

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: Tin, 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	1 pc
Minimum order quantity	50 pc
Sales key	AA04
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

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

Electrical properties

Nominal current I _N	20 A
Nominal voltage U _N	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

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
Conductor cross section flexible	0.2 mm² 4 mm²
Conductor cross section AWG	24 10



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Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm ² 4 mm ²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² 4 mm²
2 conductors with same cross section, solid	0.2 mm ² 2.5 mm ²
2 conductors with same cross section, flexible	0.2 mm ² 2.5 mm ²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.2 mm ² 1.5 mm ²
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
Tightening torque	0.5 Nm 0.6 Nm

Mounting

Mounting type	Direct mounting
Drive form screw head	Slotted (L)
Connection method	Screw connection with tension sleeve
Drive form screw head	Slotted (L)

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

green (6021)
PA
I
600
V0
850
775
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	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

Dimension check	UEO 00540 4 0 0002 00
Specification	IEC 60512-1-2:2002-02



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Climatic test

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Result	Test passed
ctrical tests	
hermal test Test group C	
Specification	IEC 60512-5-1:2002-02
Tested number of positions	12
rested flumber of positions	12
nsulation resistance	
Specification	IEC 60512-3-1:2002-02
Insulation resistance, neighboring positions	10 ¹² Ω
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
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
vironmental and real-life conditions	
/ibration test Specification	IEC 60068-2-6:1995-03
	IEC 60068-2-6:1995-03 10 - 150 - 10 Hz
· · · · · · · · · · · · · · · · · · ·	
Specification Frequency	10 - 150 - 10 Hz
Specification Frequency Sweep speed	10 - 150 - 10 Hz 1 octave/min
Specification Frequency Sweep speed Amplitude	10 - 150 - 10 Hz 1 octave/min 0.35 mm (10 Hz 60.1 Hz)
Specification Frequency Sweep speed Amplitude Sweep speed Test duration per axis	10 - 150 - 10 Hz 1 octave/min 0.35 mm (10 Hz 60.1 Hz) 5g (60.1 Hz 150 Hz)
Specification Frequency Sweep speed Amplitude Sweep speed	10 - 150 - 10 Hz 1 octave/min 0.35 mm (10 Hz 60.1 Hz) 5g (60.1 Hz 150 Hz)
Specification Frequency Sweep speed Amplitude Sweep speed Test duration per axis Durability test	10 - 150 - 10 Hz 1 octave/min 0.35 mm (10 Hz 60.1 Hz) 5g (60.1 Hz 150 Hz) 2.5 h
Specification Frequency Sweep speed Amplitude Sweep speed Test duration per axis Durability test Specification	10 - 150 - 10 Hz 1 octave/min 0.35 mm (10 Hz 60.1 Hz) 5g (60.1 Hz 150 Hz) 2.5 h IEC 60512-5:1992-08
Specification Frequency Sweep speed Amplitude Sweep speed Test duration per axis Durability test Specification Impulse withstand voltage at sea level	10 - 150 - 10 Hz 1 octave/min 0.35 mm (10 Hz 60.1 Hz) 5g (60.1 Hz 150 Hz) 2.5 h IEC 60512-5:1992-08 7.3 kV



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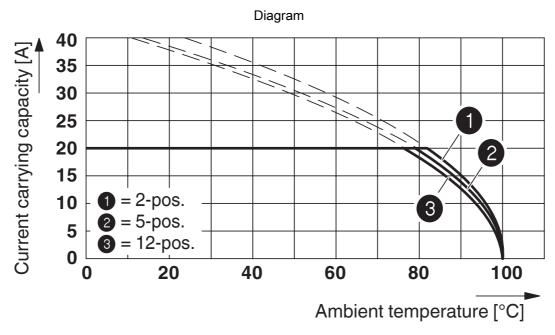
Specification	ISO 6988:1985-02
Corrosive stress	KFW 0.2 S/1 cycle
Thermal stress	100 °C/168 h
Power-frequency withstand voltage	3.31 kV
Ambient conditions Ambient temperature (operation)	-40 °C 100 °C (dependent on the derating curve)
Ambient temperature (storage/transport)	-40 °C 70 °C
Relative humidity (storage/transport)	30 % 70 %
Ambient temperature (assembly)	-5 °C 100 °C



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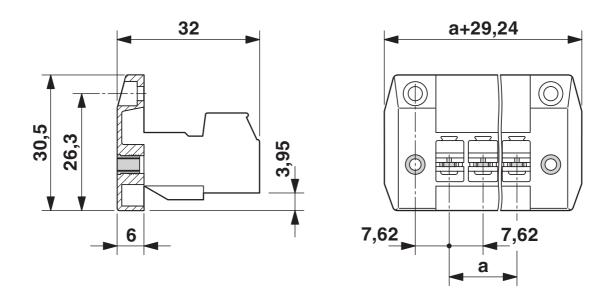
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Drawings



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

Dimensional drawing

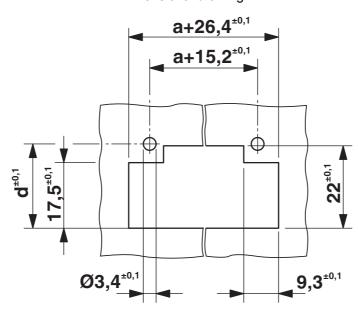




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Dimensional drawing



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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Approvals

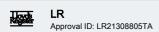
To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1840560

CSA Approval ID: 13631				
	Nominal voltage U_N	Nominal current I _N	Cross section AWG	Cross section mm ²
Use group B				
	300 V	20 A	28 - 10	-
Use group C				
	300 V	20 A	28 - 10	-

EAC	EAC
LIIL	Approval ID: B.01687

cULus Recognized Approval ID: E60425-19920722				
	Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
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

27460202
27460202
27460202
EC002638

39121400



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Environmental product compliance

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

0804549

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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/us/products/1205053



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



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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: Tin, 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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