

1840625

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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: 9, number of rows: 1, number of positions: 9, number of connections: 9, 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	1840625
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AA04
Product key	AADWCA
Catalog page	Page 518 (C-1-2013)
GTIN	4017918111779
Weight per piece (including packing)	37.19 g
Weight per piece (excluding packing)	37.19 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	9
Pitch	7.62 mm
Number of connections	9
Number of rows	1
Mounting flange	Threaded flange
Number of potentials	9
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	$0.4~\text{m}\Omega$
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 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 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
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

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

material data medering	
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]	90.2 mm
Height [h]	30.5 mm
Length [I]	32 mm
Installed height	30.5 mm
lechanical 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 0000 00
Specification	IEC 60512-1-2:2002-02



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Result	Test passed
ectrical tests	
Thermal test   Test group C	
Specification	IEC 60512-5-1:2002-02
Tested number of positions	12
Insulation resistance	
Specification	IEC 60512-3-1:2002-02
Insulation resistance, neighboring positions	10 <sup>12</sup> Ω
Air clearances and creepage distances	
Specification	IEC 60664-1:2007-04
Insulating material group	T. Control of the con
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
nvironmental and real-life conditions	
Vibration test	VEC 00000 0 0 100E 00

Vibration test	
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>	$0.4~\text{m}\Omega$	
Contact resistance R <sub>2</sub>	$0.6~\text{m}\Omega$	
Insertion/withdrawal cycles	25	

### Climatic test



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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 (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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## Classifications

### **ECLASS**

	ECLASS-11.0	27460202			
	ECLASS-12.0	27460202			
	ECLASS-13.0	27460202			
ΕT	ТІМ				
	ETIM 9.0	EC002638			
UN	UNSPSC				
	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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