

LDC Series POWR-PRO® Class L Fuses

600 V AC/DC ■ 150 – 2000 Amperes



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

Example part number (series & amperage): LDC 1200

DIMENSIONS

Please refer to the KLPC dimensions

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 fuse. 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 testing laboratory have shown that this remarkable fuse is capable of performing at much longer time constants. This makes the fuse uniquely suited for such applications as crane rail circuits and mass transit systems. Contact the factory for application information for special needs such as this.

For AC-only systems, consider the use of POWR-PRO® KLPC series fuses. They have a full ten 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 fuse reduces inventory requirements because the need for special 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.

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Current-Limiting Effects of LDC (600V) fuses

* Prospective RMS Symmetrical Amperes Short-Circuit Current

** Apparent RMS Symmetrical

Note: Data derived from Peak Let-Thru Curves

| Short Circuit Current* | Peak Let-Thru Current** 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 |

