



NBC OS1
 CSA 22.1
 ULC S139 with Hose
 600 Volt, 90°C
 CEC Type RC90
 System FHITC 120

Applications

- Fire Alarms, Lighting, Elevators, Communication
- Fire Pumps, Refuge Areas
- NBC OS1, NBC 3.2.7.10

Features

- 2-Hour fire resistance
- Splice available
- Superior resistance to flame propagation
- Only conventional tools required to terminate
- Commercially available brass/stainless steel connectors
- Printed number coding allows for easy identification (ICEA Method 4)
- Labor savings on termination, installation, and handling
- Superior impact & crush resistance (hazardous locations)
- Low smoke, low toxicity, halogen free design
- Welded armor forms an impervious barrier
- Armor for equipment grounding
- 90°C for Wet Locations
- Flexible
- Long continuous lengths available
- Multiple sizes and conductor counts available
- VFD cable design available

Performance Standards

- ULC S139 – Listed as 2-hour fire rated with Hose Stream
- FHITC 120 of the ULC Fire Resistance Directory
- IEEE 1202/FT4 vertical flame test; ST1 limited smoke
- CSA 22.2 No 123 – cUL Listed as Type RC90
- CSA 22.1 Article 12-700
- Copper sheath can be used for equipment bonding exceeding CEC Rule 10-618 and 10-804
- Copper Conductors to ASTM B8

Overview

VITALink® RC90 is a 600V 2-hour fire rated cable listed to ULC S139 with hose stream. When installed per system FHITC 120 and the CEC, VITALink® RC90 meets the code requirements for 2 hour Fire Rated Circuits, Electrical Circuit Integrity Systems, Survivability and Circuit Integrity. VITALink® RC90 Cables offer lowered cost, reliability and ease of installation advantages over MI cable and other methods of providing Fire Rated Circuits.

The equipment grounding copper armor is terminated with commercially available brass MC/RC connectors and the cable connections are made without the need for splicing or use of special tools. Compared to Mineral Insulated (MI) cable, VITALink® RC90 is not exposed to costly field expenses in preparing cable ends, special panel penetrations, additional flexible terminations and the splicing of shorter lengths in longer runs. VITALink® RC90 is not susceptible to failures caused by moisture ingress through leaky seals or faulty storage.

VITALink® RC90 Single Conductor 2-Hour Fire Rated Power Cable

Product Code	Size (AWG kcmil)	# of Cond.	Nom. Core Diameter (In)	Nom. Armor Diameter (In)	Approximate Net Weight (Lbs/1000 ft)	Ampacity 75°C Amps*
VM011X0-100	1/0	1	0.66	1.00	815	195
VM012X0-100	2/0	1	0.70	1.04	925	225
VM013X0-100	3/0	1	0.75	1.08	1,055	263
VM014X0-100	4/0	1	0.81	1.16	1,235	306
VM01250-100	250	1	0.89	1.22	1,410	344
VM01350-100	350	1	0.99	1.35	1,795	429
VM01500-100	500	1	1.13	1.50	2,350	527
VM01750-100	750	1	1.34	1.73	3,285	667

*Ampacity per CEC Table 1 and correction factors Note 2

VITALink® RC90 Multi Conductor 2-Hour Fire Rated Power Cable

Product Code	Size (AWG kcmil)	# of Cond.	Nom. Core Diameter (In)	Nom. Armor Diameter (In)	Approximate Net Weight (Lbs/1000 ft)	Ampacity 75°C Amps**
VM02014-100	14	2	0.49	0.82	395	20
VM02012-100	12	2	0.53	0.82	415	25
VM02010-100	10	2	0.58	0.89	475	35
VM03014-100	14	3	0.52	0.82	425	20
VM03012-100	12	3	0.56	0.89	475	25
VM03010-100	10	3	0.61	0.94	542	35
VM03008-100	8	3	0.72	1.04	675	50
VM03006-100	6	3	0.80	1.16	840	65
VM03004-100	4	3	0.91	1.24	1,140	85
VM03003-100	3	3	0.97	1.30	1,210	100
VM03002-100	2	3	1.04	1.41	1,400	115
VM03001-100	1	3	1.21	1.59	1,715	130
VM031X0-100	1/0	3	1.29	1.67	1,990	150
VM032X0-100	2/0	3	1.39	1.80	2,345	175
VM033X0-100	3/0	3	1.49	1.92	2,755	200
VM034X0-100	4/0	3	1.62	2.04	3,305	230
VM03250-100	250	3	1.80	2.26	3,870	255
VM03350-100	350	3	2.02	2.48	5,015	310
VM03500-100	500	3	2.30	2.82	6,720	380
VM04014-100	14	4	0.57	0.89	480	20
VM04012-100	12	4	0.62	0.94	575	25
VM04010-100	10	4	0.67	1.00	635	35
VM04008-100	8	4	0.80	1.16	815	50
VM04006-100	6	4	0.89	1.22	990	65
VM04004-100	4	4	1.00	1.35	1,285	85
VM04003-100	3	4	1.07	1.41	1,475	100
VM04002-100	2	4	1.15	1.50	1,710	115
VM04001-100	1	4	1.34	1.73	2,125	130
VM041X0-100	1/0	4	1.43	1.82	2,485	150
VM042X0-100	2/0	4	1.54	1.95	2,935	175
VM043X0-100	3/0	4	1.68	2.12	3,530	200
VM044X0-100	4/0	4	1.82	2.26	4,205	230
VM04250-100	250	4	2.00	2.46	4,925	255
VM04350-100	350	4	2.25	2.71	6,420	310
VM04500-100	500	4	2.60	3.13	8,740	380
VM05014-100	14	5	0.63	0.94	535	20
VM05012-100	12	5	0.68	1.00	615	25
VM05010-100	10	5	0.74	1.08	720	35
VM05008-100	8	5	0.88	1.22	930	50
VM05006-100	6	5	0.99	1.30	1,160	65
VM05004-100	4	5	1.11	1.48	1,525	85

**CEC Table 2, ampacities are based on three current carrying conductors.



Marmon Engineered Wire & Cable LLC
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