

## CLASS RK5 - FLNR\_ID • FLSR\_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
- Transformers
- 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)

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**

**Ampere Range** 

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 <sup>1</sup>/<sub>10</sub> – 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

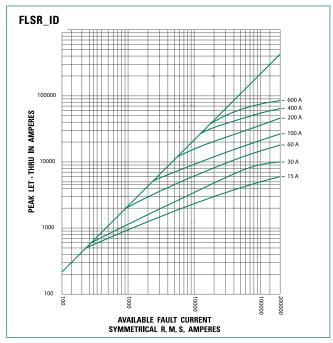
#### **Web Resources**

Download TC Curves, CAD drawings and other technical information: **littelfuse.com/flsr 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



# CLASS RK5 - FLNR\_ID • FLSR\_ID SERIES INDICATOR® FUSES

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

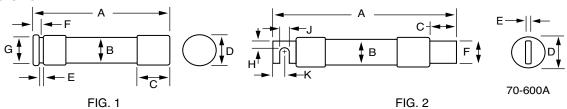
SHORT-CIRCUIT CURRENT*	APPARENT RMS SYMMETRICAL CURRENT FOR VARIOUS FUSE RATINGS								
CHOIL CHICOTT COMENT	30 A	60 A	100 A	200 A	400 A	600 A			
5,000	1,250	2,100	3,200	5,000	5,000	5,000			
10,000	1,600	2,850	4,300	7,250	10,000	10,000			
15,000	1,800	3,400	5,000	8,500	13,500	15,000			
20,000	2,250	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								
SHORT-CINCOTT CONNEXT	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			

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

#### **Dimensions**



AMPS	FIGURE NUMBER	SERIES	DIMENSIONS INCHES (mm)										
AIVII 3			Α	В	С	D	E	F	G	Н	J	K	
1/10-30	1	FLNR	2 (50.8)	1/2 (12.7)	½ (12.7)	9/16 (14.3)	5/64 (2.0)	5/32 (4.0)	³/8 (9.5)	_	_	_	
1/10-30	'	FLSR	5 (127.0)	<sup>3</sup> / <sub>4</sub> (19.1)	5% (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)	<sup>3</sup> / <sub>4</sub> (19.1)	5% (15.9)	<sup>13</sup> / <sub>16</sub> (20.6)	3/32 (2.4)	3/16 (4.8)	⁵⁄8 (15.9)	_	_	_	
35-60	'	FLSR	5½ (139.7)	1 (25.4)	5/8 (15.9)	11/16 (27.0)	<sup>3</sup> / <sub>32</sub> (2.4)	1/4 (6.4)	<sup>7</sup> /8 (22.2)	_	_	_	
70 – 100	2	FLNR	5 <sup>7</sup> / <sub>8</sub> (149.2)	1 (25.4)	11/16 (27.0)	11/16 (27.0)	1/8 (3.2)	<sup>3</sup> / <sub>4</sub> (19.1)	_	1/4 (6.4)	9/32 (7.1)	1/2 (12.7)	
70 – 100	2	FLSR	77/8 (200.0)	11/4 (31.8)	11/16 (27.0)	15/16 (33.3)	1/8 (3.2)	3/4 (19.1)	_	1/4 (6.4)	9/32 (7.1)	½ (12.7)	
110 – 200	2	FLNR	7½ (181.0)	1½ (38.1)	115/32 (37.3)	119/32 (40.5)	3/16 (4.8)	11/8 (28.6)	_	<sup>7</sup> /16 (11.1)	9/32 (7.1)	<sup>11</sup> / <sub>16</sub> (17.5)	
110-200	2	FLSR	95/8 (244.5)	13/4 (44.5)	115/32 (37.3)	127/32 (46.8)	3/16 (4.8)	11/8 (28.6)	_	7/16 (11.1)	9/32 (7.1)	<sup>11</sup> / <sub>16</sub> (17.5)	
33E 400	2	FLNR	85/8 (219.1)	2 (50.8)	115/16 (49.2)	23/32 (53.2)	1/4 (6.4)	15/8 (41.3)	_	5/8 (15.9)	<sup>13</sup> / <sub>32</sub> (10.3)	<sup>15</sup> / <sub>16</sub> (23.8)	
225-400	۷ [	FLSR	115/8 (295.3)	2½ (63.5)	2 (50.8)	219/32 (65.9)	1/4 (6.4)	15/8 (41.3)	_	5/8 (15.9)	<sup>13</sup> / <sub>32</sub> (10.3)	<sup>15</sup> / <sub>16</sub> (23.8)	
450 – 600	2	FLNR	103/8 (263.5)	2½ (63.5)	23/8 (60.3)	219/32 (65.9)	1/4 (6.4)	2 (50.8)	_	<sup>3</sup> / <sub>4</sub> (19.1)	<sup>17</sup> / <sub>32</sub> (13.5)	11/8 (28.6)	
450 - 000	2	FLSR	133/8 (339.7)	3 (76.2)	213/32 (61.1)	33/32 (78.6)	1/4 (6.4)	2 (50.8)	_	3/4 (19.1)	17/32 (13.5)	11/8 (28.6)	