



SPECIFICATIONS

Voltage ratings: AC: 250 Volts (LLNRK)
600 Volts (LLSRK)
DC: 125 Volts (LLNRK)
300 Volts (LLSRK)

Interrupting ratings:

AC: 200,000 amperes rms symmetrical.
300,000 amperes rms symmetrical
(Littelfuse self-certified)
DC: 20,000 amperes

Ampere range: 1/10 – 600 amperes

Approvals:

AC: UL Listed Class RK1 fuses per UL 248
(formerly UL 198E) (File No. E81895).
CSA certified HRCI-R (File No. LR29862)
QPL: Federal Specification No. WF-1814
DC: Littelfuse self-certified

AMPERE RATINGS

| | | | | | | |
|-------|-------|-------|--------|----|-----|-----|
| 1/40 | 1 | 2% | 6% | 25 | 90 | 300 |
| 1/300 | 1 1/4 | 3 | 7 | 30 | 100 | 350 |
| 3/40 | 1 1/4 | 3% | 8 | 35 | 110 | 400 |
| 1/4 * | 1% | 3 1/2 | 9 | 40 | 125 | 450 |
| 3/40 | 1% | 4 | 10 | 45 | 150 | 500 |
| 3/40 | 1% | 4 1/2 | 12 | 50 | 175 | 600 |
| 1/2 | 2 | 5 | 15 | 60 | 200 | |
| 5/40 | 2 1/4 | 5% | 17 1/2 | 70 | 225 | |
| 3/40 | 2 1/2 | 6 | 20 | 80 | 250 | |

* LLSRK Only.

Example part number (series & amperage): LLNRK 450

RECOMMENDED FUSE BLOCKS

LR250 series (LLNRK Series)
LR600 series (LLSRK Series)

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

Littelfuse LLNRK and LLSRK series POWR-PRO® fuses provide superior overload and short circuit protection for service entrance, main, feeder and general-purpose branch circuits up to 600 amperes.

LLNRK/LLSRK series fuses can be installed in existing Class H fuse blocks to upgrade systems containing lower interrupting rating Class H one-time or renewable fuses.

APPLICATIONS

All general-purpose circuits

Motors

Transformers

Solenoids

Fluorescent lighting

All system components with high in-rush currents

FEATURES/BENEFITS

- **Extremely current limiting** — Reduces damage to circuits and equipment under short-circuit conditions. Stops damaging short circuits faster than any mechanical protective device.
- **300kA Interrupting Rating** — Littelfuse self-certified to 300,000 amperes as standard. Meets future trend towards higher available short circuit currents.
- **Reduced costs** — Current limiting design often permits use of readily available, less costly equipment. Low resistance design reduces power consumption and utility bills.
- **Excellent time delay** — True dual-element construction, with separate non-fatiguing thermally-reversible spring-loaded thermal overload element, withstands repeated surges within rated time delay without opening needlessly. Eliminates needless downtime caused by power surges or equipment demands.

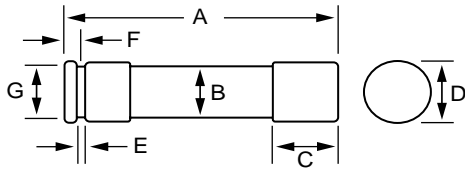


FIG. 1

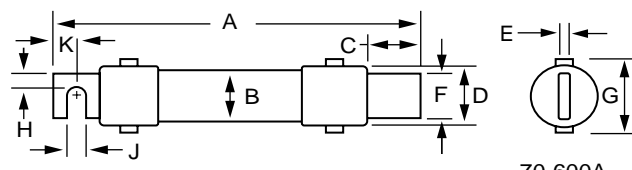
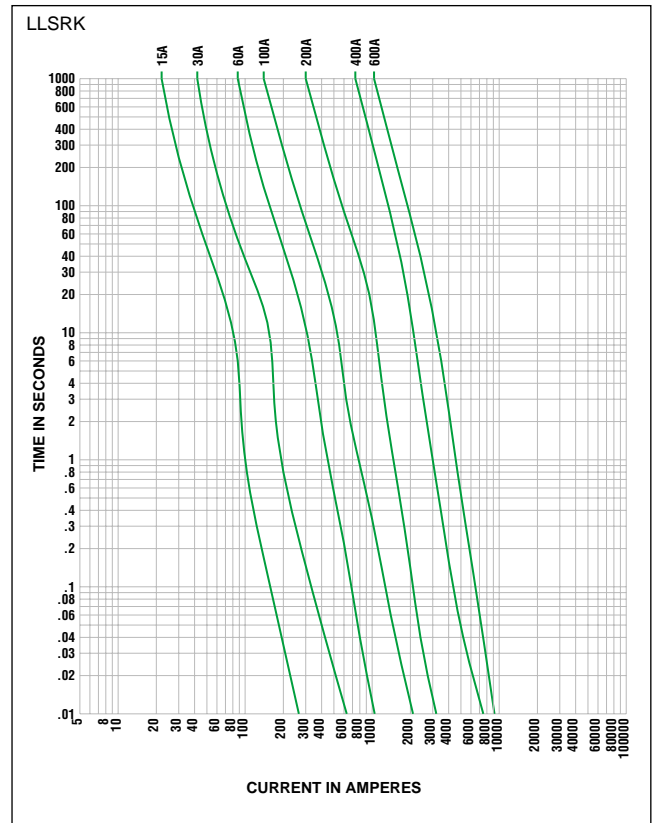
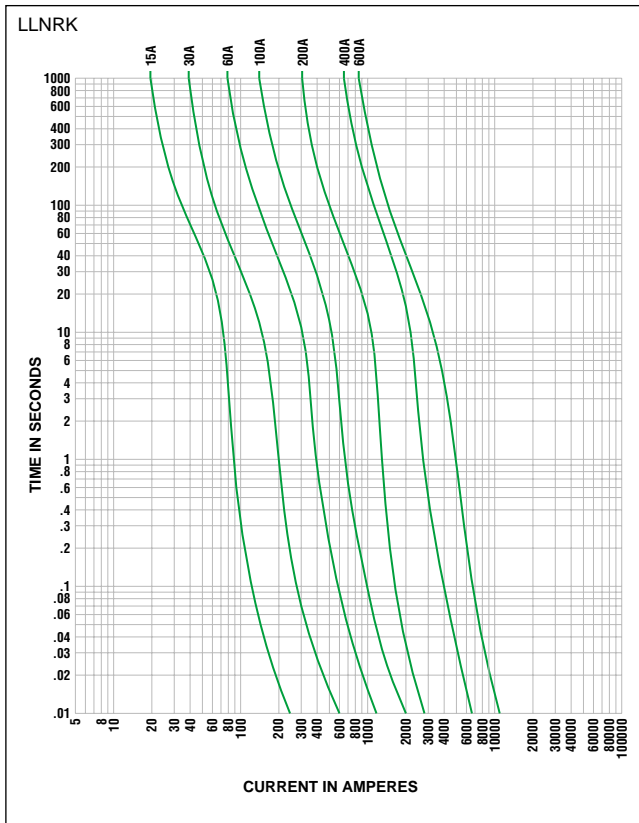


FIG. 2

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 | LLNRK | 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) | — | — | — |
| | | LLSRK | 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 | LLNRK | 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) | — | — | — |
| | | LLSRK | 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 | LLNRK | 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) |
| | | LLSRK | 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 | LLNRK | 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) |
| | | LLSRK | 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 | LLNRK | 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) |
| | | LLSRK | 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 | LLNRK | 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) |
| | | LLSRK | 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) |



Current-Limiting Effects of LLNRK (250V) fuses

* Prospective RMS Symmetrical Amperes Short-Circuit Current

** Apparent RMS Symmetrical

Note: Data derived from Peak Let-Thru Curves

| Short Circuit Current* | Peak Let-Thru Current** for various fuse ratings | | | | | |
|------------------------|--|-------|-------|-------|--------|--------|
| | 30A | 60A | 100A | 200A | 400A | 600A |
| 5,000 | 900 | 1,400 | 2,000 | 2,700 | 4,800 | 5,000 |
| 10,000 | 1,100 | 1,900 | 2,700 | 3,500 | 6,200 | 8,500 |
| 15,000 | 1,250 | 2,100 | 3,100 | 4,200 | 7,000 | 9,500 |
| 20,000 | 1,400 | 2,400 | 3,500 | 4,600 | 8,000 | 10,800 |
| 25,000 | 1,500 | 2,600 | 3,900 | 5,000 | 8,300 | 11,500 |
| 30,000 | 1,600 | 2,800 | 4,000 | 5,250 | 9,000 | 12,000 |
| 35,000 | 1,700 | 2,850 | 4,300 | 5,500 | 9,500 | 12,500 |
| 40,000 | 1,800 | 3,000 | 4,600 | 5,800 | 9,800 | 13,500 |
| 50,000 | 1,900 | 3,200 | 4,800 | 6,300 | 10,200 | 14,000 |
| 60,000 | 2,000 | 3,500 | 5,200 | 6,700 | 11,000 | 15,000 |
| 80,000 | 2,200 | 3,900 | 5,700 | 7,200 | 12,200 | 16,000 |
| 100,000 | 2,300 | 4,000 | 6,000 | 8,100 | 12,700 | 17,000 |
| 150,000 | 2,500 | 4,500 | 6,700 | 9,100 | 14,000 | 19,000 |
| 200,000 | 2,600 | 4,800 | 7,000 | 9,700 | 15,000 | 20,000 |

Current-Limiting Effects of LLSRK (600V) fuses

* Prospective RMS Symmetrical Amperes Short-Circuit Current

** Apparent RMS Symmetrical

Note: Data derived from Peak Let-Thru Curves

| Short Circuit Current* | Peak Let-Thru Current** for various fuse ratings | | | | | |
|------------------------|--|-------|-------|--------|--------|--------|
| | 30A | 60A | 100A | 200A | 400A | 600A |
| 5,000 | 1,060 | 1,600 | 2,100 | 2,600 | 4,100 | — |
| 10,000 | 1,350 | 2,000 | 2,800 | 3,400 | 5,250 | 8,000 |
| 15,000 | 1,600 | 2,300 | 3,200 | 3,900 | 6,000 | 9,000 |
| 20,000 | 1,700 | 2,600 | 3,600 | 4,500 | 6,700 | 10,000 |
| 25,000 | 1,900 | 2,800 | 3,800 | 4,800 | 7,500 | 11,000 |
| 30,000 | 2,000 | 3,000 | 4,100 | 5,200 | 8,000 | 12,000 |
| 35,000 | 2,100 | 3,100 | 4,400 | 5,700 | 8,500 | 12,500 |
| 40,000 | 2,200 | 3,300 | 4,600 | 6,000 | 9,000 | 13,000 |
| 50,000 | 2,400 | 3,500 | 4,900 | 6,500 | 9,500 | 14,000 |
| 60,000 | 2,500 | 3,800 | 5,200 | 7,000 | 10,000 | 15,000 |
| 80,000 | 2,700 | 4,000 | 5,700 | 7,750 | 11,000 | 17,000 |
| 100,000 | 2,900 | 4,200 | 6,200 | 8,500 | 12,000 | 18,000 |
| 150,000 | 3,200 | 4,600 | 7,300 | 10,000 | 14,000 | 21,000 |
| 200,000 | 3,300 | 4,700 | 8,000 | 11,000 | 16,000 | 23,000 |

