

1980556

https://www.phoenixcontact.com/us/products/1980556

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



ST-COMBI receptacle, plug-in direction vertical to the PCB, pitch: 5.2 mm, no. of positions: 9

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	1980556
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	4017918972226
Weight per piece (including packing)	12.868 g
Weight per piece (excluding packing)	12 g
Customs tariff number	85366930
Country of origin	PL



1980556

https://www.phoenixcontact.com/us/products/1980556

Technical data

Product properties

Product type	PCB headers
Product family	ST 2,5-PCBV/G
Product line	COMBICON Connectors M
Number of positions	9
Pitch	5.2 mm
Number of rows	1
Mounting flange	without
Pin layout	Zigzag pinning W
Solder pins per potential	1

Electrical properties

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



1980556

https://www.phoenixcontact.com/us/products/1980556

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	P
Pitch	5.2 mm
Width [w]	48.9 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

Visual inspection Specification

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

IEC 60512-2:1985-00

Polarization and coding

·	
Specification	IEC 60512-7:1993-08 (Polarization)
Result	Test passed

Contact holder in insert



1980556

https://www.phoenixcontact.com/us/products/1980556

Specification	IEC 60512-8:1993-01
Contact holder in insert Requirements >20 N	Test passed
Insertion and withdrawal forces	
Result	Test passed
Result No. of cycles	Test passed 50
	<u> </u>

Electrical tests

Thermal test | Test group C

Specification	IEC 60512-5-1:2002-02
Tested number of positions	12

Insulation resistance

Specification	IEC 60512-2:1985-00
Insulation resistance, neighboring positions	10 ¹² Ω

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)	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

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



1980556

https://www.phoenixcontact.com/us/products/1980556

Durability test

Specification	IEC 60512-5:1992-08
Impulse withstand voltage at sea level	7.3 kV
Contact resistance R ₁	1 mΩ
Contact resistance R ₂	1.5 mΩ
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	3.31 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

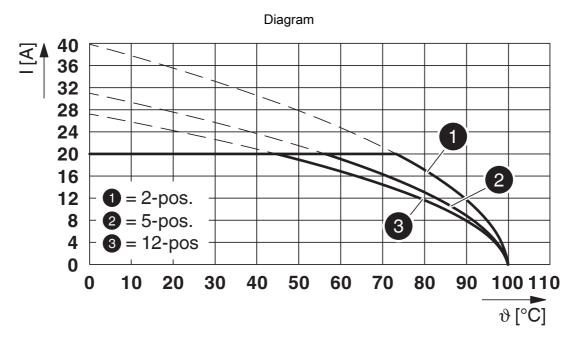
Type of packaging	packed in cardboard
.) po oi paolaging	packed in caraboard



1980556

https://www.phoenixcontact.com/us/products/1980556

Drawings



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



1980556

https://www.phoenixcontact.com/us/products/1980556

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1980556

CULus Recogn Approval ID: E6042	ized 5-20000825			
	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	-	-



1980556

https://www.phoenixcontact.com/us/products/1980556

Classifications

_	\sim	$\Lambda \cap \cap$

ECLASS-13.0 27460201 **ETIM** ETIM 9.0 EC002637 **UNSPSC** UNSPSC 21.0

39121400



1980556

https://www.phoenixcontact.com/us/products/1980556

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%

Phoenix Contact 2025 @ - all rights reserved https://www.phoenixcontact.com

Phoenix Contact USA 586 Fulling Mill Road Middletown, PA 17057, United States (+717) 944-1300 info@phoenixcon.com