

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 8.5A per circuit. It is available in 4 to 24 circuits in dual row with Right angle and vertical options. Both WTB and WTW solutions are supported in this 3mm BMI product family.

- Scoop proof housing prevents terminals from damage
- Polarized mating geometry to prevent mismatching
- Fully isolated terminal stop prevent terminals from damage
- Available in 4 to 24 circuits in dual row through-hole type with right angle and vertical options



TARGET MARKETS



FEATURES

- Blind mate interface
- Fully isolated terminals
- Fully polarized housings
- Scoop-proof housings
- Glow wire compliant option
- Supports FMLB for hot plug applications
- UL94V-0 flammability rated LCP material
- RoHS compliant and lead-free

BENEFITS

- Allows $\pm 2.54\text{mm}$ gatherability for blind mating
- Prevents terminals from potential damage during operation
- Prevents accidental mismating
- Ensures terminals and header pins are not damaged for angled mating
- Complies with International Standard IEC 60335-1 for household appliances
- Well secured terminals in housing
- High flammability rating
- Meets environmental, health, and safety requirements

TECHNICAL INFORMATION

MATERIAL

- Board Connector: Copper Alloy with optional Tin and Gold plating
- Housing: LCP & Nylon, Black, UL94 V-0
- Crimping Terminal: Copper Alloy with optional Tin and Gold plating

MECHANICAL PERFORMANCE

- 2 Terminals are used:
 - 10134160 – Insertion force 4.1N (low insertion force) – Withdrawal force 0.6N per circuit
 - 10127718 – Insertion force 8.0N (high insertion force) – Withdrawal force 2.4N per circuit
- 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: 8.5A/contact. Refer to product specifications for higher current application
- Dielectric Withstand Voltage: 22000VAC
- Temperature Rise: 30°C max

PACKAGING

- PCB Header: Tray and Tape and reel
- Crimping Housing: Bag
- Terminal: Reel

APPROVALS & CERTIFICATION

- Dual Row: UL E66906 & E467317
- 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
- Amphenol Application Specification: GS-20-0399
- Amphenol Packaging Specification: GS-14-2359

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

PART NUMBERS

Type	Description	Part Numbers
Board Header	Dual Row Vertical PCB header, through hole (BMI)	10138980
	Dual Row Right Angle PCB header, through hole (BMI)	10144754
Cable Hsg	Dual Row Receptacle Hsg	10159684
Terminal	Receptacle terminal	10134160/10132447
Cable Hsg	Dual Row Plug Hsg	10160855
Terminal	Plug terminal	10161703/10127719

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