

Delphi Sealed Printed Circuit Board Electrical Centers

Delphi Sealed Printed Circuit Board (PCB) Electrical Centers unite Delphi's proven PCB technology within a robust, sealed package. This innovative design — Delphi's first sealed PCB bussed electrical center — enables an environmentally protected electrical center that is capable of providing electronics integration in harsh conditions, such as those found in commercial vehicle, construction, agricultural and specialty vehicle applications.

The Delphi Sealed PCB Electrical Centers feature a dispensed polyurethane/silicone foam gasket as well as sealed [Delphi GT Connectors](#) and sealed [Delphi Metri-Pack Connectors](#) for outstanding resistance to temperature, chemicals and abrasion. The housing can be adapted to meet customer-specific device content or configuration requirements.

► Benefits

- Exceptional environmental protection of PCB electrical center
 - Meets Ingress Protection (IEC 60529-IP 6K9K)
 - Sealed cover through use of dispensed polyurethane/silicone foam gasket
 - Sealed connectors through use of silicone seals
 - Dust tight and high pressure water resistant
- PCB technology enables
 - Cost-effective bussing technology
 - Allows the use of lower cost, board-mounted components, including PCB relays, diodes, resistors, etc.
 - Reduced mass
 - Approximately 30 percent reduction in mass compared to stamped metal electrical centers
 - Optimized copper usage
 - Reduction of cut leads and splices in the harness allows a copper mass savings
 - Efficient copper usage on PCB traces
 - Reduced complexity
 - Efficient, responsive handling of design and engineering changes
- Flexible mounting, orientation, and location options enable uncomplicated vehicle packaging
 - Multiple mounting configurations
 - Pass-through or on-bracket design
 - Up to 4 fastening points
- Capable of future electronics integration
- Laser etching of the device label
- Enhanced electrical system performance and functionality



Delphi Sealed PCB Electrical center with laser etched label



Delphi Sealed PCB Electrical Center with sealing through use of dispensed polyurethane foam gasket

▶ Typical Applications

The environmentally protected, sealed cover and sealed connectors of the Delphi Sealed PCB Electrical Center make it suited for use in the following:

- Commercial vehicles
- Specialty vehicles
- Marine applications
- Agricultural equipment
- Construction equipment
- Automotive applications

▶ Specifications

Dimensions: 228 x 193 x 76 mm
Temperature Range: -40° to 105°C

▶ Performance Advantages

Delphi Sealed PCB Electrical Centers provide superb environmental protection for electrical centers, enhancing electrical system performance in applications subject to harsh conditions. Delphi has designed and produced robust electrical centers since 1991 and has proven field use with more than 10 million PCB units in vehicle applications worldwide. Delphi possesses the proprietary design tools and the technology portfolio to deliver complete, optimized, expertly managed electrical/electronic architecture solutions.



Delphi Sealed PCB Electrical Center shown with proven silicon sealed Delphi Connection Systems