

# CLASS RK5 – FLNR\_ID • FLNR\_ID SERIES INDICATOR® FUSES

250/600 Vac • Dual Element • Time Delay • 1/10-600 A



## Description

Available in both Indicating and Non-Indicating versions, the FLNR/FLSR series of fuses set the standard for general purpose fuses. The dual-element design provides advanced short circuit and overload protection. FLSR series fuses provide excellent protection for all types of circuits especially those containing motors.

## Applications

- Service entrance switches
- Switchboard mains and feeders
- Motor control central mains and motor branch circuits
- All general purpose circuits

## Features/Benefits

- Indication
- Dual-element design
- Available without indication
- Current limiting

## Specifications

### Voltage Ratings

AC: 250 V (FLNR\_ID); 600 V (FLSR\_ID)  
 DC: 125 V (FLNR 1/10 – 30 A);  
 125 V (FLNR\_ID 35 – 600 A);  
 300 V (FLSR\_ID)

### Interrupting Ratings

AC: 200 kA rms symmetrical  
 300 kA rms symmetrical  
 (Littelfuse self-certified)

### Ampere Range

DC: 20 kA  
 1/10 – 600 A

### Approvals

Standard 248-12, Class RK5  
 UL Listed (File: E81895)  
 CSA Certified (File: LR29862)  
 Federal Specification WF-1814  
 (QPL- W-F-1814)

## Dimensions

Please refer to the Class R dimensions page 2.

## Ordering Information

| AMPERE RATINGS |        |        |        |        |      |     |     |
|----------------|--------|--------|--------|--------|------|-----|-----|
| 1/10           | 6/10   | 1 8/10 | 4      | 8      | 30   | 80  | 225 |
| 1/8*           | 8/10   | 2      | 4 1/2  | 9      | 35   | 90  | 250 |
| 15/100         | 1      | 2 1/4  | 5      | 10     | 40   | 100 | 300 |
| 2/10           | 1 1/8  | 2 1/2  | 5 6/10 | 12     | 45   | 110 | 350 |
| 1/4            | 1 1/4  | 2 8/10 | 6      | 15     | 50   | 125 | 400 |
| 3/10†          | 1 4/10 | 3      | 6 1/4  | 17 1/2 | 60   | 150 | 450 |
| 4/10           | 1 1/2  | 3 2/10 | 7      | 20     | 70   | 175 | 500 |
| 1/2            | 1 6/10 | 3 1/2  | 7 1/2  | 25     | 75** | 200 | 600 |

\*FLNR only. †FLNR, FLSR, FLSR\_ID only. \*\*FLNR, FLSR, FLSR\_ID only

Note: For 1/10 – 30A 250 volt fuses, order non-indicating FLNR series fuses.

| TYPE           | VOLT | SERIES  | AMP | CATALOG NUMBER | ORDERING NUMBER |
|----------------|------|---------|-----|----------------|-----------------|
| NON-INDICATING | 600  | FLSR    | 15  | FLSR015        | FLSR015.T       |
| INDICATING     | 600  | FLSR_ID | 15  | FLSR015ID      | FLSR015.TXID    |
| NON-INDICATING | 250  | FLNR    | 60  | FLNR060        | FLNR060.T       |
| INDICATING     | 250  | FLNR_ID | 60  | FLNR060ID      | FLNR060.TXID    |

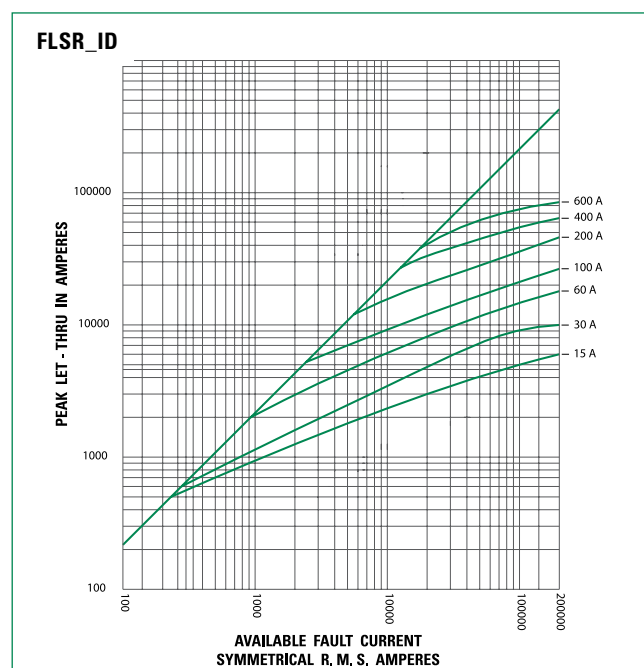
## Web Resources

Download TC Curves, CAD drawings and other technical information: [littelfuse.com/flsr](http://littelfuse.com/flsr)  
[littelfuse.com/flnr](http://littelfuse.com/flnr)

## Recommended Fuse Holders

LFR60 Series • LFR25 Series

## Peak Let-Thru Curve (600 V)



Note: For more information, see Peak Let-Thru Table

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## Current-Limiting Effects of FLSR and FLSR\_ID (600 V) Fuses

| SHORT-CIRCUIT CURRENT* | APPARENT RMS SYMMETRICAL CURRENT FOR VARIOUS FUSE RATINGS |       |        |        |        |        |
|------------------------|-----------------------------------------------------------|-------|--------|--------|--------|--------|
|                        | 30 A                                                      | 60 A  | 100 A  | 200 A  | 400 A  | 600 A  |
| 5,000                  | 1,250                                                     | 2,100 | 3,200  | 5,000  | 5,000  | 5,000  |
| 10,000                 | 1,600                                                     | 2,850 | 4,300  | 7,250  | 10,000 | 10,000 |
| 15,000                 | 1,800                                                     | 3,400 | 5,000  | 8,500  | 13,500 | 15,000 |
| 20,000                 | 2,250                                                     | 3,800 | 5,500  | 9,500  | 15,750 | 19,000 |
| 25,000                 | 2,450                                                     | 4,100 | 5,700  | 10,250 | 17,000 | 21,000 |
| 30,000                 | 2,700                                                     | 4,500 | 6,400  | 10,750 | 18,000 | 23,000 |
| 35,000                 | 2,900                                                     | 4,800 | 6,700  | 11,500 | 19,000 | 24,250 |
| 40,000                 | 3,000                                                     | 5,000 | 7,250  | 12,000 | 19,500 | 27,000 |
| 50,000                 | 3,400                                                     | 5,250 | 7,750  | 13,000 | 21,000 | 29,000 |
| 60,000                 | 3,600                                                     | 5,750 | 8,100  | 14,000 | 22,000 | 30,500 |
| 80,000                 | 3,900                                                     | 6,250 | 9,000  | 15,000 | 24,000 | 33,000 |
| 100,000                | 4,300                                                     | 6,750 | 9,750  | 16,500 | 26,000 | 35,000 |
| 150,000                | 4,500                                                     | 7,600 | 11,100 | 19,000 | 28,000 | 38,000 |
| 200,000                | 4,600                                                     | 8,400 | 12,250 | 21,500 | 30,000 | 40,000 |

## Current-Limiting Effects of FLNR and FLNR\_ID (250V) Fuses

| SHORT-CIRCUIT CURRENT* | APPARENT RMS SYMMETRICAL CURRENT FOR VARIOUS FUSE RATINGS |       |       |        |        |        |
|------------------------|-----------------------------------------------------------|-------|-------|--------|--------|--------|
|                        | 30 A                                                      | 60 A  | 100 A | 200 A  | 400 A  | 600 A  |
| 5,000                  | 1,400                                                     | 2,100 | 3,100 | 5,000  | 5,000  | 5,000  |
| 10,000                 | 1,550                                                     | 2,500 | 3,900 | 6,500  | 9,500  | 10,000 |
| 15,000                 | 2,000                                                     | 3,150 | 4,400 | 7,250  | 10,500 | 14,000 |
| 20,000                 | 2,250                                                     | 3,400 | 5,000 | 8,250  | 12,000 | 16,000 |
| 25,000                 | 2,400                                                     | 3,750 | 5,250 | 9,000  | 12,500 | 16,500 |
| 30,000                 | 2,550                                                     | 4,100 | 5,600 | 9,500  | 13,500 | 18,000 |
| 35,000                 | 2,650                                                     | 4,300 | 5,800 | 9,750  | 14,000 | 19,000 |
| 40,000                 | 2,800                                                     | 4,400 | 6,250 | 10,250 | 15,000 | 20,000 |
| 50,000                 | 3,000                                                     | 5,000 | 6,500 | 10,500 | 16,000 | 21,000 |
| 60,000                 | 3,200                                                     | 5,250 | 7,000 | 11,500 | 17,000 | 23,000 |
| 80,000                 | 3,400                                                     | 5,750 | 7,500 | 12,500 | 19,000 | 25,500 |
| 100,000                | 3,850                                                     | 6,000 | 8,000 | 13,500 | 21,000 | 27,500 |
| 150,000                | 4,100                                                     | 7,000 | 9,000 | 15,200 | 24,000 | 31,500 |
| 200,000                | 4,300                                                     | 7,500 | 9,750 | 16,500 | 26,000 | 34,000 |

\*Prospective RMS Symmetrical Amperes Short-Circuit Current  
 Note: Data Derived from Peak Let-Thru Curves

## Dimensions

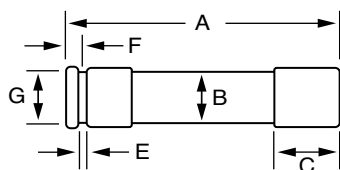


FIG. 1

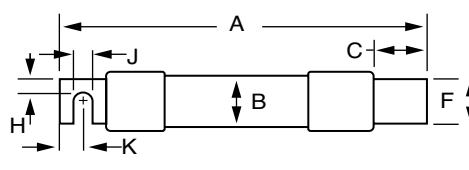


FIG. 2

70-600A

| AMPS    | FIGURE NUMBER | SERIES | DIMENSIONS INCHES (mm) |              |                |                |            |              |            |             |               |               |
|---------|---------------|--------|------------------------|--------------|----------------|----------------|------------|--------------|------------|-------------|---------------|---------------|
|         |               |        | 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)   | —          | 1/4 (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)   | —          | 1/4 (6.4)   | 9/32 (7.1)    | 1/2 (12.7)    |
| 110-200 | 2             | FLNR   | 7 7/8 (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) | —          | 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) | —          | 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) | —          | 5/8 (15.9)  | 13/32 (10.3)  | 1 5/16 (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) | —          | 5/8 (15.9)  | 13/32 (10.3)  | 1 5/16 (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)     | —          | 3/4 (19.1)  | 1 7/32 (13.5) | 1 7/8 (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)     | —          | 3/4 (19.1)  | 1 7/32 (13.5) | 1 7/8 (28.6)  |