

Minitek® Pwr 3.0 High Current Connector System

Available in Single Row and Double Row

ROBUST, VERSATILE AND HIGH CURRENT PERFORMANCE

Minitek® Pwr 3.0 High Current Connector (HCC) is designed for power applications with a current rating of up to 12A per contact and a wire gauge range from 16AWG to 30AWG for Wire-to-wire and Wire-to-Board applications. It is available in 2 to 24 circuits for dual rows and 2 to 12 circuits for single rows.

- Rated current up to 12A per contact
- Fully isolated terminals
- High retention force in housing
- Fully polarized housing



FEATURES

- High conductivity copper alloy
- Fully isolated terminals
- Positive locking on housing with low thumb latch operation
- Fully polarized housings
- High retention force in housing
- Glow wire compliant option
- UL94V-0 flammability rated nylon material
- RoHS compliant and lead-free

BENEFITS

- Rated up to 12A per contact
- Prevents terminals from potential damage during operation
- Ensures secured mating retention
- Prevents accidental mismating
- Well secured terminals in housing
- Complies with International Standard IEC 60335-1 for household appliances
- · High flammability rating
- Meets environmental, health, and safety requirements

TECHNICAL INFORMATION

MATERIAL

- Header: High conductivity Copper Alloy with optional Tin and Gold plating
- Housing: High Temperature Thermoplastic, Black, UL94V-0
- Crimping Terminal: High conductivity Copper Alloy with optional Tin and Gold plating

MECHANICAL PERFORMANCE

- Insertion Force 8N per circuit
- Withdrawal Force 2.4N per circuit
- Durability: 30 mating cycles

ELECTRICAL PERFORMANCE

- Low Level Contact Resistance: $10m\Omega$ max.
- Insulation Resistance: 1000M Ω min.
- Voltage Rating: 600Vrms
- Current Rating: 12.0A max.
- Dielectric Withstand Voltage: 2200VAC
- Temperature Rise: 30°C max.

PACKAGING

- PCB Header: Tray or Tape and Reel
- Receptacle Housing: Bag
- Terminal: Reel

APPROVALS & CERTIFICATION

- Glow Wire Ignition Temperature (GWIT) per IEC 60695-2-13
- Glow Wire Flammability Index (GWFI) per IEC 60695-2-12

SPECIFICATION

- Amphenol Product Specification: GS-12-1291
- Amphenol Application Specification: GS-20-0399
- Amphenol Packaging Specification: GS-14-2419

ENVIRONMENTAL

Operating Temperature Range: -40°C to +105°C
 *Includes 30°C terminal temperature rise at rated current

TOOLING INFORMATION

- Ratchet Hand Crimping Tool: 10129483-001LF
- Terminal Extraction Tool: 10129274-030LF

TARGET MARKETS/APPLICATIONS



1U Rack Box Customer Premises Equipment Generic Telecom Box Interface Converter WiMax Box



Air Conditioner Microwave Oven Refrigerator Set Top Box



Blade Server
Desktop PC and Motherboard
HDD Application
Rack-Mount Server
Server-Orthogonal Configuration



Defibrillator Hospital Bed Patient Monitor Ultrasound Equipment



Chemical Detection System Radar Equipment

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PART NUMBERS

| Туре | Description | Part Numbers |
|------------|-------------------------------------|-------------------|
| Dual Row | Receptacle Housing | 10132445 |
| | Plug Housing | 10132446 |
| | Right Angle Through Hole Header | 10132449 |
| | Vertical Through Hole Header | 10132450 |
| | Vertical SMT with Board Lock | 10148439 |
| | Right Angle SMT with Board Lock | 10148440 |
| | Right Angle SMT Tails and Hold Down | 10152198 |
| Single Row | Right Angle Through Hole Header | 10142730 |
| | Receptacle Housing | 10142744 |
| | Plug Housing | 10160965 |
| Terminals | Receptacle terminal | 10134160/10132447 |
| | Plug Terminal | 10161703/10132448 |

^{*}Indicates not fully qualified and might need to check with Product manager

TOOLING INFORMATION

APPLICATORS

| Terminal Part Number | AWG Range | Semi-Auto Crimping Machine | Fully-Auto Pneumatic Crimping Applicator | Fully-Auto Mechanical Crimping Applicator |
|------------------------------------|-----------|-------------------------------|---|--|
| 10132447-00XXLF 10132448-00XXLF | 16AWG | | 10159975-002 | 10159976-002 |
| | 18AWG | 10159974-002 | | |
| | 20AWG | | | |
| 10134160-X310LF | 16AWG | 10159974-003 | 10159975-003 | 10159976-003 |
| | 18AWG | | | |
| | 20AWG | | | |
| | 20AWG | 10159974-004 | 10159975-004 | 10159976-004 |
| 10134160-X320LF | 22AWG | | | |
| | 24AWG | | | |
| | 26AWG | 10159974-005 | 10159975-005 | 10159976-005 |
| 10134160-X330LF | 28AWG | | | |
| | 30AWG | | | |

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HAND CRIMP TOOLS

| Terminal Part Number | AWG Range | Fully-Auto Mechanical Crimping Applicator | |
|------------------------------------|-----------|--|--|
| | 16AWG | 10159387-002 | |
| 10132447-00XXLF 10132448-00XXLF | 18AWG | | |
| | 20AWG | | |
| | 16AWG | 10159387-003 | |
| 10134160-X310LF | 18AWG | | |
| | 20AWG | | |
| | 20AWG | 10159387-004 | |
| 10134160-X320LF | 22AWG | | |
| | 24AWG | | |
| | 26AWG | 10159387-005 | |
| 10134160-X330LF | 28AWG | | |
| | 30AWG | | |

TERMINAL EXTRACTION TOOL - 10129274-030LF