

Installation Instructions

MDB5 Series 5 Way Power Distribution Module

Part Numbers: 07985001ZXS, 07985002ZXS, 07985003ZXS,
07985004ZXS



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Description

Sealed high current power distribution box using MIDI® and MEGA® type fuses. Designed to handle standard voltage (32V) and the new 70V (48V application) MIDI® and MEGA® fuses. Built for rugged environments, the MDB5 not only provides IP67/69K fuse sealing, but also seals all input and output connections.

Specifications Overview

Amperage:	400A Max with two 50mm² Inputs 200A Max with one 50mm² Input
Fuse Rating Range:	30A - 500A
Box Dimensions:	173 (L) x 154 (W) x 50 (H)
Voltage Rating:	70V
Connections:	32V: M5 - Midi Fuses M8 - Mega Fuses M8 Input 70V: M6 - Midi Fuses M8 - Mega Fuses M8 Input
Fuse Capacity:	32V: 3 pcs. M5 - Midi Fuses 0498xxx.M, 0498xxx.H, 0498xxx.MXT 2 pcs. M8 - Mega Fuses 0878450.UX-2M8, 0298xxx.UXP-2M8, 0298xxx.ZXEH, 0298xxx.ZXH 70V: 3 pcs. M6 - Midi Fuses 4998xxx.MXISO-2M6, 4998xxx.M-M6 2 pcs. M8 - Mega Fuses 0898xxx.U-2M8
Fuse Terminal Torque:	MEGA®: 32V 15±3Nm 70V 20±1Nm MIDI®: 32V 6±1 Nm 70V 9±1Nm
Ingress Protection:	IP67 & IP69K with seals installed
Housing:	UL94, V0
Mounting Bolt:	M6 (9±1Nm)
Temperature Range	-40°C TO 105°C
Wire Sizes:	MEGA®: 2 positions 16mm², 25mm², 35mm² MIDI®: 3 positions 6-10mm², 10-16mm² Input: 50mm²

Installation

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

1. Unlatch yellow clips (this may require a small flat head screwdriver) and remove cover
2. Place the busbar over the input studs in the base
3. Install the proper MIDI and MEGA Fuses on the top of the busbar and output studs. Ensure the fuse blade is laying flat.
4. Assemble the properly sized cable seal to the corresponding wire and crimp the appropriately sized ring terminals for each input and output slot. Slide the cable seal a bit past the distance from the stud to the housing slot.
5. Push the cable assembly through the corresponding input or output slot. Assemble the ring terminal to the stud and secure the cable seal into the housing. Make sure the ring terminal width does not exceed the diameter of each of the input and output slots
Input Slot Max Width: 21mm
Small Output Slot Max Width: 12.5m
Large Output Slot Max Width: 18m
6. If no wire is required in an input or output slot, install a blank cable seal.
7. Screw down all the flange nuts onto each stud and to the appropriate torque.
M5: 4.5±1N·m
M6: 9±1N·m
32V M8: 15±3N·m
70V M8: 20±1N·m
8. Replace the cover on the housing. Ensure that the cover seal is not being pinched or damaged.
9. Snap the AssureLatch™ yellow clips closed, ensuring the cover is secured to the base.
10. Mount the PDM to the vehicle using M6 fasteners to the compression limiters in the base.
Torque: 9±1 N·m

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

Ordering Information

PART NUMBERS	DESCRIPTION
07985001ZXS	MDB 5 Way 32VDC
07985002ZXS	MDB 5 Way 70VDC
07985003ZXS	MDB 5 Way 32VDC W/ Seal Kit
07985004ZXS	MDB 5 Way 70VDC W/ Seal Kit

Installation Instructions

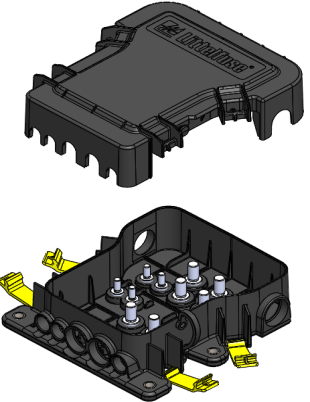
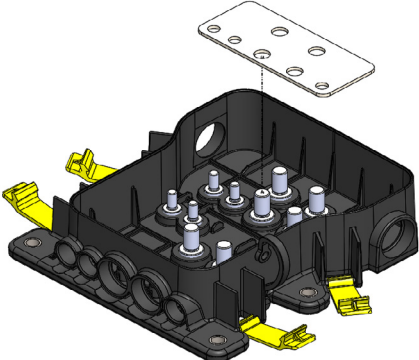
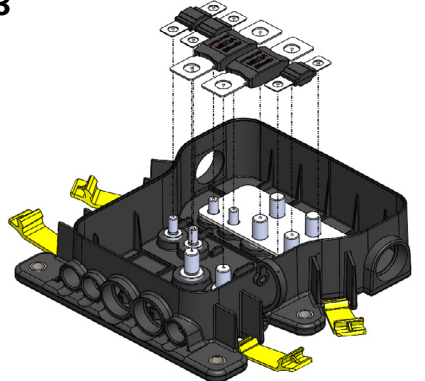
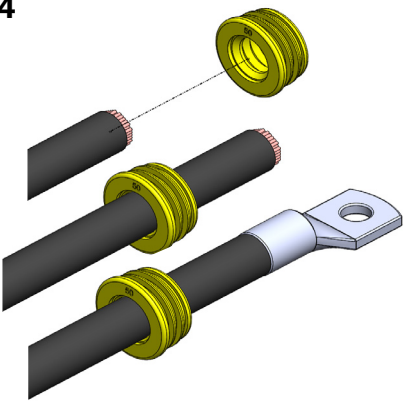
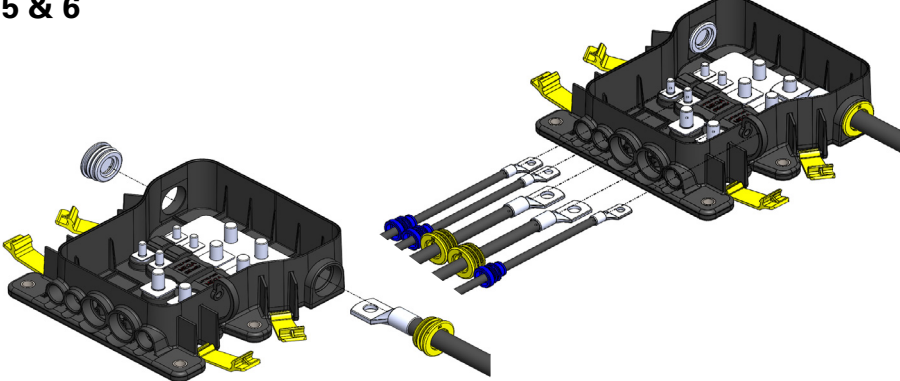
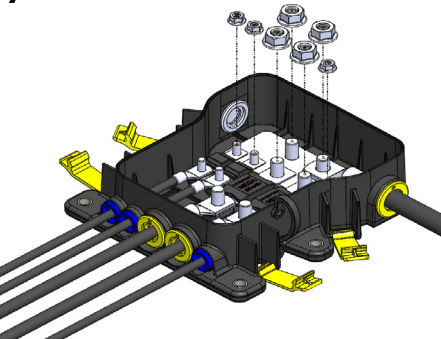
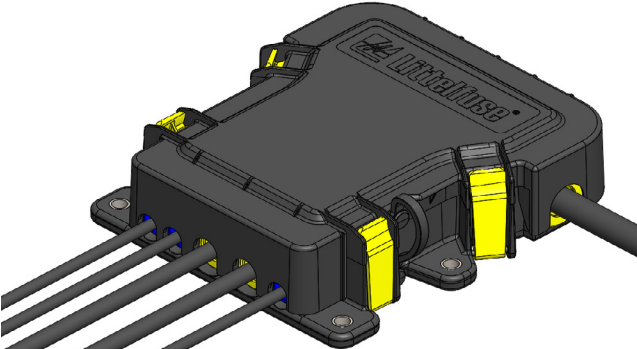
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Figure 2 - Step by Step Installation

1 	2 	3 
Unlatch yellow clips (this may require a small flat head screwdriver) and remove cover	Place the busbar over the input studs in the base	Install the proper MIDI and MEGA Fuses on the top of the busbar and output studs. Ensure the fuse blade is laying flat.
4 	5 & 6 	
Assemble the properly sized cable seal to the corresponding wire and crimp the appropriately sized ring terminals for each input and output slot. Slide the cable seal a bit past the distance from the stud to the housing slot.	Push the cable assembly through the corresponding input or output slot. Assemble the ring terminal to the stud and secure the cable seal into the housing.	If no wire is required in an input or output slot, install a blank cable seal.
7 	8 & 9 	
Screw down all the flange nuts onto each stud and to the appropriate torque.	Replace the cover on the housing. Ensure that the cover seal is not being pinched or damaged.	Snap the AssureLatch™ yellow clips closed, ensuring the cover is secured to the base.

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 for the most up-to-date technical information.