

Minitek® Pwr 4.2 High Current Connector System

Dual Row & Single Row

ROBUST, VERSATILE AND HIGH CURRENT PERFORMANCE

Minitek® Pwr 4.2 High Current Connector (HCC) is designed for power applications with current rating up to 13A per contact and wire gauge range from 30 to 16AWG for Wire-to-Wire and Wire-to-Board applications. It is available in 2 to 24 circuits for dual row and 3 to 5 circuits for single row.

- Rated current up to 13A per contact
- Fully isolated terminals
- Positive locking on housing with low thumb latch operation
- Patented right angle receptacle housing



TARGET MARKETS



FEATURES

- High current alloy material used for contacts
- Fully isolated terminals
- Positive locking on housing with low thumb latch operation
- Fully polarized housings
- High retention force in housing
- Interchangeable hand crimping and terminal extraction tools
- Patented right angle receptacle housing
- Post-plated terminal
- Glow wire compliant option
- UL94V-0 flammability rated nylon material
- RoHS compliant and lead-free

BENEFITS

- Rated up to 13A per contact
- Prevents terminals from potential damage during operation
- Ensures secured mating retention
- Prevents accidental mismatching
- Well secured terminals in housing
- New crimping tools are not required
- Ideal for cable routing within 1U or 2U equipment
- Prevents environmental corrosion such as salt spray and gas corrosion
- Complies with International Standard IEC 60335-1 for household appliances
- High flammability rating
- Meets environmental, health and safety requirements

TECHNICAL INFORMATION

MATERIAL

- Header: High current alloy with optional tin and gold platings
- Housing: Nylon 66 and LCP, natural and black, UL94V-0
- Crimping Terminal: High current alloy with optional tin and gold plating

MECHANICAL PERFORMANCE

- Terminal Insertion Force: 14.7N max.
- Terminal Withdrawal Force: 1N min.
- Durability: 30 mating cycles
- Wire Pullout Force: Refer to product specifications

ELECTRICAL PERFORMANCE

- Low Level Contact Resistance: 10mΩ max.
- Insulation Resistance: 1000MΩ min.
- Voltage Rating: 600Vrms
- Current Rating: Up to 13.0A/contact
- Dielectric Withstand Voltage: 1500V AC
- Temperature Rise: 30°C max.

PACKAGING

- PCB Header: Tray/Tape and Reel
- Crimping 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-12-1333
- Amphenol Application Specification: GS-20-0401
- Amphenol Packaging Specification: GS-14-2362

ENVIRONMENTAL

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

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

PART NUMBERS

Type	Description	Part Numbers
Dual Row	Right Angle Receptacle Housing	10122956
	Vertical Receptacle Housing	10127815
	Plug Housing with ears	10127816
	Right Angle Through Hole Header	10131318
	Vertical Through Hole Header	10131319
	Plug Housing without ears	10144559
Single Row	Receptacle Housing	10136644
	Plug Housing	10136645
	Right Angle Through Hole Header	10137784
	Vertical Through Hole Header	10137785
Terminals	Receptacle Terminal	10134170/10136289
	Plug Terminal	10156852/10136290

TOOLING INFORMATION

APPLICATORS

Terminal Part Number	AWG Range	Semi-Auto Crimping machine	Fully-Auto Pneumatic Crimping Applicator	Fully-Auto Mechanical Crimping Applicator
10134170-X330LF	22 AWG 24 AWG 26 AWG 28 AWG	10157894-002	10158621-002	10158622-002
10134170-X320LF	18 AWG 20 AWG 22 AWG 24 AWG	10157894-004	10158621-004	10158622-004
10130517-1X1XLF 10136289-1X1XLF	18AWG 20AWG 22AWG	10157894-005	10158621-005	10158622-005
10134170-X310LF	16 AWG	10157894-006	10158621-006	10158622-006
10136290-1X1XLF	18 AWG 20 AWG 22 AWG	10157894-007	10158621-007	10158622-007

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HAND CRIMP TOOLS

Terminal Part Number	AWG Range	Hand Crimp Tool Part Number
10134170-X310LF	16 AWG	10159388-001
10130517-1X1XLF 10136289-1X1XLF 10136290-1X1XLF	18 AWG 20 AWG 22 AWG	10159388-002
10134170-X330LF	22 AWG 24 AWG 26 AWG 28 AWG	10159388-004
10134170-X320LF	18 AWG 20 AWG 22 AWG 24 AWG	10159388-005

TERMINAL EXTRACTION TOOL – 10129274-042LF

BWBMPWRHCC42052IEA4