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Littelfuse®

Expertise Applied | Answers Delivered

POWR-GARD® PRODUCTS CATALOG

UL GENERAL INDUSTRIAL FUSES **HIGH-SPEED FUSES** **MEDIUM VOLTAGE FUSES**
BLOCKS & HOLDERS **PRE-ENGINEERED PANELS & SWITCHES** **SOLAR PRODUCTS**
AUTOMOTIVE & ELECTRONIC FUSES **SURGE SUPPRESSION PRODUCTS**

NEW POWR-SPEED™ High-Speed Fuses

NEW 1500V Solar Fuses & Holders

SPNH Series
Solar Fuse

LFNH Series
Fuse Holder

LFNH Series
Fuse Terminal
Covers

LFPXV Series
Touch-Safe Fuse Holders

...plus 30% more fuse blocks!

Table of Contents

Littelfuse
Expertise Applied | Answers Delivered

FUSE CLASS AND SELECTION CHART

UL CLASS	LITTELFUSE SERIES	OVERLOAD CHARACTERISTICS	AC RATINGS			DC RATINGS			RECOMMENDED FUSE BLOCKS AND FUSE HOLDERS	FUSE SERIES PAGE NUMBERS
			VOLTAGE (VOLTS)	CURRENT (AMPERES)	INTERRUPTING (AMPERES)	VOLTAGE (VOLTS)	CURRENT (AMPERES)	INTERRUPTING (AMPERES)		
L	KLPC	Time-Delay	600	200 - 6000	200K / 300K*	480	200 - 6000	20,000	–	8
	KLLU	Time-Delay	600	601 - 4000	200,000	300	601 - 4000	20,000		9
	LDC	Fast-Acting	600	150 - 2000	200,000	600	150 - 2000	50,000		10
RK1	LLNRK	Time-Delay	250	0.1 - 600	200K / 300K*	125	0.1 - 600	20,000	LFR25	13
	LLSRK_ID	Time-Delay	600	0.1 - 600		300	0.1 - 600		LFR60	13
	LLSRK	Time-Delay	600	0.1 - 600		300	0.1 - 600		LFR60	13
	KLNR	Fast-Acting	250	1 - 600	200,000	125	1 - 600		LFR25	15
	KLSR	Fast-Acting	600	1 - 600		250 300	1 - 30 35 - 600		LFR60	15
RK5	FLNR_ID	Time-Delay	250	35 - 600	200K / 300K*	125	35 - 600	20,000	LFR25	17
	FLNR		250	0.1 - 600		125	0.1 - 600			17
	FLSR_ID		600	0.1 - 600		300	0.1 - 600		LFR60	17
	FLSR		600	0.1 - 600		300	0.1 - 600			17
	IDSR		600	0.1 - 600		600	0.1 - 600			16
J	JTD_ID	Time-Delay	600	0.8 - 600	200K / 300K*	300 500	0.8 - 100 110 - 600	20,000	LFJ60 • LFPSJ	21
	JTD	Time-Delay	600	0.8 - 600						21
	JLS	Fast-Acting	600	1 - 600	200,000	–	–	–		22
T	JLLN	Fast-Acting	300	1 - 1200	200,000	160 125	1 - 60 70 - 1200	20,000	LFT30 • LSCR002 (700-800A)	24
	JLLS		600	1 - 1200		300	1 - 1200		LFT60 • LSCR002 (700-800A)	24
CC	CCMR	Time-Delay	600	0.2 - 30	200K / 300K*	250 250 300 500	0.2 - 2 4.5 - 10 2.25 - 4 12 - 30	20,000	L60030C • LFPSC • LPSC • 571 • 572 • LEC • LEY	27
	KLDR	Time-Delay	600	0.1 - 30	200,000	300	0.1 - 30			28
	KLKR	Fast-Acting	600	0.1 - 30	200,000	300	0.1 - 30			28
CD	CCMR	Time-Delay	600	35 - 60	200K / 300K*	250	35 - 60	20,000	LFC60060	27
G	SLC	Time Lag	600 480	0.5 - 20 25 - 60	100,000	170	0.5 - 60	10,000	LFG600 (½ - 20A) LFG480 (25 - 60A)	26
Solar	SPF	Solar	–	–	–	1000	1 - 30	20,000	LFPHV	62
	SPFJ		600	125-450	200,000	1000	70 - 450	20K (70 - 200A) 10K (250 - 400A) 20K (450A)	LFJ1000	63
	SPFI		–	–	–	1000	2 - 30	20,000	Not Required	61
	SPNH		–	–	–	1500	50 - 400	15,000	LFNH	60
	SPXV		–	–	–	1500	6 - 30	30,000	LPXV	58
	SPXI		–	–	–	1500	2.5 - 30	30,000	Not Required	59
K5	NLN	Fast-Acting	250	1 - 600	50,000	250	1 - 600	20K (1 - 60A) 50K (70 - 600A)	LFH25	20
	NLS		600	1 - 600		600 500 400 600 500	1 - 7 8 - 30 35 - 60 70 - 200 225 - 600	20K (1 - 60A) 50K (70 - 600A)	LFH60	20
High-Speed	L15S	Very Fast-Acting	150	1 - 1000	200,000	150 100	1 - 60 70 - 1000	20,000	LSCR • 1LFS	81
	L25S		250	1 - 800		250 200	1 - 200 225 - 800			81
	L50QS		500	35-800		500	35-800	50,000	LSCR	71
	L50S			10 - 800		450	10 - 800	20,000	LSCR • 1LFS	77
	L60S		600	1 - 800		–	–			81
	L70QS		700	35-800		700	35-800	50,000	LSCR	74
	L70S			10 - 800		650	10 - 800	20,000	LSCR • 1LFS	79
Midget (Supplementary)	BLF	Fast-Acting	250 125	0.5 - 15 20 - 30	10,000	–	–	–	L60030M • LFPSM • 571 • 572 • LEB • LEX	30
	BLN	Fast-Acting	250	1 - 30	10,000	–	–	–		30
	BLS	Fast-Acting	600 250	0.2 - 5 6 - 10	10,000	–	–	–		31
	FLA	Time-Delay	125	0.1 - 30	10,000	–	–	–		31
	FLM	Time-Delay	250	0.1 - 30	10,000	125	0.1 - 30	10,000		30
	FLQ	Time-Delay	500	0.1 - 30	10,000	300	0.1 - 30	10,000		30
	KLK	Fast-Acting	600	0.1 - 30	100K / 200K*	500	0.1 - 30	50,000		30
	KLKD	Fast-Acting	600	0.1 - 30	100,000	600	0.1 - 30	50,000		30
	KLQ	Time-Delay	600	1 - 6	10,000	–	–	–		31
	FLU	Fast-Acting	1000	0.44/ 11	10,000 20,000	1000	0.44 11	10,000 20,000	LFPHV	31
Plug	SOO, TOO	Time-Delay	125	0.25 - 30	10,000	–	–	–	Box Cover Units	65
	SLO, TLO	Medium Time-Delay	125	15 - 30	10,000	–	–	–		
Telecom	L17T	Fast-Acting	–	–	–	170	70 - 1200	100,000	LTFD Series	50
	TLN		–	–	–		1 - 600		LFR25	51
	TLS		–	–	–		1 - 125		LTFD101 • LFT30060 (cartridge)	52

* Littelfuse® self-certified

Littelfuse POWR-GARD®– Advanced Protection and Facility Savings

POWR-PRO®

Increase safety with POWR-PRO® Fuses

- Superior current-limitation from $^{1}/_{10}$ – 6000 amperes
- Type 2 "No Damage" coordination with NEMA and IEC motor circuits
- Blown fuse indication (LLSRK_ID and JTD_ID Series)
- Compact motor protection (JTD/JTD_ID, CCMR Series)
- 300,000 AIR to meet trends toward higher SCCR

POWR-PRO® Look for the POWR-PRO® logo for superior protection

UL FUSE CLASS	POWR-PRO®	PAGE NUMBERS
Class L	KLPC & LDC	8, 10
Class RK1	LLNRK/LLSRK_ID	13
Class J	JTD/JTD_ID	21
Class CC / CD	CCMR ($^{2}/_{10}$–60)	27

MRO™ PLUS

Material Reduction Opportunity Program

Increase safety and reduce inventory with MROplus

Your detailed reports will include:

- A streamlined current-limiting fuse inventory recommendation
- A guide to reducing electrical hazards within your facility
- An annual cost savings estimate
- A detailed cross reference

All you need to do is e-mail an Excel file of your fuse inventory to **techline@littelfuse.com** or to your local sales representative. We will do the rest!

Developing Next Generation 1500 Vdc Products for High And Low Current Ratings

POWR-GARD® SOLAR RATED PRODUCTS

This catalog incorporates our line of products designed specifically for the growing solar industry. As global standards are constantly changing, Littelfuse continues to develop circuit protection products that meet the requirements of the evolving photovoltaic market.

1500 Vdc Solar Products

600-1000 Vdc Solar Products

Look for this logo to indicate products that are used in solar applications. Visit our website **littelfuse.com/solar** for the latest updates on approvals, certifications, and new products.

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Protect motors and pumps from over/ under current, over/ under voltage, phase issues and ground faults. Communication modules also available.

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A cost-effective means to protect motors and pumps from voltage and phase issues.

Alternating Relays

Start and stop up to four pumps or use as a multi-channel switch. Intrinsically safe options available.

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Balance runtime between loads and can be used in hazardous locations.

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Detect if the load is running or if there is an overload or underload condition.

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Delay starting and stopping loads, cycling, and sequencing of motors, pumps, compressors, heaters, and lighting.

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Meet NEC® Requirments And Save Time With Pre-Engineered Solutions

LCP Series Coordination Panel

Ideal for circuits that require selective coordination such as emergency lighting circuits or essential electrical systems.

Features/Benefits

- Meets NEC® requirements
- Class CC & J fuse holders have open-circuit indication
- Fast-acting fuses protect against short circuits
- Feed through/sub feed lugs and 84-circuit configuration available
- Ground and neutral bars
- Copper bus standard

littelfuse.com/LCP

See page 155

LPS Series POWR-Switch

Individual fusible shunt trip disconnect switch easily coordinates with system's overcurrent protection. Typical applications include elevator circuits.

Features/Benefits

- Pre-engineered single unit makes procurement easy
- Reduces labor costs up to 66%
- Flexibility for a variety of applications
- Control power terminal block
- UL Listed package
- Cu and Al wire rated
- Lockable operating handle meets all code and safety requirements

littelfuse.com/LPS

See page 157

Section Overview

For 90 years Littelfuse® has been providing fuses to the industrial market. You can continue to count on our manufacturing and supply chain processes to deliver high quality fuses when you need them. At Littelfuse we leverage our global reach to stay on top of the latest applications and standards. Whether your circuit protection needs are focused on OEM, MRO, or construction, we are committed to being your circuit protection partner and appreciate your business.

FUSES

Table of Contents

CLASS L - KLPC SERIES POWR-PRO® FUSES

POWR-PRO® 600 Vac • Time-Delay • 200-6000 A

Description

KLPC series POWR-PRO® fuses meet or exceed the most stringent project specifications, including silver links, silver-plated copper end bells, glass-reinforced melamine bodies, O-ring seals between body and end bells, and granular quartz fillers.

Applications

- Switchboard mains and feeders
- Motor control center mains
- Large motor branch circuits
- Protection of power circuit breakers

Features/Benefits

- POWR-PRO® Performance
- Best-in-class time-delay withstand
- Current-Limiting
- Easily coordinated with other system components
- 300 kA AC Interrupting Rating (self-certified)

Specifications

Voltage Ratings	AC: 600 Vac or less DC: 480 V
Ampere Range	200 – 6000 A
Interrupting Ratings	AC: 200 kA rms symmetrical 300 kA rms symmetrical (Littelfuse self-certified) DC: 20,000 A
Approvals	AC: Standard 248-10, Class L UL Listed 601–6000 A (File: E81895) UL Recognized 200–600 A (File: E71611) CSA Certified 601–6000 A (File: LR29862) Federal Specifications 700–6000 A (QPL-W-F-1814) DC: Littelfuse self-certified
Material	Melamine body, Copper caps (silver plated)
Country of Origin	Mexico

Ordering Information

AMPERE RATINGS					
200	500	800	1350	2000	3000
250	600	900	1400	2100	3500
300	601	1000	1500	2200	4000
350	650	1100	1600	2300	4500
400	700	1200	1800	2400	5000
450	750	1300	1900	2500	6000

SERIES	AMPERAGE	CATALOG NUMBER	ORDERING NUMBER
KLPC	800	KLPC800	KLPC800.X

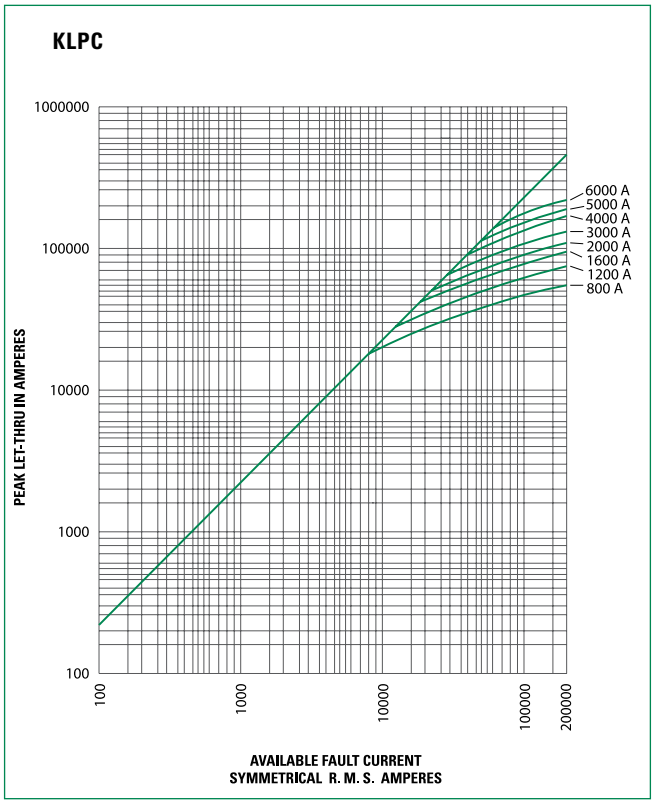
Web Resources

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

Dimensions

Please refer to the Class L dimensions 12

Peak Let-Thru Curve



Note: For more information, see Peak Let-Thru Table on pg. 11

CLASS L - KLLU SERIES FUSES

600 Vac • Time-Delay • 601-4000 A

Description

KLLU series fuses meet or exceed UL requirements for UL Class L fuses. The KLLU series offers an economical alternative to KLPC POWR-PRO® fuse with a slightly higher peak let through current.

Applications

- Service switches
- Switchboard mains and feeders
- Motor control center mains
- Large motor branch circuits
- Circuit breaker protection

Features/Benefits

- Current-Limiting
- Easily coordinated with other system components
- 200 kA AC Interrupting Rating

Specifications

Voltage Ratings	AC: 600 Vac or less DC: 300 V
Ampere Range	601–4000 A
Interrupting Ratings	AC: 200 kA rms symmetrical DC: 20 kA rms symmetrical
Approvals	Standard 248-10, Class L UL Listed (File: E81895) CSA Certified (File: LR29862) DC: Littelfuse self-certified
Material	Melamine body, Copper caps (silver plated)
Country of Origin	Mexico

Ordering Information

AMPERE RATINGS					
601	750	1000	1400	1800	3000
650	800	1200	1500	2000	3500
700	900	1350	1600	2500	4000

SERIES	AMPERAGE	CATALOG NUMBER	ORDERING NUMBER
KLLU	601	KLLU601	KLLU601.X

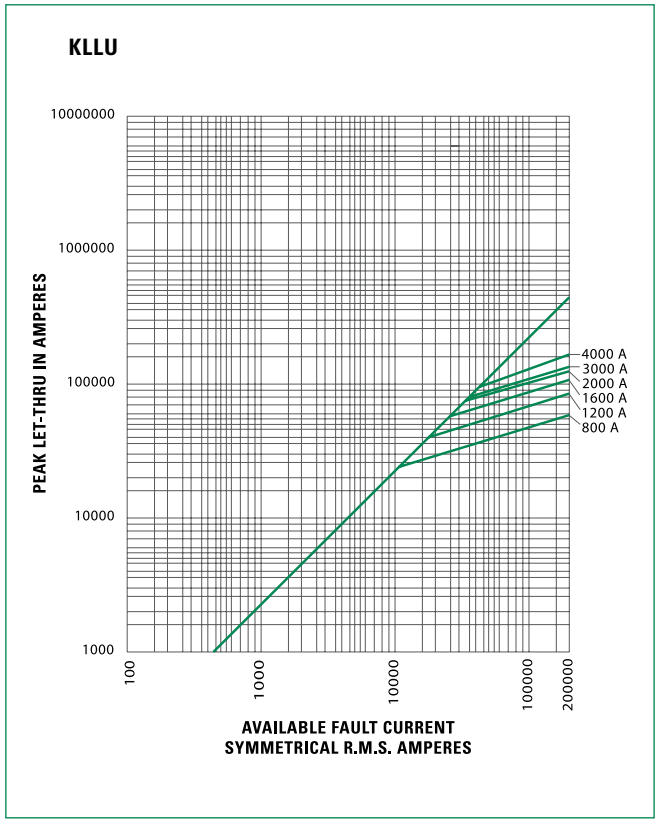
Web Resources

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

Dimensions

Please refer to the Class L dimensions 12

Peak Let-Thru Curve



Note: For more information, see Peak Let-Thru Table on pg. 11

CLASS L - LDC SERIES POWR-PRO® FUSES

POWR-PRO® 600 Vac/dc • Fast Acting • 150-2000 A

Description

High DC voltage and interrupting ratings make the POWR-PRO® LDC ideal for DC applications. The DC interrupting performance exceeds UL listing requirements.

Applications

- Solar inverter and array protection
- UPS protection especially for large battery circuits
- DC distribution and variable speed drives
- Mass transit systems

Features/Benefits

- POWR-PRO® Performance
- Extremely Current-Limiting
- 600 Vac/dc rated
- 200 kA AC Interrupting Rating
- 50 kA DC Interrupting Rating

Specifications

Voltage Ratings	600 Vac/dc or less
Ampere Range	150–2000 A
Interrupting Ratings	AC: 200 kA rms symmetrical DC: 50 kA
Time Constant	16 ms
Approvals	Standard 248-10, Class L UL Listed 601–2000 A (File: E81895) UL Recognized 150–600 A (File: E71611) CSA Certified 800-2000 A (File: LR29862)
Material	Melamine body, Copper caps (silver plated)
Country of Origin	Mexico

Ordering Information

AMPERE RATINGS				
150	450	750	1201	1601
200	500	800	1300	1800
250	600	900	1350	1900
300	601	1000	1400	2000
350	650	1100	1500	
400	700	1200	1600	

SERIES	AMPERAGE	CATALOG NUMBER	ORDERING NUMBER
LDC	700	LDC700	0LDC700.X

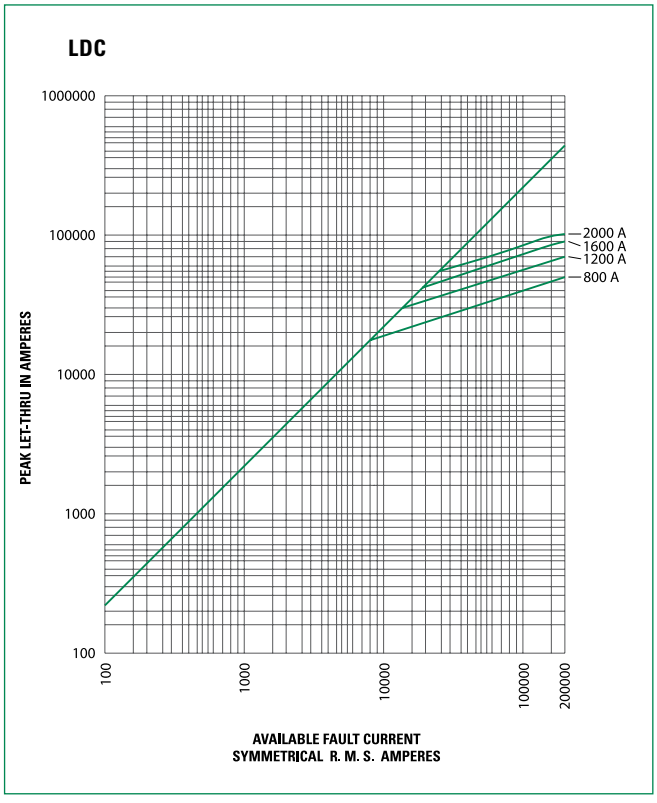
Web Resources

Download TC curves, CAD drawings and other technical documents: **littelfuse.com/ldc**

Dimensions

Please refer to the Class L dimensions 12

Peak Let-Thru Curve



Note: For more information, see Peak Let-Thru Table on pg. 11

CLASS L CURRENT-LIMITING EFFECTS

Current-Limiting Effects of KLPC (600 V) Fuses

SHORT CIRCUIT CURRENT*	APPARENT RMS SYMMETRICAL CURRENT FOR VARIOUS FUSE RATINGS							
	800 A	1200 A	1600 A	2000 A	3000 A	4000 A	5000 A	6000 A
5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
10,000	8,800	10,000	10,000	10,000	10,000	10,000	10,000	10,000
15,000	10,500	13,500	15,000	15,000	15,000	15,000	15,000	15,000
20,000	12,000	15,000	19,000	20,000	20,000	20,000	20,000	20,000
25,000	13,000	16,000	21,000	24,000	25,000	25,000	25,000	25,000
30,000	14,000	18,000	23,000	26,000	30,000	30,000	30,000	30,000
35,000	15,000	19,000	24,000	27,000	32,000	35,000	35,000	35,000
40,000	16,000	20,000	25,000	28,000	34,000	40,000	40,000	40,000
50,000	17,000	22,000	27,000	31,000	37,000	42,500	50,000	50,000
60,000	18,000	24,000	29,000	34,000	40,000	46,000	52,000	60,000
80,000	20,000	26,000	32,000	37,000	44,000	51,000	57,000	70,000
100,000	21,000	27,000	34,000	40,000	46,000	57,000	65,000	75,000
150,000	23,000	31,000	38,000	44,000	54,000	67,000	75,000	87,000
200,000	24,000	34,000	42,000	46,000	57,000	70,000	80,000	95,000

Current-Limiting Effects of KLLU (600 V) Fuses

SHORT-CIRCUIT CURRENT*	APPARENT RMS SYMMETRICAL CURRENT FOR VARIOUS FUSE RATINGS					
	800 A	1200 A	1600 A	2000 A	3000 A	4000 A
5,000	5,000	5,000	5,000	5,000	5,000	5,000
10,000	10,000	10,000	10,000	10,000	10,000	10,000
15,000	11,900	15,000	15,000	15,000	15,000	15,000
20,000	13,000	18,500	20,000	20,000	20,000	20,000
25,000	14,000	20,000	25,000	25,000	25,000	25,000
30,000	14,500	21,000	26,500	30,000	30,000	30,000
35,000	15,000	22,000	28,500	34,000	35,000	35,000
40,000	16,000	23,000	30,000	35,000	37,000	40,000
50,000	17,000	24,000	32,000	38,000	39,000	44,000
60,000	18,000	26,000	34,000	42,000	43,000	50,000
80,000	19,000	28,000	36,000	44,000	46,000	54,500
100,000	21,000	30,000	38,000	46,000	48,000	57,500
150,000	24,000	35,000	44,000	50,000	51,000	68,000
200,000	26,000	38,000	48,000	53,000	60,000	74,000

Current-Limiting Effects of LDC (600 V) Fuses

SHORT CIRCUIT CURRENT*	APPARENT RMS SYMMETRICAL CURRENT FOR VARIOUS FUSE RATINGS			
	800 A	1200 A	1600 A	2000 A
5,000	5,000	5,000	5,000	5,000
10,000	8,500	10,000	10,000	10,000
15,000	9,750	14,000	15,000	15,000
20,000	10,500	15,000	19,000	20,000
25,000	11,500	16,000	21,000	25,000
30,000	12,000	17,000	22,000	26,000
35,000	12,500	18,000	23,000	28,000
40,000	13,500	19,000	24,000	30,000
50,000	14,000	21,000	26,000	32,000
60,000	15,000	22,000	28,000	34,000
80,000	16,000	24,000	30,000	36,000
100,000	18,000	25,000	33,000	40,000
150,000	20,000	30,000	38,000	44,000
200,000	23,000	32,000	41,000	46,000

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

CLASS L SERIES DIMENSIONS

Dimensions

AMPERES	FIG. NO.	DIMENSIONS INCHES (mm)												
		A	B	C	D	E	F	G	H	J	K	L	M	N
150-800	1	3¾ (95.3)	5¾ (146.1)	6¾ (171.5)	—	—	8⅝ (219.1)	—	—	2 (50.8)	2½ (63.5)	⅜ (9.5)	⅝ x 1⅛ (15.9) x (28.6)	—
900-1200	2	3¾ (95.3)	5¾ (146.1)	6¾ (171.5)	9¼ (235.0)	9½ (241.3)	10¾ (273.1)	—	—	2 (50.8)	2½ (63.5)	⅜ (9.5)	⅝ x ¾ (15.9) x (19.1)	⅝ x 1⅛ (15.9) x (28.6)
1300-1600	2	3¾ (95.3)	5¾ (146.1)	6¾ (171.5)	9¼ (235.0)	9½ (241.3)	10¾ (273.1)	—	—	2⅜ (60.3)	3 (76.2)	7⁄16 (11.1)	⅝ x ¾ (15.9) x (19.1)	⅝ x 1⅛ (15.9) x (28.6)
1800-2000	2	3¾ (95.3)	5¾ (146.1)	6¾ (171.5)	9¼ (235.0)	9½ (241.3)	10¾ (273.1)	—	—	2¾ (69.9)	3½ (88.9)	½ (12.7)	⅝ x ¾ (15.9) x (19.1)	⅝ x 1⅛ (15.9) x (28.6)
2100-2500	3	4 (101.6)	5¾ (146.1)	6¾ (171.5)	9¼ (235.0)	9½ (241.3)	10¾ (273.1)	1⅝ (41.3)	1¾ (44.5)	3½ (88.9)	5 (127.0)	¾ (19.1)	⅝ x ¾ (15.9) x (19.1)	⅝ x 1⅛ (15.9) x (28.6)
2501-3000	3	4 (101.6)	5¾ (146.1)	6¾ (171.5)	9¼ (235.0)	9½ (241.3)	10¾ (273.1)	1⅝ (41.3)	1¾ (44.5)	4 (101.6)	5 (127.0)	¾ (19.1)	⅝ x ¾ (15.9) x (19.1)	⅝ x 1⅛ (15.9) x (28.6)
3500-4000	4	4 (101.6)	5¾ (146.1)	6¾ (171.5)	9¼ (235.0)	9½ (241.3)	10¾ (273.1)	1¾ (44.5)	3¼ (82.6)	4¾ (120.7)	5¾ (146.1)	¾ (19.1)	⅝ x 1⅜ (15.9) x (34.9)	⅝ x 1⅜ (15.9) x (34.9)
4500-5000	5	4 (101.6)	5¾ (146.1)	—	9¼ (235.0)	—	10¾ (273.1)	1⅝ (41.3)	3¼ (82.6)	5¼ (133.4)	7⅛ (181.0)	1 (25.4)	⅝ DIA. (15.9)	—
6000	5	4 (101.6)	5¾ (146.1)	—	9¼ (235.0)	—	10¾ (273.1)	1⅝ (41.3)	3¼ (82.6)	5¼ (133.4)	7⅛ (181.0)	1 (25.4)	⅝ DIA. (15.9)	—

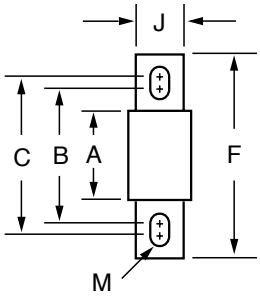


FIG.1

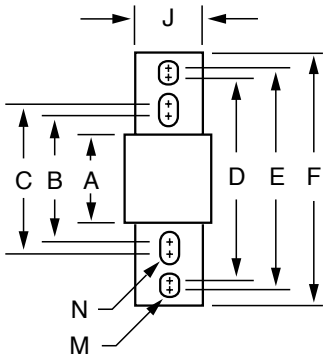


FIG.2

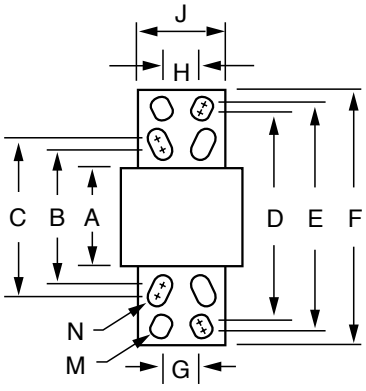


FIG. 3

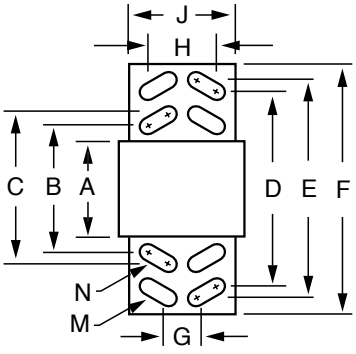


FIG. 4

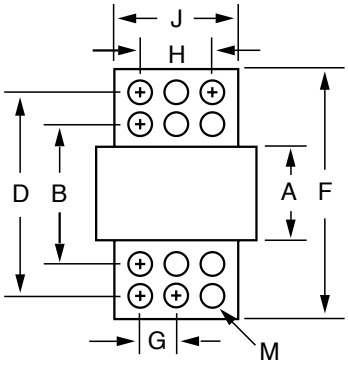
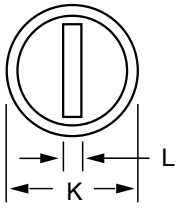


FIG. 5



CLASS RK1 – LLNRK • LLSRK • LLSRK_ID SERIES FUSES

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

Description

RK1 fuses are extremely current-limiting fuses meaning they greatly reduce or eliminate damage to circuits and equipment under short-circuit conditions. Replacing existing Class H, K and RK5 fuses with RK1 fuses is one of the easiest ways to immediately improve the protection of plant workers and equipment.

Applications

- All general purpose circuits
- Motors
- Transformers
- Safety upgrades

Features/Benefits

- POWR-PRO Performance
- Indication available
- Dual-element design
- Extremely Current-Limiting
- IEC Type 2 "No Damage" protection to IEC and NEMA type motor starters
- Indicating and DIN mount fuse holders available

Specifications

Voltage Ratings 600 Vac/300 Vdc (LLSRK/LLSRK_ID)
250 Vac/125 Vdc (LLNRK)

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

Ampere Range 1/10 – 600 A

Approvals AC: Standard 248-12, Class RK1
UL Listed (File: E81895)
CSA Certified (File: LR29862)
DC: Littelfuse self-certified
Federal Specification WF-1814
(QPL- W-F-1814)

Recommended Fuse Holders

LFR60 Series • LFR25 Series 94

Ordering Information

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

Note: All LLSRK_ID fuses rated 1 amp and above are Indicator® fuses.
**75 A is only available for the 600 V.*

600 V

TYPE	SERIES	AMP	CATALOG NUMBER	ORDERING NUMBER
INDICATING	LLSRK_ID	60	LLSRK060ID	LSRK060.TXID
NON-INDICATING	LLSRK	60	LLSRK060	LSRK060.T

250 V

TYPE	SERIES	AMP	CATALOG NUMBER	ORDERING NUMBER
NON-INDICATING	LLNRK	80	LLNRK080	LNRK080.V

Web Resources

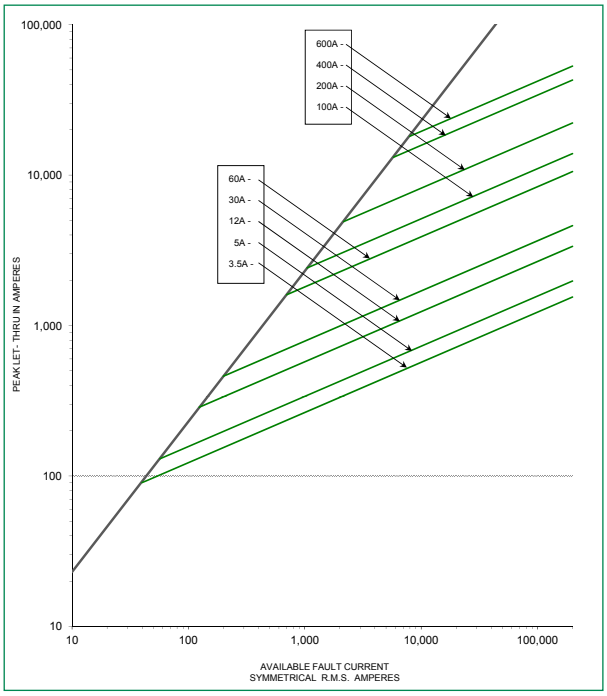
Download TC Curves, CAD drawings and other technical information: **littelfuse.com/llsrk**
littelfuse.com/llnrk

Dimensions

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

Peak Let-Thru Curve (600 V)

LLSRK & LLSRKID



Note: For more information, see Peak Let-Thru Table on pg. 14

CLASS RK1 – LLNRK • LLSRK • LLSRK_ID SERIES FUSES

Current-Limiting Effects of LLSRK and LLSRK_ID (600 V) Fuses

SHORT CIRCUIT CURRENT*	APPARENT RMS SYMMETRICAL CURRENT FOR VARIOUS FUSE RATINGS							
	3.5 A	5 A	12 A	30 A	100 A	200 A	400 A	600 A
5,000	196	251	427	586	1,764	2,821	-	-
10,000	247	316	538	739	2,222	3,554	6,850	8,489
15,000	283	362	616	845	2,544	4,069	7,842	9,718
20,000	312	399	677	930	2,800	4,478	8,631	10,696
25,000	336	430	730	1,002	3,016	4,824	9,297	11,522
30,000	357	456	776	1,065	3,205	5,126	9,880	12,244
35,000	376	481	816	1,121	3,374	5,397	10,401	12,889
40,000	393	502	854	1,172	3,528	5,642	10,874	13,476
50,000	423	541	919	1,263	3,800	6,078	11,714	14,516
60,000	450	575	977	1,342	4,038	6,459	12,448	15,426
80,000	495	633	1,075	1,477	4,445	7,109	13,700	16,979
100,000	533	682	1,158	1,591	4,788	7,658	14,758	18,290
150,000	610	781	1,326	1,821	5,481	8,766	16,894	20,936
200,000	671	859	1,460	2,005	6,032	9,648	18,594	23,043

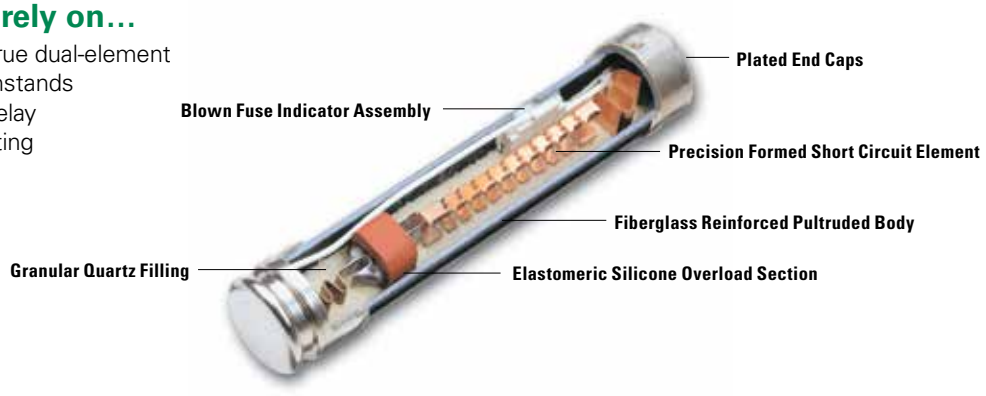
Current-Limiting Effects of LLNRK (250 V) Fuses

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	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

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

LLSRK_ID Fuses—Quality Construction for performance you can rely on…

Littelfuse **LLSRK_ID** Fuses feature true dual-element construction. This robust design withstands repeated surges within rated time delay without opening needlessly, eliminating downtime caused by power surges or equipment demands.



CLASS RK1 – KLNR / KLSR SERIES FUSES

250/600 Vac • Fast-Acting • 1-600 A

Description

KLSR and KLNR series are en economical design providing the safety of a RK1 fuse. The single element design provides fast-acting overload and short-circuit protection.

Use POWR-PRO® LLNRK and LLSRK series RK1, dual-element, time-delay fuses in all new applications requiring the current-limiting ability of UL Class RK1 fuses or in existing applications where fast-acting RK1 or RK5 fuses have been opening on harmless system surges such as motor starting currents.

Applications

- Resistance heaters
- Lighting circuits
- Non-inductive loads

Features/Benefits

- Extremely Current-Limiting
- Indicating and DIN mount fuse blocks available

Specifications

Voltage Ratings	AC: 600 Vac or less (KLSR) 250 Vac or less (KLNR) DC: 250 V (1 – 30 A KLSR); 300 V (35 – 600 A KLSR) 125 V (KLNR)
Ampere Range	1 – 600 A
Interrupting Ratings	AC: 200 kA rms symmetrical DC: 20 kA
Approvals	AC: Standard 248-12, Class RK1 UL Listed (File: E81895) CSA Certified (File: LR29862) DC: Littelfuse self-certified
Material	1-60 A: Composite body, Bronze cap (nickel plated) 70-100 A: Composite body, Copper caps 110-600 A: Melamine body, Copper caps
Country of Origin	Mexico

Ordering Information

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

VOLTAGE	SERIES	AMP	CATALOG NUMBER	ORDERING NUMBER
600	KLSR	90	KLSR090	KLSR090.V
250	KLNR	90	KLNR090	KLNR090.V

Web Resources

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

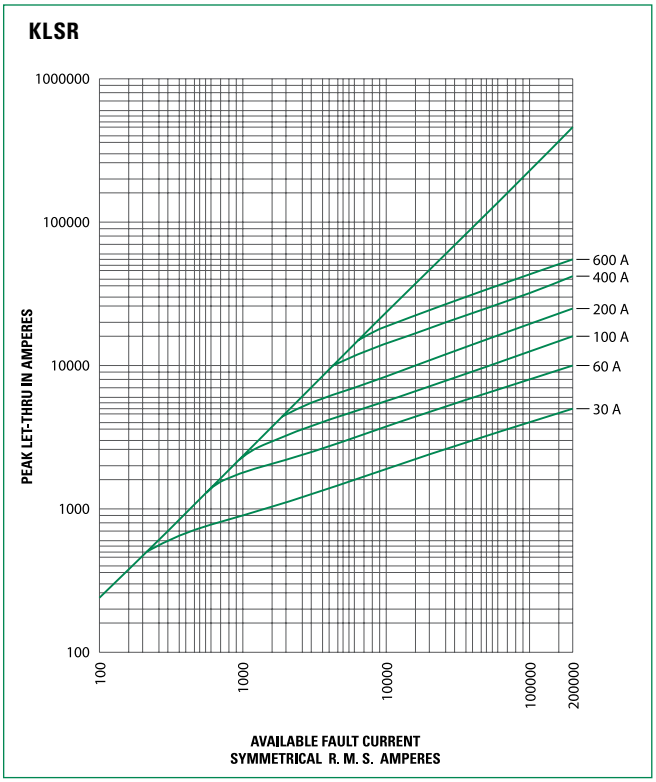
Recommended Fuse Blocks

LFR Series 94

Dimensions

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

Peak Let-Thru Curve (600 V)



CLASS RK5 – 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**

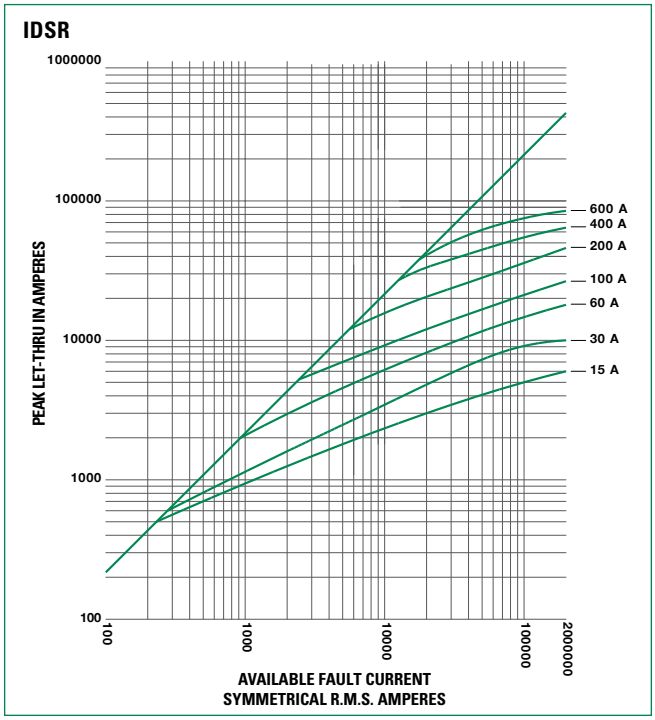
Recommended Fuse Blocks

LFR Series 94

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

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

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 19.

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

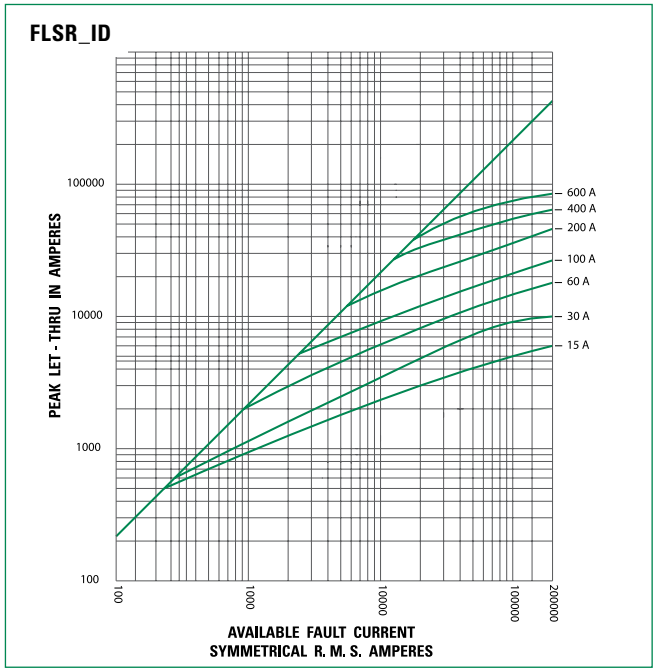
Web Resources

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

Recommended Fuse Holders

LFR60 Series • LFR25 Series 94

Peak Let-Thru Curve (600 V)



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

CLASS R SERIES DIMENSIONS

Dimensions

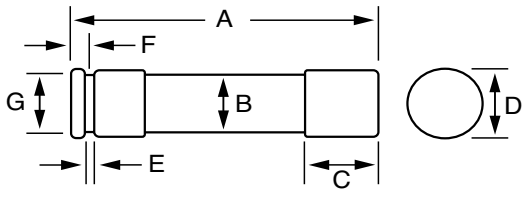
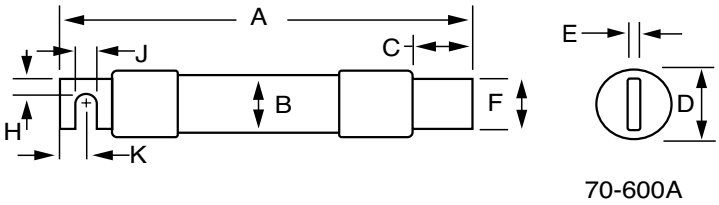


FIG. 1



70-600A

FIG. 2

AMPS	FIGURE NUMBER	SERIES	DIMENSIONS INCHES (mm)									
			A	B	C	D	E	F	G	H	J	K
1/10–30	1	LLNRK KLNR 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)	—	—	—
		LLSRK KLSR FLSR IDSR	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 KLNR 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)	—	—	—
		LLSRK KLSR FLSR IDSR	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 KLNR 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)
		LLSRK KLSR FLSR IDSR	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	LLNRK KLNR FLNR	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)	—	7/16 (11.1)	9/32 (7.1)	11/16 (17.5)
		LLSRK KLSR FLSR IDSR	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	LLNRK KLNR 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)	15/16 (23.8)
		LLSRK KLSR FLSR IDSR	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)	15/16 (23.8)
450 – 600	2	LLNRK KLNR 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)	17/32 (13.5)	1 1/8 (28.6)
		LLSRK KLSR FLSR IDSR	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)	17/32 (13.5)	1 1/8 (28.6)

CLASS K5 - NLN / NLS SERIES (ONE-TIME) FUSES

250/600 Vac • "One-Time" • 1-600 A

Description

NLN and NLS fuses provide low cost protection for general purpose feeder and branch circuits when available short circuit currents are less than 50 kA.

Note: Canadian Electrical Code NLKP Type P fuse available. Visit littelfuse.com/nlkp

Applications

General purpose residential and commercial circuits with little or no motor load.

Features/Benefits

- Economical
- 50 kA interrupting rating
- Indicating and DIN mount holders available

Web Resources

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

Specifications

Voltage Ratings AC: 600 Vac or less (NLS)
250 Vac or less (NLN)
DC: 400 V (NLS 35 – 60 A)
500 V (NLS 8 – 30 A) (NLS 225 – 600 A)
600 V (NLS 1 – 7 A) (NLS 70 – 200 A)
250 V (NLN)

Ampere Range 1 – 600 A

Interrupting Ratings AC: 50 kA rms symmetrical
DC: 20 kA (1 – 60 A)
50 kA (70 – 600 A)

Approvals Standard 248-9, Class K5
UL Listed (File: E81895)
CSA Certified (File: LR29862)

Material NLS: 1-15 A: Fiber body, Bronze cap
20-60 A: Composite body, Bronze cap
70-600 A: Fiber body, Copper cap (tin plated)
NLN: 1-30 A: Ceramic body
35-60 A: Fiber body, Bronze cap
70-600 A: Fiber body, Copper cap (tin plated)

Country of Origin Mexico

Ordering Information

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

*NLKP series available only in those amperages preceded by an asterisk.

VOLTAGE	SERIES	AMP	CATALOG NUMBER	ORDERING NUMBER
600	NLS	20	NLS020	0NLS020.T
250	NLN	15	NLN015	0NLN015.T

Recommended Fuse Blocks

LFH Series 94

Dimensions

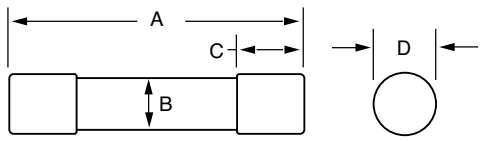


FIG. 1

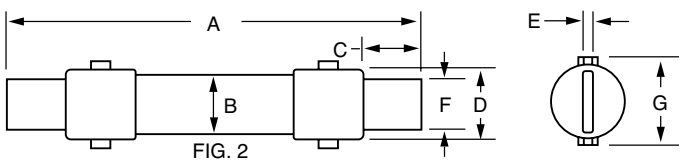


FIG. 2

AMPERES	REFER TO FIG. NO.	SERIES	DIMENSIONS INCHES (mm)						
			A	B	C	D	E	F	G
1 – 30	1	NLN	2 (50.8)	½ (12.7)	½ (12.7)	9/16 (14.3)	—	—	—
		NLS	5 (127.0)	¾ (19.1)	5/8 (15.9)	13/16 (20.6)	—	—	—
35 – 60	1	NLN	3 (76.2)	¾ (19.1)	5/8 (15.9)	13/16 (20.6)	—	—	—
		NLS	5½ (139.7)	1 (25.4)	5/8 (15.9)	1 1/16 (27.0)	—	—	—
70 – 100	2	NLN	5⅞ (149.2)	1 (25.4)	1 (25.4)	1 1/16 (27.0)	⅛ (3.2)	¾ (19.1)	1 5/16 (33.3)
		NLS	7⅞ (200.0)	1¼ (31.8)	1 (25.4)	1 5/16 (33.3)	⅛ (3.2)	¾ (19.1)	1 9/16 (39.7)
110 – 200	2	NLN	7⅛ (181.0)	1½ (38.1)	1⅜ (34.9)	1 9/16 (39.7)	3/16 (4.8)	1⅛ (28.6)	1⅞ (47.6)
		NLS	9⅝ (244.5)	1¾ (44.5)	1⅜ (34.9)	1 27/32 (46.8)	3/16 (4.8)	1⅛ (28.6)	2 3/32 (53.2)
225 – 400	2	NLN	8⅝ (219.1)	2 (50.8)	1⅞ (47.6)	2 3/32 (53.2)	¼ (6.4)	1⅝ (41.3)	2 13/32 (61.1)
		NLS	11⅝ (295.3)	2½ (63.5)	1⅞ (47.6)	2 19/32 (65.9)	¼ (6.4)	1⅝ (41.3)	2⅞ (73.0)
450 – 600	2	NLN	10⅜ (263.5)	2½ (63.5)	2¼ (57.2)	2 19/32 (65.9)	¼ (6.4)	2 (50.8)	2⅞ (73.0)
		NLS	13⅜ (339.7)	3 (76.2)	2¼ (57.2)	3 3/32 (78.6)	¼ (6.4)	2 (50.8)	3 7/16 (87.3)

CLASS J - JTD SERIES INDICATOR® POWR-PRO® FUSES

POWR-PRO® 600 Vac • Time Delay • 8/10-600 A

Specifications

Voltage Ratings	AC: 600 V DC: 300 V (8/10–100 A) 500 V (110–600 A)
Amperage Range	8/10–600 A
Interrupting Rating	AC: 200 kA rms symmetrical 300kA rms symmetrical (Littelfuse self-certified) DC: 20 kA
Material	Body: Melamine Caps: Nickel-plated Bronze (8/10–60 A) Brass (70–200 A) Brass Cap with Copper Blade (225–600 A)
Approvals	AC: Standard 248-8, Class J UL Listed (File: E81895) CSA Certified (File: LR29862) DC: Littelfuse self-certified
Country of Origin	Mexico

Description

The Littelfuse POWR-PRO® JTD_ID Indicator Class J fuse provides visual blown fuse indication and maximum protection in a compact package. The current-limiting time delay JTD_ID offers a patented design which reduces nuisance fuse openings.

Features/Benefits

- POWR-PRO® Performance
- Current-Limiting
- IEC Type 2 Protection
- Indication and non-indication version available
- Indicating and DIN mount holders available

Applications

- Fused combination motor controllers and motor control centers
- Transformer protection
- Protection for series rated molded case circuit-breaker panels
- General purpose circuits

Web Resources

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

Recommended Fuse Holders

LFJ60 Series 91
LFPSJ Series (8/10–60 A)..... 118

Dimensions

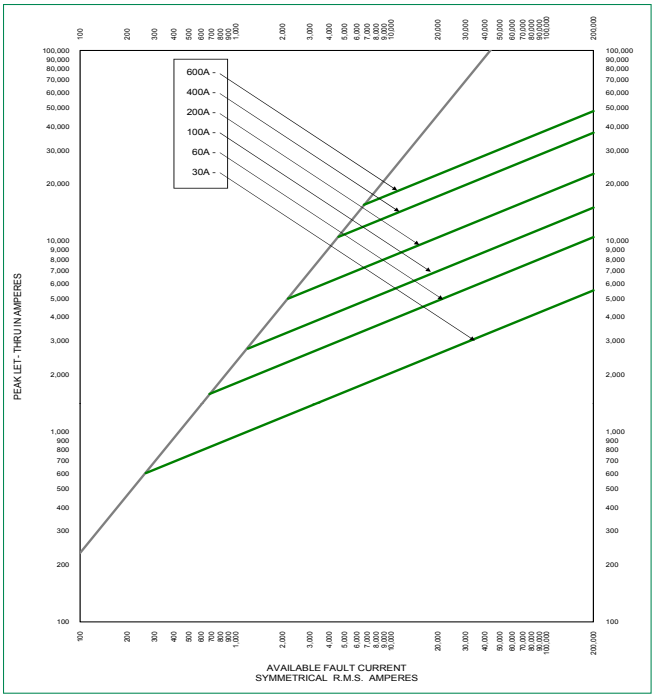
Please refer to the Class J dimensions 23

Ordering Information

AMPERAGE RATINGS							
8/10	2¼	4½	10	35	90	225	600
1	2½	5	12	40	100	250	–
1¼	2 8/10	5 6/10	15	45	110	300	–
1½	3	6	17½	50	125	350	–
1 6/10	3 2/10	7	20	60	150	400	–
1 8/10	3½	8	25	70	175	450	–
2	4	9	30	80	200	500	–

TYPE	SERIES	AMPERAGE	CATALOG NUMBER	ORDERING NUMBER
INDICATING	JTD_ID	60	JTD60ID	0JTD060.TXID
NON-INDICATING	JTD	60	JTD60	0JTD060.T

Peak Let-Thru Curve



Note: For more information, see Peak Let-Thru Table on page 23.

CLASS J – JLS SERIES FUSES

600 VAC • Fast-Acting • 1-600 A

Description

The UL Listed Class J JLS Series fuses provide space saving, fast-acting overload and short-circuit protection for vital industrial and power conversion applications.

Littelfuse's JLS Series fuses offer best in class current limitation that prevents equipment damage from overcurrent faults.

Features and Benefits

- Superior performance in a space saving package
- Reliable interruption of all overcurrents with protection up to 200kA
- Extremely current limiting
- Fast-acting protection for surge-sensitive devices and components
- Reduces heating and magnetic effects due to overcurrents, extending equipment life
- Economical and readily available

Applications

- Power conversion device protection
- Variable speed drives
- Rectifiers
- Resistive loads
- Solid-state devices

Web Resources

Download TC curves, CAD drawings and other technical information: **littelfuse.com/jls**

Recommended Fuse Holders

LFJ60 Series 91
LFPSJ Series (8/10–60 A)..... 118

Specifications

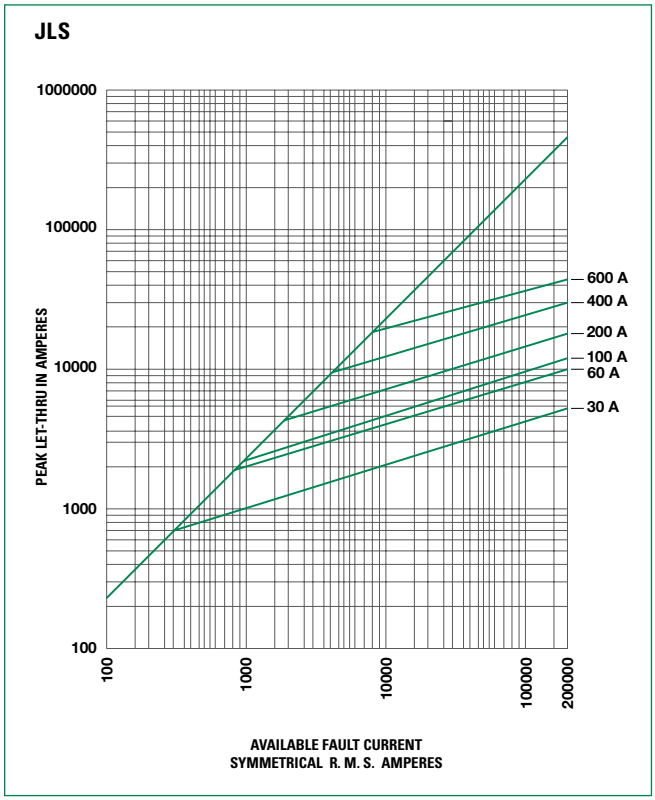
Voltage Ratings	600 VAC
Interrupting Ratings	200 kA rms symmetrical
Ampere Range	1–600 A
Approvals	Standard 248-8, Class J UL Listed (File: E81895) CSA Certified (File: LR29862) Federal Specification WF-1814 (QPL-W-F-1814)

Ordering Information

AMPERE RATINGS					
1	20	45	90	175	350
3	25	50	100	200	400
6	30	60	110	225	450
10	35	70	125	250	500
15	40	80	150	300	600

TYPE	SERIES	AMPERAGE	CATALOG NUMBER	ORDERING NUMBER
NON-INDICATING	JLS	110	JLS110	0JLS110.X

Peak Let-Thru Curve



Dimensions

Please refer to the Class J dimensions 23

CLASS J DIMENSIONS AND CURRENT-LIMITING EFFECTS

Dimensions Inches (mm)

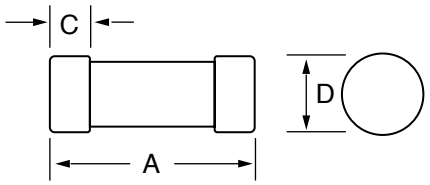


Fig. 1

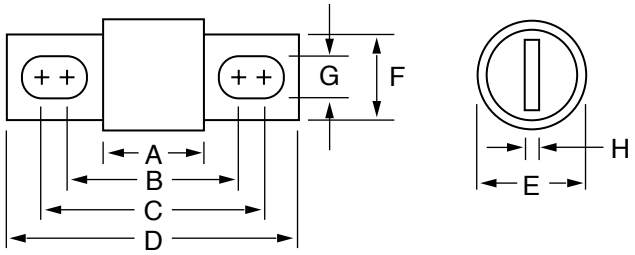


Fig. 2

Dimensions of JTD_ID, JTD and JLS

AMPERES	FIGURE NUMBER	DIMENSIONS INCHES (mm)							
		A	B	C	D	E	F	G	H
1 – 30	1	2¼ (57.2)	—	½ (12.7)	13/16 (20.6)	—	—	—	—
35 – 60	1	2⅜ (60.3)	—	⅝ (15.9)	1 1/16 (27.0)	—	—	—	—
70 – 100	2	2⅝ (66.7)	3 17/32 (89.7)	3 23/32 (94.5)	4⅝ (117.5)	1⅛ (28.6)*	¾ (19.1)	9/32 (7.1)	⅛ (3.2)
110 – 200	2	3 (76.2)	4 9/32 (108.7)	4 15/32 (113.5)	5¾ (146.1)	1½ (38.1)	1⅛ (28.6)	9/32 (7.1)	3/16 (4.8)
225 – 400	2	3⅜ (85.7)	5⅛ (130.2)	5⅜ (136.5)	7⅛ (181.0)	2 (50.8)	1⅝ (41.3)	13/32 (10.3)	¼ (6.4)
450 – 600	2	3¾ (95.3)	5 27/32 (148.4)	6 5/32 (156.4)	8 (203.2)	2½ (63.5)	2 (50.8)	17/32 (13.5)	⅜ (9.5)

*70-100 A JLS dimension = 1 (25.4)

Current-Limiting Effects of JTD_ID (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	565	750	1,500	1,800	2,800	4,800	5,000
10,000	675	925	1,900	2,450	3,600	5,700	7,750
15,000	775	1,050	2,100	2,800	4,100	6,500	9,000
20,000	825	1,125	2,300	3,000	4,400	7,250	9,700
25,000	900	1,200	2,500	3,300	5,000	8,000	10,500
30,000	950	1,300	2,600	3,500	5,100	8,400	11,000
35,000	1,000	1,350	2,700	3,700	5,400	9,000	12,000
40,000	1,050	1,400	2,800	3,900	5,600	9,200	12,500
50,000	1,100	1,500	3,000	4,200	6,000	10,000	13,000
60,000	1,200	1,600	3,200	4,500	6,400	10,500	14,000
80,000	1,300	1,700	3,400	4,900	7,200	11,200	15,500
100,000	1,375	1,800	3,600	5,200	7,800	12,200	16,500
150,000	1,500	2,000	3,950	6,000	9,000	14,500	19,000
200,000	1,600	2,175	4,000	6,500	10,000	16,000	20,500

†Prospective RMS Symmetrical Amperes Short-Circuit Current
Note: Data derived from Peak Let-Thru Curves