FLEC™ SERIES: FLEXIBLE ELECTRICAL CENTER

Configurable Power Distribution Module

Description
The Flexible Electrical Center (FLEC™) is a configurable power distribution module for the commercial vehicle market. It accommodates circuit protection components in a compact, sealed footprint. Your custom electrical schematic can be programmed into the FLEC™ to create a simple “plug-and-play” system. The PCB accepts active and passive devices. Each program is reviewed by Littelfuse for proper ratings, thermal loading, and application. The FLEC™ mates to an industry standard connection system to provide a robust solution for heavy duty environments.

Features and Benefits
- High component density in the FLEC maximizes available space and limits the number of additional units required.
- The versatile nature of the FLEC unit means it can accept a large number of component types. MINI, ATO, MAXI, JCASE, MCASE, and ISO components are all accepted.
- Rugged and sealed, the unit boasts an IP67 rating which allows it to be mounted in locations susceptible to moisture and dirt without any adverse effects.
- Input stud caps prevent accidental short circuit while performing maintenance to and around the box.
- Internal PCB allows for custom circuit configurations, including designs requiring electronics such as those used in CAN J1939 and LIN systems.
- Decreases assembly efforts at factory due to connectorized interfaces, instead of hard-wired technologies.
- Reduced risk of wiring faults: The FLEC uses highly reliable printed circuit board technologies – each FLEC is 100% electrical tested.

Specifications Overview
- Voltage Ratings: 12 or 24V DC
- Max Load: 300A
- Max Fuse Rating: 30A
- Fuse Capacity: 28 MINI style
- Relay Capacity: 18 ISO style
- Operating Temp: -40 to +85°C
- Vibration Resistance: ISO 16750-3 TEST II, 32 HOURS
- Shock Resistance: ISO 16750-3, SECTION 4.2.2
- Ingress Protection: IP67
- Output Connectors: Delphi GT Series
- Input Studs: M8
- Dimensions: 180x197x75 mm
- Accessories: Input stud caps, cover tether, fuse puller

Applications
- Primary power distribution

Web Resources
Download technical resources at:
littelfuse.com/flec

Ordering Information

<table>
<thead>
<tr>
<th>MODEL</th>
<th>DESCRIPTION</th>
<th>MAX LOAD</th>
<th>MAX FUSE RATING</th>
<th>FUSE CAPACITY</th>
<th>RELAY CAPACITY</th>
<th>IP RATING</th>
<th>OUTPUT CONNECTORS</th>
<th>CAN/LIN AVAILABLE?</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLEC3000Z-0</td>
<td>Standard FLEC</td>
<td>300A</td>
<td>30A</td>
<td>28</td>
<td>18</td>
<td>IP67</td>
<td>Delphi GT</td>
<td>No</td>
</tr>
<tr>
<td>——</td>
<td>Customized FLEC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Description
The Flexible Electrical Center (FLEC™) is a configurable power distribution module for the commercial vehicle market. It accommodates circuit protection components in a compact, sealed footprint. Your custom electrical schematic can be programmed into the FLEC™ to create a simple “plug-and-play” system. The PCB accepts active and passive devices. Each program is reviewed by Littelfuse for proper ratings, thermal loading, and application. The FLEC™ mates to an industry standard connection system to provide a robust solution for heavy duty environments.

Features and Benefits
- High component density in the FLEC maximizes available space and limits the number of additional units required.
- The versatile nature of the FLEC unit means it can accept a large number of component types. MINI, ATO, MAXI, JCASE, MCASE, and ISO components are all accepted.
- Rugged and sealed, the unit boasts an IP67 rating which allows it to be mounted in locations susceptible to moisture and dirt without any adverse effects.
- Input stud caps prevent accidental short circuit while performing maintenance to and around the box.
- Internal PCB allows for custom circuit configurations, including designs requiring electronics such as those used in CAN J1939 and LIN systems.
- Decreases assembly efforts at factory due to connectorized interfaces, instead of hard-wired technologies.
- Reduced risk of wiring faults: The FLEC uses highly reliable printed circuit board technologies – each FLEC is 100% electrical tested.

Specifications Overview
- Voltage Ratings: 12 or 24V DC
- Max Load: 300A
- Max Fuse Rating: 30A
- Fuse Capacity: 28 MINI style
- Relay Capacity: 18 ISO style
- Operating Temp: -40 to +85°C
- Vibration Resistance: ISO 16750-3 TEST II, 32 HOURS
- Shock Resistance: ISO 16750-3, SECTION 4.2.2
- Ingress Protection: IP67
- Output Connectors: Delphi GT Series
- Input Studs: M8
- Dimensions: 180x197x75 mm
- Accessories: Input stud caps, cover tether, fuse puller

Applications
- Primary power distribution

Web Resources
Download technical resources at:
littelfuse.com/flec

Ordering Information

<table>
<thead>
<tr>
<th>MODEL</th>
<th>DESCRIPTION</th>
<th>MAX LOAD</th>
<th>MAX FUSE RATING</th>
<th>FUSE CAPACITY</th>
<th>RELAY CAPACITY</th>
<th>IP RATING</th>
<th>OUTPUT CONNECTORS</th>
<th>CAN/LIN AVAILABLE?</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLEC3000Z-0</td>
<td>Standard FLEC</td>
<td>300A</td>
<td>30A</td>
<td>28</td>
<td>18</td>
<td>IP67</td>
<td>Delphi GT</td>
<td>No</td>
</tr>
<tr>
<td>——</td>
<td>Customized FLEC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Description
The Flexible Electrical Center (FLEC™) is a configurable power distribution module for the commercial vehicle market. It accommodates circuit protection components in a compact, sealed footprint. Your custom electrical schematic can be programmed into the FLEC™ to create a simple “plug-and-play” system. The PCB accepts active and passive devices. Each program is reviewed by Littelfuse for proper ratings, thermal loading, and application. The FLEC™ mates to an industry standard connection system to provide a robust solution for heavy duty environments.

Features and Benefits
- High component density in the FLEC maximizes available space and limits the number of additional units required.
- The versatile nature of the FLEC unit means it can accept a large number of component types. MINI, ATO, MAXI, JCASE, MCASE, and ISO components are all accepted.
- Rugged and sealed, the unit boasts an IP67 rating which allows it to be mounted in locations susceptible to moisture and dirt without any adverse effects.
- Input stud caps prevent accidental short circuit while performing maintenance to and around the box.
- Internal PCB allows for custom circuit configurations, including designs requiring electronics such as those used in CAN J1939 and LIN systems.
- Decreases assembly efforts at factory due to connectorized interfaces, instead of hard-wired technologies.
- Reduced risk of wiring faults: The FLEC uses highly reliable printed circuit board technologies – each FLEC is 100% electrical tested.

Specifications Overview
- Voltage Ratings: 12 or 24V DC
- Max Load: 300A
- Max Fuse Rating: 30A
- Fuse Capacity: 28 MINI style
- Relay Capacity: 18 ISO style
- Operating Temp: -40 to +85°C
- Vibration Resistance: ISO 16750-3 TEST II, 32 HOURS
- Shock Resistance: ISO 16750-3, SECTION 4.2.2
- Ingress Protection: IP67
- Output Connectors: Delphi GT Series
- Input Studs: M8
- Dimensions: 180x197x75 mm
- Accessories: Input stud caps, cover tether, fuse puller

Applications
- Primary power distribution

Web Resources
Download technical resources at:
littelfuse.com/flec

Ordering Information

<table>
<thead>
<tr>
<th>MODEL</th>
<th>DESCRIPTION</th>
<th>MAX LOAD</th>
<th>MAX FUSE RATING</th>
<th>FUSE CAPACITY</th>
<th>RELAY CAPACITY</th>
<th>IP RATING</th>
<th>OUTPUT CONNECTORS</th>
<th>CAN/LIN AVAILABLE?</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLEC3000Z-0</td>
<td>Standard FLEC</td>
<td>300A</td>
<td>30A</td>
<td>28</td>
<td>18</td>
<td>IP67</td>
<td>Delphi GT</td>
<td>No</td>
</tr>
<tr>
<td>——</td>
<td>Customized FLEC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Specifications

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Voltage Ratings</strong></td>
<td>12 or 24V DC</td>
</tr>
<tr>
<td><strong>Max Fuse Rating</strong></td>
<td>30A</td>
</tr>
<tr>
<td><strong>Max Load</strong></td>
<td>300A</td>
</tr>
<tr>
<td><strong>Fuse Capacity</strong></td>
<td>28 MINI style</td>
</tr>
<tr>
<td><strong>Relay Capacity</strong></td>
<td>18 ISO style</td>
</tr>
<tr>
<td><strong>Terminal Styles</strong></td>
<td>MINI®, PCB, JCASE®, MCASE™</td>
</tr>
<tr>
<td><strong>Temperature Range</strong></td>
<td>-40 °C to +85 °C</td>
</tr>
<tr>
<td><strong>Ingress Protection Rating</strong></td>
<td>IP67</td>
</tr>
<tr>
<td><strong>Vibration Resistance</strong></td>
<td>ISO 16750-3 Test II, 32 hours</td>
</tr>
<tr>
<td><strong>Shock Resistance</strong></td>
<td>ISO 16750-3, Section 4.2.2</td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
<td>180x197x75 mm</td>
</tr>
<tr>
<td><strong>Labels</strong></td>
<td>Consult Littelfuse for label options</td>
</tr>
<tr>
<td><strong>Input Studs</strong></td>
<td>M8</td>
</tr>
</tbody>
</table>
| **Output Connectors**  | (1) 8-way sealed Delphi 280 series  
(1) 14-way sealed Delphi 280 series  
(1) 16-way sealed Delphi 280 series  
(1) 10-way sealed Delphi 150 series  
(1) 12-way sealed Delphi 150 series  
(1) 16-way sealed Delphi 150 series |
| **Accessories**        | Input stud caps, cover tether, fuse puller |

### Dimensions in millimeters

![Dimensions Diagram](image-url)