

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
- 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
Ampere Range	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

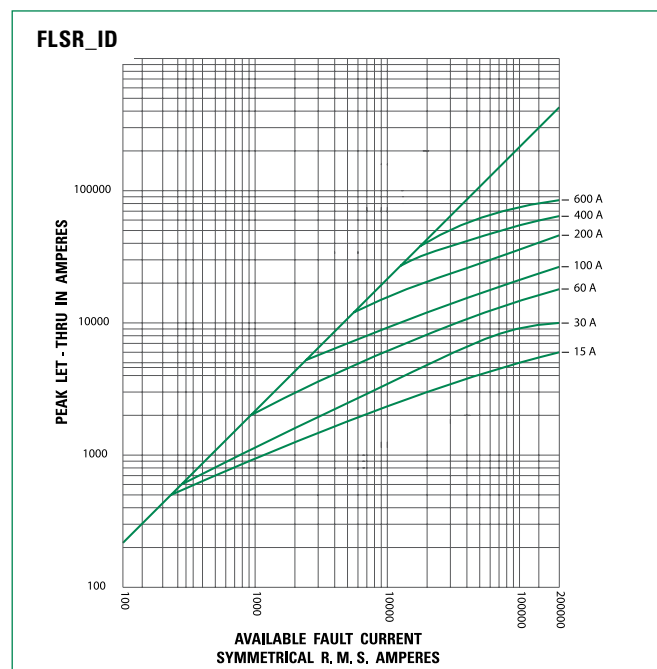
Web Resources

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

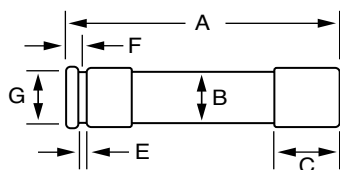


FIG. 1

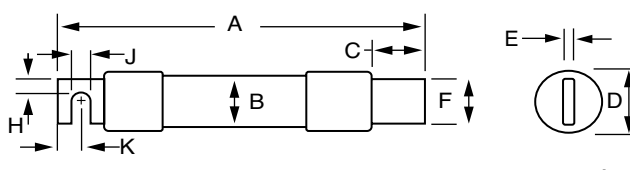


FIG. 2

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)	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)	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)	1 3/32 (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)	1 3/32 (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 3/32 (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)

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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.

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- Transformers
- Switchboard mains and feeders
- Motor control central mains and motor branch circuits
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Features/Benefits

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- Dual-element design
- Available without indication
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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
Ampere Range	1/10 – 600 A
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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

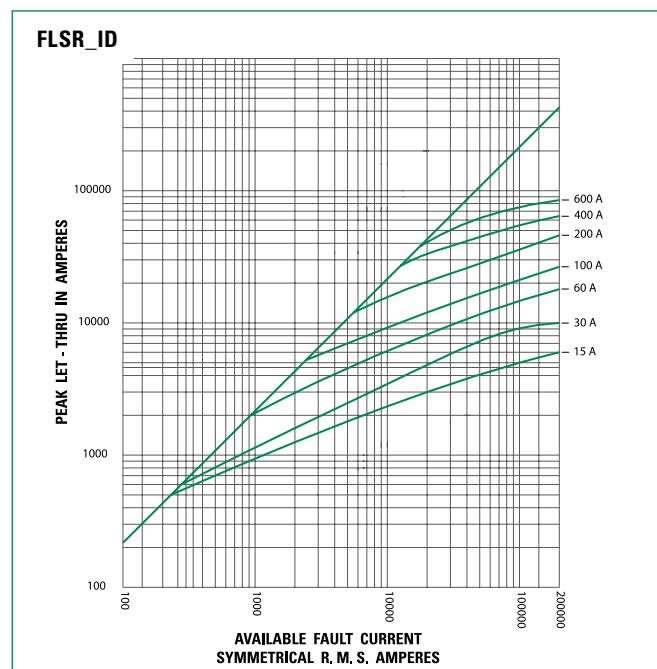
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SHORT-CIRCUIT CURRENT*	APPARENT RMS SYMMETRICAL CURRENT FOR VARIOUS FUSE RATINGS					
	30 A	60 A	100 A	200 A	400 A	600 A
5,000	1,250	2,100	3,200	5,000	5,000	5,000
10,000	1,600	2,850	4,300	7,250	10,000	10,000
15,000	1,800	3,400	5,000	8,500	13,500	15,000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

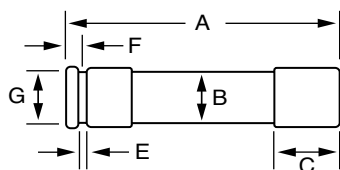


FIG. 1

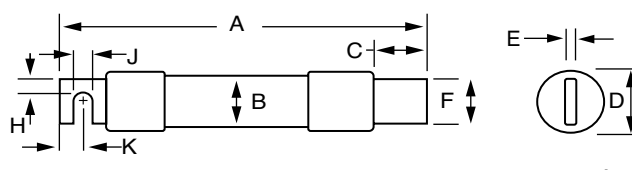


FIG. 2

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)	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)	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)	1 3/32 (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)	1 3/32 (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 3/32 (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)