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UL Class	Fuse Overload Characteristics	Interrupting Rating, Amperes	AC Voltage Rating	Available Ampere Ratings	Littelfuse Series Number	Page Number
L	Time-Delay	200,000 300,000**	600	200 – 6000	KLPC** KLLU LDC*	8-10
				601 – 4000		26-28
				150 – 2000		23-24
RK1	Time-Delay	200,000 300,000**	250	1/10 – 600	LLNRK** LLSRK** LLSRK_ID**	14-16
			600			14-16
	Fast-Acting	200,000	250 600	1 – 600	KLNR KLSR	11-13 34-35
RK5	Time-Delay	200,000 300,000**	250	1/10 – 600	FLNR/FLNR_ID** FLSR/FLSR_ID** IDSR**	29-32
			600			29-32
			600			22
T	Fast-Acting	200,000	300	1 – 1200	JLLN JLLS	41-43
			600			
J	Time-Delay	200,000/300,000**	600	8/10 – 600	JTD/JTD_ID**	17-19
	Fast-Acting	200,000	600	1 – 600	JLS	39-40
CC	Time-Delay	200,000 300,000**	600	1/10 – 30 2/10 – 30	KLDR CCMR**	45-47 20-21
	Fast-Acting	200,000	600	1/10 – 30	KLKR	45-47
CD	Time-Delay	200,000/300,000**	600	35 – 60	CCMR**	20-21
G	Time-Lag	100,000	600	1/2 – 20	SLC SLC	44
			480	25 – 60		
K5	“One-Time” Fuses Fast-Acting	50,000	250	1 – 600	NLN NLS	36-37
			600	1 – 600		
H	Renewable Fuses	10,000	250	1 – 600	RLN RLS	38
	Fast-Acting		600	1 – 600		
	Time-Delay					
Plug	Time-Delay	10,000	125	1/4 – 30	S00, T00	48
	Medium Time-Delay	10,000	125	15 – 30	SLO, TLO	48
Supplementary	Midget Fuses	Varies	32 to 1000	1/10 – 30	See Product Listings	50-54
	Electronic Fuses			1/500 – 30		55-59
	Automotive Fuses			1-250		60-62
Telecommunications	Fast-Acting	100,000	170VDC	70 – 1200	L17T	77
				1 – 600	TLN	78
				1 – 70	TLS	79

* LDC and IDSR are rated 600 volts AC/DC.

** Series are UL Listed with I.R. of 200,000 amps and Littelfuse self-certified with 300,000A I.R.

POWR-PRO® Fuses



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<i>LLSRK_ID Series Indicator POWR-PRO Class RK1 Fuses</i>	11-13
<i>LLNRK/LLSRK Series POWR-PRO Class RK1 Fuses</i>	14-16
<i>JTD_ID Series Indicator POWR-PRO Class J Fuses</i>	17-19
<i>CCMR Series POWR-PRO Class CC and CD Fuses</i>	20-21
<i>IDSR Series Indicator POWR-PRO Class RK5 Fuses</i>	22
<i>LDC Series POWR-PRO Class L Fuses</i>	23-24

Littelfuse Indicator® Fuses

Complete Circuit Protection Plus Time Saving Indication.

Indicator fuses combat one of the most common and frustrating obstacles to productivity: downtime. Every time a fuse opens and production stops, money is wasted. Locating a blown fuse used to take 20 minutes or more. Blown Littelfuse Indicator fuses can be spotted quickly and safely, while the power is turned off.

Now it couldn't be easier to locate the blown fuse. Simply look at the Indicator window. When the fuse blows, the window turns from clear to dark instantly, indicating which fuse needs to be replaced without headaches or hassles.

These technologically advanced fuses feature solid-state designs that improve overall performance and increase fuse life. When properly applied, Indicator fuses provide superior protection and improved time-delay over conventional fuse designs. The patented solid-state overload section provides consistent and reliable operation by eliminating moving parts which are subject to fatigue. This provides longer fuse life by eliminating needless fuse openings due to motor inrush currents. The superior performance allows you to consolidate your inventories by replacing older, conventional fuses which have limited performance characteristics.

LLSRK_ID *see pages 11-13*

- Class RK1
- 600 VAC
- Dual-Element, Time-Delay
- 1/10-600 Amperes

FLNR_ID/FLSR_ID *see pages 29-32*

- Class RK5
- 250/600 VAC
- Dual-Element, Time-Delay
- 1/10-600 Amperes

IDSR *see page 22*

- Class RK5
- 600 V AC/DC
- Dual-Element, Time-Delay
- 1/10-600 Amperes

JTD_ID *see pages 17-19*

- Class J
- 600 VAC
- Dual-Element, Time-Delay
- 8/10-600 Amperes

313_ID *see page 56*

- Electronic 3AG
- 125/32 VAC
- Slo-Blo®
- 1/2-10 Amperes

Use Indicator fuses and you can:

- Reduce Downtime
- Reduce Nuisance Opening
- Reduce Fuse Inventory
- Reduce Equipment Damage
- Reduce Accidents
- Reduce Housekeeping Headaches

The Indicator® Solution Software



This easy to use software analyzes your plant operations and calculates six areas of cost savings when you use Indicator fuses.

To calculate your savings, call 1-800-TEC-FUSE for a free copy of the Indicator Solution software.



Littelfuse Global Pro™ System

Introducing the Global Pro System

Offering World Class Performance and Global Acceptance

The International Challenge

Engineers and equipment designers are faced with a dilemma when choosing the right circuit protection for their globally distributed equipment. They need to worry about which markets the product will be used in, what appropriate electrical standards apply in each of those markets, and what fuses should be used so that users can find replacements easily. These can be daunting questions particularly because some of this information often is not available to the engineer when a particular piece of equipment is being designed.

The Global Pro system resolves these design issues by incorporating North American standards to fit internationally accepted IEC fuse dimensions. This allows use of touchsafe fuseholders that can be used in virtually any market and permits equipment to be easily adapted by simply replacing the fuse with one that meets local standards. It's that simple.

The benefits of the Global Pro system include:

- Global acceptance
- UL and IEC approval
- Universal voltages
- Touch-safe components
- Integrated lockout/tagout device for compliance
- Pin-indication
- Design versatility for OEMs

Global Acceptance – Total Protection

The Littelfuse Global Pro circuit protection system combines fuses, fuse holders and fusible disconnect switches in a simple, integrated package designed to comply with UL and IEC requirements. The result is the single best solution for your worldwide circuit protection needs. No matter where your product is used, Global Pro will be accepted. More significantly, it's easy too! It meets universal voltage standards, offers universal fuse sizes and uses universally understood product labels and part numbers.

Flexible Components

The components of the Global Pro system are vital to its revolutionary performance, and the key component within the system is the fuse. The Littelfuse Global Fuse is designed to offer UL Class J performance, but with the compact size and the international compatibility associated with fuses manufactured to IEC dimensions.

More Protection In Less Space

Littelfuse Global Pro fuses are significantly smaller in size than 30 amp, 60 amp, and 100 amp Class J fuses. But their small size does not limit their performance. All Global Pro fuses offer the following:

- Extremely compact size
- Pop-up indication
- Performance to UL Class J fuse requirements
- Compatibility with IEC style fuseholders

Note: For more information refer to pages 162–163 of this catalog.



MROTM PLUS

Material Reduction Opportunity Program

Circuit Protection Simplified!

The Littelfuse exclusive MROplus (Material Reduction Opportunity Plus) program is designed to help lower costs, reduce inventory and improve circuit protection performance. A team of Littelfuse technical experts will analyze inventory and generate a variety of detailed reports including: a total cost savings report, a cross reference report and a duplicate or obsolete inventory report. On average, customers who use the Littelfuse MROplus program are able to reduce their inventory by 28%. All you have to do is supply a list of current inventory and the Littelfuse MROplus program will do the rest. And, best of all, it is absolutely FREE!

POWR-PRO® Fuses



- 1** Reduce Inventory by 28%, on average
- 2** Upgrade Your Circuit Protection
- 3** Improve Plant Safety
- 4** Lower Operational Costs

For more information call 1-800-TEC-FUSE

Littelfuse POWR-PRO® System



The Littelfuse POWR-PRO System of fuses gives you all the fuses you need for complete circuit protection coverage while reducing inventory and controlling costs.

The POWR-PRO System will:

- Provide superior current-limiting protection with innovative, tested designs to prevent or reduce electrical system damage.
- Reduce inventory by standardizing system protection.
- Provide visual blown fuse indication with LLSRK_ID, and JTD_ID Indicator® fuses.
- Reduce fuse replacement downtime with simple color coded fuse labels.

See for yourself why the POWR-PRO System gives you the widest range of circuit protection available today when compared to other systems.

Minimize Arc-Flash Hazards

Some of the factors that determine the severity of an Arc-Flash are the magnitude of the fault current and the time the current is allowed to flow. Current-limiting fuses applied within their current-limiting range minimize the current flow and clear the fault in 0.00833 seconds or less. The more current-limiting the device and the faster it clears the fault minimizes Arc-Flash hazards and potentially reduces the amount of personal protective equipment (PPE) required. Using Littelfuse POWR-PRO Fuses will not only minimize Arc-Flash hazards with superior current limitation, but also provide maximum protection to equipment.

One of the quickest and easiest ways to reduce Arc-Flash hazards is to replace UL Class H, K5, and Class RK5 fuses with POWR-PRO current-limiting Class RK1 or Class J fuses. For a given current and voltage rating, Class H, K5, RK5, and RK1 fuses are the same physical size. Therefore, it is easy to upgrade to better fuse protection and increased safety. To insure that only the most current-limiting fuse is used, it is recommended to change fuse clips to a rejection style for Class R or Class J fuses. Class J fuses provides the best option by assuring non-interchangeability with non-current-limiting fuses. Whichever your choice, the equipment should be labeled to inform maintenance personnel of the proper fuse replacement. The Littelfuse MROplus™ Program can assist with analyzing and upgrading from non-current-limiting fuses.

UL Fuse Class	POWR-PRO®	Low Peak	System 2000
Class L	KLPC	KRPC	A4BQ
Class RK1	LLNRK/LLSRK_ID	LPNRK/LPSRK	A2DR/A6DR
Class J	JTD/JTD_ID	LPJ	AJT
Class CC	CCMR (2/10–60)	LPCC (1/2–30)	ATDR (0–30)

COLOR COORDINATED FOR EASE OF IDENTITY AND REPLACEMENT



Green label fuses provide all the inventory you need for:

- 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).
- Compact protection for motor circuits (JTD, JTD_ID, and CCMR).
- 300,000 AIR to meet future trends toward higher available short circuit currents.

KLPC Series POWR-PRO® Class L Fuses

600 VAC • Time-Delay • 200 – 6000 Amperes



KLPC series POWR-PRO fuses provide ideal overcurrent protection for circuits from 200 through 6000 amperes. KLPC series POWR-PRO fuses specification-grade construction and performance meet or exceed the most stringent project specifications: 99.9% pure silver links, silver-plated copper end bells, glass-reinforced melamine bodies, O-ring seals between body and end bells, and granular quartz fillers.

KLPC series POWR-PRO fuses are the only UL listed Class L fuses that provide a minimum of ten seconds time delay at 500% rated

current and are also as current-limiting as the fastest Class L fuse on the market. On average, the peak let-through currents of KLPC series fuses are 10% less than any other time-delay Class L fuse.

Applications

- Service switches
- Switchboard mains and feeders
- Bolted pressure contact switches
- Motor control center mains
- Large motor branch circuits
- UL Listed series-rated protection for molded case circuit breaker panelboards and loadcenters. (See panelboard manufacturers' literature for recommended fuse rating.)
- Primary and secondary protection for transformers
- Protection of power circuit breakers

Features and Benefits

- Eliminate unnecessary downtime — KLPC POWR-PRO series time-delay withstands system surges and keeps your circuits in service.
- Best protection for system components — Maximum current limitation means less equipment and system damage when short circuits occur. Reduced damage means that electrical service can be restored quickly, reducing costly downtime, and often permitting equipment repair rather than replacement.
- Coordinates with other system components — KLPC series fuses provide maximum coordination with fuses and circuit breakers both on the line and load side of the fuses. See the Fuseology section of this catalog for additional information.
- Eliminate need to oversize fuses — This may permit the use of smaller, less expensive switches. Since lower rated fuses are more current-limiting, equipment receives even better protection.
- 300kA Interrupting Rating — Littelfuse self-certified to 300,000 amperes as standard. Meets future trend towards higher available short circuit currents.

Specifications

Voltage Ratings:	AC: 600 Volts DC: 480 Volts
Interrupting Ratings:	AC: 200,000 amperes rms symmetrical 300,000 amperes rms symmetrical (Littelfuse self-certified) DC: 20,000 amperes
Ampere Range:	200 – 6000 amperes
Approvals:	AC: Standard 248-10, Class L UL Listed 601 – 6000 amps (File No: E81895) UL Recognized 200 – 600 amps (File No: E71611) CSA Certified 200 – 6000 amps (File No: LR29862) QPL Federal Specifications WF-1814 700 – 6000 amps DC: Littelfuse self-certified

Ampere Ratings

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

Example part number (series & amperage): KLPC 1000

KLPC Series POWR-PRO® Class L Fuses

600 VAC • Time-Delay • 200 – 6000 Amperes

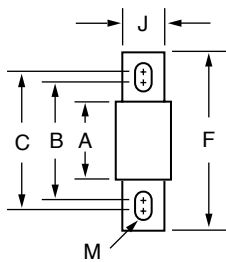


FIG. 1

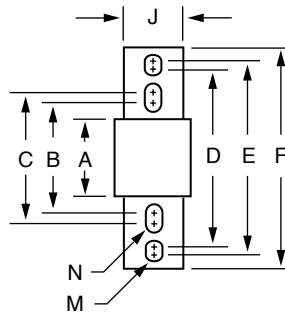


FIG. 2

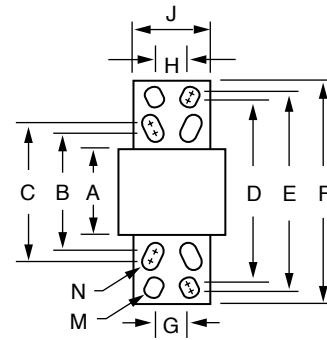


FIG. 3

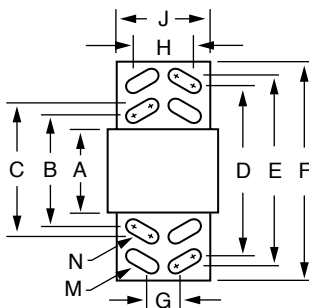


FIG. 4

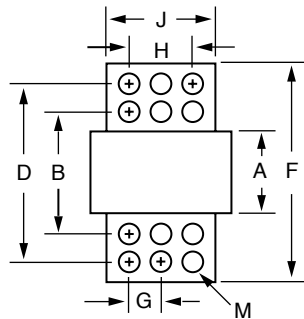
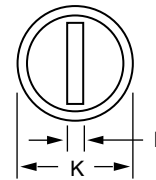


FIG. 5



Amperes	Fig. No.	Dimensions in Inches (mm in parentheses)													
		A	B	C	D	E	F	G	H	J	K	L	M	N	
200 – 800	1	3 ³ / ₄ (95.3)	5 ³ / ₄ (146.1)	6 ³ / ₄ (171.5)	—	—	8 ⁵ / ₈ (219.1)	—	—	2 (50.8)	2 ¹ / ₂ (63.5)	3 ⁸ / ₁₆ (9.5)	5 ⁵ / ₈ x 1 ¹ / ₈ (15.9) x (28.6)	—	
801 – 1200	2	3 ³ / ₄ (95.3)	5 ³ / ₄ (146.1)	6 ³ / ₄ (171.5)	9 ¹ / ₄ (235.0)	9 ¹ / ₂ (241.3)	10 ³ / ₄ (273.1)	—	—	2 (50.8)	2 ¹ / ₂ (63.5)	3 ⁸ / ₁₆ (9.5)	5 ⁵ / ₈ x 3 ³ / ₄ (15.9) x (19.1)	5 ⁵ / ₈ x 1 ¹ / ₈ (15.9) x (28.6)	
1201 – 1600	2	3 ³ / ₄ (95.3)	5 ³ / ₄ (146.1)	6 ³ / ₄ (171.5)	9 ¹ / ₄ (235.0)	9 ¹ / ₂ (241.3)	10 ³ / ₄ (273.1)	—	—	2 ³ / ₈ (60.3)	3 (76.2)	7 ¹ / ₁₆ (11.1)	5 ⁵ / ₈ x 3 ³ / ₄ (15.9) x (19.1)	5 ⁵ / ₈ x 1 ¹ / ₈ (15.9) x (28.6)	
1601 – 2000	2	3 ³ / ₄ (95.3)	5 ³ / ₄ (146.1)	6 ³ / ₄ (171.5)	9 ¹ / ₄ (235.0)	9 ¹ / ₂ (241.3)	10 ³ / ₄ (273.1)	—	—	2 ³ / ₄ (69.9)	3 ¹ / ₂ (88.9)	1 ¹ / ₂ (12.7)	5 ⁵ / ₈ x 3 ³ / ₄ (15.9) x (19.1)	5 ⁵ / ₈ x 1 ¹ / ₈ (15.9) x (28.6)	
2001 – 2500	3	4 (101.6)	5 ³ / ₄ (146.1)	6 ³ / ₄ (171.5)	9 ¹ / ₄ (235.0)	9 ¹ / ₂ (241.3)	10 ³ / ₄ (273.1)	1 ¹ / ₈ (41.3)	1 ¹ / ₄ (44.5)	3 ¹ / ₂ (88.9)	5 (127.0)	3 ⁴ / ₁₆ (19.1)	5 ⁵ / ₈ x 3 ³ / ₄ (15.9) x (19.1)	5 ⁵ / ₈ x 1 ¹ / ₈ (15.9) x (28.6)	
2501 – 3000	3	4 (101.6)	5 ³ / ₄ (146.1)	6 ³ / ₄ (171.5)	9 ¹ / ₄ (235.0)	9 ¹ / ₂ (241.3)	10 ³ / ₄ (273.1)	1 ¹ / ₈ (41.3)	1 ¹ / ₄ (44.5)	4 (101.6)	5 (127.0)	3 ⁴ / ₁₆ (19.1)	5 ⁵ / ₈ x 3 ³ / ₄ (15.9) x (19.1)	5 ⁵ / ₈ x 1 ¹ / ₈ (15.9) x (28.6)	
3001 – 4000	4	4 (101.6)	5 ³ / ₄ (146.1)	6 ³ / ₄ (171.5)	9 ¹ / ₄ (235.0)	9 ¹ / ₂ (241.3)	10 ³ / ₄ (273.1)	1 ³ / ₄ (44.5)	3 ³ / ₄ (82.6)	4 ³ / ₄ (120.7)	5 ³ / ₄ (146.1)	3 ⁴ / ₁₆ (19.1)	5 ⁵ / ₈ x 1 ³ / ₈ (15.9) x (34.9)	5 ⁵ / ₈ x 1 ³ / ₈ (15.9) x (34.9)	
4001 – 5000	5	4 (101.6)	5 ³ / ₄ (146.1)	—	9 ¹ / ₄ (235.0)	—	10 ³ / ₄ (273.1)	1 ¹ / ₈ (41.3)	3 ³ / ₄ (82.6)	5 ¹ / ₄ (133.4)	7 ⁷ / ₈ (181.0)	1 (25.4)	5 ⁵ / ₈ DIA. (15.9)	—	
5001 – 6000	5	4 (101.6)	5 ³ / ₄ (146.1)	—	9 ¹ / ₄ (235.0)	—	10 ³ / ₄ (273.1)	1 ¹ / ₈ (41.3)	3 ³ / ₄ (82.6)	5 ³ / ₄ (146.1)	7 ⁷ / ₈ (181.0)	1 (25.4)	5 ⁵ / ₈ DIA. (15.9)	—	

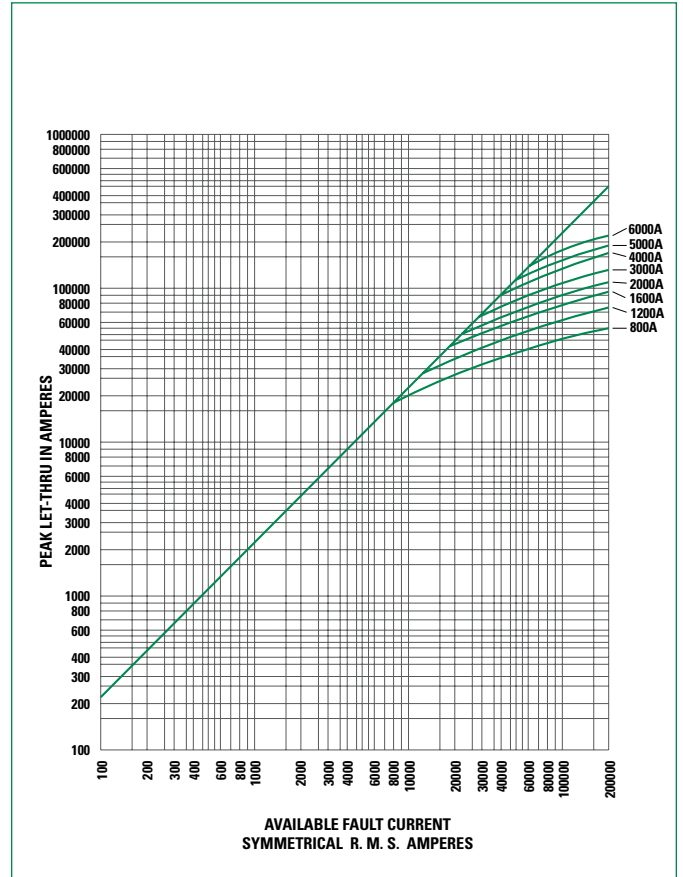
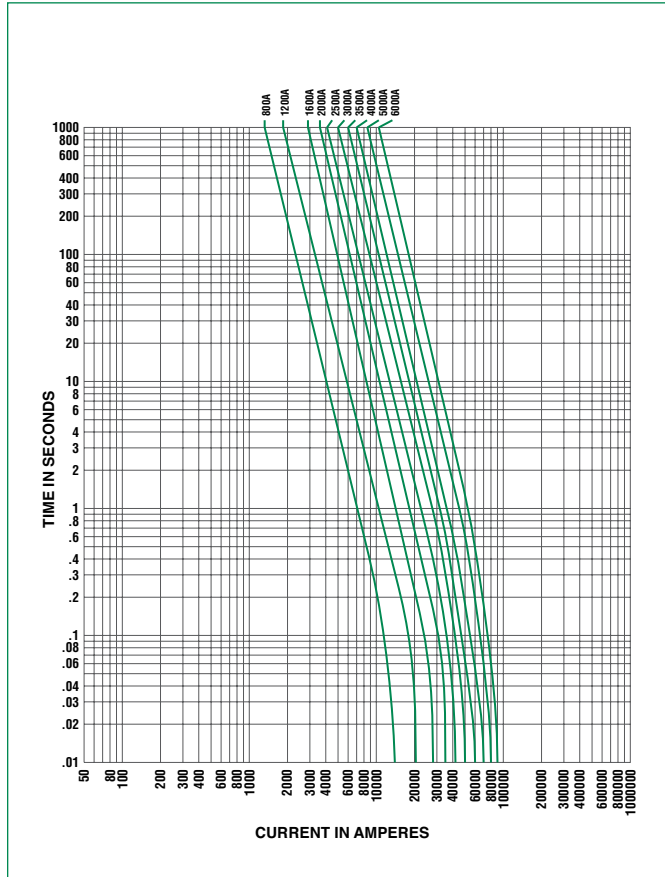
KLPC Series POWR-PRO® Class L Fuses

600 VAC • Time-Delay • 200 – 6000 Amperes

Current-Limiting Effects of KLPC (600V) fuses

Short Circuit Current*	Apparent RMS Symmetrical Current for Various Fuse Ratings							
	800A	1200A	1600A	2000A	3000A	4000A	5000A	6000A
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

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



LLSRK_ID Series Indicator® POWR-PRO® Class RK1 Fuses

600 VAC • Dual-Element, Time-Delay • 1/10 – 600 Amperes



The all new LLSRK_ID series fuse is the most advanced Class RK1 fuse available today providing unparalleled performance and protection to modern circuits. The patented Indicator technology provides instant identification of a blown fuse greatly enhancing system up-time, while the precision formed short-circuit elements virtually eliminate damage to components from unexpected electrical faults. In addition, the all new solid-state overload section has no moving parts, stopping unnecessary fatigue failures commonly found in other spring loaded fuses.

Applications

- All general purpose circuits
- Motors
- Transformers
- Solenoids
- Fluorescent lighting
- All system components with high in-rush currents

Features/Benefits

- Reduce downtime — The indicating window of the LLSRK_ID immediately identifies the open fuse. If the indicating strip is black, the fuse has opened. It's that simple. Maintenance personnel can immediately determine that there is an open fuse.
- Reduce fuse inventory — The superior performance of the LLSRK_ID allows it to be used in a variety of applications, thus decreasing fuse inventory.
- Reduce nuisance opening — Indicator fuses offer superior time-delay and cycling characteristics, which can lengthen fuse life.
- Reduce equipment damage — Indicator fuses provide superior overload and short-circuit protection that can reduce equipment damage. The LLSRK_ID is extremely current-limiting and provides IEC Type 2 “No Damage” protection to IEC and NEMA type motor starters.
- Reduce accidents — The LLSRK_ID Indicator fuse improves safety by minimizing exposure to live circuits. Unlike other forms of blown fuse indication, once the indicating strip darkens, it stays dark. Other forms of indication require the power to remain on, which causes a potential safety hazard to personnel.

Ordering Information

For online ordering use part number LSRK.

Specifications

Voltage Rating: 600 VAC/300 VDC
Interrupting Ratings: AC: 200,000 amperes rms symmetrical
 300,000 amperes rms symmetrical (Littelfuse self-certified)
 DC: 20,000 amperes
Ampere Range: 1/10 – 600 amperes
Approvals: AC: Standard 248-12, Class RK1
 UL Listed (File No: E81895)
 CSA Certified (File No: LR29862)
 DC: Littelfuse self-certified

Ampere Ratings

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

Example part number (series & amperage): LLSRK30ID.
 NOTE: All fuses rated 1 amp and above are Indicator fuses.

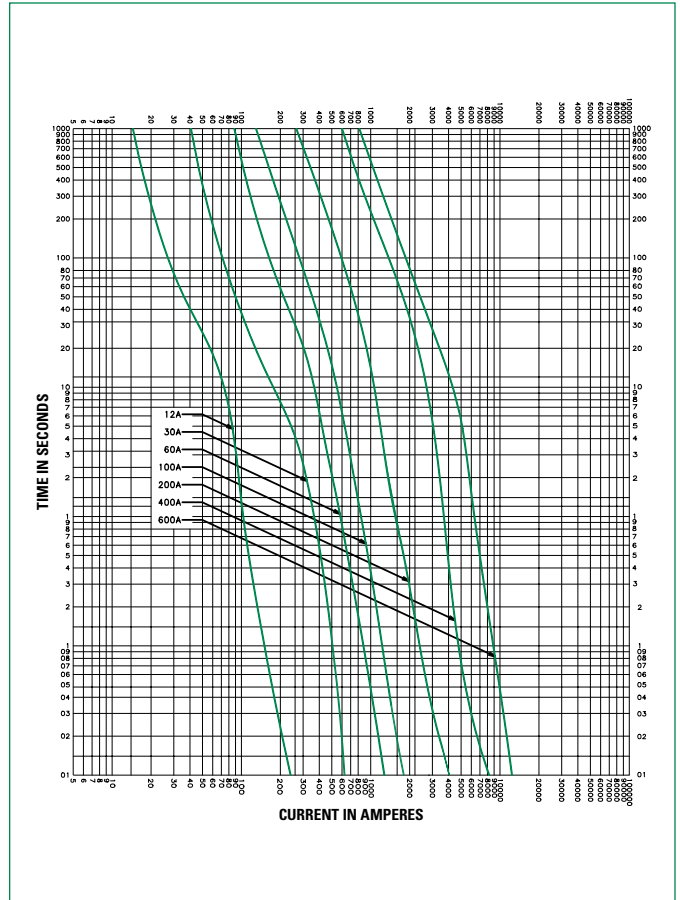
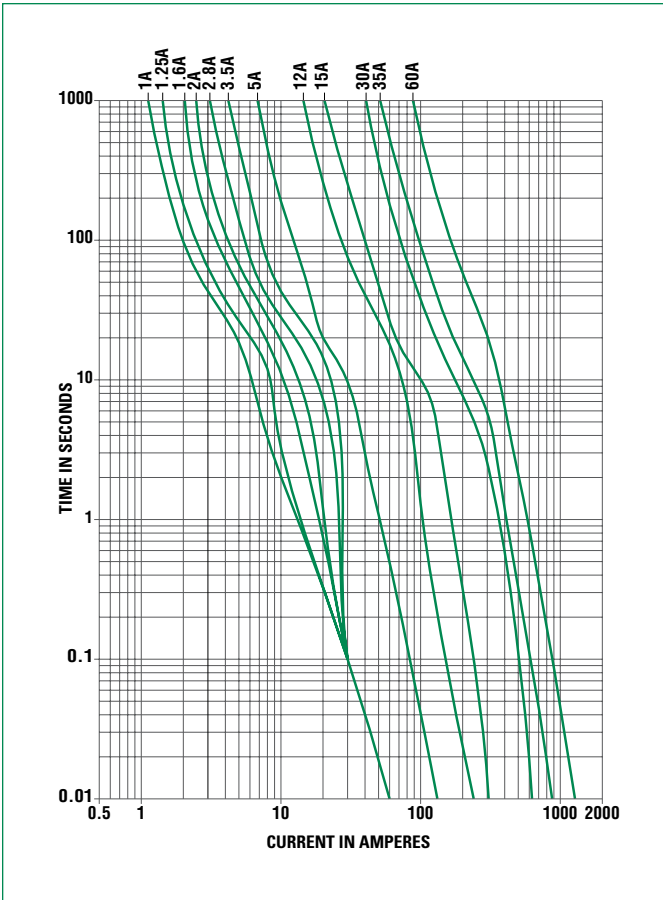
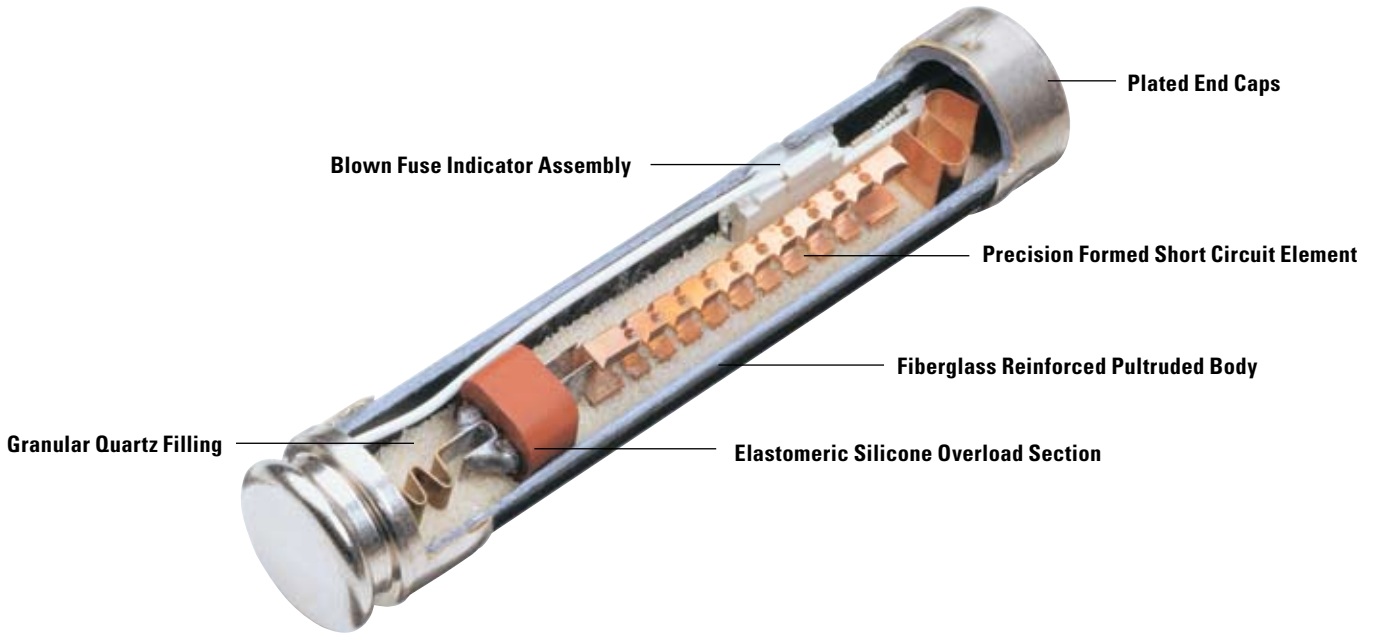
Recommended Fuse Blocks

LR600 Series
 Refer to the Blocks & Holders section of this catalog for additional information.

LLSRK_ID Series Indicator[®] POWR-PRO[®] Class RK1 Fuses

600 VAC • Dual-Element, Time-Delay • 1/10 – 600 Amperes

POWR-PRO[®] Fuses



Contact Littelfuse for additional fuse curves.

LLSRK_ID Series Indicator® POWR-PRO® Class RK1 Fuses

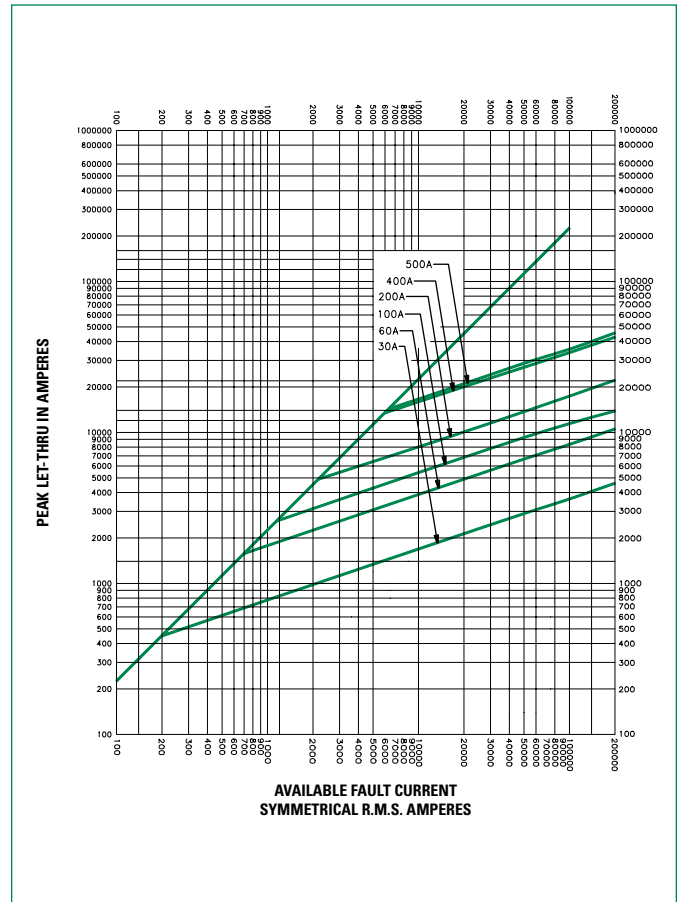
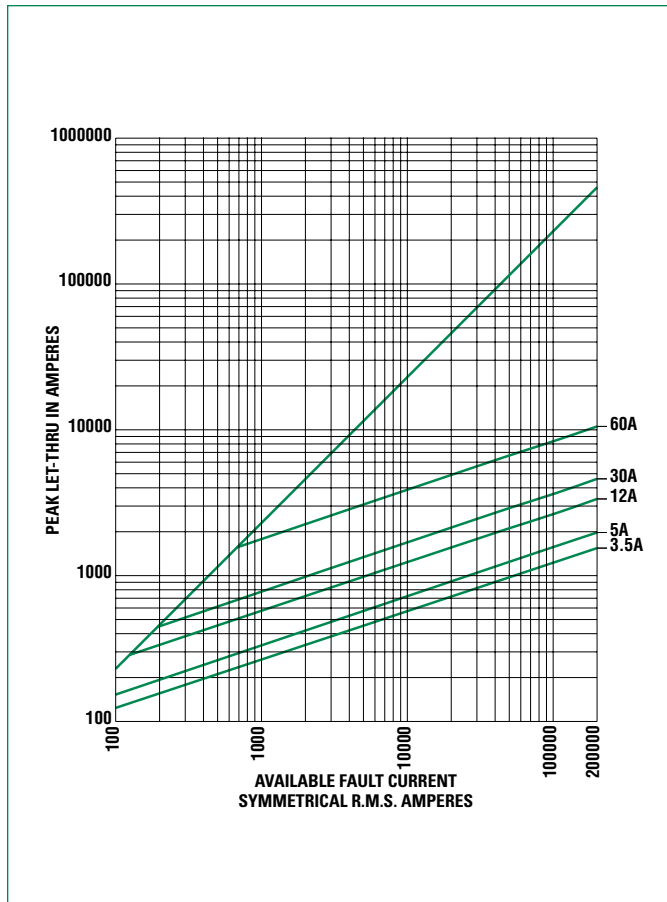
600 VAC • Dual-Element, Time-Delay • 1/10 – 600 Amperes

Current-Limiting Effects of LLSRK_ID (600V) Fuses

Short Circuit Current*	Apparent RMS Symmetrical Current for Various Fuse Ratings					
	30A	60A	100A	200A	400A	600A
5,000	1,060	1,600	2,100	2,600	4,100	--
10,000	1,350	2,000	2,800	3,400	5,250	8,000
15,000	1,600	2,300	3,200	3,900	6,000	9,000
20,000	1,700	2,600	3,600	4,500	6,700	10,000
25,000	1,900	2,800	3,800	4,800	7,500	11,000
30,000	2,000	3,000	4,100	5,200	8,000	12,000
35,000	2,100	3,100	4,400	5,700	8,500	12,500
40,000	2,200	3,300	4,600	6,000	9,000	13,000
50,000	2,400	3,500	4,900	6,500	9,500	14,000
60,000	2,500	3,800	5,200	7,000	10,000	15,000
80,000	2,700	4,000	5,700	7,750	11,000	17,000
100,000	2,900	4,200	6,200	8,500	12,000	18,000
150,000	3,200	4,600	7,300	10,000	14,000	21,000
200,000	3,300	4,700	8,000	11,000	16,000	23,000

* Prospective RMS Symmetrical Amperes Short-Circuit Current

Note: Data derived from Peak Let-Thru Curves



LLNRK/LLSRK Series POWR-PRO® Class RK1 Fuses

250/600 VAC • Dual-Element, Time-Delay • 1/10 – 600 Amperes



Littelfuse LLNRK and LLSRK series POWR-PRO fuses provide superior overload and short-circuit protection for service entrance, main, feeder and general-purpose branch circuits up to 600 amperes.

LLNRK/LLSRK series fuses can be installed in existing Class H fuse blocks to upgrade systems containing lower interrupting rating Class H one-time or renewable fuses.

Applications

- All general purpose circuits
- Motors
- Transformers
- Solenoids
- Fluorescent lighting
- All system components with high in-rush currents

Features/Benefits

- Extremely current-limiting — Reduces damage to circuits and equipment under short-circuit conditions. Stops damaging short-circuits faster than any mechanical protective device.
- 300kA Interrupting Rating — Littelfuse self-certified to 300,000 amperes as standard. Meets future trend towards higher available short-circuit currents.
- Reduced costs — Current-limiting design often permits use of readily available, less costly equipment. Low resistance design reduces power consumption and utility bills.
- Excellent time-delay — True dual-element construction, with separate non-fatiguing thermally-reversible spring-loaded thermal overload element, withstands repeated surges within rated time delay without opening needlessly. Eliminates needless downtime caused by power surges or equipment demands.

Specifications

Voltage Ratings:	AC: 250 Volts (LLNRK)
	600 Volts (LLSRK)
Interrupting Ratings:	DC: 125 Volts (LLNRK)
	300 Volts (LLSRK)
Ampere Range:	AC: 200,000 amperes rms symmetrical
	300,000 amperes rms symmetrical (Littelfuse self-certified)
Approvals:	DC: 20,000 amperes
	1/10 – 600 amperes
Approvals:	AC: Standard 248-12, Class RK1
	UL Listed (File No: E81895)
	CSA Certified (File No: LR29862)
	QPL: Federal Specification No. WF-1814
	DC: Littelfuse self-certified

Ampere Ratings

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

* LLSRK Only.

Example part number (series & amperage): LLNRK 450.

For online ordering, use numbers LNRK and LSRK for LLNRK/LLSRK.

Recommended Fuse Blocks

LR250 series (LLNRK Series)

LR600 series (LLSRK Series)

Refer to the Blocks & Holders section of this catalog for additional information.

LLNRK/LLSRK Series POWR-PRO® Class RK1 Fuses

250/600 VAC • Dual-Element, Time-Delay • 1/10 – 600 Amperes

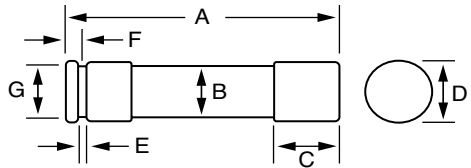


FIG. 1

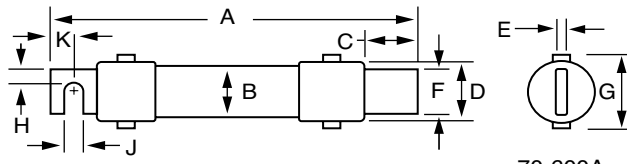
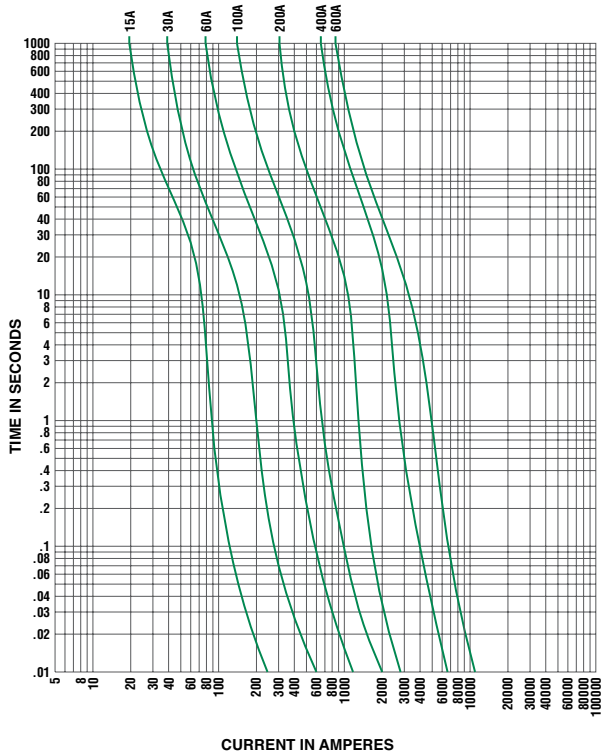


FIG. 2

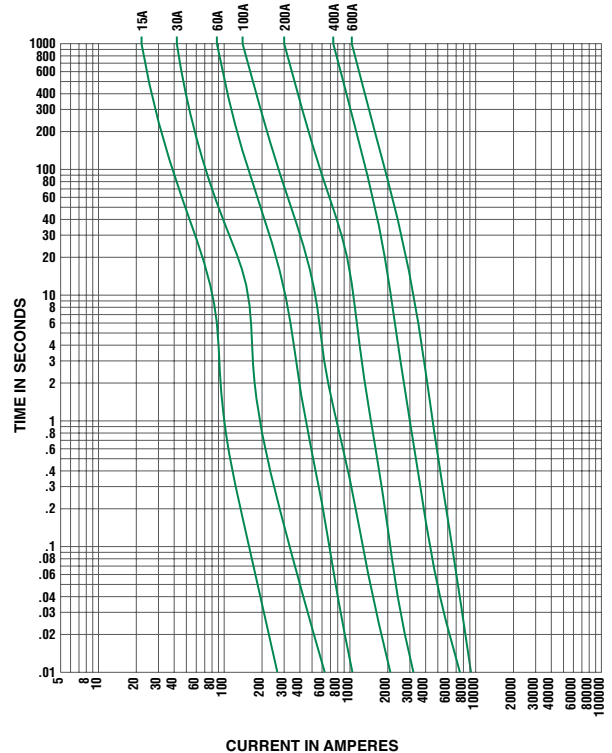
70-600A

Amperes	Refer to Fig. No.	Series	Dimensions in Inches (mm in parentheses)									
			A	B	C	D	E	F	G	H	J	K
1/10 – 30	1	LLNRK	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	5 (127.0)	3/4 (19.1)	5/8 (15.9)	3/16 (20.6)	3/32 (2.4)	3/16 (4.8)	5/8 (15.9)	—	—	—
35 – 60	1	LLNRK	3 (76.2)	3/4 (19.1)	5/8 (15.9)	3/16 (20.6)	3/32 (2.4)	3/16 (4.8)	5/8 (15.9)	—	—	—
		LLSRK	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	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 1/4 (31.8)	1/4 (6.4)	9/32 (7.1)	1/2 (12.7)
		LLSRK	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 1/2 (38.1)	1/4 (6.4)	9/32 (7.1)	1/2 (12.7)
110 – 200	2	LLNRK	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)	1 27/32 (46.8)	7/16 (11.1)	9/32 (7.1)	1 11/16 (17.5)
		LLSRK	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)	2 3/32 (53.2)	7/16 (11.1)	9/32 (7.1)	1 11/16 (17.5)
225 – 400	2	LLNRK	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)	2 11/32 (59.5)	5/8 (15.9)	1 13/32 (10.3)	1 15/16 (23.8)
		LLSRK	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)	2 27/32 (72.2)	5/8 (15.9)	1 13/32 (10.3)	1 15/16 (23.8)
450 – 600	2	LLNRK	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)	2 27/32 (72.2)	3/4 (19.1)	1 17/32 (13.5)	1 1/8 (28.6)
		LLSRK	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 11/32 (84.9)	3/4 (19.1)	1 17/32 (13.5)	1 1/8 (28.6)

LLNRK



LLSRK



LLNRK/LLSRK Series POWR-PRO® Class RK1 Fuses

250/600 VAC • Dual-Element, Time-Delay • 1/10 – 600 Amperes

Current-Limiting Effects of LLNRK (250V) fuses

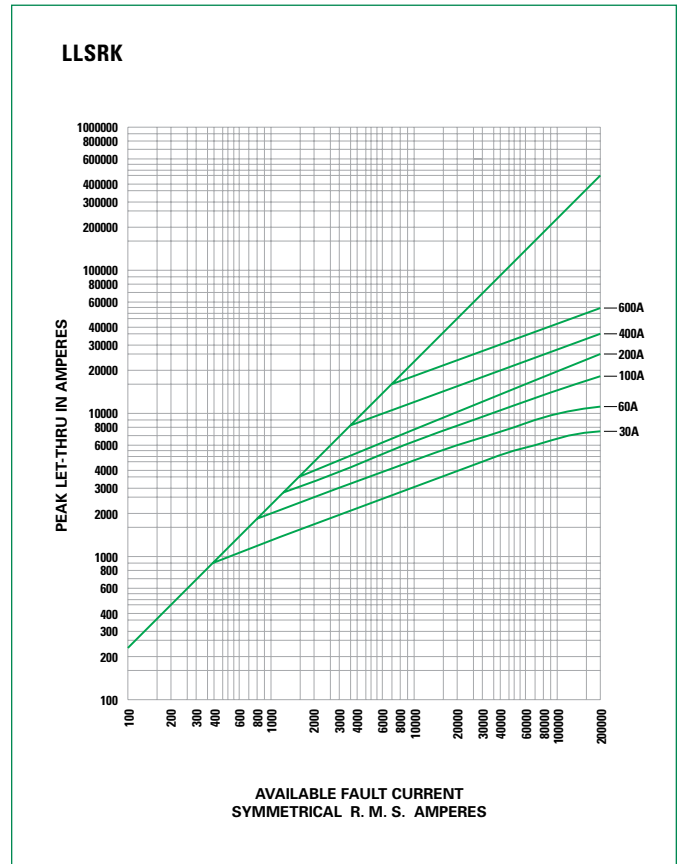
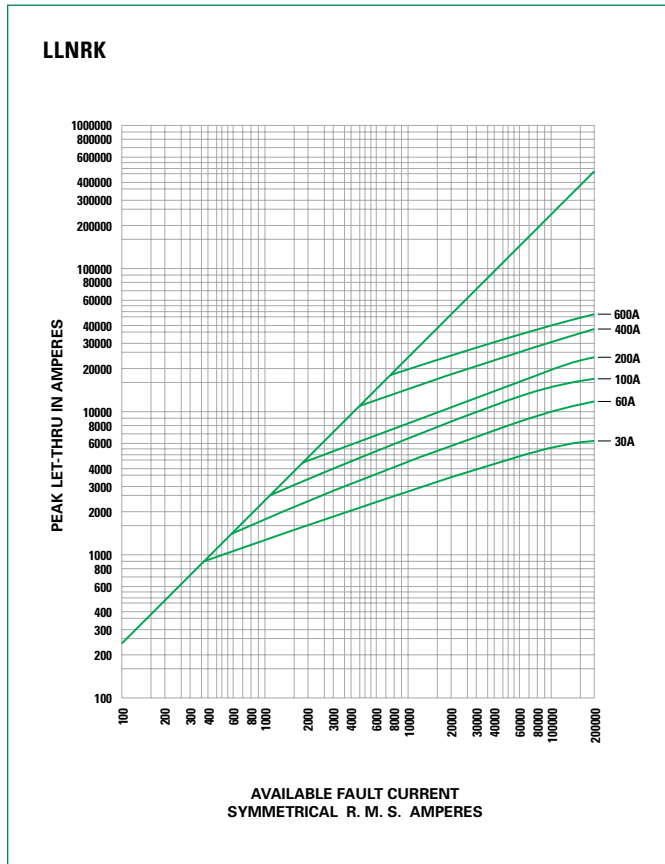
Current-Limiting Effects of LLSRK (600V) fuses

Short Circuit Current*	Apparent RMS Symmetrical for Various Fuse Ratings					
	30A	60A	100A	200A	400A	600A
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

Short Circuit Current*	Apparent RMS Symmetrical for Various Fuse Ratings					
	30A	60A	100A	200A	400A	600A
5,000	1,060	1,600	2,100	2,600	4,100	—
10,000	1,350	2,000	2,800	3,400	5,250	8,000
15,000	1,600	2,300	3,200	3,900	6,000	9,000
20,000	1,700	2,600	3,600	4,500	6,700	10,000
25,000	1,900	2,800	3,800	4,800	7,500	11,000
30,000	2,000	3,000	4,100	5,200	8,000	12,000
35,000	2,100	3,100	4,400	5,700	8,500	12,500
40,000	2,200	3,300	4,600	6,000	9,000	13,000
50,000	2,400	3,500	4,900	6,500	9,500	14,000
60,000	2,500	3,800	5,200	7,000	10,000	15,000
80,000	2,700	4,000	5,700	7,750	11,000	17,000
100,000	2,900	4,200	6,200	8,500	12,000	18,000
150,000	3,200	4,600	7,300	10,000	14,000	21,000
200,000	3,300	4,700	8,000	11,000	16,000	23,000

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

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



JTD_ID Series Indicator® POWR-PRO® Class J Fuses

600 VAC • Time Delay • 8/10 – 600 Amperes



The Littelfuse POWR-PRO JTD_ID Indicator Class J fuse provides visual blown fuse indication and maximum protection in a compact package. The compact Class J package was designed specifically for circuits where space is at a premium. The current-limiting time delay JTD_ID offers a patented, true dual-element design that is ideal for use in circuits with high, in-rush currents. The Superior performance characteristics of JTD_ID Indicator fuses reduce nuisance fuse opening, and the blown fuse indication reduces downtime while increasing safety.

Applications

- Fused combination motor controllers to provide IEC Type 2 (“No Damage”) motor branch circuit short-circuit and ground fault protection
- Motor control centers
- Transformer protection
- Protection for UL Listed series rated molded case circuit breaker panels
- General purpose circuits — mains, feeders and branch circuits — especially when space is limited.

Features/Benefits

- Reduce downtime — A glance at the indicating window of a JTD_ID Indicator fuse pinpoints open fuses immediately. If the indicating window is dark, the fuse has opened. It’s that simple.
- Reduce nuisance opening — Indicator fuses have superior time-delay and cycling characteristics which can lengthen fuse life and decrease needless opening.
- Reduce fuse inventory — JTD_ID Indicator fuses have superior performance characteristics, which means they can be used on a variety of applications; therefore, decreasing fuse inventory.
- Reduce equipment damage — Indicator fuses provide superior overload and short-circuit protection that can reduce equipment damage. Indicator fuses also provide IEC Type 2 “No Damage” protection to IEC and NEMA type motor starters.
- Reduce accidents — The JTD_ID Indicator fuse improves safety by minimizing exposure to live circuits. Unlike other forms of blown fuse indication, once the indicating window darkens, it stays dark. It does not matter if the power is on or off or if the fuse is in a tool box. Other forms of indication require the power to remain on, which is a safety hazard for personnel.

POWR-PRO® Fuses

Specifications

Voltage Ratings:	AC: 600 Volts
	DC: 300 Volts (1/10 - 100A)
	500 Volts (110 - 600A)
Interrupting Ratings:	AC: 200,000 amperes rms symmetrical
	300,000 amperes rms symmetrical (Littelfuse self-certified)
Ampere Range:	8/10 – 600 amperes
Approvals:	AC: Standard 248-8, Class J
	ULListed (File No: E81895)
	CSA Certified (File No: LR29862)
	DC: Littelfuse self-certified
	1/10 - 100A: 300VDC self certified
	110 - 600A: 500VDC self certified

Ampere Ratings

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

Example part number (series & amperage): JTD 60 ID

Recommended Fuse Blocks

LJ600 series, LPSJ series
Refer to Blocks & Holders section of this catalog for additional information.

JTD_ID Series Indicator® POWR-PRO® Class J Fuses

600 VAC • Time-Delay • 8/10 – 600 Amperes

An Inside Look . . .

Superior Short-Circuit Elements

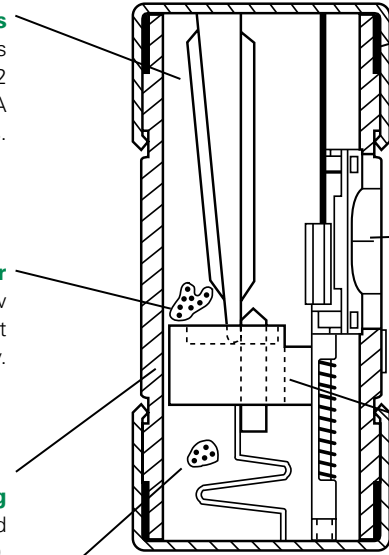
Reduce damage to equipment and enables the Littelfuse JTD_ID to provide IEC Type 2 “No Damage” protection to IEC and NEMA motor starters.

Stone-Sand Filler

Helps provide I^2t and I_{peak} values well below UL maximum limits and improves heat dissipation and reliability.

Elastomeric Silicone EPR Plug

A space-age material used in the patented overload section of the Littelfuse JTD_ID.



Plated End Caps

Help reduce corrosion and provide superior contact for lower heat generation.

Blown Fuse Indicator

Incorporates precision wound elements to provide consistent and reliable blown fuse indication.

Solid State Overload Section

Patented thermally reversible design utilizes high-tech aircraft grade polymers to ensure reliable operation every time.

Granular Quartz Filler

Assists in quenching the arc that occurs during overload conditions.

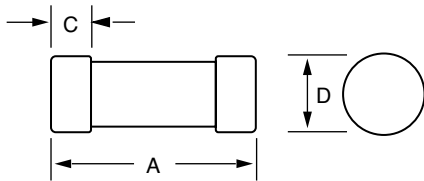


FIG. 1

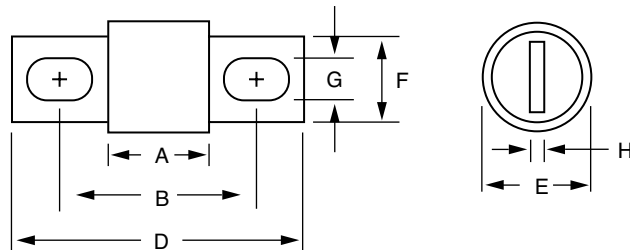


FIG. 2

Amperes	Refer to Fig. No.	Dimensions in Inches (mm in parentheses)							
		A	B	C	D	E	F	G	H
8/10–30	1	2¼ (57.2)	—	½ (12.7)	13/16 (20.6)	—	—	—	—
35–60	1	2½ (60.3)	—	5/8 (15.9)	1¼ (27.0)	—	—	—	—
70–100	2	25/8 (66.7)	35/8 (92.1)	—	45/8 (117.5)	1½ (28.6)	¾ (19.1)	9/32 (7.1)	1/8 (3.2)
110–200	2	3 (76.2)	45/8 (111.1)	—	5¾ (146.1)	15/8 (41.3)	1½ (28.6)	9/32 (7.1)	3/16 (4.8)
225–400	2	33/8 (85.7)	5¼ (133.4)	—	7½ (181.0)	2½ (54.0)	15/8 (41.3)	13/32 (10.3)	¼ (6.4)
450–600	2	3¾ (95.3)	6 (152.4)	—	8 (203.2)	25/8 (66.7)	2 (50.8)	17/32 (13.5)	3/8 (9.5)

JTD_ID Series Indicator® POWR-PRO® Class J Fuses

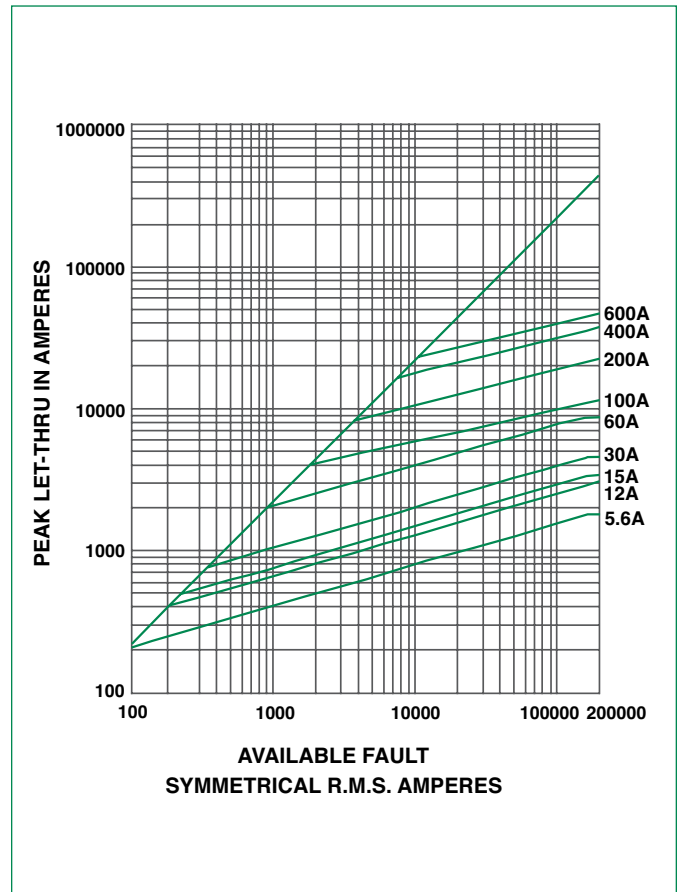
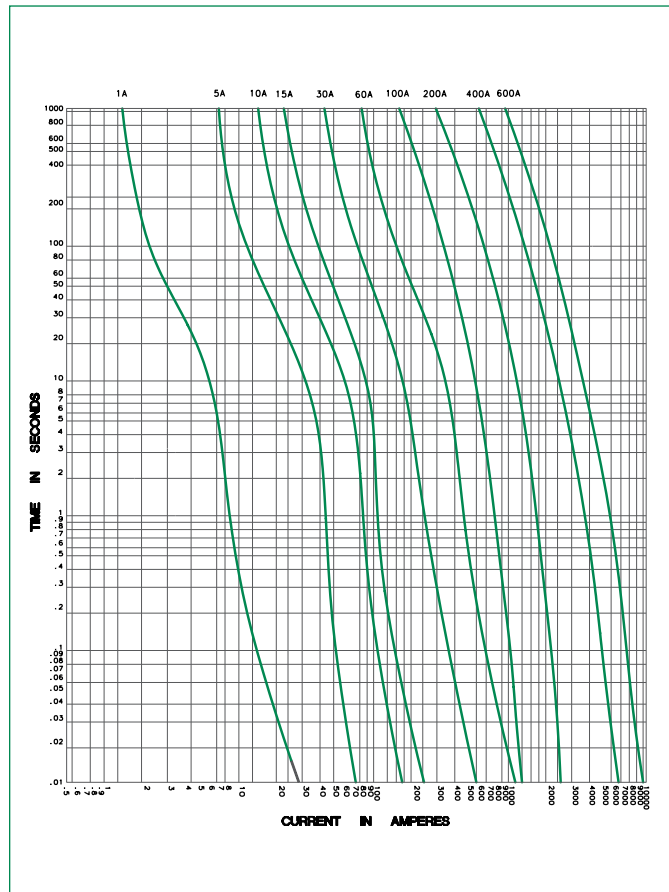
600 VAC • Time-Delay • 8/10 – 600 Amperes

Current-Limiting Effects of JTD_ID (600V) fuses

Short Circuit Current*	Apparent RMS Symmetrical for Various Fuse Ratings						
	15A	30A	60A	100A	200A	400A	600A
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



POWR-PRO® Fuses

CCMR Series POWR-PRO® Class CC and CD Fuses

600 VAC • Dual-Element, Time-Delay • 2/10 – 60 Amperes

POWR-PRO® Fuses



For space saving protection of motor circuits up to 40 HP*, we recommend Littelfuse POWR-PRO CCMR series fuses. These fuses are the only true dual-element, time-delay fuses that come in a small package specifically engineered for motor branch circuit protection. CCMR series fuses provide Type 2 “No Damage” protection to both NEMA-rated and the more sensitive IEC (International Electrotechnical Commission) type motor circuit components.

Rating for rating, CCMR fuses are the most current-limiting fuses available. They also provide superior short-circuit protection since their time-delay characteristics permit the use of smaller fuse ratings in motor

circuits than would be possible if using fast-acting fuses. CCMR series fuses provide superior protection in a fraction of the space required by other fuse classes. For example, when 600V three pole, 30 ampere Class R fuse blocks are replaced by Littelfuse Class CC fuse blocks, mounting space requirements may be reduced 70% or more. This is especially important when a panel contains control devices for many motors.

In addition to the UL Listed smaller sizes, Littelfuse CCMR series fuses are now available in larger sizes — from 35 to 60 amperes! **No other fuse is available with this current carrying capacity in a package this small. In fact, the 60 ampere CCMR fuse is the smallest 60A fuse available rated at 600 volts.**

Applications

- CCMR series fuses are specifically designed to withstand sustained starting currents of small motors
- Provide short-circuit protection for motor branch circuits
- Use with IEC- and NEMA-rated motor controllers and contactors
- General purpose circuits up to 60 amps

Features/Benefits

- Space savings — No other fuse class approved for branch circuit protection has a 600 volt rating and 300,000 A.I.R. in such a small package.
- Extremely current-limiting — Reduces damage caused by heating and magnetic effects of short-circuit currents. Stops damaging short-circuit currents faster than any mechanical protective device.
- Excellent time-delay — Eliminates needless downtime caused by power surges or equipment demands. Permits selection of fuse sizes closer to actual load conditions, which provides better protection.
- 300kA Interrupting Rating — Littelfuse self-certified to 300,000 amperes as standard. Meets future trend towards higher available short-circuit currents.

**Consult the Motor Protection Tables in the Fuseology section for specific motor sizing information
Note: For availability of RoHS compliant product, call 1-800-TEC-FUSE.*

Specifications

- Voltage Ratings:** AC: 600 Volts
DC: 250 Volts (CCMR 2/10 — 2A)
(CCMR 4 1/2 — 10A)
(CCMR 35 — 60A)
300 Volts (CCMR 2 1/4 — 4A)
500 Volts (CCMR 12 — 30A)
- Interrupting Ratings:** AC: 200,000 amperes rms symmetrical
300,000 amperes rms symmetrical
(Littelfuse self-certified)
DC: 20,000 amperes
- Ampere Range:** 2/10 — 60 amperes
- Approvals:** AC: Standard 248-4, Class CC
UL Listed 2/10 — 30 amps (File No: E81895)
Standard 248, Class CD
UL Listed 35 — 60 amps (File No: E81895)
CSA Certified 2/10 — 60 amps
(File No: LR29862)
DC: Littelfuse self-certified

Ampere Ratings

2/10	1	2	3 1/2	6 1/4	12	35
1/4	1 1/4	2 1/4	4	7	15	40
3/10	1 1/10	2 1/2	4 1/2	7 1/2	17 1/2	45
1/2	1 1/2	2 8/10	5	8	20	50
5/10	1 5/10	3	5 5/10	9	25	60
5/10	1 1/10	3 1/10	6	10	30	

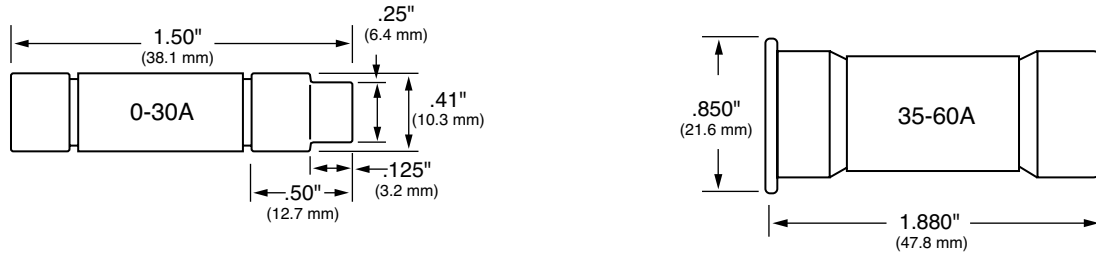
Example part number (series & amperage): CCMR 40

Recommended Fuse Blocks

- LPSC (CCMR 2/10 — 30A)
 - L60030C series (CCMR 2/10 — 30A)
 - L60060C series (CCMR 35 — 60A)
- Refer to Blocks & Holders section of this catalog for additional information.

CCMR Series POWR-PRO® Class CC and CD Fuses

600 VAC • Dual-Element, Time-Delay • 2/10 – 60 Amperes



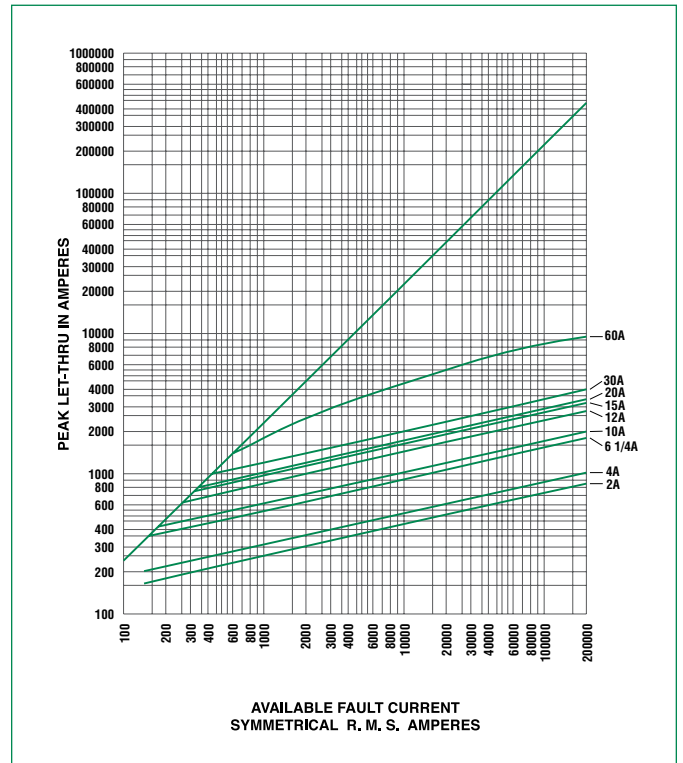
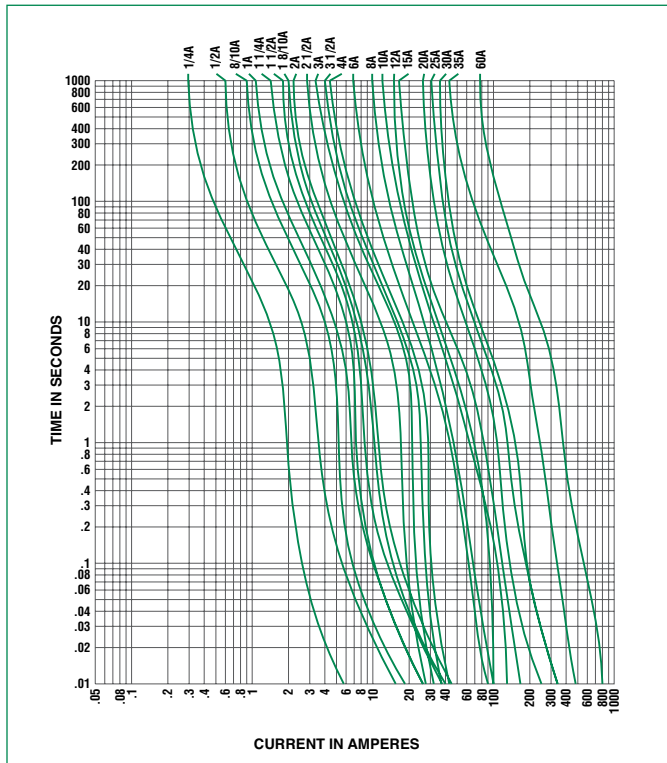
POWR-PRO® Fuses

Current-Limiting Effects of CCMR (600V) fuses

Short Circuit Current*	Apparent RMS Symmetrical For Various Fuse Ratings							
	2A	4A	6 1/4A	10A	12A	15A	20A	30A
5,000	160	190	330	370	525	600	625	750
10,000	180	220	400	440	600	700	725	875
15,000	200	250	430	480	675	775	800	950
20,000	220	260	460	520	720	825	850	1,000
25,000	230	280	480	550	750	850	900	1,050
30,000	240	290	500	570	800	900	950	1,125
35,000	245	300	520	590	825	925	975	1,175
40,000	255	310	550	600	850	975	1,000	1,200
50,000	260	330	570	640	875	1,000	1,100	1,300
60,000	280	340	600	670	900	1,050	1,125	1,350
80,000	300	360	625	700	1,000	1,125	1,200	1,400
100,000	310	380	650	750	1,050	1,200	1,250	1,500
150,000	340	420	700	800	1,150	1,300	1,400	1,600
200,000	350	440	750	850	1,200	1,400	1,450	1,750

*Prospective RMS Symmetrical Amperes Short-Circuit Current

Note: Data Derived from Peak Let-Thru Curves



IDSR Series Indicator® POWR-PRO® Class RK5 Fuse

600 V AC/DC • Time-Delay • 1/10 – 600 Amperes



The Littelfuse IDSR Indicator fuse offers a patented solid-state design and provides state-of-the-art reliability along with the convenience of blown fuse indication. The unique design of the IDSR also features a 600 volt AC/DC rating making it ideal for DC applications.

Money is wasted each time a circuit opens and halts production. The indicator window of the IDSR allows maintenance personnel to pinpoint blown fuses immediately. The circuit can then be tested and any problem corrected without unnecessary delay, minimizing costly downtime.

Applications

- DC circuits
- All general purpose circuits
- Motors
- Transformers
- Solenoids
- Fluorescent lighting
- All system components with high in-rush currents

Features/Benefits

- Superior Performance – Littelfuse leading edge metallurgy eliminates all moving parts in a true dual-element design. The IDSR also provides superior time-delay to withstand minor current surges without sacrificing protection for sustained overloads or short-circuit conditions.
- 600 Volt AC/DC Rating – The IDSR is UL Listed for 600 volts AC/DC, which makes it ideal for a variety of applications. It is also MSHA approved.
- Reduce Downtime – Costly downtime is minimized using Littelfuse Indicator fuses. A glance at the indicator window tells if the fuse has blown. If the window is dark, the fuse has opened. It's that simple.
- Increase Safety – Littelfuse Indicator Fuses minimize exposure to "live" circuit parts while searching for a blown fuse. Other forms of indication require current to power a light. Littelfuse Indicator fuses can be identified with the power off.

Specifications

Voltage Ratings: AC: 600 Volts
DC: 600 Volts

Interrupting Ratings: AC: 200,000 amperes rms symmetrical
300,000 amperes rms symmetrical
(Littelfuse self-certified)

DC: 20,000 amperes

Ampere Range: 1/10 – 600 amperes

Approvals: Standard 248-12 and UL 198M, Class RK5
UL Listed (File No: E81895)
CSA Certified (File No: LR29862)
MSHA 600 Volt Listing

Dimensions

Please refer to the FLSR_ID dimensions.

Ampere Ratings

1/10	6/10	1 1/10	4	8	30	80	225
1/8	3/10	2	4 1/2	9	35	90	250
15/100	1	2 1/4	5	10	40	100	300
3/10	1 1/8	2 1/2	5 5/10	12	45	110	350
1/4	1 1/4	2 9/10	6	15	50	125	400
3/10	1 1/10	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

Example part number (series & amperage): IDSR 30

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

Recommended Fuse Blocks

LR600 series

Refer to the Blocks & Holders section of this catalog for additional information. Contact Littelfuse for characteristic curves.

LDC Series POWR-PRO® Class L Fuses

600 V AC/DC Time-Delay • 150 – 2000 Amperes



Littelfuse POWR-PRO LDC series Class L fuses represent another first in fuse protection. LDC series fuses are the first UL Listed 600 volts AC and DC Class L fuses. Since they may be used for both AC and DC, they eliminate the concern that AC only fuses may be inserted into DC circuits.

While LDC series fuses UL Listed DC interrupting rating is more than adequate for most applications (50,000 amperes at a 16 millisecond time constant), tests in our high power laboratory have shown that this remarkable fuse is capable of performing at much longer time

constants. This makes the fuse uniquely suited for applications such as crane rail circuits and mass transit systems. Contact the factory for application information.

For AC only systems, consider the use of POWR-PRO KLPC series fuses. They have a full 10 seconds time-delay at 500% rated current, and have a wider range of ratings.

Applications

- UPS protection, especially for large battery circuits
- DC distribution
- DC variable speed drives
- Protection of crane rail circuits and other large DC equipment such as electrical power shovels, ship and dock cranes, etc.
- Mass transit systems, including new light rail applications
- General purpose AC/DC circuits for mains, feeders, and branch circuits

Features/Benefits

- 600 Volt AC/DC rated — “All-purpose” Class L fuses reduce inventory requirements because the need for separate AC and DC fuses is eliminated.
- UL Listed 200,000 A.I.R. AC – 50,000 A.I.R. DC — Reliable interruption of all overcurrents up to their ratings. Minimizes the need for time consuming and expensive short-circuit studies.
- Moderate time-delay — Four seconds time-delay at 500% current provides adequate time-delay for many AC applications and most DC applications. They will withstand most harmless overloads or line surges. If your needs exceed the LDC capabilities, consider the use of KLPC fuses for AC applications.
- Selective coordination — LDC series fuses coordinate well with all Littelfuse fuses rated 600 amperes or less. A combination of LDC and IDSR series fuses provide a complete 600 volt rated DC system.
- Extremely current-limiting — Maximum current limitation reduces damage to circuits and equipment under short-circuit conditions. Stops damaging short-circuits faster than any mechanical protective device.

Specifications

Voltage Ratings:	AC: 600 Volts DC: 600 Volts
Interrupting Ratings:	AC: 200,000 amperes rms symmetrical DC: 50,000 amperes (16 millisecond time-constant)
Ampere Range:	150 – 2000 amperes
Approvals:	Standard 248-10, Class L UL Listed 601 – 2000 amps (File No: E81895) UL Recognized 150 – 600 amps (File No: E71611) CSA Certified 150 – 2000 amps (File No: LR29862)

Ampere Ratings

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

Example part number (series & amperage): LDC 1200

Dimensions

Please refer to the KLPC dimensions

LDC Series POWR-PRO® Class L Fuses

600 V AC/DC Time-Delay • 150 – 2000 Amperes

Current-Limiting Effects of LDC (600V) Fuses

Short-Circuit Current*	Apparent RMS Symmetrical for Various Fuse Ratings			
	800A	1200A	1600A	2000A
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

