

1876194

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PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 630 V, contact surface: Au, contact connection type: Pin, number of potentials: 6, number of rows: 1, number of positions: 6, number of connections: 6, product range: GIC 2,5/..-ST, pitch: 7.62 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: 0 °, locking clip: - without locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard

Your advantages

- · Gold-plated contacts ensure transfer quality remains stable over the long term
- · Well-known connection principle allows worldwide use
- · Low temperature rise, thanks to maximum contact force
- · Larger pitch for increased voltage requirements
- · Inverted connector with pin contacts for touch-proof device outputs or free-hanging cable/cable connections

Commercial data

Item number	1876194
Packing unit	50 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Sales key	AA03
Product key	AACAEA
GTIN	4017918267957
Weight per piece (including packing)	12.49 g
Weight per piece (excluding packing)	11.909 g
Customs tariff number	85366990
Country of origin	DE



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Technical data

Product properties

Product type	PCB connector
Product family	GIC 2,5/ST
Product line	COMBICON Connectors M
Number of positions	6
Pitch	7.62 mm
Number of connections	6
Number of rows	1
Number of potentials	6
Mounting flange	without

Data management status

Article revision	02

Electrical properties

Nominal current I _N	12 A
Nominal voltage U _N	630 V
Rated voltage (III/3)	400 V
Rated surge voltage (III/3)	6 kV
Rated voltage (III/2)	630 V
Rated surge voltage (III/2)	6 kV
Rated voltage (II/2)	1000 V
Rated surge voltage (II/2)	6 kV

Connection data

Connection technology

Connector system	COMBICON MSTB 2,5
Nominal cross section	2.5 mm²
Contact connection type	Pin

Interlock

Locking type	without
Mounting flange	without

Conductor connection

Connection method	Screw connection with tension sleeve
Conductor/PCB connection direction	0 °
Conductor cross section rigid	0.2 mm ² 2.5 mm ²
Conductor cross section flexible	0.2 mm² 2.5 mm²
Conductor cross section AWG	24 12
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm ² 2.5 mm ²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² 2.5 mm²



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2 conductors with same cross section, solid	0.2 mm² 1 mm²
2 conductors with same cross section, flexible	0.2 mm² 1.5 mm²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.25 mm² 1 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² 1 mm²
Cylindrical gauge a x b / diameter	2.8 mm x 2.0 mm / 2.4 mm
Stripping length	7 mm
Drive form screw head	Slotted (L)
Tightening torque	0.5 Nm 0.6 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	Completely gold-plated
Metal surface terminal point (top layer)	Gold (0.8 Au)
Metal surface terminal point (middle layer)	Nickel (2 - 3 µm Ni)
Metal surface contact area (top layer)	Gold (0.8 Au)
Metal surface contact area (middle layer)	Nickel (2 - 3 µm Ni)

Material data - housing

Color (Housing)	green (6021)
Insulating material	PA
Insulating material group	1
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	7.62 mm
Width [w]	45.62 mm
Height [h]	15 mm
Length [I]	19.1 mm

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.

Environmental and real-life conditions

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

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)	400 V
Rated surge voltage (III/3)	6 kV
minimum clearance value - non-homogenous field (III/3)	5.5 mm
minimum creepage distance (III/3)	5.5 mm
Note on connection cross section	With connected conductor 4 mm² (solid).
Rated insulation voltage (III/2)	630 V
Rated surge voltage (III/2)	6 kV
minimum clearance value - non-homogenous field (III/2)	5.5 mm
minimum creepage distance (III/2)	5.5 mm
Rated insulation voltage (II/2)	1000 V
Rated surge voltage (II/2)	6 kV
minimum clearance value - non-homogenous field (II/2)	5.5 mm
minimum creepage distance (II/2)	5.5 mm

Packaging specifications

Type of packaging	packed in cardboard
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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1876194

CSA Approval ID: 13631				
	Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
Use group B				
	300 V	10 A	28 - 12	-
Use group D				
	300 V	10 A	28 - 12	-

cULus Recogn Approval ID: E6042	CULus Recognized Approval ID: E60425-19931014			
	Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
Use group B				
	250 V	12 A	30 - 12	-
Use group D				
	300 V	10 A	30 - 12	-

VDE Zeichengenehmigung Approval ID: 40050646				
	Nominal voltage U_N	Nominal current I _N	Cross section AWG	Cross section mm ²
	400 V	12 A	-	0.2 - 2.5



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Classifications

ECLASS

	ECLASS-11.0	27460202		
	ECLASS-12.0	27460202		
	ECLASS-13.0	27460202		
ΕT	ETIM			
	ETIM 9.0	EC002638		
UN	UNSPSC			
	UNSPSC 21.0	39121400		



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Environmental product compliance

EU RoHS

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substances above the limits
above 0.1 wt%
: 6

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