

OCP 48V Barklip® BK150 IO

OCP 48V COMPATIBLE POWER CABLE ASSEMBLY FOR OPEN COMPUTE IT GEAR POWER DISTRIBUTION ARCHITECTURE

Amphenol's OCP 48V compliant Barklip® BK150 power cable assemblies are designed to meet OCP V3 IT Gear power distribution architecture standards and provide a convenient method of distributing up to 150A per contact between busbars, cables, and circuit boards. The connector system features two individual power circuits and two newly added secondary chassis grounding contacts. In addition, the connector system offers new optional sense contacts for mate last-break first capabilities. Barklip® BK150's increased current carrying capabilities and customizable features enables the technology to be used in a variety of evolving power dense data center applications such as Power Shelves, BBU's, Server/Storage Sleds.

- Contacts with high conductivity copper alloy
- Supports 48V Power Rack Architecture
- Simple configurable plug-and-play solutions
- Ultra-low end-of-life contact resistance of 0.5mΩ
- Fully compliant with ORv3 IT Gear Power Input Solution specifications



TARGET MARKETS



FEATURES

- Contacts with high conductivity copper alloy
- Ultrasonically welded between wire and contact
- 12 independent conducting beams and silver plating
- Floating panel mount design
- New sense pin contacts
- New Secondary Chassis Grounding Contacts

BENEFITS

- Carries up to 150A/contact (still air)
- Low voltage drop and high reliability
- Ultra-low end-of-life contact resistance of 0.5mΩ
- 6.4mm side-to-side gatherability
- Supports ±3mm float horizontally and ±2mm vertically
- Enables mate last- first break capability
- Provides additional grounding functionality for safety

TECHNICAL INFORMATION

MATERIAL

- Power Contacts: High conductivity Copper Alloy
- Housing & TPA: Thermoplastic, UL 94V-0, Halogen-free

MECHANICAL PERFORMANCE

- Mating Busbar Thickness: 6.00±0.20mm (see product spec busbar recommendations)
- Mating/Un-mating Force: Mating force shall not exceed 100N and un-mating shall not be less than 20N
- Durability: 50 mating cycles

ELECTRICAL PERFORMANCE

- Power Contacts:
 - 100A (30°C temperature-rise over ambient, still air)
 - 150A (XX°C temperature-rise over ambient, airflow @ XXXLFM)
- Ground Contacts: 64A total max. for 2-minute duration (32A/contact)
- Sense Contact: 1.5A (30°C temperature-rise over ambient, still air)
- Operating Voltage Rating: 60VDC (The voltage rating is also dependent on the application)
- Contact Resistance: End-of-life contact resistance of 0.5mΩ

ENVIRONMENTAL

- Operating Temperature Range: -40°C to +105°C
- RoHS Information: This product is compatible according to the European Union Directive 2011/65/EU

APPROVALS & CERTIFICATION

- UL/CSA File #: E66906

PACKAGING

- Carton

SPECIFICATIONS

- Product Specification: GS-12-1717
- Application Specification: GS-20-0725

TARGET MARKETS/APPLICATIONS



Hyperscale Computing Architectures



Server/Storage Sleds



Industrial Energy Storage

PART NUMBERS

Description	Part Numbers
ORv3 Barklip® BK150, with Ground Contacts + Sense Pins	10162876-*