

# CoolPower® Slim Drawer

## HIGH CURRENT CONNECTOR WITH COOLBAND CONTACT TECHNOLOGY

Amphenol's CoolPower® Slim Drawer Series is configurable to accommodate various combinations of power and signal contacts and several mounting and termination options. CoolPower® Slim Drawer can deliver up to 60A per pin and provides an ultra-low end-of-life contact resistance of just 0.40mΩ. Additional features include blind-mating, sequential mating, and true hot plug capabilities.

CoolPower® Slim Drawer is the ideal solution for power-dense applications such as datacom/networking equipment, robotics, EV charging stations, telecommunications equipment, and energy storage systems.

- Up to 60A per pin
- High current CoolBand power contacts for maximum performance
- Optional sequential contact engagement (first mate / last break)
- PCB orientation features and keying to prevent improper mounting and mating
- Metal guide pin / float mount system for additional mating reliability



### TARGET MARKETS



### FEATURES

- Low footprint height of only 10.80mm above board
- High current CoolBand contact technology
- Power contacts for power distribution and signal contacts for monitoring and control
- Highly configurable power and signal contacts
- Metal guide pin options

### BENEFITS

- Optimizes board space usage and airflow
- Provides maximum performance and low resistance in a robust pin and socket
- Meets next-generation requirements
- Design flexibility
- Blind mateability

## TECHNICAL INFORMATION

### MATERIAL

Unless otherwise specified, the materials for each component shall be:

- Housing: High temperature thermoplastic, glass reinforced UL 94V-0, Black
- Hardware: Steel or Brass, Nickel plated
- Contacts: Phosphor Bronze signal, Gold over Nickel plating, Matte Tin termination (socket & pin)
- Contacts: Copper Alloy pins with Silver or Gold over Nickel plating
- Contacts: Beryllium Copper mating power grid, Silver or Gold over Nickel plating (socket), Copper Alloy balance, Silver over Nickel or Matte Tin plating

### MECHANICAL PERFORMANCE

- Durability: 10,000+ mating cycles
- CoolBand mating force per power contact:

CoolBand Size	8	10	12	14	16
Mating gauge pin (mm)	Ø3.50	Ø3.00	Ø2.40	Ø2.00	Ø1.50
Insertion force (kg)	2.00	1.20	1.10	0.90	0.50

- Minimum wipe length of power contact interface: 4.00mm
- Blind-mating guide blade alignment correction: 1.50mm
- Integrated features to prevent improper mating and incorrect assembly

### ELECTRICAL PERFORMANCE

- Current Rating: Up to 60A per power contact (2.40mm solder tails) & 4A per signal contact
- Contact Resistance: LLCR: 20mΩ max. for signal contact
- Contact Resistance: LLCR: 0.25mΩ max. for power contacts
- Insulation Resistance: 5000MΩ
- Dielectric Withstanding Voltage: 2500VDC
- Working Voltage: 600VAC for power pins, 250V AC for signal contacts

## PART NUMBERS

Description	Part Numbers
Slim Drawer pin connector, solder cup termination family	DWR-TXXXXP-VX1X-0X
Slim Drawer socket connector, solder cup termination family	DWR-TXXXXS-VX1X-0X
Slim Drawer pin connector, vertical PCB solder tail termination (.150in) family	DWR-TXXXXP-VX3X-0X
Slim Drawer socket connector, vertical PCB solder tail termination (.150in) family	DWR-TXXXXS-VX3X-0X
Slim Drawer pin connector, vertical press fit termination family	DWR-TXXXXP-VX6X-0X
Slim Drawer socket connector, vertical press fit termination family	DWR-TXXXXS-VX6X-0X
Slim Drawer pin connector, right angle PCB solder tail termination (.150in) family	DWR-TXXXXP-RX3X-XX
Slim Drawer socket connector, right angle PCB solder tail termination (.150in) family	DWR-TXXXXS-RX3X-XX

### ENVIRONMENTAL

- Operating Temperature: -55°C to +105°C
- Storage temperature: -55°C to +125°C

### APPROVALS AND CERTIFICATIONS

- UL and CSA are in process
- RoHS Compliant
- UL1977

### PACKAGING

- Carton
- Trays

### TARGET MARKETS/APPLICATIONS



Power supply and distribution with signal line capabilities  
Test equipment



Servers (1U,2U)  
Storage devices



Test equipment



Test equipment