1840557

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Feed-through connector, nominal cross section: 4 mm<sup>2</sup>, color: green, nominal current: 20 A, rated voltage (III/2): 630 V, contact surface: Tin, type of contact: Pin, number of potentials: 2, number of rows: 1, number of positions: 2, number of connections: 2, 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, 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	1840557
Packing unit	50 pc
Minimum order quantity	50 pc
Sales Key	AAD
Product Key	AADWCA
Catalog Page	Page 518 (C-1-2013)
GTIN	4017918111700
Weight per Piece (including packing)	11.05 g
Weight per Piece (excluding packing)	10.166 g
Customs tariff number	85366990
Country of origin	PL



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# Technical Data

## **Product properties**

Туре	Feed-through header
Product line	COMBICON Connectors L
Product type	Feed-through connector
Product family	DFK-PC 4/GF
Number of positions	2
Pitch	7.62 mm
Number of connections	2
Number of rows	1
Mounting flange	Threaded flange
Number of potentials	2
Solder pins per potential	1

## **Electrical properties**

Nominal current I <sub>N</sub>	20 A
Nominal voltage U <sub>N</sub>	630 V
Degree of pollution	3
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

Conductor cross section rigid Conductor cross section flexible

Conductor cross section AWG

Туре	Feed-through header
Connector system	COMBICON PC 4
Nominal cross section	4 mm <sup>2</sup>
Type of contact	Pin

Interlock

Locking type	Screw locking
Mounting flange	Threaded flange
Conductor connection	
Connection method	Screw connection with tension sleeve

0.2 mm<sup>2</sup> ... 4 mm<sup>2</sup>

0.2 mm<sup>2</sup> ... 4 mm<sup>2</sup>

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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 mm <sup>2</sup> 2.5 mm <sup>2</sup>
2 conductors with same cross section, flexible	0.2 mm <sup>2</sup> 2.5 mm <sup>2</sup>
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.2 mm <sup>2</sup> 1.5 mm <sup>2</sup>
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm <sup>2</sup> 2.5 mm <sup>2</sup>
Cylindrical gauge a x b / diameter	3.6 mm x 3.1 mm / 3.0 mm
Stripping length	7 mm
Tightening torque	0.5 Nm 0.6 Nm

## Mounting

Mounting type	Direct mounting
Drive form screw head	Slotted (L)
Drive form screw head	Slotted (L)

## Material specifications

Material	data -	contact
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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

Material data - actuating element

Color ()

## 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	h
Pitch	7.62 mm
Width [w]	36.86 mm
Height [h]	30.5 mm
Length [I]	32 mm
Installed height	30.5 mm

## Mechanical tests

Test for conductor damage and slackening

Test for conductor damage and stackening	
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	0.2 mm² / solid / > 10 N
setpoint/actual 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	
Specification	IEC 60512-7:1993-08 (Polarization)
Result	Test passed
Visual inspection	
Specification	IEC 60512-1-1:2002-02
Result	Test passed



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nension check	
Specification	IEC 60512-1-2:2002-02
Result	Test passed
ctrical tests	
Thermal test   Test group C	
Specification	IEC 60512-5-1:2002-02
Tested number of positions	12
nsulation 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	1
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

## Environmental and real-life conditions

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

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 mΩ
Contact resistance R <sub>2</sub>	0.6 mΩ



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Insertion/withdrawal cycles	25
imatic 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
mbient 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
ckaging specifications	
Type of packaging	packed in cardboard

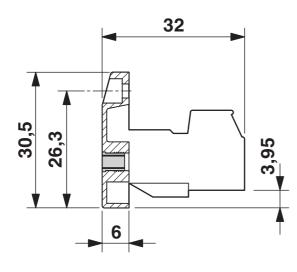
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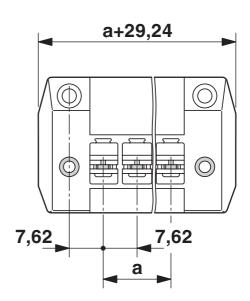
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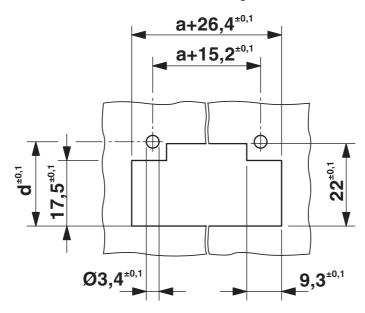
# Drawings

**Dimensional drawing** 





Dimensional drawing

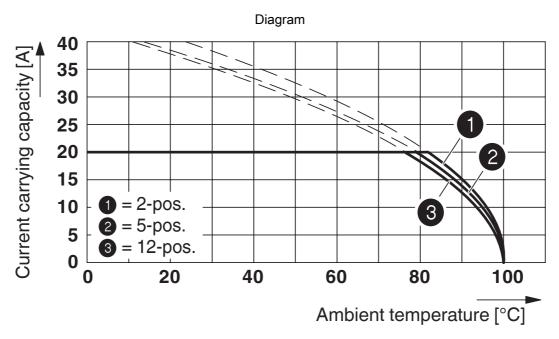


Dimension d depending on the wall thickness (W) in mm: W=1: d=21.4 W=2: d=21.9 W=3: d=22.5 W=4: d=23.1 W=5: d=23.7



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



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# Approvals

CSA Approval ID: 1	13631			
	Nominal Voltage U <sub>N</sub>	Nominal Current I <sub>N</sub>	Cross Section AWG	Cross Section mm <sup>2</sup>
	300 V	20 A	28 - 10	-
	300 V	20 A	28 - 10	-

EAC Approval ID: B.01687

CULus Approval	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>
	300 V	35 A	30 - 10	-
	300 V	35 A	30 - 10	-
	600 V	5 A	30 - 10	-



DNV GL Approval ID: TAE00001EZ



Approval ID: LR21308805TA

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# Classifications

## ECLASS

ECLASS-12.0         27460202           ECLASS-13.0         27460202	ECLASS-11.0	27460202
ECLASS-13.0 27460202	ECLASS-12.0	27460202
	ECLASS-13.0	27460202

## ETIM

	ETIM 8.0	EC002638
UN	NSPSC	
	UNSPSC 21.0	39121400

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# **Environmental Product Compliance**

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

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Accessories

DFK-MSTB-SS - Screw set

0708263 https://www.phoenixcontact.com/in/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 https://www.phoenixcontact.com/in/products/1701967

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



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## SK 7,62/3,8:FORTL.ZAHLEN - Marker card

### 0804549

https://www.phoenixcontact.com/in/products/0804549



Marker card, white, labeled, horizontal: consecutive numbers 1  $\dots$  10, 11  $\dots$  20, etc. up to 91  $\dots$  100, mounting type: adhesive, for terminal block width: 7.62 mm, lettering field size: 7.62 x 3.8 mm

## SZS 0,6X3,5 - Screwdriver

1205053 https://www.phoenixcontact.com/in/products/1205053



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

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PC 4/ 2-STF-7,62 - PCB connector

1828249

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PCB connector, nominal cross section: 4 mm<sup>2</sup>, color: green, nominal current: 20 A, rated voltage (III/2): 630 V, contact surface: Tin, type of contact: Socket, number of potentials: 2, number of rows: 1, number of positions: 2, number of connections: 2, 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, mounting: Screw flange, type of packaging: packed in cardboard

## PC 5/ 2-STF1-7,62 - PCB connector

1777833 https://www.phoenixcontact.com/in/products/1777833



PCB connector, nominal cross section: 6 mm<sup>2</sup>, color: green, nominal current: 41 A, rated voltage (III/2): 1000 V, contact surface: Tin, type of contact: Socket, number of potentials: 2, number of rows: 1, number of positions: 2, number of connections: 2, product range: PC 5/..-STF1, pitch: 7.62 mm, connection method: Screw connection with tension sleeve, screw head form: H1L Philipps recess with slotted Torx, conductor/PCB connection direction: 0 °, locking clip: - without locking clip, plug-in system: COMBICON PC 5, locking: Screw locking, mounting: Screw flange, type of packaging: packed in cardboard

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SPC 5/ 2-STF-7,62 - PCB connector

1996126

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PCB connector, nominal cross section: 6 mm<sup>2</sup>, color: green, nominal current: 41 A, rated voltage (III/2): 1000 V, contact surface: Tin, type of contact: Socket, number of potentials: 2, number of rows: 1, number of positions: 2, number of connections: 2, product range: SPC 5/..-STF, pitch: 7.62 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, locking clip: - without locking clip, plug-in system: COMBICON PC 5, locking: Screw locking, mounting: Screw flange, type of packaging: packed in cardboard

## TSPC 5/ 2-STF-7,62 - PCB connector

1728206 https://www.phoenixcontact.com/in/products/1728206



PCB connector, nominal cross section: 6 mm<sup>2</sup>, color: green, nominal current: 41 A, rated voltage (III/2): 1000 V, contact surface: Tin, type of contact: Socket, number of potentials: 2, number of rows: 1, number of positions: 2, number of connections: 4, product range: TSPC 5/..-STF, pitch: 7.62 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, locking clip: - without locking clip, plug-in system: COMBICON PC 5, locking: Screw locking, mounting: Screw flange, type of packaging: packed in cardboard

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