Power Plate Solutions for the Rail Market

Reliability, innovation, and highly engineered, collectively describe ITT VEAM’s ability to support the demands for custom interconnect solutions for the rail market.

ITT’s VEAM brand was challenged with designing and manufacturing a harsh environments multi-poles power interconnection system, which connects the railcar to the bogie.

This custom solution requires a compact design, while supporting a high performance in operating voltage and withstanding the harsh environment.

The solution
The ITT VEAM has answered this challenge by designing a customizable Power Platform System. This interconnect solution included; contacts with multipoint band, materials suitable to withstand the harsh environment of this application, mechanical and electrical solution to meet customer requirements.

Key features
• Crimp contact up to 240 sqmm
• The contacts come with multi- point bands ensuring low contact resistance and good performance up to maximum 700A
• Fast and easy coupling system with two screws or with latch mechanism
• Protection degree IP67, plating protection up to 500 hours salt spray.

The VEAM Difference:
• The double screw or latching mechanism provides quick and fast connect and disconnect.
• Meets all the latest railway standards on smoke and fire protection (I2F2).
• The dimensions of receptacle and plug allows a significant space saving in hard applications

Applications

1- BOGIES
2- CONVERTERS
3- INTER-VEHICLES
4- POWER DISTRIBUTION
Why ITT
ITT is a focused multi-industrial company that designs and manufactures highly engineered critical components and customized technology solutions.

ITT Interconnect Solutions’ VEAM brand is a leading global manufacturer of connector products serving international customers in transportation end markets. ITT’s Interconnect Solutions business, which also includes the Cannon and BIW Connector Systems brands, manufactures and supplies a variety of connectors and interconnects that make it possible to transfer data, signal and power in an increasingly connected world.

Power Plate Configurations

<table>
<thead>
<tr>
<th>Specifications</th>
<th>2 Pole</th>
<th>3 Pole</th>
<th>4 Pole</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating voltage according to EN50124-1 (OV2/PD3)</td>
<td>Up to 1000</td>
<td>Up to 1200</td>
<td>Up to 1200</td>
</tr>
<tr>
<td>Sealing</td>
<td>IP27</td>
<td>IP67</td>
<td>IP27</td>
</tr>
<tr>
<td>Current rating (A)</td>
<td>Up to 700</td>
<td>Up to 350</td>
<td>Up to 245</td>
</tr>
<tr>
<td>Operating temperature:</td>
<td>-40°C + 100°C</td>
<td>-40°C + 100°C</td>
<td>-40°C + 100°C</td>
</tr>
<tr>
<td>Contacts:</td>
<td>Copper Alloy</td>
<td>Copper Alloy</td>
<td>Copper Alloy</td>
</tr>
<tr>
<td>Shell:</td>
<td>Aluminum Alloy</td>
<td>Aluminum Alloy</td>
<td>Aluminum Alloy</td>
</tr>
<tr>
<td>Wire size (max.)</td>
<td>Up to 240 mmq</td>
<td>Up to 120 mmq</td>
<td>Up to 50 mmq</td>
</tr>
</tbody>
</table>

* The actual design of the product may change according to the specific electrical and mechanical requirement.