

Minitek® Pwr 3.0 BMI Connector System

Blind Mate Interface (BMI) Connector

ROBUST AND VERSATILE SELF-ALIGNING CONNECTOR

Minitek® Pwr 3.0 BMI is a flexible and comprehensive solution designed for power application with current rating up to 5A per circuit. It is available in 8, 12 and 14 circuits for dual row.

- Scoop proof housing prevents terminals from damage
- Polarized mating geometry to prevent mismatching
- Fully isolated terminal stop prevent terminals from damage
- BMI option in vertical, through-hole type for dual row. 8, 12 and 14 positions available



TARGET MARKETS



FEATURES

- Blind mate interface
- Low insertion force for installation of crimped terminal
- Fully isolated terminals
- Positive locking on housing with low thumb latch operation
- Fully polarized housings
- Scoop-proof housings
- High retention force in housing
- Glow wire compliant option
- UL94V-0 flammability rated LCP material
- RoHS compliant and lead-free

BENEFITS

- Allows ± 2.54mm gatherability for blind mating
- Easy to use
- Prevents terminals from potential damage during operation
- Ensures secured mating retention
- Prevents accidental mismatching
- Ensures terminals and header pins are not damaged for angled mating
- 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

- Board Connector: Brass with optional Tin and Gold Flash plating
- Housing: LCP & Nylon, Black, UL94 V-0
- Crimping Terminal: Phosphorus Bronze with optional Tin and Gold Flash plating

MECHANICAL PERFORMANCE

- Terminal Insertion Force: 4.5N max.
- Terminal Withdrawal Force: 2N min. before durability, 1.5N min. after durability
- Durability: 100 mating cycles
- Wire Pullout Force: Refer to product specifications

ELECTRICAL PERFORMANCE

- Low Level Contact Resistance: 20mΩ max.
- Insulation Resistance: 1000MΩ min.
- Voltage Rating: 250Vrms
- Current Rating: 5A/contact. Refer to product specifications for higher current application
- Dielectric Withstand Voltage: 1000VAC
- Temperature Rise: 30°C max

PACKAGING

- PCB Header: Tray
- Crimping Housing: Bag
- Terminal: Reel

APPROVALS & CERTIFICATION

- Dual Row: UL E66906 & E467317
- Single Row: UL pending
- 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-12-1177 and GS-12-1374
- Amphenol Application Specification: GS-20-0399
- Amphenol Packaging Specification: GS-14-2359

ENVIRONMENTAL

- Operating Temperature: -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

PART NUMBERS

Type	Description	Part Numbers
Dual Row	Vertical PCB header, through hole (BMI)	10138980*
Dual Row	Right Angle PCB header, through hole (BMI)	10144754*
Terminal	Receptacle terminal (pre-plated solution)	10134160*

*denotes base part number. Please contact Amphenol ICC for complete part numbers.

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