

FLNR/FLSR Class RK5 Fuses

250/600 VAC ■ Dual-Element, Time-Delay ■ 1/10 – 600 Amperes



Littelfuse FLNR/FLSR series fuses have been the superior UL Class RK5 dual-element time-delay fuses, and are the most widely used class of fuses. FLNR/FLSR series fuses provide excellent protection for all types of circuits especially those containing motors. However, users and specifiers should consider the significant benefits offered by Indicator fuses. Complete information on these fuses may be found in this section of this catalog.

APPLICATIONS

Service entrance switches
Switchboard main and feeder switches
Motor control center mains and motor branch circuits
Individual fused combination motor controllers
Distribution panelboards
Industrial control panels
Protection of fully-rated panelboards and loadcenters
All general purpose circuits

SAFETY

- 200,000 A.I.R. — Reliable interruption of all overcurrents up to 200,000 amperes.
- Faster acting short circuit protection than any non-current limiting mechanical protective device.

RELIABILITY

- Accurate and reliable — Automated, precision manufactured and assembled parts ensure accurate, consistent response to overloads and short circuits.

SPECIFICATIONS

Voltage ratings: AC: 250 Volts (FLNR);
600 Volts (FLSR)
DC: 125 Volts (FLNR)
300 Volts (FLSR)

Interrupting ratings: AC: 200,000 amperes rms symmetrical
DC: 20,000 amperes

Ampere range: 1/10 – 600 amperes

Approvals: AC: UL Listed Class RK5 fuses per UL 248
(formerly UL 198E)
(File No. E81895)

CSA Certified HRCI-R per C22.2 #106
(File No. LR29862)

DC: FLNR: UL Listed 125 Volts per UL 198L
(File No. E81895)

FLSR: UL Listed 300 Volts per UL 198L
(File No. E81895)

MSHA 300 Volt listing

Federal Specification No. WF1814 (QPL)

AMPERE RATINGS

| | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|
| 1/10 | 1/8 | 1/4 | 1/2 | 3/4 | 1 | 1 1/2 | 2 |
| 1/8 | 1/4 | 1/2 | 3/4 | 1 | 1 1/2 | 2 | 2 1/2 |
| 1/4 | 1/2 | 3/4 | 1 | 1 1/2 | 2 | 2 1/2 | 3 |
| 1/2 | 3/4 | 1 | 1 1/2 | 2 | 2 1/2 | 3 | 3 1/2 |
| 3/4 | 1 | 1 1/2 | 2 | 2 1/2 | 3 | 3 1/2 | 4 |
| 1 | 1 1/2 | 2 | 2 1/2 | 3 | 3 1/2 | 4 | 4 1/2 |
| 1 1/2 | 2 | 2 1/2 | 3 | 3 1/2 | 4 | 4 1/2 | 5 |
| 2 | 2 1/2 | 3 | 3 1/2 | 4 | 4 1/2 | 5 | 5 1/2 |
| 2 1/2 | 3 | 3 1/2 | 4 | 4 1/2 | 5 | 5 1/2 | 6 |
| 3 | 3 1/2 | 4 | 4 1/2 | 5 | 5 1/2 | 6 | 6 1/2 |
| 3 1/2 | 4 | 4 1/2 | 5 | 5 1/2 | 6 | 6 1/2 | 7 |
| 4 | 4 1/2 | 5 | 5 1/2 | 6 | 6 1/2 | 7 | 7 1/2 |
| 4 1/2 | 5 | 5 1/2 | 6 | 6 1/2 | 7 | 7 1/2 | 8 |
| 5 | 5 1/2 | 6 | 6 1/2 | 7 | 7 1/2 | 8 | 8 1/2 |
| 5 1/2 | 6 | 6 1/2 | 7 | 7 1/2 | 8 | 8 1/2 | 9 |
| 6 | 6 1/2 | 7 | 7 1/2 | 8 | 8 1/2 | 9 | 9 1/2 |
| 6 1/2 | 7 | 7 1/2 | 8 | 8 1/2 | 9 | 9 1/2 | 10 |
| 7 | 7 1/2 | 8 | 8 1/2 | 9 | 9 1/2 | 10 | 11 |
| 7 1/2 | 8 | 8 1/2 | 9 | 9 1/2 | 10 | 11 | 12 |
| 8 | 8 1/2 | 9 | 9 1/2 | 10 | 11 | 12 | 13 |
| 8 1/2 | 9 | 9 1/2 | 10 | 11 | 12 | 13 | 14 |
| 9 | 9 1/2 | 10 | 11 | 12 | 13 | 14 | 15 |
| 9 1/2 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 | 22 |
| 15 | 16 | 17 | 18 | 19 | 20 | 22 | 25 |
| 16 | 17 | 18 | 19 | 20 | 22 | 25 | 30 |
| 17 | 18 | 19 | 20 | 22 | 25 | 30 | 35 |
| 18 | 19 | 20 | 22 | 25 | 30 | 35 | 40 |
| 19 | 20 | 22 | 25 | 30 | 35 | 40 | 45 |
| 20 | 22 | 25 | 30 | 35 | 40 | 45 | 50 |
| 22 | 25 | 30 | 35 | 40 | 45 | 50 | 55 |
| 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 |
| 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 |
| 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 |
| 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 |
| 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 |
| 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 |
| 55 | 60 | 65 | 70 | 75 | 80 | 85 | 90 |
| 60 | 65 | 70 | 75 | 80 | 85 | 90 | 95 |
| 65 | 70 | 75 | 80 | 85 | 90 | 95 | 100 |
| 70 | 75 | 80 | 85 | 90 | 95 | 100 | 110 |
| 75 | 80 | 85 | 90 | 95 | 100 | 110 | 125 |
| 80 | 85 | 90 | 95 | 100 | 110 | 125 | 150 |
| 85 | 90 | 95 | 100 | 110 | 125 | 150 | 175 |
| 90 | 95 | 100 | 110 | 125 | 150 | 175 | 200 |
| 95 | 100 | 110 | 125 | 150 | 175 | 200 | 225 |
| 100 | 110 | 125 | 150 | 175 | 200 | 225 | 250 |
| 110 | 125 | 150 | 175 | 200 | 225 | 250 | 300 |
| 125 | 150 | 175 | 200 | 225 | 250 | 300 | 350 |
| 150 | 175 | 200 | 225 | 250 | 300 | 350 | 400 |
| 175 | 200 | 225 | 250 | 300 | 350 | 400 | 450 |
| 200 | 225 | 250 | 300 | 350 | 400 | 450 | 500 |
| 225 | 250 | 300 | 350 | 400 | 450 | 500 | 550 |
| 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 |

**FLNR only, *FLSR only

Example part number (series & amperage): FLSR100

RECOMMENDED FUSE BLOCKS

LR250 series (for FLNR series fuses)

LR600 series (for FLSR series fuses)

Refer to Fuse Block section of this catalog for additional information.

LONGER EQUIPMENT LIFE

- Reduced damage to equipment caused by heating and magnetic forces of short circuits.
- Equipment runs cooler with low-resistance dual-element fuses.

FLNR/FLSR Class RK5 Fuses

250/600 VAC ■ Dual-Element, Time Delay ■ 1/10 – 600 Amperes

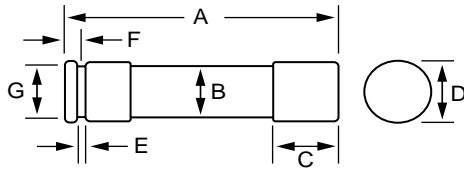


FIG. 1

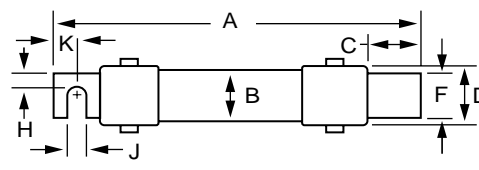


FIG. 2

70-600A



| AMPERES | REFER TO FIG. NO. | SERIES | DIMENSIONS IN INCHES (mm in parentheses) | | | | | | | | | |
|-----------|-------------------|--------|--|-----------------|-------------------|-------------------|---------------|-----------------|--------------------|----------------|-----------------|-----------------|
| | | | A | B | C | D | E | F | G | H | J | K |
| 1/10 – 30 | 1 | FLNR | 2 (50.8) | 1/2 (12.7) | 1/2 (12.7) | 9/16 (14.3) | 5/64 (2.0) | 5/32 (4.0) | 3/8 (9.5) | — | — | — |
| | | FLSR | 5 (127.0) | 3/4 (19.1) | 5/8 (15.9) | 13/16 (20.6) | 3/32 (2.4) | 3/16 (4.8) | 5/8 (15.9) | — | — | — |
| 35 – 60 | 1 | FLNR | 3 (76.2) | 3/4 (19.1) | 5/8 (15.9) | 13/16 (20.6) | 3/32 (2.4) | 3/16 (4.8) | 5/8 (15.9) | — | — | — |
| | | FLSR | 5-1/2 (139.7) | 1 (25.4) | 5/8 (15.9) | 1-1/16 (27.0) | 3/32 (2.4) | 1/4 (6.4) | 7/8 (22.2) | — | — | — |
| 70 – 100 | 2 | FLNR | 5-7/8 (149.2) | 1 (25.4) | 1-1/16 (27.0) | 1-1/16 (27.0) | 1/8 (3.2) | 3/4 (19.1) | 1-1/4 (31.8) | 1/4 (6.4) | 9/32 (7.1) | 1/2 (12.7) |
| | | FLSR | 7-7/8 (200.0) | 1-1/4 (31.8) | 1-1/16 (27.0) | 1-5/16 (33.3) | 1/8 (3.2) | 3/4 (19.1) | 1-1/2 (38.1) | 1/4 (6.4) | 9/32 (7.1) | 1/2 (12.7) |
| 110 – 200 | 2 | FLNR | 7-1/8 (181.0) | 1-1/2 (38.1) | 1-15/32 (37.3) | 1-19/32 (40.5) | 3/16 (4.8) | 1-1/8 (28.6) | 1-27/32 (46.8) | 7/16 (11.1) | 9/32 (7.1) | 11/16 (17.5) |
| | | FLSR | 9-5/8 (244.5) | 1-3/4 (44.5) | 1-15/32 (37.3) | 1-27/32 (46.8) | 3/16 (4.8) | 1-1/8 (28.6) | 2-3/32 (53.2) | 7/16 (11.1) | 9/32 (7.1) | 11/16 (17.5) |
| 225 – 400 | 2 | FLNR | 8-5/8 (219.1) | 2 (50.8) | 1-15/16 (49.2) | 2-3/32 (53.2) | 1/4 (6.4) | 1-5/8 (41.3) | 2-11/32 (59.5) | 5/8 (15.9) | 13/32 (10.3) | 15/16 (23.8) |
| | | FLSR | 11-5/8 (295.3) | 2-1/2 (63.5) | 2 (50.8) | 2-19/32 (65.9) | 1/4 (6.4) | 1-5/8 (41.3) | 2-27/32 (72.2) | 5/8 (15.9) | 13/32 (10.3) | 15/16 (23.8) |
| 450 – 600 | 2 | FLNR | 10-3/8 (263.5) | 2-1/2 (63.5) | 2-3/8 (60.3) | 2-19/32 (65.9) | 1/4 (6.4) | 2 (50.8) | 2-27/32 (72.2) | 3/4 (19.1) | 17/32 (13.5) | 1-1/8 (28.6) |
| | | FLSR | 13-3/8 (339.7) | 3 (76.2) | 2-13/32 (61.1) | 3-3/32 (78.6) | 1/4 (6.4) | 2 (50.8) | 3-11/32 (84.93) | 3/4 (19.1) | 17/32 (13.5) | 1-1/8 (28.6) |