

# SPT-THR 2,5/12-H-5,0 P26 - PCB terminal block



1135307

<https://www.phoenixcontact.com/us/products/1135307>

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.



PCB terminal block, nominal current: 32 A, rated voltage (III/2): 400 V, nominal cross section: 4 mm<sup>2</sup>, number of potentials: 12, number of rows: 1, number of positions per row: 12, product range: SPT 2,5/...-H-THR, pitch: 5 mm, connection method: Push-in spring connection, mounting: THR soldering, conductor/PCB connection direction: 0 °, color: black, Pin layout: Linear pinning, Solder pin [P]: 2.6 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
- Intuitive use through colour coded actuation lever
- Operation and conductor connection from one direction enable integration into front of device
- Designed for integration into the SMT soldering process

## Commercial data

Item number	1135307
Packing unit	1 pc
Minimum order quantity	40 pc
Sales key	AA13
Product key	AAMCAA
GTIN	4063151068912
Weight per piece (including packing)	19.26 g
Weight per piece (excluding packing)	19.26 g
Customs tariff number	85369010
Country of origin	PL

1135307

<https://www.phoenixcontact.com/us/products/1135307>

## Technical data

### Product properties

Product line	COMBICON Terminals M
Product type	Printed circuit board terminal
Product family	SPT 2,5/..-H-THR
Number of positions	12
Pitch	5 mm
Number of connections	12
Number of rows	1
Number of potentials	12
Pin layout	Linear pinning
Solder pins per potential	2

### Electrical properties

Nominal current $I_N$	32 A
Nominal voltage $U_N$	400 V
Degree of pollution	3
Rated voltage (III/3)	320 V
Rated surge voltage (III/3)	4 kV
Rated voltage (III/2)	400 V
Rated surge voltage (III/2)	4 kV
Rated voltage (II/2)	500 V
Rated surge voltage (II/2)	4 kV

### Connection data

#### Connection technology

Nominal cross section	4 mm <sup>2</sup>
-----------------------	-------------------

#### Conductor connection

Connection method	Push-in spring connection
Conductor cross section rigid	0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup> (Conductor connection with open terminal point)
	0.5 mm <sup>2</sup> ... 4 mm <sup>2</sup> (Push-in connection)
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross section AWG	24 ... 12
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm <sup>2</sup> ... 0.5 mm <sup>2</sup>
Stripping length	10 mm

### Mounting

# SPT-THR 2,5/12-H-5,0 P26 - PCB terminal block



1135307

<https://www.phoenixcontact.com/us/products/1135307>

Mounting type	THR soldering
Pin layout	Linear pinning

## Processing notes

Process	Reflow/wave soldering
Moisture Sensitive Level	MSL 1
Classification temperature $T_c$	260 °C
Solder cycles in the reflow	3

## 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 $\mu\text{m}$ Sn)
Metal surface soldering area (top layer)	Tin (4 - 8 $\mu\text{m}$ Sn)

### Material data - housing

Color (Housing)	black (9005)
Insulating material	LCP
Insulating material group	IIIa
CTI according to IEC 60112	175
Flammability rating according to UL 94	V0

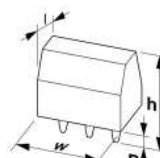
### Material data - actuating element

Color (Actuating element)	white (9010)
Insulating material	PA GF
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0

## Notes

Assembly instruction:	This item is not suitable for PCB cleaning with liquids.
-----------------------	--

## Dimensions

Dimensional drawing	
Pitch	5 mm
Width [w]	60.8 mm
Height [h]	15.4 mm
Length [l]	19.15 mm

# SPT-THR 2,5/12-H-5,0 P26 - PCB terminal block



1135307

<https://www.phoenixcontact.com/us/products/1135307>

Installed height	12.8 mm
Solder pin length [P]	2.6 mm

## Mechanical tests

### Test for conductor damage and slackening

Specification	IEC 60999-1:1999-11
Result	Test passed

### Pull-out test

Specification	IEC 60999-1:1999-11
Conductor cross section/conductor type/tractive force setpoint/actual value	0.2 mm <sup>2</sup> / solid / > 10 N
	0.2 mm <sup>2</sup> / flexible / > 10 N
	4 mm <sup>2</sup> / solid / > 60 N
	4 mm <sup>2</sup> / flexible / > 60 N
	0.5 mm <sup>2</sup> / solid / > 20 N

## Electrical tests

### Temperature-rise test

Specification	IEC 60947-7-4:2019-01
Requirement temperature-rise test	The sum of ambient temperature and temperature rise of the PCB terminal block shall not exceed the upper limiting temperature.

### Short-time withstand current

Specification	IEC 60947-7-4:2019-01
---------------	-----------------------

### Insulation resistance

Specification	IEC 60512-3-1:2002-02
Insulation resistance, neighboring positions	> 5 MΩ

### Air clearances and creepage distances |

Specification	IEC 60947-7-4:2019-01
Insulating material group	IIIa
Comparative tracking index (IEC 60112)	CTI 175
Rated insulation voltage (III/3)	320 V
Rated surge voltage (III/3)	4 kV
minimum clearance value - non-homogenous field (III/3)	3 mm
minimum creepage distance (III/3)	5 mm
Rated insulation voltage (III/2)	400 V
Rated surge voltage (III/2)	4 kV
minimum clearance value - non-homogenous field (III/2)	3 mm
minimum creepage distance (III/2)	4 mm
Rated insulation voltage (II/2)	500 V
Rated surge voltage (II/2)	4 kV
minimum clearance value - non-homogenous field (II/2)	3 mm
minimum creepage distance (II/2)	5 mm

# SPT-THR 2,5/12-H-5,0 P26 - PCB terminal block



1135307

<https://www.phoenixcontact.com/us/products/1135307>

## Environmental and real-life conditions

### Vibration test

Specification	IEC 60068-2-6:2007-12
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 Hz ... 60.1 Hz)
Sweep speed	50 m/s <sup>2</sup> (60.1 Hz ... 150 Hz)
Test duration per axis	2.5 h

### Glow-wire test

Specification	IEC 60695-2-10:2013-04
Temperature	850 °C
Time of exposure	5 s

### Aging

Specification	IEC 60947-7-4:2019-01
---------------	-----------------------

### Ambient conditions

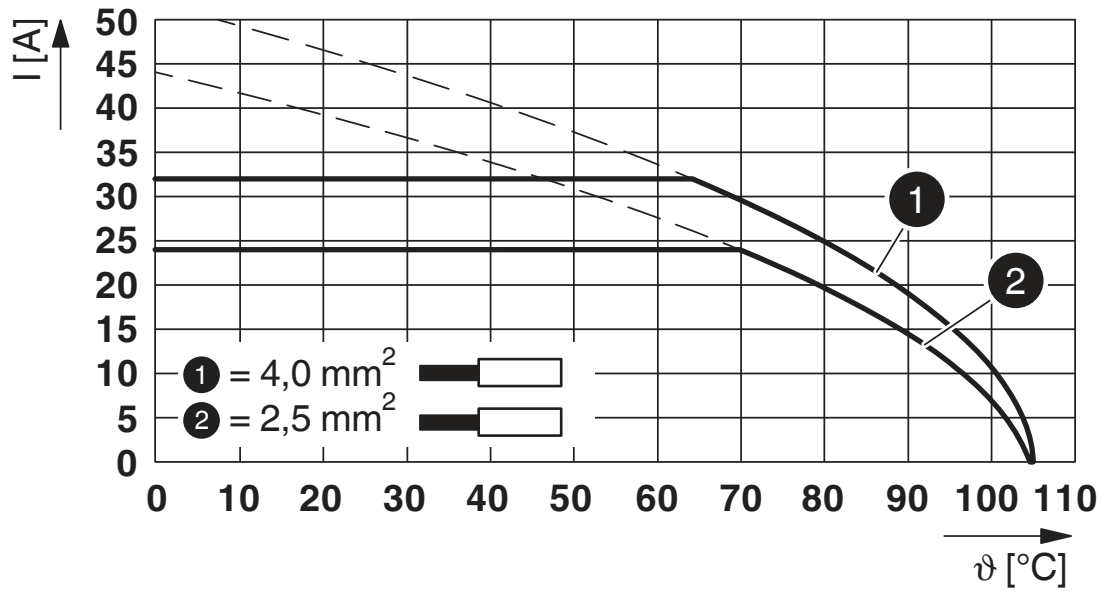
Ambient temperature (operation)	-40 °C ... 105 °C (Depending on the current carrying capacity/derating curve)
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C

## Packaging specifications

Type of packaging	packed in cardboard
-------------------	---------------------

## Drawings

Diagram



Type: SPT-THR 2,5/...-H-5,0 P...

# SPT-THR 2,5/12-H-5,0 P26 - PCB terminal block





1135307

<https://www.phoenixcontact.com/us/products/1135307>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1135307>

 <b>VDE Zeichengenehmigung</b> Approval ID: 40046113				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	400 V	32 A	-	0.2 - 4

 <b>cULus Recognized</b> Approval ID: E60425-20061129				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
Use group B	300 V	20 A	24 - 12	-
Use group F	500 V	20 A	24 - 12	-
Use group D	300 V	10 A	24 - 12	-

# SPT-THR 2,5/12-H-5,0 P26 - PCB terminal block



1135307

<https://www.phoenixcontact.com/us/products/1135307>

## Classifications

### ECLASS

ECLASS-11.0	27460101
ECLASS-12.0	27460101
ECLASS-13.0	27460101

### ETIM

ETIM 8.0	EC002643
----------	----------

### UNSPSC

UNSPSC 21.0	39121400
-------------	----------



# SPT-THR 2,5/12-H-5,0 P26 - PCB terminal block



1135307

<https://www.phoenixcontact.com/us/products/1135307>

## Environmental product compliance

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

# SPT-THR 2,5/12-H-5,0 P26 - PCB terminal block



1135307

<https://www.phoenixcontact.com/us/products/1135307>

## Accessories

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

1204517

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

---

### CRIMPFOX 6 - Crimping pliers

1212034

<https://www.phoenixcontact.com/us/products/1212034>



Crimping pliers, for ferrules without insulating collar according to DIN 46228 Part 1 and ferrules with insulating collar according to DIN 46228 Part 4, 0.25 mm<sup>2</sup> ... 6.0 mm<sup>2</sup>, lateral entry, trapezoidal crimp

---

Phoenix Contact 2023 © - 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](mailto:info@phoenixcon.com)