1980543

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ST-COMBI receptacle, plug-in direction vertical to the PCB, pitch: 5.2 mm, no. of positions: 8

Your advantages

- · Universal plug-in solutions from the DIN rail through to the device can be implemented with the same plug
- The pitch width of this base strip is matched to that of the COMBI plug

Commercial data

Item number	1980543
Packing unit	50 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Sales key	AA03
Product key	AACSNB
Catalog page	Page 297 (C-1-2019)
GTIN	4017918972219
Weight per piece (including packing)	12.052 g
Weight per piece (excluding packing)	10.219 g
Customs tariff number	85366930
Country of origin	PL

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Technical data

Product properties

Product type	PCB headers
Product family	ST 2,5-PCBV/G
Product line	COMBICON Connectors M
Number of positions	8
Pitch	5.2 mm
Number of rows	1
Mounting flange	without
Pin layout	Zigzag pinning W
Solder pins per potential	1

Electrical properties

Nominal current I _N	20 A
Nominal voltage U _N	630 V
Contact resistance	1 mΩ
Rated voltage (III/3)	500 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

Mounting

Mounting type	Wave soldering
Pin layout	Zigzag pinning W

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	Tin-plated
Metal surface contact area (top layer)	Tin (4 - 8 μm Sn)
Metal surface soldering area (top layer)	Tin (4 - 8 μm Sn)
Material data - housing	
Color (Housing)	gray (7042)
Insulating material	PA
Insulating material group	1
CTI according to IEC 60112	600

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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

Note on application

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

Dimensional drawing

	h P
Pitch	5.2 mm
Width [w]	43.7 mm
Height [h]	25.3 mm
Length [I]	18.05 mm
Installed height	21.7 mm
Solder pin length [P]	3.6 mm
Pin dimensions	11 mm

PCB design

Hole diameter 1.6 mm

Mechanical tests

Specification	IEC 60512-2:1985-00
Result	Test passed
Dimension check	
Specification	IEC 60512-2:1985-00
Result	Test passed
Resistance of inscriptions Specification	IEC 60068-2-70:1995-12
	IEC 60068-2-70:1995-12 Test passed
Specification	
Specification Result	



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Specification	IEC 60512-8:1993-01
Contact holder in insert Requirements >20 N	Test passed
sertion and withdrawal forces	
Result	Test passed
No. of cycles	50
Insertion strength per pos. approx.	6 N
Withdraw strength per pos. approx.	4 N
ctrical tests	
nermal test Test group C	
Specification	IEC 60512-5-1:2002-02
Tested number of positions	12
sulation resistance	
Specification	IEC 60512-2:1985-00
Insulation resistance, neighboring positions	10 ¹² Ω
r 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)	500 V
Rated surge voltage (III/3)	6 kV
minimum clearance value - non-homogenous field (III/3)	5.5 mm
minimum creepage distance (III/3)	6.3 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

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



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pecification	IEC 60512-5:1992-08
mpulse withstand voltage at sea level	7.3 kV
Contact resistance R ₁	1 mΩ
Contact resistance R ₂	1.5 mΩ
nsertion/withdrawal cycles	50
natic 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
bient 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
aging specifications	
Type of packaging	packed in cardboard



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Drawings



Type: SP 2,5/... with ST 2,5-PCBV/...-G-5,2



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Approvals

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CULus Recogni Approval ID: E60425	CULus Recognized Approval ID: E60425-20000825				
	Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²	
Use group B					
	300 V	15 A	-	-	
Use group C					
	300 V	15 A	-	-	

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Classifications

ECLASS

	ECLASS-13.0	27460201		
ETIM				
	ETIM 9.0	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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