

# **FUSE BLOCK OVERVIEW**



#### **Description**

Littelfuse offers a comprehensive line of fuse blocks that incorporate many benefits such as indication, snap torelease, DIN-Rail mounting and universal mounting holes.

## **New Options Available**

- Reduced Footprint—Save space with designs up to 35% smaller in width
- Indication—Increase safety and reduce downtime with built-in local indication
- Universal Mounting Holes—Simplify replacement with universal mounting options
- DIN Rail Mountable—Ease installation with a 35 mm hat DIN Rail mounting option
- One-Hand Release—Save time by using only one hand for a simple release from DIN Rail

#### **Fuse Block Selection**

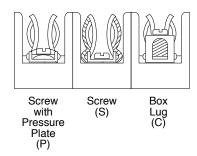
The following guidelines should help simplify the selection of proper fuse blocks:

- **1. Determine the system voltage**—Since fuses are selected on the basis of system voltage, fuse blocks are selected to match the voltage rating of the fuse.
- 2. Determine the design short-circuit current—If available short-circuit current cannot be determined, or if it will vary with equipment location, select fuses with a 200,000 ampere interrupting rating (A.I.R.) and mating fuse blocks with a withstand rating of 200,000 amperes for maximum safety.
- **3. Determine the type and ampere rating of the fuse to be used**—The fuse ampere rating, opening characteristics (fast acting or time-delay) and size are important considerations in fuse selection. Fuse blocks may be used with a fuse rated at the corresponding amperage rating or below. For example, a fuse block rated at 30 amperes may be used with a fuse rated from 0 to 30 amperes.
- **4. Determine if NEC®, CSA, UL, or other requirements are applicable**—Any of these requirements should be obtained from the approving agency in advance of fuse and fuse block selection.

#### 5. Select the type of wire termination

Three types of wire termination are available:

- Screw\*—for use with spade lugs or ring terminals
- Screw with Pressure Plate\*—for use with solid or stranded wire without terminal. Recommended where vibration will be a factor
- Box Lug—for use with all types of solid wire and Class B and Class C stranded wire. The most durable, but not for use with welding cable or other rope-stranded conductors.
- \*<sup>1</sup>/4" Quick Connect terminals are available on the Midget and Class CC fuse blocks.



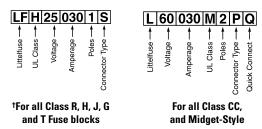
- **6. Decide on the number of poles in each block**—The number of poles for each set of fuses is determined by the characteristics of the circuit.
- **7. Determine if block should be DIN Rail mounted**—Many of the new Littelfuse fuse blocks are DIN Rail mountable. Be sure to look to corresponding ordering tables to match the correct part number on the following product pages.

#### 8. Determine if fuse clips need to be reinforced

Fuse clips may have a tendency to lose some of their tension over a period of time. This may be prevented by specifying reinforced fuse clips.

#### Ordering Information

The Littelfuse fuse block part number consists of the below skeleton. Please refer to UL Class Tables for specific information.



†These new fuse blocks replace previous Littelfuse fuse blocks that had very similar part numbers for customer convenience. The only change is an "F" has been added as the second character in the new block part numbers.

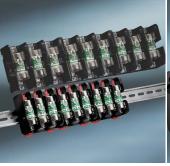
Caution: Littelfuse indicating fuse blocks are intended to quickly identify open fuses while power is still applied. Only qualified electrically trained technicians should replace fuses and follow standard OSHA and NFPA 70E safe work practices, such as Lock-Out and Tag-Out procedures and verification before replacing any fuses in indicating fuse blocks.

# Littelfuse® Expertise Applied | Answers Delivered

# LF SERIES INDICATING FUSE BLOCKS













**Smaller Footprint Provides Space Savings** 



**DIN-Rail Mounting Eases Installation** 



Indication Improves Functionality

# An Indication of Value

The Littelfuse LF Series Fuse Blocks and Covers offer generous space savings and a greater value over previous generations. View the different series classes for available indication, snap-to-release DIN rail mounting, universal mounting holes and touch-safe covers.



# LF SERIES CLASS CC/CD AND MIDGET (10x38 mm) FUSE BLOCKS

600 V





## **Description**

The Littelfuse Class CC, CD and midget blocks offer generous space savings and enhanced value. DIN-rail mounting and universal mounting holes are available as well as an indication feature on all Class CD fuse blocks.

#### Features/Benefits

- Space-saving design
- Universal mounting holes for easy replacement
- Indication offered on CD blocks
- One hand release from DIN rail optional
- Rejection feature that prevents the insertion of fuses with lower interrupting rating or voltage ratings
- Clip design reduces resistance and heat
- Non DIN-rail fuse blocks have interlocking feature allowing ganging for any number of poles
- · Covers available for all amperages to enhance safety

#### **Specifications**

Voltage Rating 600 Vac/dc

Ampere Ratings L600M Midget (10x38): 30 A

L600C Class CC: 30 A LFC Class CD: 60 A

L600CM Class CC & Midget: 30 A

Dielectric strength 1200 V minimum

Materials Clip/terminals: Tin-plated copper alloy

Box lug: Copper

Screw & captive pressure plate: Zinc-plated steel

Base: Thermoplastic UL94 V-0 flammability rating

Withstand Rating L60030C: 200kA

(SCCR) L60030M:10kA, 20kA or 100kA based on the

Midget fuse used

LFC600: 200kA

**Approvals** L600M: UL Recognized (File: E14721)

CSA Certified (File: LR7316)

L600C: UL Listed (File: E14721) CSA Certified (File: LR7316)

UL Listed (File: E14721)

CSA Certified (File: LR7316)

L600CM: UL Recognized (File: E14721) CSA Certified (File: LR7316)

**Environmental** RoHS Compliant, Lead (Pb) Free

LFC:

#### **Recommended Fuses**

Class CC Blocks: CCMR, KLDR, KLKR

Class CM Block: Fuses same as CC & Midget Blocks

Class CD Blocks: CCMR

Midget Blocks: BLF, BLN, BLS, FLA, FLM, FLQ,

FLU, KLK, KLKD, KLQ

#### **Web Resources**

Sample requests and technical downloads:

littelfuse.com/fuseblocks

## Ordering Information (L600C Class CC and L600M Midget 30 A)

| ₽.<br>18 | ES    | CLASS CC ORDERING NUMBER |                | MIDGET ORDERING NUMBER |                | CONNECTOR        | TODOUE                 | WIRE      | WIDE TYPE |                  | BASE  | COVER                           |
|----------|-------|--------------------------|----------------|------------------------|----------------|------------------|------------------------|-----------|-----------|------------------|-------|---------------------------------|
| AMP      | POLES | NON-DIN*                 | DINR           | NON-DIN*               | DINR           | TYPE             | TORQUE                 | RANGE     | WIRE TYPE |                  | TEMP  | ORDERING<br>NUMBER <sup>†</sup> |
|          | 1     | L60030C1C                | L60030C1CDINR  | L60030M1C              | L60030M1CDINR  |                  | 4.0 N-m<br>(35 in-lbs) | 6-14 AWG  | CU Only   | Solid / Stranded |       |                                 |
| 30       | 2     | L60030C2C                | L60030C2CDINR  | L60030M2C              | L60030M2CDINR  | Box Lug          |                        |           |           |                  | 125°C | SPL001                          |
|          | 3     | L60030C3C                | L60030C3CDINR  | L60030M3C              | L60030M3CDINR  |                  |                        |           |           |                  |       |                                 |
|          | 1     | L60030C1PQ               | L60030C1PQDINR | L60030M1PQ             | L60030M1PQDINR | Pressure Plate   | 2.3 N-m<br>(20 in-lbs) | 10-14 AWG |           |                  | 125°C | SPL001                          |
| 30       | 2     | L60030C2PQ               | L60030C2PQDINR | L60030M2PQ             | L60030M2PQDINR | w/Q.C. Terminal  |                        |           |           |                  |       |                                 |
|          | 3     | L60030C3PQ               | L60030C3PQDINR | L60030M3PQ             | L60030M3PQDINR | W/ Q.O. Terrinia |                        |           |           |                  |       |                                 |
|          | 1     | L60030C1SQ               | L60030C1SQDINR | L60030M1SQ             | L60030M1SQDINR | Screw            | 2.3 N-m<br>(20 in-lbs) | 10-14 AWG |           |                  |       |                                 |
| 30       | 2     | L60030C2SQ               | L60030C2SQDINR | L60030M2SQ             | L60030M2SQDINR |                  |                        |           |           |                  | 125°C | SPL001                          |
|          | 3     | L60030C3SQ               | L60030C3SQDINR | L60030M3SQ             | L60030M3SQDINR |                  |                        |           |           |                  |       |                                 |

## Ordering Information (L600CM Class CC and Midget Combination 30 A)

| MP | TING | POL      | LES .  | COMBINATION 2 CLASS CC / 1 MIDGET<br>ORDERING NUMBER |      | CONNECTOR                         | TORQUE                 | WIRE<br>RANGE | WIRE TYPE                   | BASE<br>TEMP | COVER<br>ORDERING   |
|----|------|----------|--------|--|------|-----------------------------------|------------------------|---------------|-----------------------------|--------------|---------------------|
| ⋖  | RA   | CLASS CC | MIDGET | NON-DIN  | DINR | TYPE                              |                        | NAINGE        |                             | IEIVIP       | NUMBER <sup>†</sup> |
| 3  | 30   | 2        | 1      | L60030CM3PQ  | _    | Pressure Plate<br>w/Q.C. Terminal | 2.3 N-m<br>(20 in-lbs) | 10-14 AWG     | CU Only<br>Solid / Stranded | 125°C        | SPL001              |



# LF SERIES CLASS CC/CD AND MIDGET (10X38 mm) FUSE BLOCKS

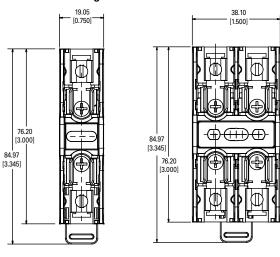
# Ordering Information (LFC Class CD 60 A)

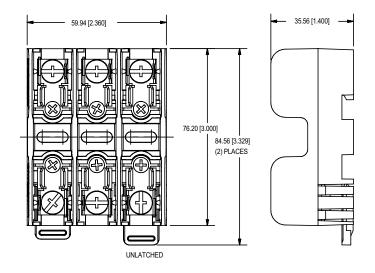
|   | AMP<br>RATING | POLES      | ORDERING<br>NUMBER | CONNECTOR<br>TYPE | TORQUE                     | WIRE<br>RANGE | WIR   | E TYPE              | BASE TEMP<br>RATING | DIN RAIL<br>MOUNT | INDICATION | COVER<br>ORDERING<br>NUMBER <sup>†</sup> |
|---|---------------|------------|--------------------|-------------------|----------------------------|---------------|-------|---------------------|---------------------|-------------------|------------|--|
| ( |               | 1          | LFC600601CID       | Box Lug           | 5.6 N-m (50 in-lbs)        | 2-4 AWG       | CU-AL | Solid /<br>Stranded | 125°C               | •                 | •          | LFC60060FBC                              |
|   | 60            | 2          | LFC600602CID       |                   | (***                       |               |       |                     |                     |                   |            |  |
|   |               | 3 LFC60060 | LFC600603CID       |                   | 2.8 N-m (25 in-lbs) 6-14 A | 6-14 AWG      |       |                     |                     |                   |            |  |

<sup>\*</sup> Gangable - † Covers sold individually. One cover needed for each pole.

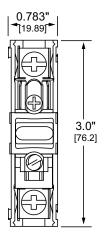
## **Dimensions mm (inches)**

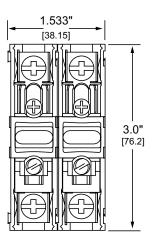
#### L600M-DINR Midget and L600C-DINR Class CC 30 A

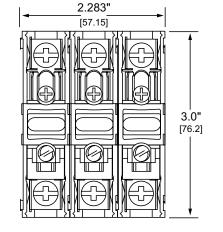


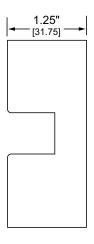


#### L600M Midget, L600C Class CC and L600CM Combination 30 A











# LF SERIES CLASS CC/CD AND MIDGET (10X38 mm) FUSE BLOCKS

# **Dimensions mm (inches)**

LFC CLASS CD 60 A

