

1840560

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Feed-through connector, nominal cross section: 4 mm², color: green, nominal current: 20 A, rated voltage (III/2): 630 V, contact surface: Sn, contact connection type: Pin, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: DFK-PC 4/..-GF, pitch: 7.62 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, mounting: Direct mounting, conductor/PCB connection direction: 0 °, number of solder pins per potential: 1, plug-in system: COMBICON PC 4, Pin connector pattern alignment: Standard, locking: Screw locking mechanism, mounting: Threaded 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
- · Flexible side panels enable convenient wall mounting prewired from the inside

### Commercial data

Item number	1840560
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AADWCA
Product key	AADWCA
Catalog page	Page 518 (C-1-2013)
GTIN	4017918111717
Weight per piece (including packing)	14.694 g
Weight per piece (excluding packing)	13.694 g
Customs tariff number	85366990
Country of origin	PL



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## Technical data

## Product properties

Product type	Feed-through connector
Product family	DFK-PC 4/GF
Product line	COMBICON Connectors L
Туре	Feed-through header
Number of positions	3
Pitch	7.62 mm
Number of connections	3
Number of rows	1
Number of potentials	3
Mounting flange	Threaded flange
Solder pins per potential	1

#### Data management status

Article revision	06
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## Electrical properties

Nominal current I <sub>N</sub>	20 A
Nominal voltage U <sub>N</sub>	630 V
Contact resistance	0.4 mΩ
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

Туре	Feed-through header
Connector system	COMBICON PC 4
Nominal cross section	4 mm²
Contact connection type	Pin

### Interlock

Locking type	Screw locking mechanism
Mounting flange	Threaded flange

### 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



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Conductor areas asstian flevible	0.2 mm² 4 mm²
Conductor cross section flexible	0.2 mm 4 mm-
Conductor cross section AWG	24 10
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
2 conductors with same cross section, solid	0.2 mm² 2.5 mm²
2 conductors with same cross section, flexible	0.2 mm² 2.5 mm²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.2 mm² 1.5 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² 2.5 mm²
Cylindrical gauge a x b / diameter	3.6 mm x 3.1 mm / 3.0 mm
Stripping length	7 mm
Drive form screw head	Slotted (L)
Tightening torque	0.5 Nm 0.6 Nm

## Mounting

Mounting type	Direct mounting
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## 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 (5 - 7 μm Sn)
Metal surface contact area (top layer)	Tin (5 - 7 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**



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Dimensional drawing	h
Pitch	7.62 mm
Width [w]	44.48 mm
Height [h]	30.5 mm
Length [I]	32 mm
Installed height	30.5 mm
echanical tests	
Test for conductor damage and slackening	IFO 00000 4.4000 44
Specification  Result	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
Sciponivacidal value	0.2 mm² / flexible / > 10 N
	4 mm² / solid / > 60 N
	4 mm² / flexible / > 60 N
Insertion and withdrawal forces	
Result	Test passed
No. of cycles	25
Insertion strength per pos. approx.	8 N
Withdraw strength per pos. approx.	6 N
Torque test	
Specification	IEC 60999-1:1999-11
Resistance of inscriptions	
Specification	IEC 60068-2-70:1995-12
Result	Test passed
Polarization and coding	IEC 60512 7:1003 09 (Polorization)
Specification  Result	IEC 60512-7:1993-08 (Polarization) Test passed
roour	rust passeu
Visual inspection	
Specification	IEC 60512-1-1:2002-02
Result	Test passed
Dimension check	
Specification	IEC 60512-1-2:2002-02



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Test directions

hermal test   Test group C	
Specification	IEC 60512-5-1:2002-02
Tested number of positions	12
sulation resistance	
Specification	IEC 60512-3-1:2002-02
Insulation resistance, neighboring positions	10 <sup>12</sup> Ω
ir 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
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

# Specification IEC 60068-2-6:1995-03 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

X-, Y- and Z-axis

Durability test		
Specification	IEC 60512-5:1992-08	
Impulse withstand voltage at sea level	7.3 kV	
Contact resistance R <sub>1</sub>	$0.4~\text{m}\Omega$	
Contact resistance R <sub>2</sub>	$0.6~\text{m}\Omega$	
Insertion/withdrawal cycles	25	



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### Climatic test

Specification	ISO 6988:1985-02
Corrosive stress	KFW 0.2 S/1 cycle
Thermal stress	100 °C/168 h
Power-frequency withstand voltage	3.31 kV
1	
ambient conditions  Ambient temperature (operation)	-40 °C 100 °C (dependent on the derating curve)
Ambient temperature (operation)	-40 °C 100 °C (dependent on the derating curve)
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## Packaging specifications

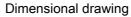
Type of packaging	packed in cardboard

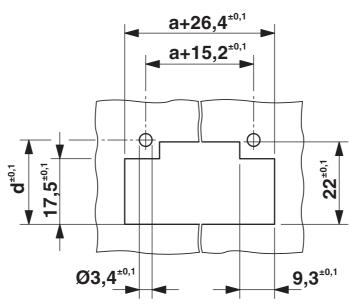


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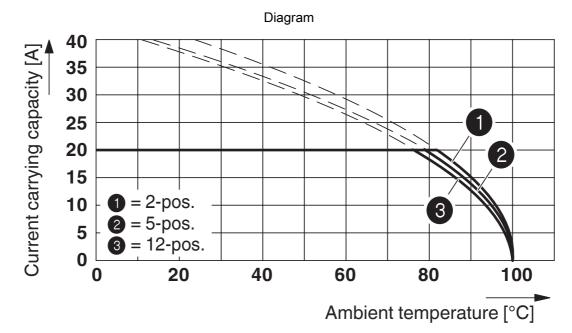
## **Drawings**





Dimension d depending on the wall thickness (W) in mm: W=1: d=21.4

W=2: d=21.9 W=3: d=22.5 W=4: d=23.1 W=5: d=23.7



Type: PC 4/...-STF-7,62 with DFK-PC 4/...-GF-7,62



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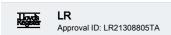
## **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/gb/products/1840560

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

CULus Recognized Approval ID: E60425-19920722				
	Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
Use group B				
	300 V	35 A	30 - 10	-
Use group C				
	300 V	35 A	30 - 10	-
Use group D				
	600 V	5 A	30 - 10	-

DNV GL
Approval ID: TAE00001EZ





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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

EU	RoHS
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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	0.144 kg CO2e



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### Accessories

DFK-MSTB-SS - Screw set

0708263

https://www.phoenixcontact.com/gb/products/0708263



Screw set, for securing the header to the device wall, consists of an M3 x 10 screw, with a spring washer and a nut

## CP-PC RD - Coding profile

1701967

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Coding profile, for plugging into the coding ribs of the plug at a later date, insulating material, color: Red  $\,$ 





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### SZS 0.6X3.5 - Screwdriver

1205053

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Actuation tool, for ST terminal blocks, insulated, also suitable for use as a bladed screwdriver, size:  $0.6 \times 3.5 \times 100$  mm, 2-component grip, with non-slip grip

### PC 4/ 3-STF-7,62 - PCB connector

1828252

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PCB connector, nominal cross section: 4 mm², color: green, nominal current: 20 A, rated voltage (III/2): 630 V, contact surface: Sn, contact connection type: Socket, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: PC 4/..-STF, pitch: 7.62 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON PC 4, locking: Screw locking mechanism, mounting: Screw flange, type of packaging: packed in cardboard

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