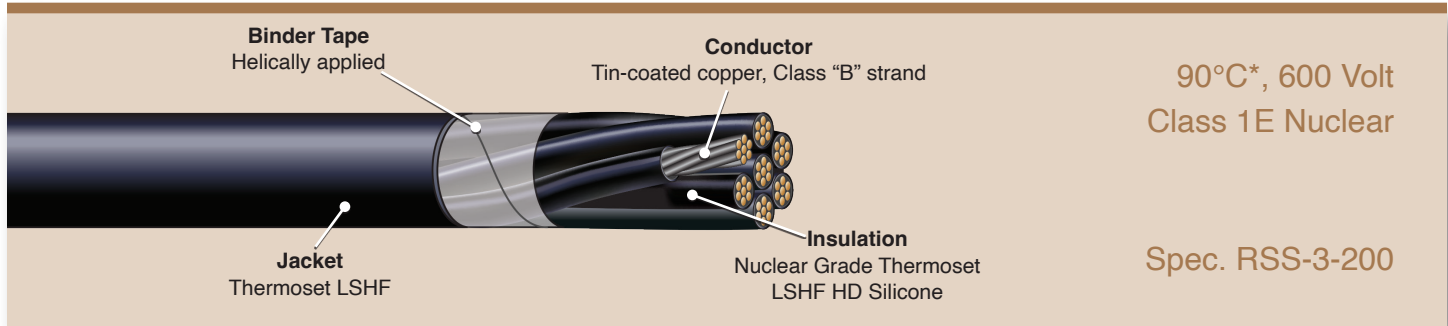


Firewall® LSHF

Safety Class Control Cable

(HD-SR/LSHF)



Features

- Complete Low Smoke Halogen Free (LSHF) Insulation and Jacket
- Thermoset insulation and jacket for enhanced thermal stability
- Extremely flame retardant
- Nuclear qualified with a minimum 60-year thermal life expectancy at 90°C
- Radiation resistant (up to 90 Megrads)
- Full traceability
- Excellent mechanical properties, including flexible insulation and jacket materials
- Tin-coated copper conductors for improved terminations and corrosion resistance
- All insulated conductors pass a wet dielectric (tank) test prior to cabling to verify electrical integrity
- All jackets have printed sequential footage markers for improved inventory control
- Easy strippability for installation

Scope

RSCC's Firewall® LSHF control cable is a completely thermoset construction specifically designed for low smoke halogen free applications in utility generating plants and substations. It is intended for use in harsh and demanding environments, including Class 1E nuclear applications. It may be installed in trays, ducts, conduits or in direct burial applications to perform a variety of low voltage control and related functions.

Performance Standards

- Insulation meets physical requirements of ICEA S-95-658 and S-73-532
- Jacket is in accordance with ICEA T-33-655 for Low Smoke Halogen Free Polymetric Jackets
- Class 1E qualified in accordance with IEEE 383-2003. (RSCC Report QR-1704)
- Cable passes IEEE-1202 vertical tray flame test with Low Smoke per UL 1685
- Insulated conductors pass UL VW-1 flame test
- Quality assurance program in accordance with 10 CFR 50 Appendix B

Construction

- **Conductor:** Annealed, tin-coated copper, Class "B" strand (ASTM B8 & B33)
- **Insulation:** Proprietary thermoset, heat, moisture, ozone, and radiation resistant flame retardant High Durometer (HD) Silicone
- **Circuit Identification:** Insulation per ICEA Method 4, Black colored insulation with printed numbers
- **Fillers:** As applicable
- **Binder Tape:** Helically applied
- **Jacket:** Colorable LSHF thermoset polyolefin

* Rated 90°C for normal operation in wet and dry locations, 130°C for emergency overload conditions, and 250°C for short circuit conditions.



Made in the USA



Marmon Electrical
A Berkshire Hathaway Company

Firewall® LSHF

Safety Class Control Cable

(HD-SR/LSHF)



16 AWG, 7 Strand

Product Code	Number of Conductors	Insulation Thickness		Insulated Conductor Diameter (inch)	Jacket Thickness (Mils)	Nominal Overall Diameter		Approximate Net Weight (Lbs/M')
		(inch)	(mm)			(inch)	(mm)	
C840020	2	.030	.76	.12	45	.34	8.64	75
C840030	3	.030	.76	.12	45	.36	9.11	90
C840040	4	.030	.76	.12	45	.39	9.91	105
C840050	5	.030	.76	.12	45	.42	10.67	120
C840070	7	.030	.76	.12	45	.46	11.68	140
C840090	9	.030	.76	.12	60	.56	14.22	200
C840120	12	.030	.76	.12	60	.62	15.75	240
C840190	19	.030	.76	.12	60	.72	18.29	340
C840250	25	.030	.76	.12	80	.88	23.35	480
C840370	37	.030	.76	.12	80	1.00	25.40	650

14 AWG, 7 Strand

Product Code	Number of Conductors	Insulation Thickness		Insulated Conductor Diameter (inch)	Jacket Thickness (Mils)	Nominal Overall Diameter		Approximate Net Weight (Lbs/M')
		(inch)	(mm)			(inch)	(mm)	
C830020	2	.030	.76	.14	45	.37	9.40	90
C830030	3	.030	.76	.14	45	.39	9.91	115
C830040	4	.030	.76	.14	45	.42	10.67	135
C830050	5	.030	.76	.14	45	.46	11.68	160
C830070	7	.030	.76	.14	45	.50	12.70	185
C830090	9	.030	.76	.14	60	.62	15.75	260
C830120	12	.030	.76	.14	60	.69	17.53	320
C830190	19	.030	.76	.14	80	.80	20.32	460
C830250	25	.030	.76	.14	80	.97	24.64	655
C830370	37	.030	.76	.14	80	1.10	27.94	880

12 AWG, 7 Strand

Product Code	Number of Conductors	Insulation Thickness		Insulated Conductor Diameter (inch)	Jacket Thickness (Mils)	Nominal Overall Diameter		Approximate Net Weight (Lbs/M')
		(inch)	(mm)			(inch)	(mm)	
C820020	2	.030	.76	.16	45	.41	10.41	120
C820030	3	.030	.76	.16	45	.43	10.92	150
C820040	4	.030	.76	.16	45	.47	11.94	185
C820050	5	.030	.76	.16	45	.51	12.95	215
C820070	7	.030	.76	.16	60	.59	14.99	270
C820090	9	.030	.76	.16	60	.68	17.27	345
C820120	12	.030	.76	.16	60	.76	19.30	435
C820190	19	.030	.76	.16	80	.93	23.62	680
C820250	25	.030	.76	.16	80	1.08	27.43	875
C820370	37	.030	.76	.16	80	1.23	31.24	1230

10 AWG, 7 Strand

Product Code	Number of Conductors	Insulation Thickness		Insulated Conductor Diameter (inch)	Jacket Thickness (Mils)	Nominal Overall Diameter		Approximate Net Weight (Lbs/M')
		(inch)	(mm)			(inch)	(mm)	
C810020	2	.030	.76	.18	45	.45	11.43	160
C810030	3	.030	.76	.18	45	.48	12.19	205
C810040	4	.030	.76	.18	60	.55	13.97	270
C810050	5	.030	.76	.18	60	.60	15.24	315
C810070	7	.030	.76	.18	60	.66	16.76	385
C810090	9	.030	.76	.18	60	.76	19.30	485
C810120	12	.030	.76	.18	80	.90	22.86	655
C810190	19	.030	.76	.18	80	1.05	26.67	960
C810250	25	.030	.76	.18	80	1.22	30.99	1245
C810370	37	.030	.76	.18	80	1.40	35.56	1775

* Rated 90°C for normal operation in wet and dry locations, 130°C for emergency overload conditions, and 250°C for short circuit conditions.