

1702756

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Feed-through header, nominal cross section: 16 mm², color: green, nominal current: 76 A, rated voltage (III/2): 1000 V, contact surface: Ag, contact connection type: Socket, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: DFK-IPC 16/..-GF, pitch: 10.16 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.8 mm, number of solder pins per potential: 3, plug-in system: COMBICON PC 16, Pin connector pattern alignment: Standard, locking: Screw locking mechanism, mounting method: Threaded flange, type of packaging: packed in cardboard

Your advantages

- · Well-known mounting principle allows worldwide use
- · Flange system enables secure fixing to the housing panel by means of tool-free snap-in locking or screws
- · Inverted header with socket contacts for touch-proof device outputs or PCB/PCB connections
- · Shroud for professional EMC shield connection on the front of the device
- · Screwable flange for superior mechanical stability
- · Integrated double steel spring provides additional safety in the event of temperature and power fluctuations

Commercial data

Item number	1702756
Packing unit	10 pc
Minimum order quantity	10 pc
Note	Made to order (non-returnable)
Sales key	AA05
Product key	AAEWAB
GTIN	4046356031349
Weight per piece (including packing)	32.21 g
Weight per piece (excluding packing)	26.94 g
Customs tariff number	85366990
Country of origin	PL



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Technical data

Product properties

Product type	Feed-through header
Product family	DFK-IPC 16/GF
Product line	COMBICON Connectors XL
Туре	Feed-through header
Number of positions	4
Pitch	10.16 mm
Number of connections	4
Number of rows	1
Number of potentials	4
Mounting type	Threaded flange
Pin layout	Linear pinning
Solder pins per potential	3

Electrical properties

Properties

Nominal current I _N	76 A
Nominal voltage U _N	1000 V
Contact resistance	0.3 mΩ
Rated voltage (III/3)	630 V
Rated surge voltage (III/3)	6 kV
Rated voltage (III/2)	1000 V
Rated surge voltage (III/2)	8 kV
Rated voltage (II/2)	1000 V
Rated surge voltage (II/2)	6 kV

Mounting

Mounting type	Wave soldering
Pin layout	Linear pinning

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	completely silver-plated
Metal surface contact area (top layer)	Silver (4 - 8 µm Ag)
Metal surface soldering area (top layer)	Silver (4 - 8 µm Ag)

Material data - housing	
Color (Housing)	green (6021)



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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.
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Dimensions

Dimensional drawing	P
Pitch	10.16 mm
Width [w]	81.72 mm
Height [h]	21.6 mm
Length [I]	46.95 mm
Installed height	17.8 mm
Solder pin length [P]	3.8 mm
Pin dimensions	1.2 x 0.8 mm
PCB design	
Pin spacing	5.08 mm
Hole diameter	1.7 mm

Mechanical tests

Visual inspection

Result

visual inspection	
Specification	IEC 60512-1:2001-01
Result	Test passed
Dimension check	
Specification	IEC 60512-1:2001-01
Result	Test passed
Resistance of inscriptions	
Specification	IEC 60068-2-70:1995-12

Test passed



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Polarization and coding	
Specification	IEC 60512-7:1993-08 (Polarization)
Result	Test passed
Contact holder in insert	
Specification	IEC 60512-8:1993-01
Contact holder in insert	Test passed
Requirements >20 N	
nsertion and withdrawal forces	
Result	Test passed
No. of cycles	50
Insertion strength per pos. approx.	10 N
Withdraw strength per pos. approx.	9 N
ectrical tests	
ictical tests	
Thermal test Test group C	
Specification	IEC 60512-5-1:2002-02
Tested number of positions	9
nsulation resistance	
Specification	IEC 60512-2:1985-00
Specification Insulation resistance, neighboring positions	IEC 60512-2:1985-00 10 ¹² Ω
Insulation resistance, neighboring positions	
Insulation resistance, neighboring positions Air clearances and creepage distances 1. Insulation coordination	10 ¹² Ω
Insulation resistance, neighboring positions Air clearances and creepage distances 1. Insulation coordination Specification	10 ¹² Ω IEC 61984:2008-10
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Insulation resistance, neighboring positions Air clearances and creepage distances 1. Insulation coordination Specification Insulating material group Comparative tracking index (IEC 60112)	10 ¹² Ω IEC 61984:2008-10 I CTI 600
Insulation resistance, neighboring positions Air clearances and creepage distances 1. Insulation coordination Specification Insulating material group Comparative tracking index (IEC 60112) Rated insulation voltage (III/3)	10 ¹² Ω IEC 61984:2008-10 I CTI 600 630 V
Insulation resistance, neighboring positions Air clearances and creepage distances 1. Insulation coordination Specification Insulating material group Comparative tracking index (IEC 60112) Rated insulation voltage (III/3) Rated surge voltage (III/3)	10 ¹² Ω IEC 61984:2008-10 I CTI 600 630 V 6 kV
Insulation resistance, neighboring positions Air clearances and creepage distances 1. Insulation coordination Specification Insulating material group Comparative tracking index (IEC 60112) Rated insulation voltage (III/3) Rated surge voltage (III/3) minimum clearance value - non-homogenous field (III/3)	10 ¹² Ω IEC 61984:2008-10 I CTI 600 630 V 6 kV 5.5 mm
Insulation resistance, neighboring positions Air clearances and creepage distances 1. Insulation coordination Specification Insulating material group Comparative tracking index (IEC 60112) Rated insulation voltage (III/3) Rated surge voltage (III/3) minimum clearance value - non-homogenous field (III/3) minimum creepage distance (III/3)	10 ¹² Ω IEC 61984:2008-10 I CTI 600 630 V 6 kV 5.5 mm 8 mm
Insulation resistance, neighboring positions Air clearances and creepage distances 1. Insulation coordination Specification Insulating material group Comparative tracking index (IEC 60112) Rated insulation voltage (III/3) Rated surge voltage (III/3) minimum clearance value - non-homogenous field (III/3) minimum creepage distance (III/3) Rated insulation voltage (III/2)	10 ¹² Ω IEC 61984:2008-10 I CTI 600 630 V 6 kV 5.5 mm 8 mm 1000 V
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Insulation resistance, neighboring positions Air clearances and creepage distances 1. Insulation coordination Specification Insulating material group Comparative tracking index (IEC 60112) Rated insulation voltage (III/3) Rated surge voltage (III/3) minimum clearance value - non-homogenous field (III/3) minimum creepage distance (III/3) Rated insulation voltage (III/2) Rated surge voltage (III/2) minimum clearance value - non-homogenous field (III/2) minimum creepage distance (III/2) Rated insulation voltage (III/2) Rated surge voltage (III/2) minimum clearance value - non-homogenous field (III/2) minimum clearance value - non-homogenous field (III/2) minimum clearance value - non-homogenous field (III/2) minimum creepage distance (III/2)	10 ¹² Ω IEC 61984:2008-10 I CTI 600 630 V 6 kV 5.5 mm 8 mm 1000 V 8 kV 8 mm 1000 V 6 kV 5.5 mm
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Insulation resistance, neighboring positions Air clearances and creepage distances 1. Insulation coordination Specification Insulating material group Comparative tracking index (IEC 60112) Rated insulation voltage (III/3) Rated surge voltage (III/3) minimum clearance value - non-homogenous field (III/3) minimum creepage distance (III/3) Rated insulation voltage (III/2) Rated surge voltage (III/2) minimum clearance value - non-homogenous field (III/2) minimum creepage distance (III/2) Rated insulation voltage (III/2) Rated surge voltage (III/2) Rated surge voltage (III/2) minimum clearance value - non-homogenous field (III/2) minimum clearance value - non-homogenous field (III/2) minimum creepage distance (III/2) Air clearances and creepage distances 2. Insulation coordination Specification	IEC 61984:2008-10 I CTI 600 630 V 6 kV 5.5 mm 8 mm 1000 V 8 kV 8 mm 1000 V 6 kV 5.5 mm 1000 V 6 kV 5.5 mm



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Rated surge voltage (III/3)	6 kV
Rated Surge voltage (III/3)	UKV
minimum clearance value - non-homogenous field (III/3)	5.5 mm
minimum creepage distance (III/3)	8 mm
Rated insulation voltage (III/2)	1250 V DC
Rated surge voltage (III/2)	8 kV
minimum clearance value - non-homogenous field (III/2)	8 mm
minimum creepage distance (III/2)	8 mm
Rated insulation voltage (II/2)	1500 V DC
Rated surge voltage (II/2)	8 kV
minimum clearance value - non-homogenous field (II/2)	8 mm
minimum creepage distance (II/2)	8 mm

Environmental and real-life conditions

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)
Acceleration	5g (60.1 Hz 150 Hz)
Test duration per axis	2.5 h
Test directions	X-, Y- and Z-axis

Durability test

Specification	IEC 60512-5:1992-08
Impulse withstand voltage at sea level	9.8 kV
Contact resistance R ₁	$0.3~\text{m}\Omega$
Contact resistance R ₂	$0.4~\text{m}\Omega$
Insertion/withdrawal cycles	50

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	4.26 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

Packaging specifications

Type of packaging	packed in cardboard
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Packaging specifications



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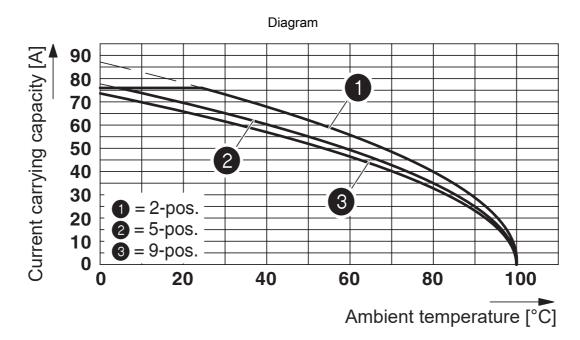
	in cardboard
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Drawings



Type: IPC 16/...-STF-10,16 with DFK-IPC 16/...-GF-10,16



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Approvals

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cULus Recogn Approval ID: E6042	CULus Recognized Approval ID: E60425-20040202			
	Nominal voltage U_N	Nominal current I _N	Cross section AWG	Cross section mm ²
В				
	300 V	55 A	-	-
С				
	300 V	55 A	-	-
D				
	600 V	5 A	-	-

	VDE approval of drawings Approval ID: 40055586				
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
keine					
		1000 V	76 A	-	-



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Classifications

ECLASS

	ECLASS-13.0	27460201
	ECLASS-15.0	27460201
ΕT	TIM	
	ETIM 9.0	EC002637
UN	ISPSC	

UNSPSC 21.0 39121400



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Environmental product compliance

EU RoHS

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%		

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