

# BarKlip® BK100 I/O

# DIRECT PLUGGABLE CLIP THAT CONNECTS TO BUSBARS

Amphenol's BarKlip® BK100 I/O provides a convenient method of distributing up to 100A between busbars, cables and circuit boards. It features 12 fully independent cantilevered beams, providing a true compliant spring to adjust for variations in busbar alignment and surface finish. The ultrasonically welded connection between the wire and contact increases the efficiency and reliability of current transition.

The cable connects with a system rack bar and a 6.00mm thick copper bar, to achieve a direct pluggable connection to an un-insulated busbar. This connection generates very low energy loss, with a maximum resistance of only  $0.3m\Omega$  per port.

BarKlip® BK100 I/O is an ideal solution for next generation data center designs, EV charging stations, UPS, and networking equipment applications.

- Floating panel mount for blind-mate applications
- Spring-like design adjusts to busbar variations
- Ideal for 1U racks



#### **FEATURES**

- Contacts with high conductivity copper alloy,
  12 independent conducting beams and silver plating
- Ultrasonically welded connection between wire and contact
- High temperature housing
- Low-halogen housing
- 10AWG to 4AWG
- Terminates up to four 8AWG wires

#### **BENEFITS**

- Carries up to 100A/contact (30°C T-rise in still air) and provide low contact resistance
- Low voltage drop and high reliability
- Wide operating temperature range of -40°C to 105°C
- Meets JEDEC JS709 Electronic Industry Standard
- Supports different wire combinations with equal crosssection area for a wide range of power distribution requirements

## **▶** BarKlip® BK100 I/O

### **TECHNICAL INFORMATION**

#### **MATERIAL**

- Contacts: High Performance Copper Alloy
- Contact finish: AGT® Silver Plating over Nickel
- Housing: High-Temperature Thermoplastic, UL 94 V-0, halogen-free, Black
- Cable: 10AWG 4AWG or equal cross section area wire

#### **MECHANICAL PERFORMANCE**

- Mating busbar's thickness: 6.0±0.1mm
- Durability: 50 mating cycles

#### **ELECTRICAL PERFORMANCE**

- Current Rating: up to 100A/contact (30°C T-rise in still air)
- Operating Voltage: 60V
- Dielectric Withstanding Voltage: 1000V
- Insulation Resistance: 5000M $\Omega$
- Contact Resistance: 0.3mΩ max.

#### **ENVIRONMENTAL**

- Operating Temperature Range: -40°C to 105°C (without wire consideration)
- RoHS Information: This product is compatible according to the European Union Directive 2011/65/EU

#### **SPECIFICATIONS**

- Product Specification: GS-12-1410
- Application Specification: GS-20-0535

#### **APPROVALS AND CERTIFICATIONS**

• UL and CSA are in process

#### **PACKAGING**

Carton

#### **TARGET MARKETS/APPLICATIONS**



AC/DC Pluggable Power Supplies Networking Equipment Switches



Servers Storage



**Hyperscale Computing Architectures** 



**EV** Charging

# **PART NUMBERS**

Description	Part Numbers
Cable Assembly 6AWG Screw Mount	10142911-001LF
Cable Assembly 6AWG Slide to Lock	10143222-001LF