## AFCi Basics

## Minitek ${ }^{\circledR}$ Pwr 4.2 Connector System

## Dual Row \& Single Row

## COMPACT, ROBUST AND VERSATILE

Minitek ${ }^{\circledR}$ Pwr 4.2 mm is a flexible and comprehensive solution designed for power application with current rating up to 9A per circuit. It is available in 2 to 24 circuits for dual row and 3 to 5 circuits for single row.

- Solutions for Wire-to-Board, Wire-to-Wire and Wire-toPanel applications
- Scoop proof housing prevents terminals from damage
- Polarized mating geometry to prevent mismatching
- Fully isolated terminal stop prevent terminals from damage
- Blind mating interface (BMI) option in vertical, through hole type for dual row. 14 positions available


## FEATURES

- 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
- BMI option
- UL94V-0 flammability rated nylon material
- Patented right angle type receptacle
- RoHS compliant and lead-free



## BENEFITS

- Easy to use
- Prevents terminals from potential damage during operation
- Ensures secured mating retention
- Prevents accidental mismating
- 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
- Allows $\pm 2.54 \mathrm{~mm}$ gatherability for blind mating
- High flammability rating
- Ideal for cable routing within 1U or 2U equipment systems
- Meets environmental, health and safety requirements


## TECHNICAL INFORMATION

## MATERIAL

- Board Connector: Brass with optional Tin and Gold Flash plating
- Housing: Nylon 66 \& LCP, Natural \& Black, UL94V-0
- Crimping Terminal: Brass/Phosphorus Bronze with optional Tin and Gold Flash 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: $10 \mathrm{~m} \Omega$ max.
- Insulation Resistance: $1000 \mathrm{M} \Omega$ min.
- Voltage Rating: 600Vrms
- Current Rating: Up to 9A/contact
- Dielectric Withstand Voltage: 1500VAC
- Temperature Rise: $30^{\circ} \mathrm{C}$ 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-12-1181 and GS-12-1377
- Amphenol Application Specification: GS-20-0401
- Amphenol Packaging Specification: GS-14-2362


## ENVIRONMENTAL

- Operating Temperature: $-40^{\circ} \mathrm{C}$ to $+105^{\circ} \mathrm{C}$
${ }^{*}$ Includes $30^{\circ} \mathrm{C}$ terminal temperature rise at rated current


## TOOLING INFORMATION

- Ratchet Hand Crimping Tool: 10129483-001LF
- Terminal Extraction Tool: 10129274-042LF


## TARGET MARIKETS/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
> Minitek ${ }^{\circledR}$ Pwr 4.2 Connector System

## PART NUMBERS

| Type | Description | Part Numbers |
| :--- | :--- | :--- |
|  | Right angle PCB header, through hole | 10127819 |
|  | Vertical PCB header, through hole | 10127820 |
|  | Right angle receptacle housing with cover | 10122956 |
|  | Receptacle housing | 10127815 |
|  | Header housing | 10144559 |
|  | Panel mount header housing | 10127816 |
|  | Vertical PCB header, through hole (BMI) | 10138978 |
| Single Row | Right angle PCB header, through hole | 10136646 |
|  | Vertical PCB header, through hole | 10136647 |
|  | Receptacle housing | 10136644 |
|  | Panel mount header housing | 10136645 |
|  | Receptacle terminal (post-plated solution) | 10127817 |
|  | Receptacle terminal (pre-plated solution) | 10134170 |
|  | Header terminal | 10127818 |

