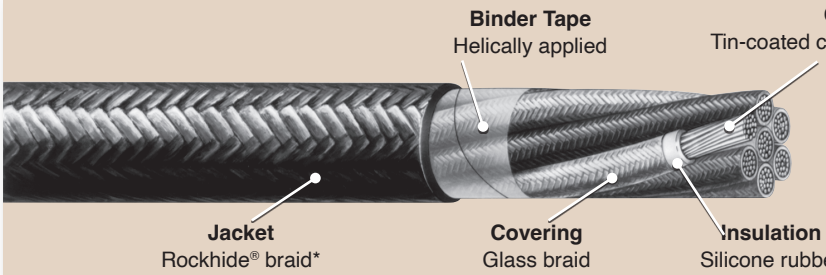
Firewall® SR
Control Cable
(Silicone Rubber)

FIREWALL®



125°C, 600 Volt
Class 1E Nuclear

Spec. RSS-9-008

Scope

Firewall® SR control cable is a silicone rubber insulated construction specifically designed for high temperature applications within nuclear generating facilities. It is intended for use in harsh and demanding environments where temperature extremes preclude the use of standard cables. It may be installed in trays, ducts, conduits or in confined spaces such as equipment housings.

Features

- Nuclear qualified with a minimum 40-year thermal life expectancy at 125°C
- Radiation resistant (up to 200 megarads)
- Extremely Flame retardant
- Extremely flexible for installation ease
- Excellent circuit integrity during flame conditions
- Full traceability
- Easy strippability for termination ease
- Tin-coated copper conductors for improved terminations, corrosion resistance and temperature endurance
- All singles pass a wet dielectric (tank) test prior to braid covering to verify electrical integrity
- All cables have printed sequential footage markers for improved inventory control

Performance Standards

- Silicone rubber insulation in accordance with ICEA S-19-81
- Class 1E qualified in accordance with IEEE 383-1974 and IEEE 323-1974 (RSCC Report QR-8802)
- Cable passes IEEE 383-1974 70,000 BTU/hr vertical tray flame test as modified by NRC Reg. Guide 1.131
- Quality assurance program in accordance with 10 CFR 50 Appendix B
- Cable passes ICEA T-29-520 210,000 BTU/hr vertical tray flame test
- Single conductors pass the vertical flame test specified in IEEE 383-1974 para. 2.5.6 (ICEA S-19-81 Section 6.19.6)

Construction

Conductor: Annealed, tin-coated copper, Class "B" strand (ASTM B8 & B33)

Insulation: Proprietary heat, moisture and radiation resistant silicone rubber

Covering: Glass braid with high temperature finish

Circuit Identification: Up to 6/C, colored braids per ICEA Method 5, Table K-5. Over 6/C, printed number and name of color per ICEA Method 3, K-5 sequence.

Fillers: As applicable

Binder Tape: Helically applied polyester

Overall Covering: Rockhide® braid* with high temperature finish

* Rockhide® is a proprietary blend of aramid and other high temperature synthetic fibers.

Marmon Industrial Energy & Infrastructure

Made in the USA

Marmon Electrical

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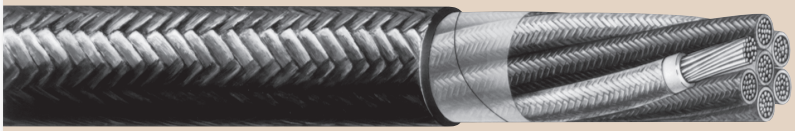

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14 AWG, 7 Strand

Product Code	Number of Conductors	Insulation Thickness (inch)	Insulation Thickness (mm)	Individual Braid Thickness (Mils)	Single Conductor Diameter (inch)	Overall Braid Thickness (Mils)	Nominal Overall Diameter (inch)	Nominal Overall Diameter (mm)	Approximate Net Weight (Lbs/M')
C64-0020	2	.045	1.14	7	.19	40	.46	11.68	90
C64-0030	3	.045	1.14	7	.19	40	.49	12.45	110
C64-0040	4	.045	1.14	7	.19	40	.54	13.72	150
C64-0050	5	.045	1.14	7	.19	40	.59	14.99	180
C64-0070	7	.045	1.14	7	.19	40	.64	16.26	220
C64-0090	9	.045	1.14	7	.19	40	.76	19.30	295
C64-0120	12	.045	1.14	7	.19	40	.86	21.84	365
C64-0190	19	.045	1.14	7	.19	40	1.01	25.65	585
C64-0250	25	.045	1.14	7	.19	40	1.19	30.23	815
C64-0370	37	.045	1.14	7	.19	40	1.39	35.31	1115

12 AWG, 7 Strand

Product Code	Number of Conductors	Insulation Thickness (inch)	Insulation Thickness (mm)	Individual Braid Thickness (Mils)	Single Conductor Diameter (inch)	Overall Braid Thickness (Mils)	Nominal Overall Diameter (inch)	Nominal Overall Diameter (mm)	Approximate Net Weight (Lbs/M')
C64-1020	2	.045	1.14	7	.21	40	.51	12.95	120
C64-1030	3	.045	1.14	7	.21	40	.55	13.97	150
C64-1040	4	.045	1.14	7	.21	40	.61	15.49	215
C64-1050	5	.045	1.14	7	.21	40	.67	17.02	265
C64-1070	7	.045	1.14	7	.21	40	.73	18.54	335
C64-1090	9	.045	1.14	7	.21	40	.86	21.84	425
C64-1120	12	.045	1.14	7	.21	40	.98	24.89	515
C64-1190	19	.045	1.14	7	.21	40	1.16	29.46	770
C64-1250	25	.045	1.14	7	.21	40	1.36	34.54	1100
C64-1370	37	.045	1.14	7	.21	40	1.58	40.13	1450

10 AWG, 7 Strand

Product Code	Number of Conductors	Insulation Thickness (inch)	Insulation Thickness (mm)	Individual Braid Thickness (Mils)	Single Conductor Diameter (inch)	Overall Braid Thickness (Mils)	Nominal Overall Diameter (inch)	Nominal Overall Diameter (mm)	Approximate Net Weight (Lbs/M')
C64-2020	2	.045	1.14	7	.23	40	.54	13.72	140
C64-2030	3	.045	1.14	7	.23	40	.58	14.73	200
C64-2040	4	.045	1.14	7	.23	40	.65	16.51	260
C64-2050	5	.045	1.14	7	.23	40	.70	17.78	370
C64-2070	7	.045	1.14	7	.23	40	.79	20.07	400
C64-2090	9	.045	1.14	7	.23	40	.91	23.11	570
C64-2120	12	.045	1.14	7	.23	40	1.03	26.16	690
C64-2190	19	.045	1.14	7	.23	40	1.22	30.99	1090
C64-2250	25	.045	1.14	7	.23	40	1.43	36.32	1490
C64-2370	37	.045	1.14	7	.23	40	1.67	42.42	2065

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