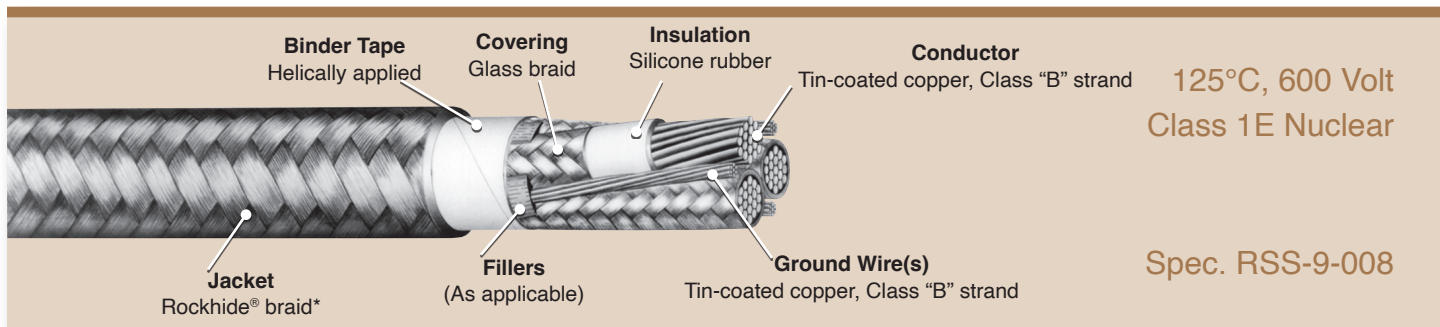


# Firewall® SR

## Power Cable

(Silicone Rubber)



### 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

### Scope

Firewall® SR Multi-Conductor Power 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.

### 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:** Colored braids per ICEA Method 5, Table K-5

**Ground Wire(s):** Annealed, tin-coated copper, class “B” strand, sized to comply with ICEA requirements

**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.



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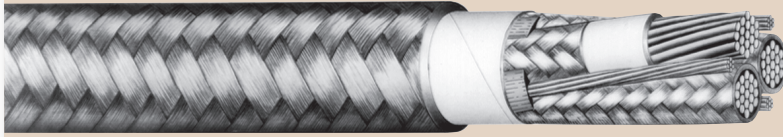


Marmon Electrical  
A Berkshire Hathaway Company

# Firewall® SR

## Power Cable

(Silicone Rubber)



125°C, 600 Volt  
Class 1E Nuclear

Spec. RSS-9-008

### Three Conductors

Product Code	Conductor Size	Number of Strands	Insulation Thickness		Individual Braid Thickness (Mils)	Size of Ground Wires	Overall Braid Thickness (Mils)	Nominal Overall Diameter		Approximate Net Weight (Lbs/M')
			(inch)	(mm)				(inch)	(mm)	
P40-3027	8 AWG	7	.060	1.52	7.5	3-14 AWG	40	.70	17.78	320
P40-3028	6 AWG	7	.060	1.52	7.5	3-12 AWG	40	.78	19.81	460
P40-3029	4 AWG	7	.060	1.52	7.5	3-12 AWG	40	.89	22.61	635
P40-3030	2 AWG	7	.060	1.52	7.5	3-10 AWG	40	1.01	25.65	940
P40-3031	1 AWG	19	.080	2.03	20	3-10 AWG	40	1.24	31.50	1270
P40-3032	1/0 AWG	19	.080	2.03	20	3-10 AWG	40	1.33	33.78	1505
P40-3033	2/0 AWG	19	.080	2.03	20	3-10 AWG	40	1.42	36.07	1810
P40-3034	3/0 AWG	19	.080	2.03	20	3-8 AWG	40	1.53	38.86	2240
P40-3035	4/0 AWG	19	.080	2.03	20	3-8 AWG	40	1.65	41.91	2705
P40-3036	250 kcmil	37	.095	2.41	20	3-8 AWG	40	1.84	46.74	3240
P40-3037	350 kcmil	37	.095	2.41	20	3-7 AWG	40	2.07	52.58	4400
P40-3038	500 kcmil	37	.095	2.41	20	3-6 AWG	40	2.61	66.29	5600

### Four Conductors

Product Code	Conductor Size	Number of Strands	Insulation Thickness		Individual Braid Thickness (Mils)	Size of Ground Wires	Overall Braid Thickness (Mils)	Nominal Overall Diameter		Approximate Net Weight (Lbs/M')
			(inch)	(mm)				(inch)	(mm)	
P40-3039	8 AWG	7	.060	1.52	7.5	2-12 AWG	40	.78	19.81	410
P40-3040	6 AWG	7	.060	1.52	7.5	2-10 AWG	40	.87	22.10	585
P40-3041	4 AWG	7	.060	1.52	7.5	2-10 AWG	40	.98	24.89	820
P40-3042	2 AWG	7	.060	1.52	7.5	2-8 AWG	40	1.13	28.70	1215
P40-3043	1 AWG	19	.080	2.03	20	2-8 AWG	40	1.38	35.05	1645
P40-3044	1/0 AWG	19	.080	2.03	20	2-8 AWG	40	1.48	37.59	1965
P40-3045	2/0 AWG	19	.080	2.03	20	2-8 AWG	40	1.59	40.39	2365
P40-3046	3/0 AWG	19	.080	2.03	20	2-7 AWG	40	1.73	43.94	2920
P40-3047	4/0 AWG	19	.080	2.03	20	2-7 AWG	40	1.86	47.24	3540
P40-3048	250 kcmil	37	.095	2.41	20	2-7 AWG	40	2.05	52.03	4200
P40-3049	350 kcmil	37	.095	2.41	20	2-6 AWG	40	2.36	59.94	4900
P40-3050	500 kcmil	37	.095	2.41	20	2-5 AWG	40	2.91	73.91	6200



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