor diameter.

8. CABLE TAPE

8.1 The cable assembly shall be covered with a suitable tape applied with a 10% minumum lap.

9. ARMOR

9.1 An aluminum or galvanized steel interlocked armor shall be applied over the cable core. Armor shall be in accordance with UL Standard 1569 and Paragraph 4.3.3 of ICEA.

10. COVERING

10.1 Shall be PVC meeting the requirements of ICEA Table 4-1 and the Sunlight Resistant requirements of UL 1569. Average jacket thickness shall be in accordance with UL 1569. Minimum thickness at any point shall be not less than 70% of the specified thickness.

11. IDENTIFICATION

11.1 An ink print legend shall be applied to the surface of the PVC covering providing cable and manufacturer identification.

12. TESTS

12.1 Cable shall be tested in accordance with UL requirements for Type MC cable and ICEA S-95-658.