SPT 2,5/ 5-H-5,0-EX - PCB terminal block

1732412

https://www.phoenixcontact.com/us/products/1732412

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Printed circuit board terminal, nominal current: 23 A, nominal cross section: 2.5 mm^2, number of potentials: 5, number of rows: 1, number of positions per row: 5, product range: SPT 2,5/..-H-EX, pitch: 5 mm, connection method: Push-in spring connection, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: green, Pin layout: Linear pinning, Solder pin [P]: 2.5 mm, number of solder pins per potential: 2, type of packaging: packed in cardboard

Your advantages

- Time saving push-in connection, tools not required
- Defined contact force ensures that contact remains stable over the long term
- Clamping space opened by means of fixed screwdriver enables convenient conductor connection
- Operation and conductor connection from one direction enable integration into front of device
- Satisfies the more stringent safety requirements of “Ex eb” protection according to IEC 60079-7 for potentially explosive areas
- Two solder pins reduce the mechanical strain on the soldering spots

Commercial data

Item number	1732412
Packing unit	50 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Sales key	AA13
Product key	AAMBFA
Catalog page	Page 163 (C-1-2013)
GTIN	4046356282956
Weight per piece (including packing)	6.657 g
Weight per piece (excluding packing)	5.06 g
Customs tariff number	85369010
Country of origin	PL

Technical data

Product properties

Product type	Printed circuit board terminal
Product family	SPT 2,5/..-H-EX
Product line	COMBICON Terminals M
Number of positions	5
Pitch	5 mm
Number of connections	5
Number of rows	1
Number of potentials	5
Pin layout	Linear pinning
Solder pins per potential	2

Electrical properties

Properties

Nominal current I_N	23 A
Nominal voltage U_N	176 V
Rated current / conductor cross section	23 A/2.5 mm²

Ex data

Ex approval

Identification	0344 Ex II 2GD / Ex eb IIC Gb
EU-type examination certificate	KEMA 07ATEX0193 U
IECEx certificate	IECEx KEM 07.0057 U

Connection data

Connection technology

Nominal cross section	2.5 mm²

Conductor connection

Connection method	Push-in spring connection
Conductor cross section rigid	0.2 mm² ... 4 mm²
Conductor cross section flexible	0.2 mm² ... 2.5 mm²
Conductor cross section AWG	24 ... 14
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² ... 2.5 mm² (Stripping length 8 mm)
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² ... 1.5 mm² (Stripping length 8 mm)
Stripping length	10 mm

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	hot-dip tin-plated
Metal surface terminal point (top layer)	Tin (4 - 8 µm Sn)
Metal surface soldering area (top layer)	Tin (4 - 8 µm Sn)

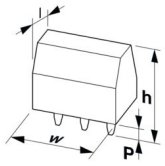
Material data - housing

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

Note on application	Rated insulation voltage with pitch spacer RZ-SPT 2,5-2,5: 275 V RZ-SPT 2,5-5,0: 440 V

Dimensions

Dimensional drawing	
Pitch	5 mm
Width [w]	26.4 mm
Height [h]	16 mm
Length [l]	14.4 mm
Installed height	13.5 mm
Solder pin length [P]	2.5 mm
Pin dimensions	0.8 x 0.8 mm

PCB design

Pin spacing	8.2 mm
Hole diameter	1.2 mm

Mechanical tests

Connection test

Specification	IEC 60998-2-2:2002-12
Result	Test passed

Test for conductor damage and slackening

Specification	IEC 60998-2-2:2002-12
Result	Test passed

Pull-out test

Specification	IEC 60998-2-2:2002-12
Conductor cross section/conductor type/tractive force setpoint/actual value	0.2 mm² / solid / > 10 N
	0.2 mm² / flexible / > 10 N
	4 mm² / solid / > 60 N
	2.5 mm² / flexible / > 50 N

Electrical tests

Temperature-rise test

Specification	IEC 60998-2-1:2002-12
Requirement temperature-rise test	Increase in temperature ≤ 45 K

Insulation resistance

Specification	IEC 60998-1:2002-12
Insulation resistance, neighboring positions	10^9 Ω

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

Glow-wire test

Specification	IEC 60998-1:2002-12
Temperature	850 °C
Time of exposure	5 s

Ambient conditions

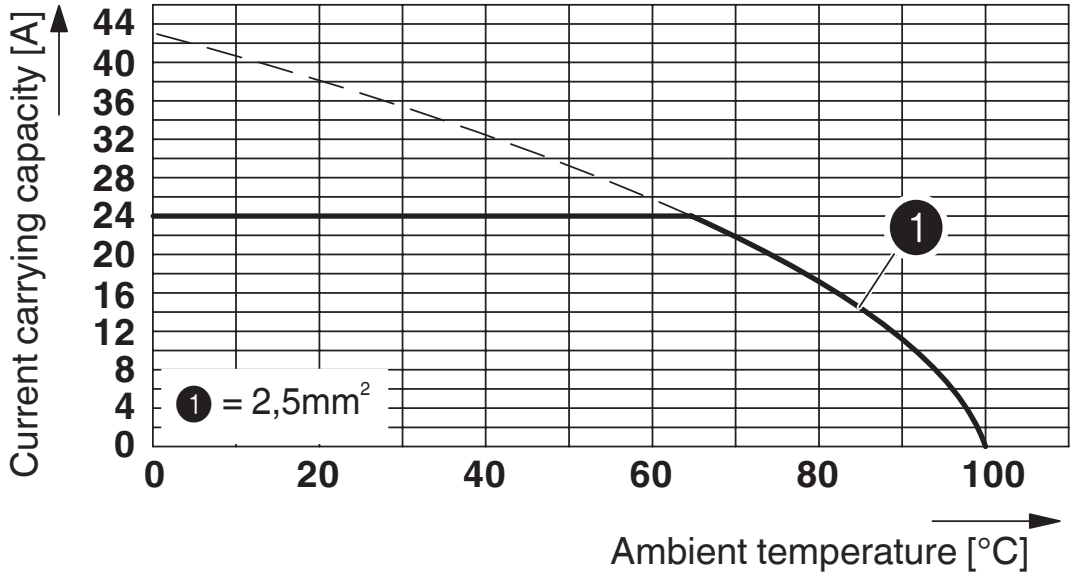
Ambient temperature (operation)	-50 °C ... 110 °C
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C

Packaging specifications

Type of packaging	packed in cardboard

Drawings

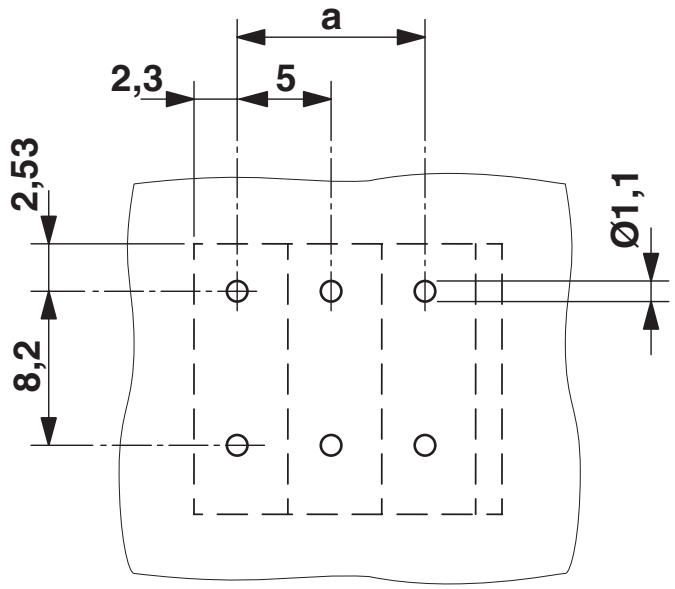
Diagram



Type: SPT 2,5/5-H-5,0

Test following DIN EN 60512-5-2:2003-01
Reduction factor = 1
No. of positions: 5

Drilling plan/solder pad geometry



Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1732412

cULus Recognized
Approval ID: E60425-20061129

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
	300 V	20 A	24 - 12	-
Use group D				
	150 V	15 A	24 - 12	-
Use group C				
	150 V	20 A	24 - 12	-

ATEX
Approval ID: KEMA 07ATEX0193 U

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	176 V	23 A	-	0.2 - 4

IECEx
Approval ID: IECEx KEM 07.0057U

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	176 V	23 A	-	0.2 - 4

Classifications

ECLASS

ECLASS-12.0	27460101
ECLASS-13.0	27460101

ETIM

ETIM 9.0	EC002643

UNSPSC

UNSPSC 21.0	39121400

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%

EF3.0 Climate Change

CO2e kg	0.059 kg CO2e

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