

PCB terminal block - SPT 2,5/ 4-H-5,0-EX - 1732409

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)

PCB terminal block, nominal current: 23 A, nominal cross section: 2.5 mm², pitch: 5 mm, number of positions: 4, connection method: Push-in spring connection, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: green, Pin layout: Linear double pinning, Solder pin [P]: 2.5 mm




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



Key Commercial Data

| | |
|--------------|---|
| Packing unit | 50 pc |
| GTIN |  4 046356 282949 |
| GTIN | 4046356282949 |

Technical data

Item properties

| | |
|---------------------------|---------------------------|
| Brief article description | PCB terminal block |
| Range of articles | SPT 2,5/..-H-EX |
| Pitch | 5 mm |
| Number of positions | 4 |
| Connection method | Push-in spring connection |
| Mounting type | Wave soldering |
| Pin layout | Linear double pinning |
| Number of levels | 1 |
| Number of connections | 4 |
| Number of potentials | 4 |

PCB terminal block - SPT 2,5/ 4-H-5,0-EX - 1732409

Technical data

Electrical parameters

| | |
|-----------------|-------|
| Nominal current | 23 A |
| Nom. voltage | 176 V |
| Rated current | 23 A |
| Rated voltage | 176 V |

Connection capacity

| | |
|-------------------------------------|---|
| Connection method | Push-in spring connection |
| Conductor cross section solid | 0.2 mm ² ... 4 mm ² |
| Conductor cross section flexible | 0.2 mm ² ... 2.5 mm ² |
| Conductor cross section AWG / kcmil | 24 ... 14 |
| Stripping length | 10 mm |

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

| | |
|---|--------------|
| Housing color | 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 |

Dimensions for the product

| | |
|-----------------------------|--------------|
| Length [l] | 14.4 mm |
| Width [w] | 21.4 mm |
| Height [h] | 16 mm |
| Pitch | 5 mm |
| Height (without solder pin) | 13.5 mm |
| Solder pin [P] | 2.5 mm |
| Pin spacing | 8.2 mm |
| Pin dimensions | 0.8 x 0.8 mm |

Dimensions for PCB design

| | |
|---------------|--------|
| Hole diameter | 1.1 mm |
| Pin spacing | 8.2 mm |

PCB terminal block - SPT 2,5/ 4-H-5,0-EX - 1732409

Technical data

Packaging information

| | |
|----------------------------|---------------------|
| Type of packaging | packed in cardboard |
| Pieces per package | 50 |
| Denomination packing units | Pcs. |

Ambient conditions

| | |
|---|-------------------|
| Ambient temperature (storage/transport) | -40 °C ... 70 °C |
| Ambient temperature (assembly) | -5 °C ... 100 °C |
| Ambient temperature (operation) | -50 °C ... 110 °C |

Termination and connection method

| | |
|--|-----------------------|
| Connection test | IEC 60998-2-2:2002-12 |
| Test result | Test passed |
| Test for conductor damage and slackening | IEC 60998-2-2:2002-12 |
| | Test passed |

Pull-out test

| | |
|--|---|
| Pull-out test | IEC 60998-2-2:2002-12 |
| | Test passed |
| Conductor cross section / conductor type / tensile force | 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 |

Mechanical tests according to standard

| | |
|--------------------|--------------------------|
| Test specification | IEC 60998-2-2 (in parts) |
|--------------------|--------------------------|

Electrical tests

| | |
|-------------------------|---------------------|
| Rated current | 23 A |
| Conductor cross section | 2.5 mm ² |

Air clearances and creepage distances

| | |
|---|--------|
| Minimum clearance - inhomogeneous field (III/3) | 3 mm |
| Minimum clearance - inhomogeneous field (III/2) | 3 mm |
| Minimum clearance - inhomogeneous field (II/2) | 3 mm |
| Minimum creepage distance value (III/3) | 3.2 mm |
| Minimum creepage distance value (III/2) | 3 mm |
| Minimum creepage distance value (II/2) | 3.2 mm |

Temperature-rise test

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

Current carrying capacity / derating curves

| | |
|---------|--|
| Caption | Type: SPT 2,5/5-H-5,0 Test following DIN EN 60512-5-2:2003-01 |
|---------|--|

PCB terminal block - SPT 2,5/ 4-H-5,0-EX - 1732409

Technical data

Current carrying capacity / derating curves

| | |
|---------------------|---|
| | Reduction factor = 1 No. of positions: 5 |
| Specification | Following IEC 60512-5-2:2002-02 |
| Number of positions | 5 |
| Reduction factor | 1 |

Vibration test

| | |
|------------------------|------------------------|
| Specification | IEC 60068-2-6:1995-03 |
| Result | Test passed |
| Frequency | 10 - 150 - 10 Hz |
| Sweep speed | 1 octave/min |
| Amplitude | 0.35 mm (10 - 60.1 Hz) |
| Acceleration | 5 g (60.1 - 150 Hz) |
| Test duration per axis | 2.5 h |

Resistance to ageing, humidity and penetration of solids

| | |
|------------|-----------------|
| Dry heat | 168 h/100°C |
| Humid heat | 48 h/30 °C/92 % |

Insulation resistance

| | |
|--|---------------------|
| Specification | IEC 60998-1:2002-12 |
| Result | Test passed |
| Insulation resistance, neighboring positions | 10 ⁹ Ω |

Glow-wire test

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

Mechanical strength/tumbling barrel test

| | |
|-----------------------|---------------------|
| Specification | IEC 60998-1:2002-12 |
| Height of fall | 50 cm |
| Number of drop cycles | 50 |
| Rotation speed | 5 rpm |

Standards and Regulations

| | |
|--|----|
| Flammability rating according to UL 94 | V0 |
|--|----|

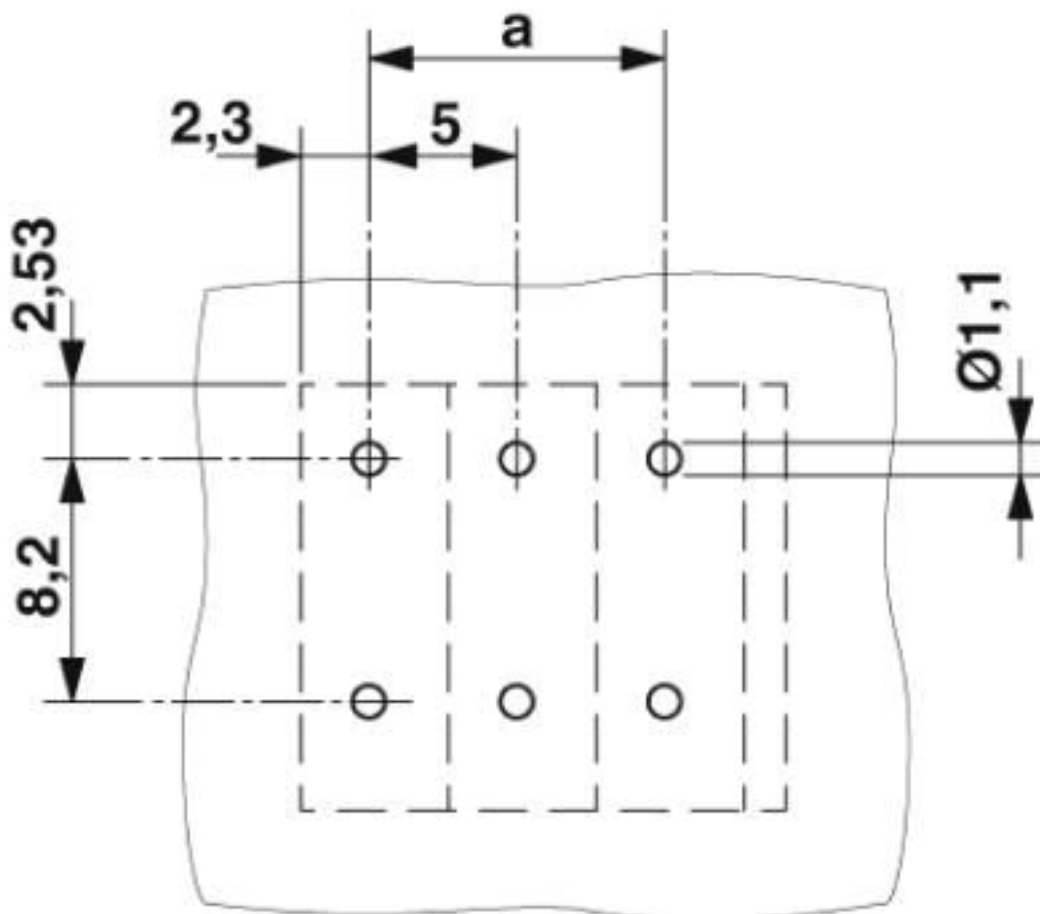
Environmental Product Compliance

| | |
|------------|---|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
| | No hazardous substances above threshold values |

Drawings

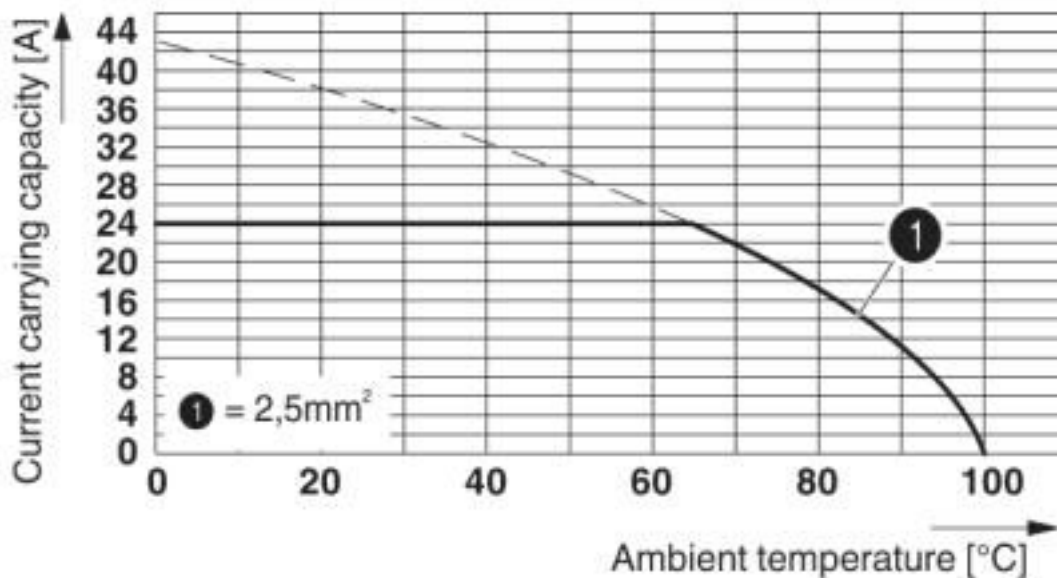
PCB terminal block - SPT 2,5/ 4-H-5,0-EX - 1732409

Drilling diagram



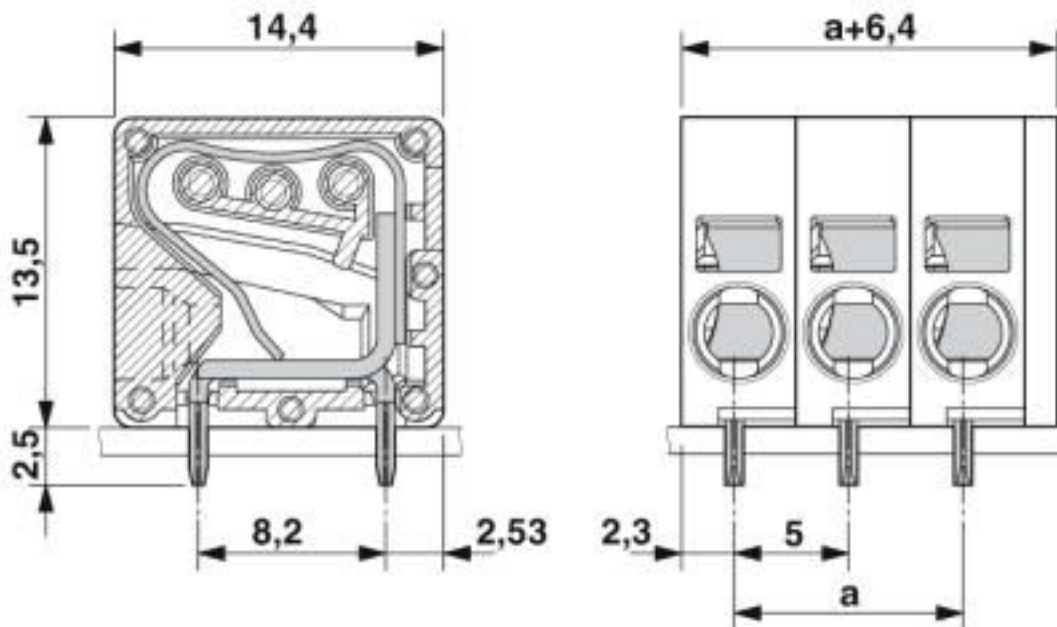
PCB terminal block - SPT 2,5/ 4-H-5,0-EX - 1732409

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

Dimensional drawing



PCB terminal block - SPT 2,5/ 4-H-5,0-EX - 1732409

Classifications

eCl@ss

| | |
|---------------|----------|
| eCl@ss 10.0.1 | 27440401 |
| eCl@ss 4.0 | 27141100 |
| eCl@ss 4.1 | 27141100 |
| eCl@ss 5.0 | 27141100 |
| eCl@ss 5.1 | 27261100 |
| eCl@ss 6.0 | 27261100 |
| eCl@ss 7.0 | 27440401 |
| eCl@ss 8.0 | 27440401 |
| eCl@ss 9.0 | 27440401 |

ETIM

| | |
|----------|----------|
| ETIM 3.0 | EC001121 |
| ETIM 4.0 | EC002643 |
| ETIM 5.0 | EC002643 |
| ETIM 6.0 | EC002643 |
| ETIM 7.0 | EC002643 |

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 30211801 |
| UNSPSC 7.0901 | 39121432 |
| UNSPSC 11 | 39121432 |
| UNSPSC 12.01 | 39121432 |
| UNSPSC 13.2 | 39121432 |
| UNSPSC 18.0 | 39121432 |
| UNSPSC 19.0 | 39121432 |
| UNSPSC 20.0 | 39121432 |
| UNSPSC 21.0 | 39121432 |

Approvals

Approvals

Approvals

cULus Recognized

Ex Approvals

IECEX / ATEX / EAC Ex

Approval details

PCB terminal block - SPT 2,5/ 4-H-5,0-EX - 1732409

Approvals

| | | | |
|----------------------------|-------|---|-----------------|
| cULus Recognized | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | E60425-20061129 |
| | B | D | |
| Nominal voltage UN | 300 V | 150 V | |
| Nominal current IN | 20 A | 15 A | |
| mm ² /AWG/kcmil | 24-12 | 24-12 | |

Accessories

Accessories

Screwdriver tools

Screwdriver - SZF 1-0,6X3,5 - 1204517



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

Phoenix Contact 2020 © - all rights reserved
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
<http://www.phoenixcontact.com>

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Fixed Terminal Blocks](#) category:

Click to view products by [Phoenix Contact](#) manufacturer:

Other Similar products are found below :

[MBE-1512](#) [MBE-154](#) [MBE-156](#) [MBES-153](#) [MBES-156](#) [MH-2512](#) [MHE-132](#) [MHE-163](#) [MI-254 \(35\)](#) [MI-272](#) [880507](#) [MPT-275](#)
[15602-04-08-21](#) [BA311TU](#) [BA411SU](#) [MV-152](#) [MV-252-D](#) [MV-253/NCNOC](#) [MV-254-D](#) [MV-255](#) [MV-462](#) [MV-493](#) [MVE-252](#) [MVE-253](#)
[MVE-273](#) [MVEB-153](#) [1700096](#) [1705142](#) [1712417](#) [1713020](#) [1713088](#) [1745195](#) [1760594](#) [1776118-2](#) [1790852](#) [1-796689-8](#) [1-796692-6](#)
[1800001](#) [1800114](#) [1995279](#) [20020314-C121B01LF](#) [CB2-12](#) [KP03215000J0G](#) [KP04215000J0G](#) [S451](#) [282802-2](#) [29.007](#) [29.116](#) [30.103](#)
[30.106](#)