

ROME HL TECK 90 MINUS 40C, FT4, 1000 VOLTS

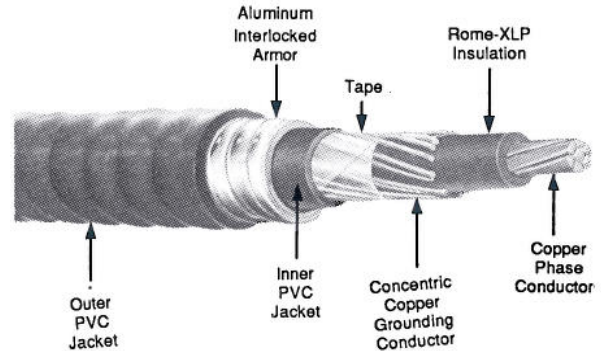
Single Conductor, Rome-XLP Insulation (RW90)
Inner PVC Jacket, Aluminum Armor, Outer PVC Jacket

APPLICATION: As flame retardant single conductor power cable rated 1000 volts, 90C in wet or dry locations. Widely used in the pulp and paper, petroleum, petrochemical, mining industries where cables with outstanding resistance to mechanical abuse, chemical attack and high reliability are required. Suitable for use in direct burial, open wiring, ventilated flexible cable ways, and in non-ventilated, ventilated or ladder type cable trays. Inner and outer PVC jacket have low acid gas evolution and low flame spread properties along with excellent low temperature properties.

STANDARDS:

1. Listed as TECK90 MINUS 40C per CSA Std. C22.2 No. 131.
2. Passes FT-4 70000 BTU/Hr cable tray flame test of CSA Std. C22.2 No. 0.3.
3. Complies with Acid Gas Evolution Test of Ontario Hydro Provisional Spec L-891 SM-77. Less than 14% acid gas evolution.
4. HL approved for use in hazardous locations per CSA Std. C22.2 No. 174.

CONSTRUCTION: Single conductor Class B stranded uncoated copper, Rome-XLP crosslinked polyethylene insulation, concentric bare copper grounding conductor, tape, PVC inner jacket, aluminum interlocked armor, PVC outer jacket, surface printed.



Size AWG or kcmil		Thickness		Diameters						Weight		AMP*	Connectors	
Phase	Ground	Insul.	Inner Jkt.	Inner Jkt.		Armor		Outer Jkt.		lb/k ft.	kg/km		T & B	Crouse-Hinds
		Mils	Mils	In.	mm	In.	mm	In.	mm					
6	8	60	30	.490	12.4	.655	16.6	.760	19.3	340	506	100	10465AL	0100219
4	6	60	30	.530	13.5	.695	17.6	.800	20.3	440	655	135	10465AL	0100220
3	6	60	30	.555	14.1	.720	18.3	.825	21.0	480	714	155	10465AL	0100220
2	6	60	30	.585	14.9	.750	19.0	.855	21.7	530	789	180	10465AL	0100220
1	4	80	45	.690	17.5	.855	21.7	.960	24.4	700	1042	210	10467AL	0100222
1/0	4	80	45	.725	18.4	.890	22.6	.995	25.3	775	1153	245	10467AL	0100222
2/0	4	80	45	.765	19.4	.985	25.0	1.09	27.7	930	1384	285	10468AL	0100222
3/0	3	80	45	.815	20.7	1.03	26.2	1.14	29.0	1085	1615	330	10468AL	0100223
4/0	3	80	45	.870	22.1	1.09	27.7	1.20	30.5	1240	1845	385	10469AL	0100224
250	2	90	60	.965	24.5	1.19	30.2	1.29	32.8	1495	2225	425	10469AL	0100224
300	2	90	60	1.02	25.9	1.24	31.5	1.34	34.0	1675	2493	480	10470AL	0100225
350	1	90	60	1.09	27.7	1.31	33.3	1.41	35.8	1910	2842	530	10470AL	0100225
400	1	90	60	1.13	28.7	1.35	34.3	1.46	37.1	2120	3155	575	10470AL	0100225
500	1/0	90	60	1.20	30.5	1.42	36.1	1.53	38.9	2510	3735	660	10550AL	0100225
600	1/0	90	60	1.29	32.8	1.51	38.4	1.61	40.9	2870	4271	740	10550AL	0100225
750	2/0	90	60	1.41	35.8	1.63	41.4	1.74	44.2	3520	5238	845	10472AL	0100227
1000	2/0	90	60	1.59	40.4	1.82	46.2	1.93	49.0	4445	6615	1000	10473AL	0100227
1250	3/0	110	80	1.86	47.2	2.11	53.6	2.22	56.4	5625	8371	1130	10474AL	0100229
1500	4/0	110	80	2.03	51.6	2.26	57.4	2.38	60.4	6650	9896	1260	10552AL	0100230
1750	4/0	110	80	2.14	54.4	2.38	60.4	2.49	63.2	7570	11266	1370	10553AL	0100565
2000	4/0	110	80	2.25	57.2	2.48	63.0	2.59	65.8	8500	12650	1470	10553AL	0100565

*AMPACITY in accordance with Rule 12-2212 of Canadian Electrical Code, Part 1, for installation in air or ventilated tray, with maintained spacing, 90°C conductor temperature, 30°C ambient.

- NOTES:**
1. Connectors used on single conductor cables must be non-magnetic.
 2. Phase conductor stranding is compressed on size 6AWG, compact strand on sizes 4AWG-1000 kcmil and concentric strand on sizes 1250-2000 kcmil.
 3. The ground conductor consists of concentric bare copper wires applied over the XLPE insulation. Total area of the ground conductor is equivalent to the size indicated in table.

Information on this sheet subject to change without notice.

Specification

ROME HL TECK 90 MINUS 40C, FT4, 1000 VOLTS

Single Conductor, Rome-XLP Insulation (RW90)
Inner PVC Jacket, Aluminum Armor, Outer PVC Jacket

1. SCOPE

- 1.1 This specification describes single conductor Rome TECK 90 MINUS 40C cable with Rome-XLP crosslinked polyethylene insulation, PVC inner jacket, aluminum interlocked armor, and PVC outer jacket. The cables may be used in circuits not exceeding 1000 volts at temperatures of 90°C in wet or dry locations. Cables are intended for use indoors or outdoors, in open wiring, ventilated flexible cableways, cable trays and direct burial installations in commercial or industrial applications.

2. STANDARDS

- 2.1 The following standards shall form a part of this specification to the extent specified herein:
 - 2.1.1 CSA Std C22.2 No. 131 TECK 90 MINUS 40C cable.
 - 2.1.2 CSA Std C22.2 No. 0.3 Clause 4.11.4 FT-4 flame test.
 - 2.1.3 Ontario Hydro Provisional Spec L891SM-77.
 - 2.1.4 CSA Std C22.2 No. 174 Cables and Cable Glands for Use In Hazardous Locations.
 - 2.1.5 CSA Std C22.2 No. 38 Thermoset Insulated Wires and Cables

3. CONDUCTORS

- 3.1 Conductors shall be Class B stranded annealed uncoated copper conforming to CSA C22.2 No. 131. Size 6AWG shall be compressed strand, sizes 4AWG-1000 kcmil shall be compact stranded, sizes 1250-2000 kcmil shall be concentric strand. A nonhygroscopic separator may be used over the conductor at the option of the manufacturer.

4. INSULATION

- 4.1 Shall be Rome-XLP crosslinked polyethylene meeting the requirements of CSA C22.2 No. 38 for RW90. Average thickness shall be in accordance with CSA C22.2 No. 131 for 1000 volt rated cable. Minimum thickness at any point shall be not less than 90% of the specified average thickness.

5. GROUNDING CONDUCTOR

- 5.1 A bonding or grounding conductor consisting of concentric bare copper wires shall be helically applied over the XLPE insulation. The grounding conductor shall comply with Table 1 and Clause 4.2.3 of CSA C22.2 No. 131. A nonhygroscopic cable tape shall be applied over the concentric wires.

6. INNER PVC JACKET

- 6.1 Shall be PVC meeting the requirements of C22.2 No. 131 including requirements for low temperature classification of -40C. Thickness of jacket shall be as specified in C22.2 No. 131.

7. INTERLOCKED ARMOR

- 7.1 An aluminum alloy interlocked armor shall be applied over the inner PVC jacket meeting the requirements of C22.2 No. 131, Clause 4.11.

8. OUTER PVC JACKET

- 8.1 Cables shall have an overall black PVC jacket meeting the requirements of C22.2 No. 131 including requirements for low temperature classification of -40C. Thickness of jacket shall not be less than 40 mils.

9. IDENTIFICATION

- 9.1 Cable shall be surface ink printed with a legend identifying the manufacturer, size, voltage rating, TECK 90 MINUS 40C, XLPE, FT4, HL and length markings in meters.

10. TESTS

- 10.1 Completed cable shall be capable of compliance with the FT4 flame test of C22.2 No. 0.3, HL requirements of C22.2 No. 174 and the acid gas evolution test of OH L891SM-77, in addition to the requirements for Type TECK 90 MINUS 40C cable in C22.2 No. 131.