# **Product Data Sheet**

# Amphenol Amphe-PD™ Connectors for Power Applications

No. 191

Amphenol Industrial Operations now introduces its Amphe-PD™ connector series. The Amphe-PD™ series features RADSOK® technology, a terminal that features a stamped hyperbolic grid providing low insertion force, high amperage, high reliability, and a longer cycle life. The Amphe-PD™ connector series is ideally suited for the datacom industry, as well as many other applications.

The Amphe-PD™ connectors generate more processing power with less heat than a similar-sized connector. The series produces greater amperage without wasting valuable space, offering a compact solution for datacom applications, which require small, yet powerful connectors.

The Amphe-PD™ solution is UL listed at 69A and CSA listed at 55A. Amphe-PD™ features a single position RADSOK® with molded socket shell or a dual-position TUV "touch-proof" with a V0 rating. In addition, the RADSOK™ in the Amphe-PD™ supports 50A to 70A continuous duty.

Amphenol's Amphe-PD™ series was developed with the ability to connect to wires, busbars, as well as circuit boards. This flexibility allows the Amphe-PD™ to be used in a wide variety of applications. Several different plastic receptacle-mounting variations are also available.

With millions of parts in the field, the RADSOK® electrical connection has proven to be extremely reliable, with almost no reported connection failures in Amphenol RADSOK-designed applications. RADSOK® utilizes the tensile strength properties of the flat, high conductivity alloy grid for the high normal forces required for conductivity, while providing a large conductive surface area. This results in a correspondingly low voltage drop and low temperature rise while maintaining low insertion forces.

Additional benefits of the Amphe-PD product include:

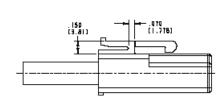
- Low cost, 100% molded housings
- Integrated latching mechanism
- Easy, tool-less assembly
- Low Insertion Force
- High reliability

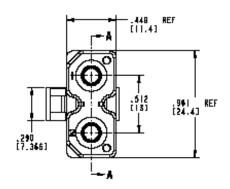
- High Cycle Durability
- High Ampacity
- Tactile and audible locking
- Proven metal clip contact retention on receptacles
- TPA device on plug to insure socket locking

**Technical Specifications:** UL rated 69 Amps (6 AWG). CSA rated 55 Amps (6 AWG). Molded from UL94V-0 thermoplastic (self extinguishing). Meets RoHS and UL94V-0 guidelines. 2-Pole DC Power interconnect in about 1 square inch. Passes UL and TUV finger proof design standards.

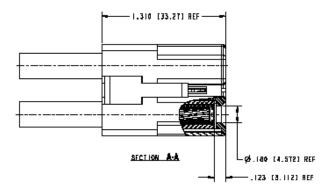
# <u>Plug</u>

### 10-638974-000 3.6mm RADSOK® Plug



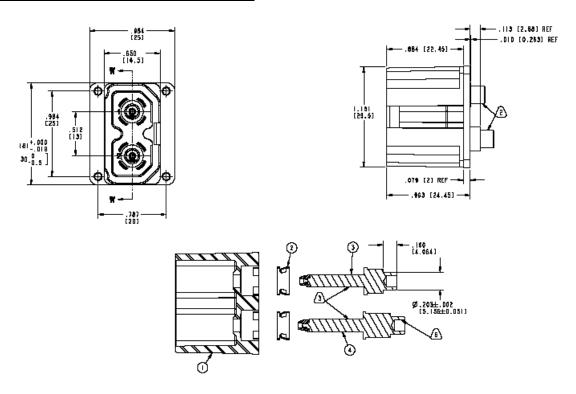


Amphenol RADSOK® PowerBus-

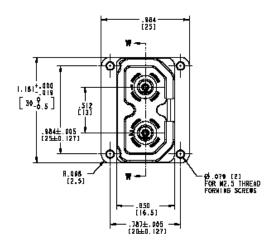


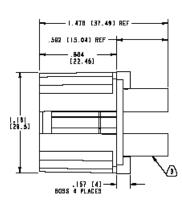
# **Receptacles**

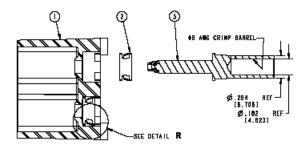
### **10-638975-000 Busbar Receptacle**



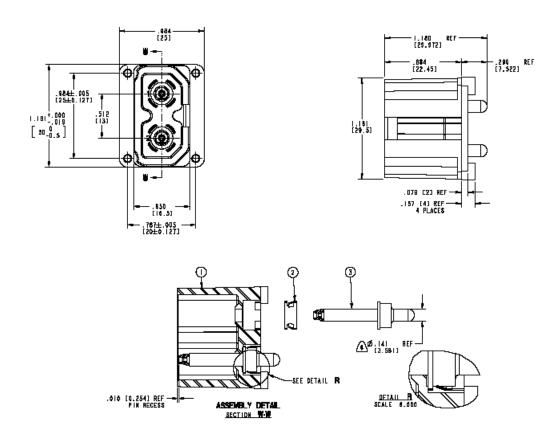
### 10-638976-000 Busbar Receptacle







### 10-638977-000 PCB Tail Receptacle



For additional information on the GT Reverse Bayonet series of connectors, please ask for Catalog 12-024. For additional information on the Amphe-Power® family of connectors with RADSOK Technology, please ask for Catalog SL-391.

For further information on your individual application requirements, contact:

**Amphenol Corporation** 

Amphenol Industrial Operations

40-60 Delaware Avenue

Sidney, New York 13838-1395

Phone: 1-607-563-5011 Fax: 1-607-563-5351

Internet: www.amphenol-industrial.com and www.radsok.com

# **Amphenol** RADSOK® POWER BUS

## Amphe-PD™

High-powered applications are constantly in need of a solution that is higher in power, smaller in size, and low in cost. The Amphe-PD™ is that ideal solution.

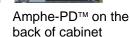
The new low insertion force, locking, two-pole connector is UL listed at 69A and CSA listed at 55A. It is also TUV Finger Proof with a V0 fire rating. By combining parallel circuits into one, heat generation is reduced, space is saved, and very importantly, reliability is increased.

- Low cost, 100% molded housings
- Meets RoHS and UL94V-0 guidelines
- Integrated latching mechanism
- Easy, tool-less assembly
- Molded from UL94V-0 thermoplastic (self extinguishing)
- 2-Pole DC Power interconnect in about 1 square inch
- Tactile and audible locking
- Proven metal clip contact retention on receptacles
- TPA device on plug to insure socket locking



Amphe-PD™ Receptacle and plug







#### Part numbers:

### 10-638975-000 Busbar Receptacle

- Swage pins for .093 thick Cu layered busbar
- **TUV** finger proof pins
- **Housings without bosses**
- The swage geometry may be adjusted for different thickness busbars.
- Housing designed to be captured within the busbar layers.

### 10-638976-000 Crimp Pin Receptacle

- AWG crimp, TUV finger proof
- Housing with screw bosses
- The crimp may be made with a Pico or Daniel's crimp tool (For reference only: Daniels Crimp tool WA23 with a WA23-3 die)

#### 10-638977-000 PCB Tail Receptacle

- **PCB Tail, TUV Finger Proof Pins**
- Housing with screw bosses
- The 10-638977-000 is sold fully assembled
- to be soldered to a PCB.

#### 10-638974-000 3.6mm RADSOK® Plug

- 3.6 mm RADSOK® Plug Connector
- **TUV** finger proof
- 6 AWG wire crimp wells
- The Plug is designed to accept SuperFlex 6 AWG wire to keep T-Rise to a minimum and
- Supports a very tight bend radius. Smaller wire size crimp wells are available.

