IDSR SERIES INDICATOR® POWR-PRO® FUSES

POWR-PRO® 600 Vac/dc • Dual Element • Time-Delay • 1/10-600 A

Description

The IDSR combines 600 Vdc capability with indication to provide an ideal solution for many DC applications.

Applications

- DC circuits
- Solar inverters
- Motors
- Transformers
- Solenoids
- Fluorescent lighting

Features/Benefits

- POWR-PRO® Performance
- Current limiting
- Indication

Specifications

Voltage Ratings	AC: 600 Vac or less DC: 600 Vdc or less
Ampere Range	1/10 – 600 A
Interrupting Ratings	AC: 200 kA rms symmetrical 300 kA rms symmetrical (Littelfuse self-certified) DC: 20 kA
Approvals	Standard 248-12, Class RK5 UL Listed (File: E81895) CSA Certified (File: LR29862)
Material	1/10-60 A: Composite body, Bronze caps 70-600 A: Composite body, Copper caps
Country of Origin	Mexico

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

Note: All fuses rated 1A and above are Indicator® fuses.

VOLTAGE	SERIES	AMP	CATALOG NUMBER	ORDERING NUMBER
600	IDSR	30	IDSR030	IDSR030.T

Web Resources

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

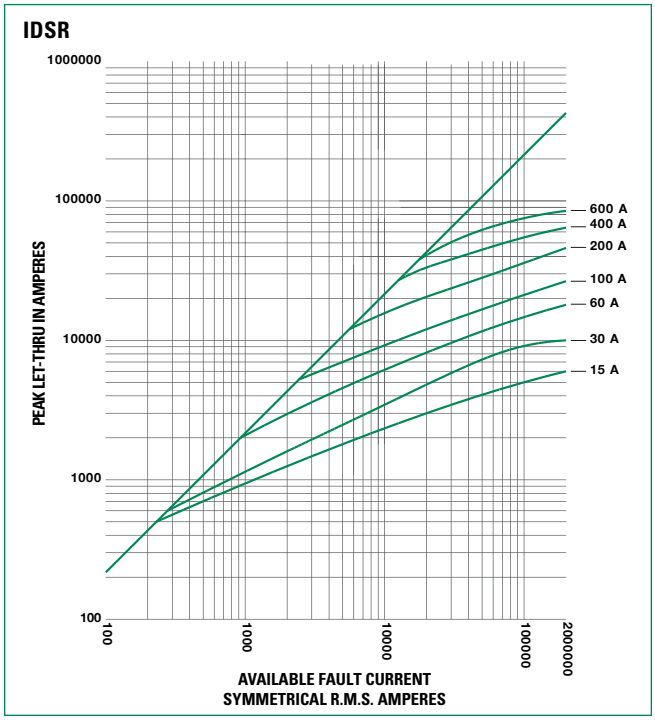
Recommended Fuse Blocks

LFR Series 88

Dimensions

Please refer to the Class R dimensions..... 19

Peak Let-Thru Curve



Note: For more information, see Peak Let-Thru Table on pg. 18

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

Features/Benefits

- Indicator and Non-Indicator versions available
- Dual-element design
- Current limiting

Specifications

Voltage Ratings AC: 600 Vac or less (FLSR_ID)
250 Vac or less (FLNR_ID)
DC: 300 V (FLSR_ID)
125 V (FLNR 1/10 – 30 A);
125 V (FLNR_ID 35 – 600 A)

Ampere Range 1/10 – 600 A

Interrupting Ratings AC: 200 kA rms symmetrical
300 kA rms symmetrical
(Littelfuse self-certified)
DC: 20 kA

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

Material FLSR: 1/10-60 A: Composite body, Bronze caps
70-600 A: Composite body, Copper caps
FLNR: 1/10-60 A: Fiber body, Bronze caps
70-600 A: Composite body, Copper caps

Country of Origin Mexico

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

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

VOLTAGE	INDICATION	SERIES	AMP	CATALOG NUMBER	ORDERING NUMBER
600 V	–	FLSR	15	FLSR015	FLSR015.T
600 V	•	FLSR_ID	15	FLSR015ID	FLSR015.TXID
250 V	–	FLNR	60	FLNR060	FLNR060.T
250 V	•	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 Blocks

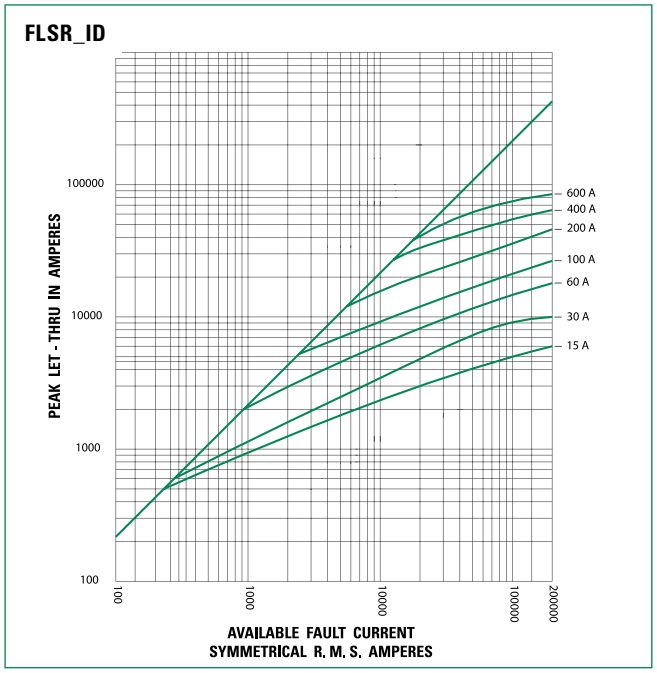
LFR Series 88

Dimensions

Please refer to the Class R dimensions..... 19

Refer to FLNR dim. for FLNR_ID and the FLSR dim. for FLSR_ID.

Peak Let-Thru Curve (600 V)



Note: For more information, see Peak Let-Thru Table on pg. 18

CLASS RK5 CURRENT-LIMITING EFFECTS

Current-Limiting Effects of IDSR (600 V) Fuses

SHORT CIRCUIT CURRENT*	APPARENT RMS SYMMETRICAL CURRENT FOR VARIOUS FUSE RATINGS						
	15 A	30 A	60 A	100 A	200 A	400 A	600 A
5,000	800	1,100	2,100	3,200	5,000	5,000	5,000
10,000	1,100	1,600	2,900	4,300	7,300	10,000	10,000
15,000	1,300	1,900	3,400	5,000	8,600	13,700	15,000
20,000	1,400	2,200	3,800	5,600	9,500	15,500	19,000
25,000	1,500	2,500	4,100	6,100	10,300	16,700	21,500
30,000	1,600	2,700	4,500	6,500	11,000	17,700	23,500
35,000	1,700	2,900	4,700	6,800	11,600	18,600	25,200
40,000	1,800	3,100	5,000	7,200	12,100	19,400	26,600
50,000	1,900	3,400	5,400	7,800	13,100	20,800	29,500
60,000	2,000	3,600	5,800	8,300	13,900	22,000	30,600
80,000	2,200	4,000	6,300	9,100	15,400	24,000	33,200
100,000	2,300	4,200	6,800	9,800	16,700	25,500	35,100
150,000	2,600	4,500	7,700	11,200	19,300	28,100	38,000
200,000	2,800	4,600	8,400	12,400	21,400	30,000	39,600

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