Micro Power Distribution Box (µPDB) Sealed Modules

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MicroPDB (µPDB) Sealed Modules, offered in standard and customizable versions, are compact automotive power distribution boxes that provide a junction point for power switching and circuit protection for vehicles or subsystems within wiring architectures

Features and Advantages

Connectorized system
Attaches simply and inexpensively to the vehicle. Reduces the amount of cut leads needed compared to traditional auxiliary boxes. Eliminates hardwiring and the accompanying costs and potential errors

Standard connector configurations
Provides design flexibility to meet an application's specific needs

MX150 Receptacle (Left); µPDB Sealed Module (Right)

µPDB Sealed Module Mated With MX150 Receptacle

Fully sealed with an IP6k7 NEMA rating
Can be mounted in multiple locations within the vehicle. Delivers reliability. Is fully submersible, withstands wet environments

Small footprint
Facilitates design for space-constrained applications with weight limits. Provides significant space and weight savings

Modular custom design
Delivers superior cost savings and performance by providing only those features required by the application. Uses only the specific components and materials needed for the application

Standard Modules

1 Relay, Supporting Electronics
200316-1101
(Application Example: Cooling Fan)

- Current rating: 48.0A
- Operating temp: -40 to +110°C
- Switching voltage: 12V
- Features:
  - 60.0A relay
  - PCB: 4 oz Cu, dual layer
  - FR4 170ºC TG

1 Relay, 3 Fast-Blow Fuses, Supporting Electronics
200316-1103
Application Example: Urea Module

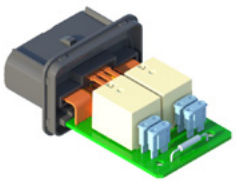
- Current rating:
  - Load 1: 7.5A (fuse 1)
  - Load 2: 6.0A (fuse 2)
  - Load 3: 7.5A (fuse 3)
- Operating temp: -40 to +110°C
- Switching voltage: 12V
- Features:
  - 30.0A relay
  - Micro2 fuses (1×20.0A and 2×15.0A)
  - PCB: 4 oz Cu, dual layer
  - FR4 170ºC TG

1 Relay, 1 Slow-Blow Fuse, Supporting Electronics
200316-1102
(Application Example: All-Wheel Drive Module)

- Current rating: 30.0A
- Switching voltage: 12V
- Operating temp: -40 to +110°C
- Features:
  - 60.0A relay
  - 40.0A LP-J case fuse
  - PCB: 4 oz Cu, dual layer
  - FR4 170ºC TG

Cold-Start Module, 12V
200316-1121

- Current rating:
  - 20.0A starting current; 7.5A steady-state current (each glow-wire plug)
  - Total 4 glow-wire plugs
- Operating Temp: -40 to +110°C
- Switching Voltage: 12V
- Coil Voltage: 12V
- Features:
  - 2×40.0A Relay
  - Micro2 Fuses (4×25.0A)
  - PCB: 4oz Cu, dual-layer



Cold-Start Module, 24V
200316-1122

- Current rating:
  - 12.0A starting current; 4.0A steady state current (each glow plug)
- Total 4 glow plugs
- Operating Temp: -40 to +110°C
- Storage Temp: -40 to +125°C
- Switching Voltage: 24V
- Coil Voltage: 12/24V
- Features:
  - 2×40.0A Relay
  - Micro2 Fuses (4×15.0A)
  - PCB 4oz Cu, dual layer
  - FR4 170ºC TG

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Markets and Applications

Automotive

- Vehicles
- Subsystems within wiring architectures
- Specialty vehicles
  - Police cars
  - Ambulances

Commercial Vehicle

- Overland trucking
- Off-road
  - Motorcycles
  - Recreational vehicles (RVs)
  - All-terrain vehicles (ATVs)
  - Snowmobiles
  - Boats
  - Personal watercraft (PWC)

Ordering Information

Series No.	Component	Product Attribute
200316-1101	Micro Power Distribution Box	1 Relay, Supporting Electronics
200316-1102		1 Relay, 1 Slow-Blow Fuse, Supporting Electronics
200316-1103		1 Relay, 3 Fast-Blow Fuses, Supporting Electronics
200316-1121		Cold-Start Module, 12V
200316-1122		Cold-Start Module, 24V

Custom Product	Description
Contact Molex	µPDB Custom Sealed Modules

www.molex.com/link/micropdb.html

Order No. 987651-4062 Rev. 2 USA/0k/GF/2019.03