

SPT 2,5/ 9-H-5,0-EX - PCB terminal block



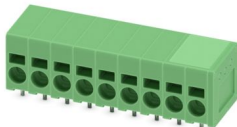
1732454

<https://www.phoenixcontact.com/us/products/1732454>

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Printed circuit board terminal, nominal current: 23 A, nominal cross section: 2.5 mm², number of potentials: 9, number of rows: 1, number of positions per row: 9, 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	1732454
Packing unit	50 pc
Minimum order quantity	50 pc
Product key	AAMBFA
GTIN	4046356282994
Weight per piece (including packing)	11.458 g
Weight per piece (excluding packing)	10.9 g
Country of origin	PL

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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	9
Pitch	5 mm
Number of connections	9
Number of rows	1
Number of potentials	9
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 mm ²

Ex data

Ex approval

Identification	0344 ^{CE} 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 mm ²
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Conductor connection

Connection method	Push-in spring connection
Conductor cross-section rigid	0.2 mm ² ... 4 mm ²
Conductor cross-section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross-section AWG	24 ... 14
Conductor cross-section, flexible, with ferrule, without plastic sleeve	0.25 mm ² ... 2.5 mm ² (Stripping length 8 mm)
Conductor cross-section, flexible, with ferrule, with plastic sleeve	0.25 mm ² ... 1.5 mm ² (Stripping length 8 mm)
Stripping length	10 mm

Mounting

Mounting type	Wave soldering
Pin layout	Linear pinning

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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 µm - 8 µm Sn)
Metal surface soldering area (top layer)	Tin (4 µm - 8 µm Sn)

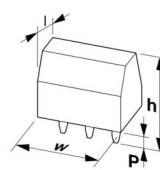
Material data - housing

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
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Dimensions

Dimensional drawing	
Pitch	5 mm
Width [w]	46.4 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

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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 mm ² / solid / > 10 N
	0.2 mm ² / flexible / > 10 N
	4 mm ² / solid / > 60 N
	2.5 mm ² / 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 (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-50 °C ... 110 °C

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Packaging specifications

Type of packaging
packed in cardboard

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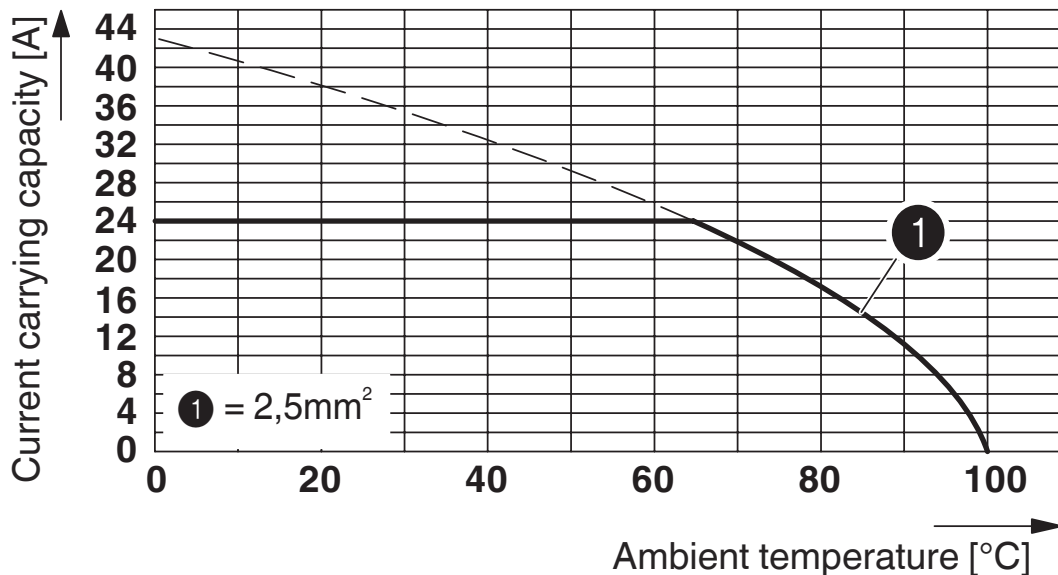


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Drawings

Diagram



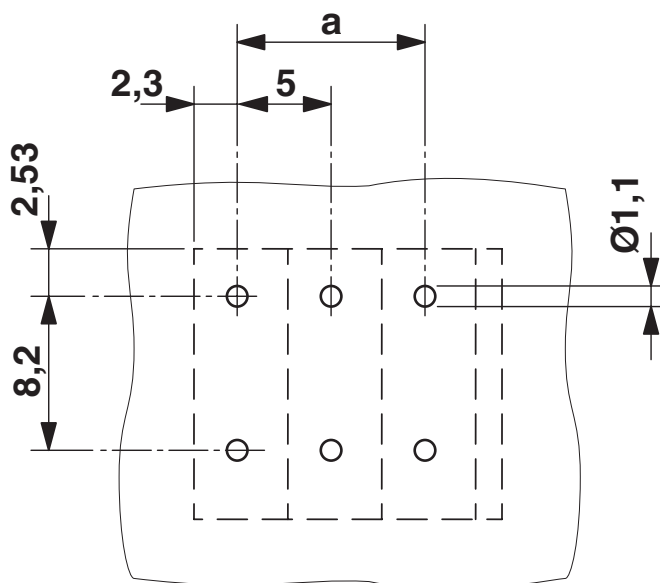
Type: SPT 2,5/5-H-5,0

Test following DIN EN 60512-5-2:2003-01

Reduction factor = 1

No. of positions: 5

Drilling plan/solder pad geometry



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Approvals

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 cULus Recognized Approval ID: E60425-20061129				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B	300 V	20 A	24 - 12	-
D	150 V	15 A	24 - 12	-
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
keine	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
keine	176 V	23 A	-	0.2 - 4

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Classifications

ECLASS

ECLASS-13.0	27460101
ECLASS-15.0	27460101

ETIM

ETIM 10.0	EC002643
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UNSPSC

UNSPSC 21.0	39121400
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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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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EF3.1 Climate Change

CO2e kg	0.119 kg CO2e
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