

1840612

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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: 8, number of rows: 1, number of positions: 8, number of connections: 8, 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 method: 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 panel mounting prewired from the inside

Commercial data

Item number	1840612
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AA04
Product key	AADWCA
GTIN	4017918111762
Weight per piece (including packing)	34.075 g
Weight per piece (excluding packing)	32.203 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	8
Pitch	7.62 mm
Number of connections	8
Number of rows	1
Number of potentials	8
Mounting type	Threaded flange
Solder pins per potential	1

Electrical properties

Properties

Nominal current I _N	20 A
Nominal voltage U _N	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

Mounting type Threaded flange	Locking type	Screw locking mechanism
	Mounting type	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



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Conductor cross-section AWG	24 10
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 mm² 1.5 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm ² 2.5 mm ²
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]	82.58 mm
Height [h]	30.5 mm
Length [I]	32 mm
Installed height	30.5 mm
echanical tests	
Test for conductor damage and slackening	IFC 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
Setpolitivactual 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
Vigual inspection	
Visual inspection Specification	IEC 60512-1-1:2002-02
Result	Test passed
. Count	1 cost pubbod
Dimension check	
Specification	IEC 60512-1-2:2002-02



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Result

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Insertion/withdrawal cycles

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ctrical tests	
hermal 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 ¹² Ω
vir 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
vironmental and real-life conditions /ibration test	
SURCINCATION	IFC 60068-2-6·1995-03
Specification Frequency	IEC 60068-2-6:1995-03
Frequency	10 - 150 - 10 Hz
Frequency Sweep speed	10 - 150 - 10 Hz 1 octave/min
Frequency Sweep speed Amplitude	10 - 150 - 10 Hz 1 octave/min 0.35 mm (10 Hz 60.1 Hz)
Frequency Sweep speed Amplitude Acceleration	10 - 150 - 10 Hz 1 octave/min 0.35 mm (10 Hz 60.1 Hz) 5g (60.1 Hz 150 Hz)
Frequency Sweep speed Amplitude Acceleration 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) 2.5 h
Frequency Sweep speed Amplitude Acceleration Test duration per axis Test directions	10 - 150 - 10 Hz 1 octave/min 0.35 mm (10 Hz 60.1 Hz) 5g (60.1 Hz 150 Hz)
Frequency Sweep speed Amplitude Acceleration Test duration per axis Test directions Ourability 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 X-, Y- and Z-axis
Frequency Sweep speed Amplitude Acceleration Test duration per axis Test directions 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 X-, Y- and Z-axis
Frequency Sweep speed Amplitude Acceleration Test duration per axis Test directions 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 X-, Y- and Z-axis IEC 60512-5:1992-08 7.3 kV
Frequency Sweep speed Amplitude Acceleration Test duration per axis Test directions 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 X-, Y- and Z-axis

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Test passed



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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
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

Packaging specifications

Type of packaging	packed in cardboard

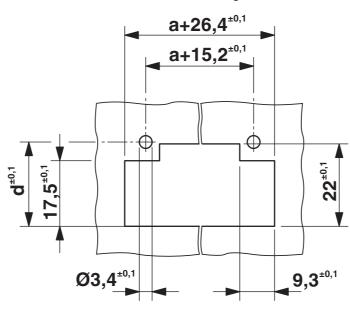


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Drawings

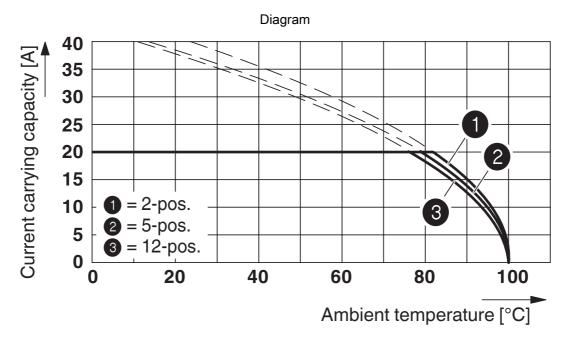




Dimension d depending on the wall thickness (W) in mm: W=1: d=21.4

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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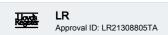
Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1840612

•	CSA Approval ID: 2355836				
		Nominal voltage U_N	Nominal current I _N	Cross section AWG	Cross section mm ²
В					
		300 V	20 A	28 - 10	-
С					
		300 V	20 A	28 - 10	-

CULus Recognized Approval ID: E60425-19920722				
	Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
В				
	300 V	35 A	30 - 10	-
С				
	300 V	35 A	30 - 10	-
D				
	600 V	5 A	30 - 10	-

DNV GL
Approval ID: TAE00001EZ





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Classifications

ECLASS

	ECLASS-13.0	27460202		
	ECLASS-15.0	27460202		
ETIM				
	IIVI			
	ETIM 9.0	EC002638		
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	0afb9a8d-7cba-462b-bf22-6ac55b49f3fe
EF3.0 Climate Change	
CO2e kg	0.246 kg CO2e

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