

FRONT-FMC 1,5/D28-MF-6,35 - PCB header



1714762

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PCB headers, nominal cross section: 1.5 mm², color: light gray, nominal current: 6 A, rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Pin, number of potentials: 56, number of rows: 2, number of positions: 28, number of connections: 56, product range: FRONT-FMC 1,5/..-MF, pitch: 6.35 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3 mm, number of solder pins per potential: 1, plug-in system: IEC 60603 Connectors - Type D, Pin connector pattern alignment: Standard, locking: Screw locking mechanism, mounting method: Threaded flange, type of packaging: packed in cardboard

Your advantages

- Well-known mounting principle allows worldwide use
- Screwable flange for superior mechanical stability

Commercial data

Item number	1714762
Packing unit	20 pc
Minimum order quantity	500 pc
Note	Made to order (non-returnable)
Product key	AABSKA
GTIN	4055626387765
Weight per piece (including packing)	12.1 g
Weight per piece (excluding packing)	12.1 g
Country of origin	CN

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Technical data

Product properties

Product type	PCB headers
Product family	FRONT-FMC 1,5/..-MF
Product line	COMBICON Connectors S
Number of positions	28
Pitch	6.35 mm
Number of connections	56
Number of rows	2
Number of potentials	56
Mounting type	Threaded flange
Pin layout	Linear pinning
Solder pins per potential	1

Electrical properties

Properties

Nominal current I_N	6 A
Nominal voltage U_N	320 V
Contact resistance	1.7 mΩ
Rated voltage (III/3)	320 V
Rated surge voltage (III/3)	4 kV
Rated voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV

Mounting

Mounting type	Wave soldering
Pin layout	Linear pinning

Material specifications

Material data - contact

Note	WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/JEDEC JESD 201
Contact material	Cu alloy
Surface characteristics	Tin-plated
Metal surface contact area (top layer)	Tin (4 - 8 μm Sn)
Metal surface contact area (middle layer)	Nickel (1.5 - 4 μm Ni)
Metal surface soldering area (top layer)	Tin (4 - 8 μm Sn)
Metal surface soldering area (middle layer)	Nickel (1.5 - 4 μm Ni)

Material data - housing

Color (Housing)	light gray (7035)
Insulating material	PA

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Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0

Notes

Notes on operation	In accordance with IEC 61984, COMBICON connectors have no switching power (COC). During designated use, they must not be plugged in or disconnected when carrying voltage or under load.
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Dimensions

Dimensional drawing	
Pitch	6.35 mm
Width [w]	103.5 mm
Height [h]	16.2 mm
Length [l]	13.2 mm
Installed height	13.2 mm
Solder pin length [P]	3 mm
Pin dimensions	1 x 0.8 mm

PCB design	
Hole diameter	1.4 mm

Mechanical tests

Visual inspection	
Specification	IEC 60512-1-1:2002-02
Result	Test passed

Dimension check	
Specification	IEC 60512-1-2:2002-02
Result	Test passed

Resistance of inscriptions	
Specification	IEC 60068-2-70:1995-12
Result	Test passed

Polarization and coding	
Specification	IEC 60512-13-5:2006-02
Result	Test passed

Contact holder in insert	
Specification	IEC 60512-15-1:2008-05

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Contact holder in insert Requirements >20 N	Test passed
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Insertion and withdrawal forces

Result	Test passed
No. of cycles	50
Insertion strength per pos. approx.	5 N
Withdraw strength per pos. approx.	3.5 N

Electrical tests

Thermal test | Test group C

Specification	IEC 60512-5-1:2002-02
Tested number of positions	32

Air clearances and creepage distances |

Specification	IEC 60664-1:2007-04
Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	320 V
Rated surge voltage (III/3)	4 kV
minimum clearance value - non-homogenous field (III/3)	3 mm
minimum creepage distance (III/3)	4 mm
Rated insulation voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV
minimum clearance value - non-homogenous field (III/2)	3 mm
minimum creepage distance (III/2)	3 mm

Environmental and real-life conditions

Vibration test

Specification	IEC 60068-2-6:2007-12
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 Hz ... 60.1 Hz)
Acceleration	5g (60.1 Hz ... 150 Hz)
Test duration per axis	2.5 h
Test directions	X-, Y- and Z-axis

Durability test

Specification	IEC 60512-9-1:2010-03
Impulse withstand voltage at sea level	4.8 kV
Contact resistance R ₁	1.7 mΩ
Contact resistance R ₂	1.8 mΩ
Insertion/withdrawal cycles	50

Climatic test

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Specification	ISO 6988:1985-02
Corrosive stress	0.2 dm ³ SO ₂ on 300 dm ³ /40 °C/1 cycle
Thermal stress	105 °C/168 h
Power-frequency withstand voltage	2.21 kV

Shocks

Specification	IEC 60068-2-27:2008-02
Pulse shape	Semi-sinusoidal
Acceleration	5g
Shock duration	11 ms
Test directions	X-, Y- and Z-axis (pos. and neg.)

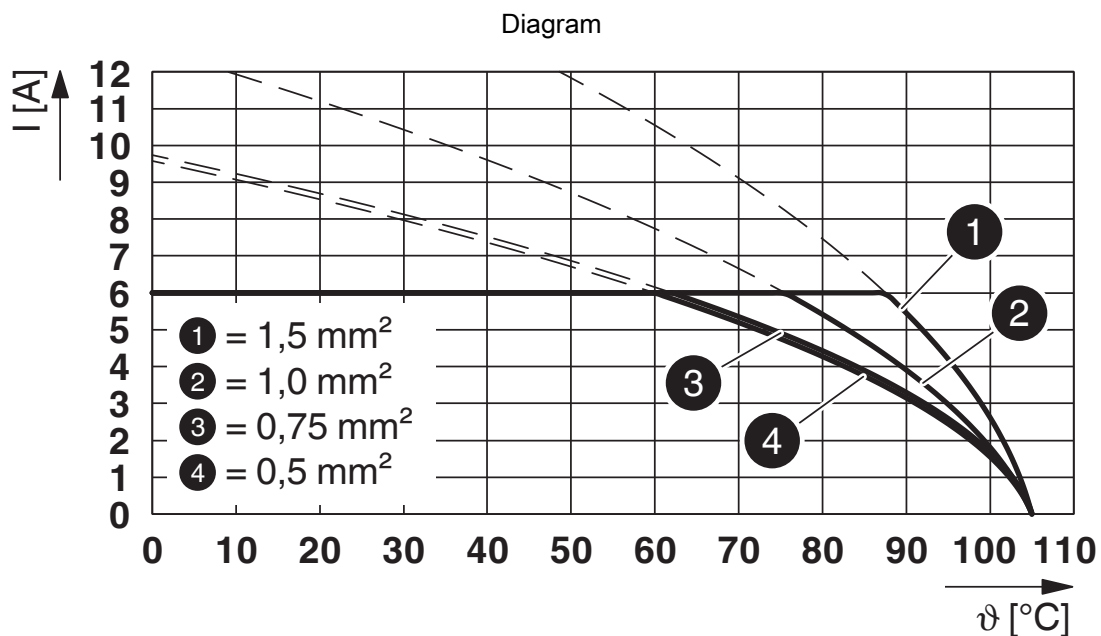
Ambient conditions

Ambient temperature (operation)	-40 °C ... 105 °C (dependent on the derating curve)
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C

Packaging specifications

Type of packaging	packed in cardboard
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Drawings



Type: FRONT-FMC 1,5/D...-FF-6,35-R with FRONT-FMC 1,5/D...-MF-6,35

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Classifications

ECLASS

ECLASS-13.0	27460201
ECLASS-15.0	27460201

ETIM

ETIM 9.0	EC002637
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UNSPSC

UNSPSC 21.0	39121400
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Environmental product compliance

EU RoHS	
Fulfills EU RoHS substance requirements	Yes, No exemptions
China RoHS	
Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits
EU REACH SVHC	
REACH candidate substance (CAS No.)	No substance above 0.1 wt%
EF3.0 Climate Change	
CO2e kg	0.457 kg CO2e