

1850000

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Flange cover, fitted on the left and right of PCVK 4-7,62 for reliable screw connection of plugs with screw flanges, pitch: 7.62 mm, color: green

## Your advantages

- · Well-known connection principle allows worldwide use
- Direct plug-in block for DIN rail mounting

### Commercial data

Item number	1850000
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AA04
Product key	AADMBB
GTIN	4017918110253
Weight per piece (including packing)	4.169 g
Weight per piece (excluding packing)	4.149 g
Customs tariff number	85389099
Country of origin	PL



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## Technical data

## Product properties

Product type	DIN rail connector
Product family	PCVK 4-F
Product line	COMBICON Connectors L
Number of positions	1
Pitch	7.62 mm
Number of connections	1
Number of rows	1
Number of potentials	1
Mounting flange	Threaded flange

## Electrical properties

### **Properties**

Nominal current I <sub>N</sub>	20 A
Nominal voltage U <sub>N</sub>	630 V
Contact resistance	0.9 mΩ
Rated voltage (III/3)	500 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 PC 4
Nominal cross section	4 mm²
Contact connection type	Pin

### Interlock

Locking type	without
Mounting flange	without

### Conductor connection

Connection method	Screw connection with tension sleeve
Connection direction of the conductor to plug-in direction	0°
Conductor cross section rigid	0.2 mm² 4 mm²
Conductor cross section flexible	0.2 mm² 4 mm²
Conductor cross section AWG	24 12
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² 4 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² 4 mm²



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2 conductors with same cross section, solid	0.25 mm² 2.5 mm²
2 conductors with same cross section, flexible	0.25 mm² 2.5 mm²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.25 mm² 1.5 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² 2.5 mm²
Stripping length	10 mm
Drive form screw head	Slotted (L)
Tightening torque	0.5 Nm 0.6 Nm

## 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

### 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.

### Dimensions

Dimensional drawing	h
Pitch	7.62 mm
Width [w]	7.62 mm
Height [h]	37 mm
Length [I]	41.2 mm



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## Mechanical tests

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 setpoint/actual value	0.2 mm² / solid / > 10 N
	0.2 mm² / flexible / > 10 N
	4 mm² / solid / > 60 N
	4 mm² / flexible / > 60 N
nsertion and withdrawal forces	
Result	Test passed
No. of cycles	25
Insertion strength per pos. approx.	7 N
Withdraw strength per pos. approx.	4 N
orque test	
Specification	IEC 60999-1:1999-11
Contact holder in insert	
Specification	IEC 60512-15-1:2008-05
Contact holder in insert Requirements >20 N	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
/isual inspection	
Specification	IEC 60512-1-1:2002-02
Result	Test passed
Dimension check	
Specification	IEC 60512-1-2:2002-02
-p	Test passed

## 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

### Air clearances and creepage distances |

All dearances and dreepage distances		
Specification	IEC 60664-1:2007-04	
Insulating material group	I	
Comparative tracking index (IEC 60112)	CTI 600	
Rated insulation voltage (III/3)	500 V	
Rated surge voltage (III/3)	6 kV	
minimum clearance value - non-homogenous field (III/3)	5.5 mm	
minimum creepage distance (III/3)	6.3 mm	
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)	3.2 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 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	7.3 kV
Contact resistance R <sub>1</sub>	0.9 mΩ
Contact resistance R <sub>2</sub>	1 mΩ
Insertion/withdrawal cycles	25

### Climatic test

Specification	ISO 6988:1985-02
Corrosive stress	$0.2~\mathrm{dm^3SO_2}$ on 300 dm $^3$ /40 °C/1 cycle
Thermal stress	100 °C/168 h
Power-frequency withstand voltage	3.31 kV

#### Ambient conditions



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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

## Packaging specifications

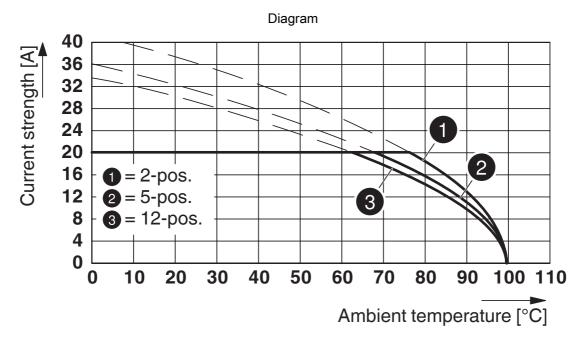
Type of packaging	packed in cardboard



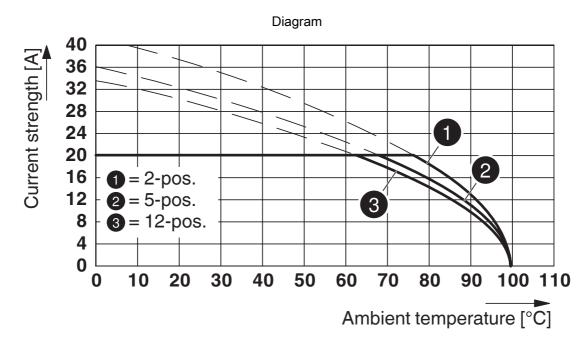
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## **Drawings**



Type: PC 5/...-ST1-7,62 with PCVK 4-7,62



Type: PC 5/...-STF1-7,62 with PCVK 4-7,62 and PCVK 4-7,62-F



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## **Approvals**

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•	CSA Approval ID: 13631				
		Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		300 V	20 A	28 - 10	-



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## Classifications

	ECLASS-13.0	27250117			
Εī	ETIM				
	ETIM 9.0	EC000897			
UNSPSC					
	UNSPSC 21.0	39121400			



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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c)
China RoHS	
Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.
EU REACH SVHC	
REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	dc3b69de-8232-4422-a8dc-c40471dc606b
EF3.0 Climate Change	
CO2e kg	0.062 kg CO2e

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