≣FCi Basics

Amphenol ICC

Minitek[®] Pwr 3.0 High Current Connector System

Dual Row

ROBUST, VERSATILE AND HIGH CURRENT PERFORMANCE

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

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



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
- Glowwire 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
- New crimping tools are notrequired
- Complies with International Standard IEC 60335-1for
- household appliances
- High flammability rating
- Meets environmental, health and safety requirements

TECHNICAL INFORMATION

MATERIAL

- Header: High current alloy with optional tin and gold plating
- Housing: High Temperature Thermoplastic, black, UL94V-0
- Crimping Terminal: High Current Alloy with optional Tin and Gold plating

MECHANICAL PERFORMANCE

- Terminal Insertion Force: 4.1N max. (6N after durability)
- Terminal Withdrawal Force: 1.5N min. (tin plated) & 0.6N min. (Au plated)
- Durability: 50 mating cycles
- Wire Pullout Force: Referto product specifications

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: 1500V AC
- 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: -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

[101010101010 001000100010 001100110011	
ľ		

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

www.amphenol-icc.com

Disclaimer

Please note that the above information is subject to change without notice.

Minitek[®] Pwr 3.0 High Current Connector System

PART NUMBERS

Туре	Description	Part Numbers
	Receptacle Housing	10132445
	Plug Housing	10132446
	Right Angle Through Hole Header	10132449
Dual Row	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
	Right Angle Through Hole Header	10142730
Single Row	Receptacle Housing	10142744
	Plug Housing	10160965
Terminals	Receptacle Terminal	10134160/10132447
TCHIIIIdis	Plug Terminal	10161703/10132448

www.amphenol-icc.com

Disclaimer

Please note that the above information is subject to change without notice.

Minitek[®] Pwr 3.0 High Current Connector System

TOOLING INFORMATION

APPLICATORS

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

HAND CRIMP TOOLS

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

TERMINAL EXTRACTION TOOL – 10129274–030LF

www.amphenol-icc.com