



Circuit Defender 2 Hour Rated Circuit Integrity Shielded

300V, 90°C, Shielded, UL Certified and listed Two-Hour Fire Resistive Fire Alarm Power Limited Cables



Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** 18, 16 or 14 AWG solid bare oxygen-free copper (OFC) or oxygen-free high thermal conductivity (OFHC)
2. **Tape:** Mica
3. **Insulation:** Silicone Rubber, Color: black and red
4. **Shield:** 100% coverage aluminum/polyester foil shield with a drain wire
5. **Jacket:** PVC, Color: red

APPLICATIONS AND FEATURES:

Circuit Defender™ cables have been qualified and listed to the demanding requirements of UL 2196 and CAN/ULC-S139 Test for Fire Resistive Cables, and are UL listed Types FPLR/CMR and CSA Certified FAS. Circuit Defender™ Cables meet various industry code requirements (NFPA 70, NFPA 101, NFPA 130, and NFPA 502) for Fire Resistance according to UL 2196 when selected and installed per applicable codes including federal, state, and local and municipal rules, laws, and regulations.

SPECIFICATIONS:

- UL 1424 Cables for Power-Limited Fire-Alarm Circuits
- CSA C22.2 No.208 FAS
- NFPA 70 NFPA 101, NFPA 130, and NFPA 502
- UL Listed File #E75610 & #E118871
- UL 2196 and CAN/ULC-S139, UL Electrical Circuit Integrity System #44 (FHIT/7 44)
- UL 444 Communications Cables (90°C, 300V)
- RoHS-3 Complies with Latest Directive

SAMPLE PRINT LEGEND:

SOUTHWIRE Circuit Defender™ E75610 X/C # AWG SHIELDED FPLR/CMR/ 90C - R26267 FRR 2-HR (FHIT/7 44) UL 2196 & ULC S139 MAX 72V --- CSA LL90458 FAS/300V





Table 1 – Physical and Electrical Data

Stock Number	Cond. Size	Cond. Number	Cond. Strands	Diameter Over Cond.	Color	Insul. Thickness	Jacket Thickness	Approx. OD	Approx. Weight	DC Resistance @ 25°C	AC Resistance @ 75°C	Inductive Reactance	Allowable Ampacity 75°C	Allowable Ampacity 90°C
	AWG	No.	strands	inch		mil	mil	inch	lb / 1000ft	Ω /1000ft	Ω /1000ft	Ω/1000ft	Amp	Amp
18 AWG														
SC4002-2F	18	2	Solid	0.040	BK, RD	30	25	0.338	41	6.669	8.035	0.036	-	14
16 AWG														
SC5002-2F	16	2	Solid	0.050	BK, RD	30	25	0.364	56	4.181	5.037	0.033	-	18
14 AWG														
SC6002-2F	14	2	Solid	0.064	BK, RD	30	25	0.388	68	2.631	3.170	0.058	20	25

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

