Power Solutions

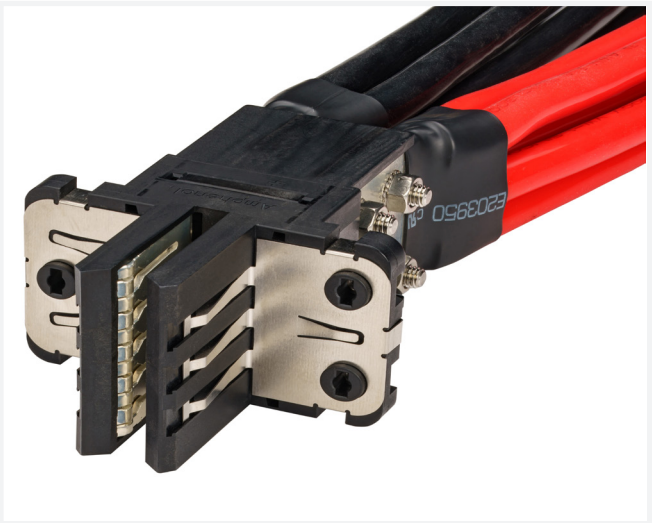
Amphenol

BarKlip® BK600 I/O

OCP-COMPATIBLE POWER CABLE ASSEMBLY COMPLIANT WITH OPEN COMPUTE POWER DISTRIBUTION ARCHITECTURE

Amphenol's BarKlip® BK600 I/O power cable assemblies feature an OCP-compatible design compliant with ORv3 power distribution architecture standards. Barklip® BK600 I/O can distribute up to 700A between busbars, cables, and circuit boards. Designed similar to other ORv3 busbar connectors, the BK600 I/O provides best-in-class current carrying capability featuring silver plated contacts ensuring low contact resistance, ultrasonically welded cables for high reliability, and secondary chassis grounding contacts providing grounding functionality for improved safety. BarKlip® BK600 I/O's high current carrying capabilities and customizable design are ideal for data center applications such as power shelves (PSUs), battery backup units (BBU's), server/ storage sleds, and high-density system architecture powering Artificial Intelligence (AI).

- Distributes up to 700A per contact
- Supports 48V Power Rack Architecture
- Fully compliant with ORv3 Power Output Specifications
- Features chassis grounding contacts
- Ultra-low end-of-life contact resistance of 0.05mΩ



TARGET MARKETS

FEATURES

- Contacts with high conductivity copper alloy
- Ultrasonically welded between wire and contact
- 22 independent conducting beams and silver plating
- Secondary chassis grounding contacts
- New, longer contact design
- Floating panel mount design

BENEFITS

- Carries up to 700A/Contact (45°C/300LFM airflow)
- Low voltage drop and high reliability
- Ultra-low end-of-life contact resistance of 0.05mΩ
- Provides additional grounding functionality for safety
- Maximizes contact wipe with ORv3 laminated busbar (6mm thick)
- Supports ±3mm float horizontally and vertically

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 120N and un-mating shall not be less than 15N
- Durability: 50 mating cycles

ELECTRICAL PERFORMANCE

- Power Contacts:
  - 420A (30°C temperature-rise over ambient, still air, 4AWG x 12)
  - 700A (45°C temperature-rise over ambient, 300LFM airflow, 4AWG x 12)
- Ground Contacts:
  - 64A total max. for 2-minute duration (32A/Contact)
- Operating Voltage Range:
  - 480VDC (The voltage rating is dependent on the application)
- Contact Resistance:
  - End-of-life contact resistance of 0.05mΩ

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
- TUV File #: 034414 0045

PACKAGING

- Carton

SPECIFICATIONS

- Product Specification: GS-12-1751
- Application Specification: GS-20-0745

TARGET MARKETS/APPLICATIONS

Hyperscale Computing Architectures
Server/Storage Sleds
Artificial Intelligence (AI) & Machine Learning (ML)

EV Charging

Industrial Energy Storage

PART NUMBERS

Description	Part Numbers
BarKlip® BK600 I/O	10164745-*

PWRBK600923EA4