

1861112

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Feed-through header, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Gold, contact connection type: Pin, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: DFK-MSTB 2,5/..-GF, pitch: 5.08 mm, connection method: Solder/Slip-on connection, mounting: Direct mounting, pin layout: Linear pinning, solder pin [P]: 9.3 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5, Pin connector pattern alignment: Standard, locking: Screw locking mechanism, mounting: Threaded flange, type of packaging: packed in cardboard

### Your advantages

- · Gold-plated contacts ensure transfer quality remains stable over the long term
- Free choice permanent solder connection or standardized slip-on connection
- · Maximum flexibility when it comes to device design one header for connectors with different connection technologies
- · Cable connection on the inside of the device enables flexible positioning of the panel feed-through
- · Screwable flange for superior mechanical stability

#### Commercial data

Item number	1861112
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AA03
Product key	AACWBB
GTIN	4017918227524
Weight per piece (including packing)	4.711 g
Weight per piece (excluding packing)	4.429 g
Customs tariff number	85366930
Country of origin	DE



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### Technical data

## Product properties

Product type	Feed-through header
Product family	DFK-MSTB 2,5/GF
Product line	COMBICON Connectors M
Number of positions	3
Pitch	5.08 mm
Number of connections	3
Number of rows	1
Number of potentials	3
Mounting flange	Threaded flange
Pin layout	Linear pinning
Solder pins per potential	1

### Electrical properties

Nominal current I <sub>N</sub>	12 A
Degree of pollution	3
Rated voltage (III/3)	320 V
Rated surge voltage (III/3)	4 kV
Rated voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV
Rated voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV

### Mounting

Mounting type	Direct mounting
Pin layout	Linear pinning
Flange	
Tightening torque	0.3 Nm
Attachment to feed-through panel	
Tightening torque	0.3 Nm
Screw	0708263 DFK-MSTB SS for housing walls of up to 6 mm thick

## 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 gold-plated
Metal surface contact area (top layer)	Gold (0.8 - 1.4 µm Au)
Metal surface contact area (middle layer)	Nickel (2 - 4 µm Ni)



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Metal surface soldering area (top layer)	Gold (0.8 - 1.4 µm Au)
Metal surface soldering area (middle layer)	Nickel (2 - 4 µm Ni)
Material data - housing	
Color (Housing)	green (6021)
Insulating material	PA
Insulating material group	T Company of the Comp
CTI according to IEC 60112	600
Flammability rating according to UL 94	V2

#### 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 h
Pitch	5.08 mm
Width [w]	35.56 mm
Height [h]	29.3 mm
Length [I]	17.5 mm
Installed height	20.2 mm
Solder pin length [P]	9.3 mm
Pin dimensions	0.8 x 2.8 mm
PCB design	
Hole diameter	3.2 mm

### Electrical tests

#### 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)	320 V
Rated surge voltage (III/3)	4 kV
minimum clearance value - non-homogenous field (III/3)	3 mm
minimum creepage distance (III/3)	4 mm
Rated insulation voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV
minimum clearance value - non-homogenous field (III/2)	3 mm
minimum creepage distance (III/2)	3 mm



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Rated insulation voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV
minimum clearance value - non-homogenous field (II/2)	3 mm
minimum creepage distance (II/2)	3.2 mm

### Environmental and real-life conditions

### 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

Type of packaging	packed in cardboard



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### **Approvals**

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CSA Approval ID: 13631				
	Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
Use group B				
	300 V	15 A	-	-
Use group D				
	300 V	10 A	-	-

cULus Recogn Approval ID: E6042	CULus Recognized Approval ID: E60425-19931011			
	Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
Use group B				
	300 V	15 A	-	-
Use group D				
	300 V	10 A	-	-

VDE Zeichengenehmigung Approval ID: 40050648				
	Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
	250 V	12 A	-	-



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## Classifications

### **ECLASS**

	ECLASS-11.0	27460201		
	ECLASS-12.0	27460201		
	ECLASS-13.0	27460201		
ETIM				
	ETIM 8.0	EC002637		
UNSPSC				
	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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