

https://www.phoenixcontact.com/us/products/1847372



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PCB connector, nominal cross section: 1.5 mm², color: green, nominal current: 8 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Socket, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: MC 1,5/..-STF, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: 0 °, plug-in system: COMBICON MC 1,5, locking: Screw locking mechanism, mounting: Screw flange, type of packaging: packed in cardboard

Your advantages

- · Well-known connection principle allows worldwide use
- · Low temperature rise, thanks to maximum contact force
- · Allows connection of two conductors
- · Screwable flange for superior mechanical stability

Commercial data

Item number	1847372
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AA02
Product key	AABACD
Catalog page	Page 247 (C-1-2013)
GTIN	4017918102630
Weight per piece (including packing)	4.156 g
Weight per piece (excluding packing)	3.742 g
Customs tariff number	85366990
Country of origin	US



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Technical data

Product properties

Product type	PCB connector
Product family	MC 1,5/STF
Product line	COMBICON Connectors S
Туре	Standard
Number of positions	4
Pitch	5.08 mm
Number of connections	4
Number of rows	1
Number of potentials	4
Mounting flange	Screw flange

Electrical properties

Nominal current I _N	8 A
Nominal voltage U _N	320 V
Degree of pollution	3
Contact resistance	1.2 mΩ
Rated voltage (III/3)	250 V
Rated surge voltage (III/3)	4 kV
Rated voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV
Rated voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV

Connection data

Connection technology

Туре	Standard
Connector system	COMBICON MC 1,5
Nominal cross section	1.5 mm ²
Contact connection type	Socket

Interlock

Locking type	Screw locking mechanism
Mounting flange	Screw flange
Tightening torque	0.3 Nm

Conductor connection

Connection method	Screw connection with tension sleeve
Conductor/PCB connection direction	0 °
Conductor cross section rigid	0.14 mm² 1.5 mm²
Conductor cross section flexible	0.14 mm² 1.5 mm²
Conductor cross section AWG	28 16



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Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² 1.5 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² 0.5 mm²
2 conductors with same cross section, solid	0.08 mm² 0.5 mm²
2 conductors with same cross section, flexible	0.08 mm² 0.75 mm²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.25 mm² 0.34 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² 0.5 mm²
Cylindrical gauge a x b / diameter	2.4 mm x 1.5 mm / 1.6 mm
Stripping length	7 mm
Tightening torque	0.22 Nm 0.25 Nm
Specifications for ferrules without insulating collar	
recommended crimping tool	1212034 CRIMPFOX 6
Specifications for ferrules with insulating collar	
recommended crimping tool	1212034 CRIMPFOX 6

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	hot-dip tin-plated
Metal surface terminal point (top layer)	Tin (4 - 8 µm Sn)
Metal surface contact area (top layer)	Tin (4 - 8 µm Sn)

Material data - housing

Color (Housing)	green (6021)
Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0
Glow wire flammability index GWFI according to EN 60695-2-12	850
Glow wire ignition temperature GWIT according to EN 60695-2-13	775
Temperature for the ball pressure test according to EN 60695-10-2	125 °C

Dimensions

Dimensional drawing



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Pitch	5.08 mm
Width [w]	29.48 mm
Height [h]	11.1 mm
Length [I]	15.5 mm
ounting	
Drive form screw head	Slotted (L)
Drive form screw head	Slotted (L)
Flange	
Tightening torque	0.3 Nm
otes	
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.
echanical tests	
Test for conductor damage and slackening	
Specification	IEC 60999-1:1999-11
Result	Test passed
Pull-out test	
Specification	IEC 60999-1:1999-11
Conductor cross section/conductor type/tractive force	0.14 mm² / solid / > 10 N
setpoint/actual value	0.14 mm² / flexible / > 10 N
	1.5 mm² / solid / > 40 N
	1.5 mm² / flexible / > 40 N
Insertion and withdrawal forces	
Result	Test passed
No. of cycles	25
Insertion strength per pos. approx.	8 N
Withdraw strength per pos. approx.	5 N
Torque test	
Specification	IEC 60999-1:1999-11
Resistance of inscriptions	
Specification	IEC 60068-2-70:1995-12
Desuit	Test passed
Result	
Polarization and coding	
	IEC 60512-13-5:2006-02
Polarization and coding	IEC 60512-13-5:2006-02 Test passed
Polarization and coding Specification	



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Result	Test passed
Dimension check	
Specification	IEC 60512-1-2:2002-02
Result	Test passed
nvironmental and real-life conditi	ons
Vibration test	
Specification	IEC 60068-2-6:2007-12

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)
Sweep speed	5g (60.1 Hz 150 Hz)
Test duration per axis	2.5 h

Durability test		
Specification	IEC 60512-9-1:2010-03	
Impulse withstand voltage at sea level	4.8 kV	
Contact resistance R ₁	1.2 mΩ	
Contact resistance R ₂	1.4 mΩ	
Insertion/withdrawal cycles	25	

Climatic test		
Specification	ISO 6988:1985-02	
Corrosive stress	0.2 dm ³ SO ₂ on 300 dm ³ /40 °C/1 cycle	
Thermal stress	100 °C/168 h	
Power-frequency withstand voltage	2.21 kV	

Shocks		
Specification	IEC 60068-2-27:2008-02	
Pulse shape	Half-sine	
Acceleration	30g	
Shock duration	18 ms	
Test directions	X-, Y- and Z-axis (pos. and neg.)	

Ambient conditions	
Ambient temperature (operation)	-40 °C 100 °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

Electrical tests

Thermal test | Test group C

Specification	IEC 60512-5-1:2002-02	
Tested number of positions	12	



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Insulation resistance

Specification	IEC 60512-3-1:2002-02		
Insulation resistance, neighboring positions	> 5 MΩ		
Nir placemans and process distances I			
Air clearances and creepage distances			
Specification	IEC 60664-1:2007-04		
Insulating material group	1		
Comparative tracking index (IEC 60112)	CTI 600		
Rated insulation voltage (III/3)	250 V		
Rated surge voltage (III/3)	4 kV		
minimum clearance value - non-homogenous field (III/3)	3 mm		
minimum creepage distance (III/3)	3.2 mm		
Note on connection cross section	With connected conductor 1.5 mm² (solid).		
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		
Rated insulation voltage (II/2)	630 V		
Rated surge voltage (II/2)	4 kV		

Packaging specifications

minimum creepage distance (II/2)

minimum clearance value - non-homogenous field (II/2)

Type of packaging	packed in cardboard
Type of puolicying	packed in caraboard

3 mm

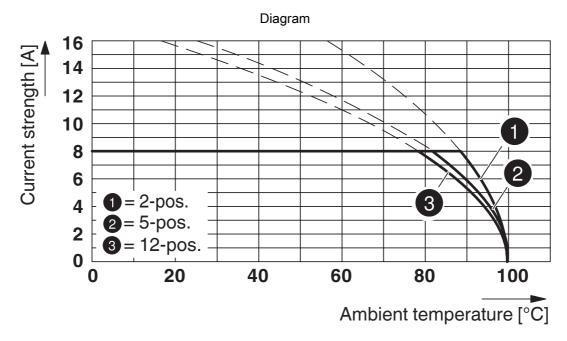
3.2 mm



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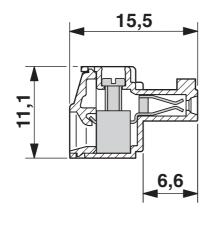


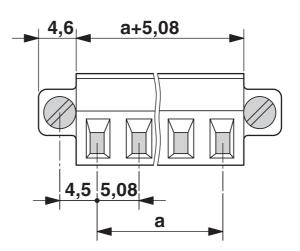
Drawings



Type: MC 1,5/...-STF-5,08 with MC 1,5/...-GF-5,08

Dimensional drawing







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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1847372

CSA Approval ID: 13631				
	Nominal voltage U_N	Nominal current I _N	Cross section AWG	Cross section mm ²
Use group B				
	300 V	8 A	28 - 16	-
Use group D				
	300 V	8 A	28 - 16	-

CULus Recognized Approval ID: E60425-20110128				
	Nominal voltage U_N	Nominal current I _N	Cross section AWG	Cross section mm ²
Use group B				
	300 V	8 A	30 - 14	-
Use group D				
	300 V	8 A	30 - 14	-

VDE Zeichengenehmigung Approval ID: 40011723				
	Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
	250 V	8 A	-	0.2 - 1.5



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Classifications

UNSPSC 21.0

ECLASS

ECLASS-11.0	27460202
ECLASS-12.0	27460202
ECLASS-13.0	27460202
ETIM	
ETIM 9.0	EC002638
UNSPSC	

39121400



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Environmental product compliance

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%



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Accessories

SZS 0,4X2,5 VDE - Screwdriver

1205037

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Screwdriver, slot-headed, VDE insulated, size: $0.4 \times 2.5 \times 80$ mm, 2-component grip, with non-slip grip

SK 5,08/2,8:FORTL.ZAHLEN - Marker card

0804280

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Marker card, white, labeled, horizontal: consecutive numbers 1 \dots 10, 11 \dots 20, etc. up to 91 \dots (99)100, mounting type: adhesive, for terminal block width: 5.08 mm, lettering field size: 5.08 x 2.8 mm



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B-STIFT - Marker pen

1051993

https://www.phoenixcontact.com/us/products/1051993



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

MC 1,5/ 4-GF-5,08 - PCB header

1847482

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PCB headers, nominal cross section: 1.5 mm², color: green, nominal current: 8 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Pin, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: MC 1,5/..-GF, pitch: 5.08 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.4 mm, number of solder pins per potential: 1, plug-in system: COMBICON MC 1,5, Pin connector pattern alignment: Standard, locking: Screw locking mechanism, mounting: Threaded flange, type of packaging: packed in cardboard



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MCV 1,5/ 4-GF-5,08 - PCB header

1847631

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PCB headers, nominal cross section: 1.5 mm², color: green, nominal current: 8 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Pin, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: MCV 1,5/..-GF, pitch: 5.08 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.4 mm, number of solder pins per potential: 1, plug-in system: COMBICON MC 1,5, Pin connector pattern alignment: Standard, locking: Screw locking mechanism, mounting: Threaded flange, type of packaging: packed in cardboard

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