

# Installation Instructions

## MiniFlec Series Power Distribution Module

Part Number: LFMX0007Z-01



LFMX0006Z-01

### Description

The standard MiniFlec is a compact, front access, internally bussed, connectorized, sealed power distribution module, suitable for mounting in rugged commercial vehicle applications. The MiniFlec is a product that has dense concentration of high power circuits and accepts plug devices like automotive fuses, diodes and relays to protect and control complex electrical systems. An internally mounted Printed Circuit Board (PCB) allows bussed connections to a large number of devices.

### Installation

Assemble the PDM and mount to a surface following the below sequence:

1. Fill the available fuse and relay spots to match the the application needs. Check the locations on the fuse and relay table for the maximum fuse and relay ratings for each space and do not exceed the maximum rated values.
2. Use the mounting hole pattern on the mounting surface and mark the mounting hole pattern. Drill the holes so they are sized for M6 bolts. Place the MiniFlec over the pattern and bolt it in place. Torque down the mounting screws to 12-15Nm (4.5-5.9 ft-lb).
3. The harnesses should be made to match the terminal map on the schematic. The connectors should now be attached. Each has a unique key that should prevent misassembly. Make certain that the connectors are fully inserted and the secondary lock is fully engaged. If the secondary lock will not fully engage, the connector is not fully connected. Be sure that the output cables are routed so they have sufficient bend radius and are not at risk of being damaged or pinched. Lastly, make sure that all cables are strain relieved by being supported within 18" of the battery.

Step by step images shown in Figure 1 on page 2.

### Specifications Overview

<b>Max Load:</b>	150A
<b>Fuse Rating Ranges:</b>	MINI® Fuse: 2-30A MCASE+® Fuse: 15-60A
<b>Color:</b>	Black
<b>Housing:</b>	Glass Reinforces Nylon (94V-0)
<b>Ingress Protection:</b>	IEC 529 IP67/69K
<b>Input Stud:</b>	M8
<b>Mating Terminals &amp; Seals</b>	Tyco HDSCS Series Connectors with MCP Terminals Tyco 1-1564542-1 Tyco 1-1418437-1 Tyco 2-1564514-1 Tyco 1-1670894-1
<b>Working Voltages:</b>	9-16V with 12V Relays 18-32V with 24V Relays
<b>Input Stud Torque:</b>	12-15Nm
<b>Mounting Bolt Torque:</b>	12-15Nm
<b>Vibration Resistance:</b>	ISO 16750-4
<b>Operating Temp:</b>	-40°C to +85°C
<b>Dimensions (LxWxH):</b>	157mm x 96mm x 126mm
<b>Accessories:</b>	Fuse Puller, Spare Fuses Tether
<b>Relay Capacity:</b>	3 Form C 280 Series Micro Relays, 3 Form A Ultra Micro Relays, 1 ISO Micro Relay

FUSE LOCATION	MAX FUSE VALUE
F01	30A
F02	30A
F03	30A
F04	20A
F05	20A
F06	20A
F07	50A MCASE
F08	30A
F09	20A
F10	30A
F11	30A
F12	30A
F13	60A MCASE
F14	20A

RELAY LOCATION	MAX RELAY VALUE
K01	35A
K02	35A
K03	35A
K04	20A
K05	20A
K06	20A
K07	40A

### Ordering Information

PART NUMBERS	DESCRIPTION
LFM0007Z-01	Standard Unloaded MiniFlec Power Distribution Module

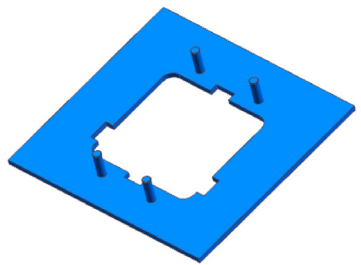
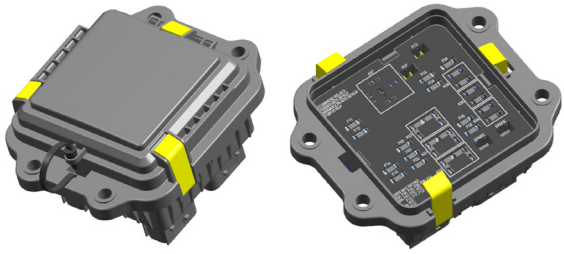
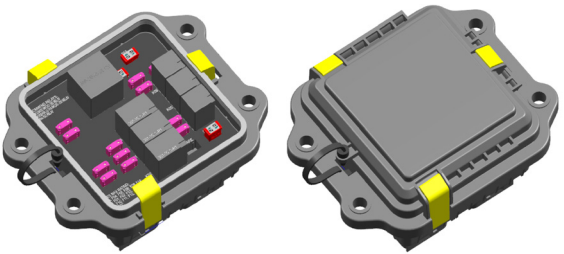
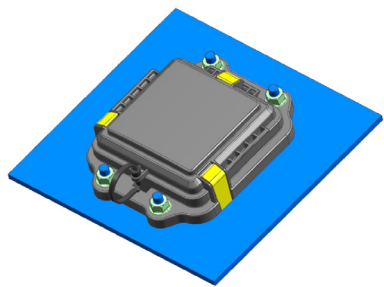
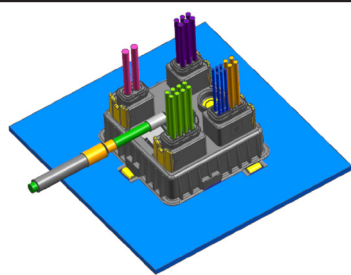
A custom MiniFlec can be built specific to your design requirements and is a special order product. Please talk to your local representative for additional details.

# Installation Instructions

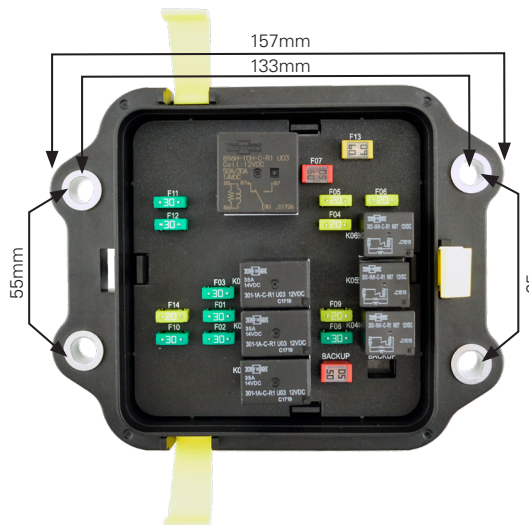
## MiniFlec Series Power Distribution Module

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Figure 1 - Step by Step Installation

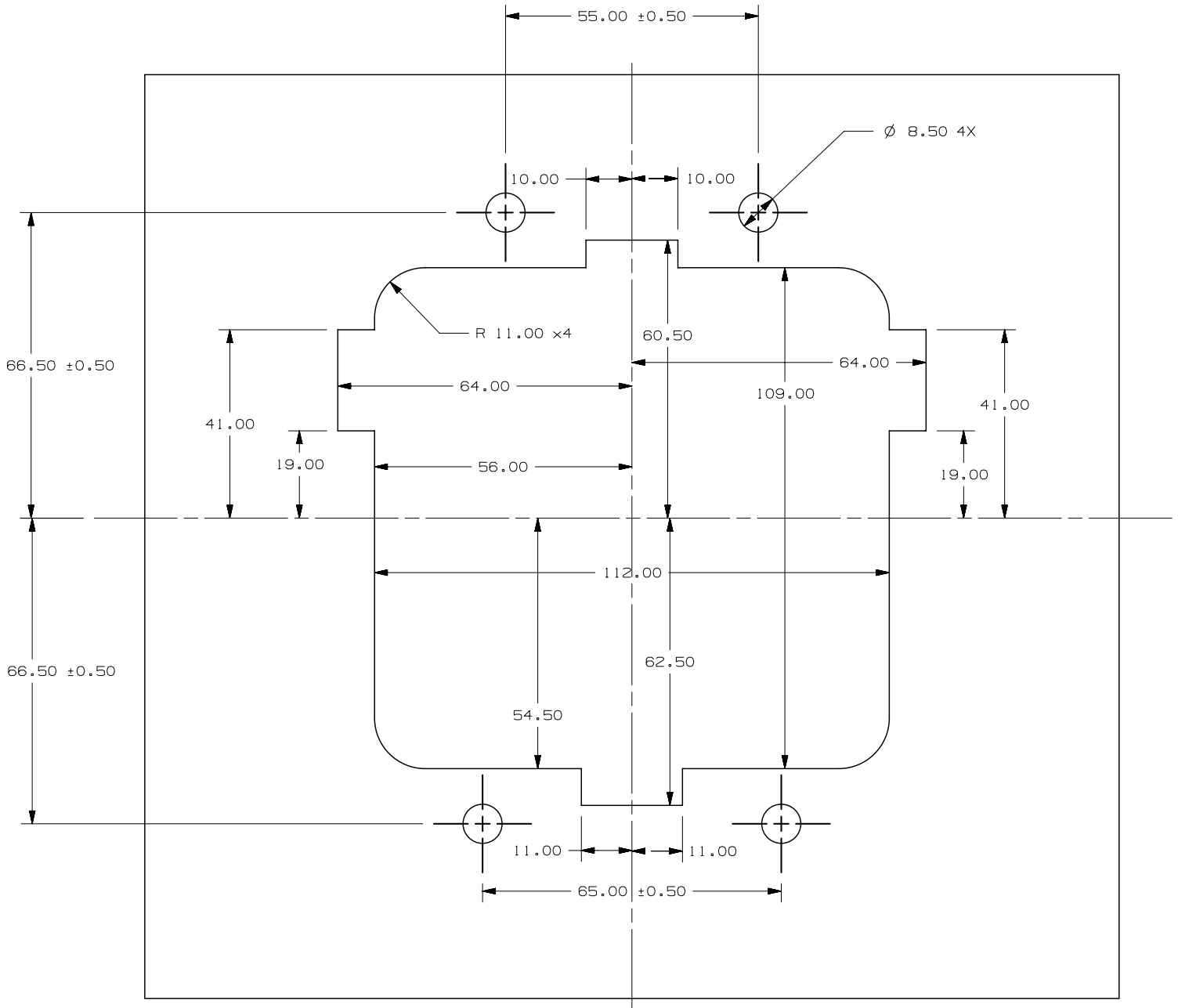
STEP 1	IMAGE	
	DETAILS	Cut the panel per the mounting hole pattern and place the mounting bolts into the locations on the panel.
STEP 2	IMAGE	
	DETAILS	Take the unit out of the packaging. Snap open the AssureLatch latches with a small flathead screwdriver or other tool. Remove the cover.
STEP 3	IMAGE	
	DETAILS	Fill in all fuse locations with application specific fuses make sure not to exceed the maximum value for the fuse locations as listed in fuse table. Fill the application specific relays using the recommended types of relays. There is a location on the inside cover to place a fuse identification label. We recommend you add a label here to help with maintenance and troubleshooting. Replace the cover and snap on the AssureLatch latches. If you do not get positive tactile and audible feedback that the latches are fully seated, check the position of the cover. The box is only seated correctly and sealed when latches are properly snapped into place.
STEP 4	IMAGE	
	DETAILS	Bring the main power cable through the cutout and attach the ring terminal to the main M8 power stud. Run the harness with the connectors through the mounting hole and attach the connectors to the appropriate point. All the connectors are keyed and cannot be assembled to an incorrect location. Press the connectors into the mating connector locations and make sure they are fully seated and the secondary lock is closed.
STEP 5	IMAGE	
	DETAILS	Put the MiniFlec into the cut out and tighten the mounting bolts to 12-15Nm.

### Mounting Pattern Diagram



Specifications, descriptions and illustrative material in this literature are as accurate as known at the time of publication, but are subject to changes without notice. Visit [littelfuse.com](http://littelfuse.com) for the most up-to-date technical information.

**MiniFlec Mounting Template**



**NOTE:** This document may not print true to scale. Always ensure printed document template matches the measurements provided.

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