Micro Power Distribution Box (µPDB) Sealed Modules

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.

- **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

<table>
<thead>
<tr>
<th>Module Description</th>
<th>Current Rating</th>
<th>Operating Temp</th>
<th>Switching Voltage</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Relay, Supporting Electronics</td>
<td>48.0A</td>
<td>-40 to +110°C</td>
<td>12V</td>
<td>- 60.0A relay, PCB 4 oz Cu, dual layer, FR4 170°C TG</td>
</tr>
<tr>
<td>1 Relay, 3 Fast-Blow Fuses, Supporting Electronics</td>
<td>7.5A (fuses 1 and 3), 6.0A (fuses 2), 7.5A (fuse 3)</td>
<td>-40 to +110°C</td>
<td>12V</td>
<td>- 30.0A relay, Micro2 fuses (1×20.0A and 2×15.0A), PCB 4 oz Cu, dual layer, FR4 170°C TG</td>
</tr>
<tr>
<td>Cold-Start Module, 12V</td>
<td>30.0A</td>
<td>-40 to +110°C</td>
<td>12V</td>
<td>- 40.0A LP-J case fuse, PCB 4 oz Cu, dual layer, FR4 170°C TG</td>
</tr>
<tr>
<td>Cold-Start Module, 24V</td>
<td>30.0A</td>
<td>-40 to +125°C</td>
<td>24V</td>
<td>- 40.0A LP-J case fuse, PCB 4 oz Cu, dual layer, FR4 170°C TG</td>
</tr>
</tbody>
</table>

- **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.

- **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 170°C TG

- **Current rating:** 12.0A starting current, 4.0A 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: 4 oz Cu, dual-layer

- **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: 4 oz Cu, dual-layer

- **Current rating:** 5.0A starting current, 1.0A steady state current (each glow-wire plug)
- **Total 4 glow-wire plugs**
- **Operating Temp:** -40 to +110°C
- **Switching Voltage:** 24V
- **Coil Voltage:** 12/24V
- **Features:**
  - 2×40.0A Relay
  - Micro2 Fuses (4×15.0A)
  - PCB 4oz Cu, dual layer
  - FR4 170°C TG

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# Micro Power Distribution Box (µPDB) Sealed Modules

## 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

<table>
<thead>
<tr>
<th>Series No.</th>
<th>Component</th>
<th>Product Attribute</th>
</tr>
</thead>
<tbody>
<tr>
<td>200316-1101</td>
<td>Micro Power Distribution Box</td>
<td>1 Relay, Supporting Electronics</td>
</tr>
<tr>
<td>200316-1102</td>
<td></td>
<td>1 Relay, 1 Slow-Blow Fuse, Supporting Electronics</td>
</tr>
<tr>
<td>200316-1103</td>
<td></td>
<td>1 Relay, 3 Fast-Blow Fuses, Supporting Electronics</td>
</tr>
<tr>
<td>200316-1121</td>
<td></td>
<td>Cold-Start Module, 12V</td>
</tr>
<tr>
<td>200316-1122</td>
<td></td>
<td>Cold-Start Module, 24V</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Custom Product</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact Molex</td>
<td>µPDB Custom Sealed Modules</td>
</tr>
</tbody>
</table>

www.molex.com/link/micropdb.html

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