

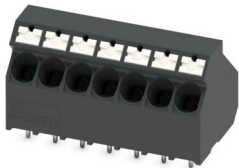
# SPTA-THR 2,5/ 7-5,0 P26 - PCB terminal block



1366010

<https://www.phoenixcontact.com/us/products/1366010>

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.



Printed circuit board terminal, nominal current: 32 A, rated voltage (III/2): 400 V, nominal cross section: 4 mm<sup>2</sup>, number of rows: 1, number of positions per row: 7, product range: SPTA 2,5/-THR, pitch: 5 mm, connection method: Push-in spring connection, mounting: THR soldering / wave soldering, conductor/PCB connection direction: 45 °, 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 operation due to color-coded actuating push button
- Angled connection enables multi-row arrangement on the PCB
- Designed for integration into the SMT soldering process

## Commercial data

|                                      |                                |
|--------------------------------------|--------------------------------|
| Item number                          | 1366010                        |
| Packing unit                         | 50 pc                          |
| Minimum order quantity               | 50 pc                          |
| Note                                 | Made to order (non-returnable) |
| Sales key                            | AA13                           |
| Product key                          | AAMCAC                         |
| GTIN                                 | 4063151713034                  |
| Weight per piece (including packing) | 12.72 g                        |
| Weight per piece (excluding packing) | 2.22 g                         |
| Customs tariff number                | 85369010                       |
| Country of origin                    | PL                             |

# SPTA-THR 2,5/ 7-5,0 P26 - PCB terminal block



1366010

<https://www.phoenixcontact.com/us/products/1366010>

## Technical data

### Product properties

|                           |                                |
|---------------------------|--------------------------------|
| Product type              | Printed circuit board terminal |
| Product family            | SPTA 2,5/..-THR                |
| Product line              | COMBICON Terminals M           |
| Number of positions       | 7                              |
| Pitch                     | 5 mm                           |
| Number of rows            | 1                              |
| Pin layout                | Linear pinning                 |
| Solder pins per potential | 2                              |

### Electrical properties

#### Properties

|                             |       |
|-----------------------------|-------|
| Nominal current $I_N$       | 32 A  |
| Nominal voltage $U_N$       | 400 V |
| 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

|               |                                |
|---------------|--------------------------------|
| Mounting type | THR soldering / wave soldering |
| Pin layout    | Linear pinning                 |

# SPTA-THR 2,5/ 7-5,0 P26 - PCB terminal block



1366010

<https://www.phoenixcontact.com/us/products/1366010>

## Processing notes

|                                           |                       |
|-------------------------------------------|-----------------------|
| Process                                   | Reflow/wave soldering |
| Moisture Sensitive Level                  | MSL 1                 |
| Classification temperature T <sub>c</sub> | 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 µm Sn)                                                                |
| Metal surface soldering area (top layer) | Tin (4 - 8 µm 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           |
| 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 | 200 °C       |

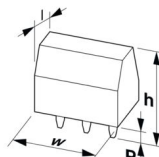
### Material data – actuating element

|                                        |                     |
|----------------------------------------|---------------------|
| Color (Actuating element)              | signal white (9003) |
| Insulating material                    | PA GF               |
| Insulating material group              | I                   |
| CTI according to IEC 60112             | 600                 |
| Flammability rating according to UL 94 | V0                  |

## Notes

|               |                                                          |
|---------------|----------------------------------------------------------|
| Assembly note | This item is not suitable for PCB cleaning with liquids. |
|---------------|----------------------------------------------------------|

## Dimensions

|                     |                                                                                      |
|---------------------|--------------------------------------------------------------------------------------|
| Dimensional drawing |  |
| Pitch               | 5 mm                                                                                 |

# SPTA-THR 2,5/ 7-5,0 P26 - PCB terminal block



1366010

<https://www.phoenixcontact.com/us/products/1366010>

|                       |         |
|-----------------------|---------|
| Width [w]             | 35.8 mm |
| Height [h]            | 21.6 mm |
| Length [l]            | 18.3 mm |
| Installed height      | 19 mm   |
| Solder pin length [P] | 2.6 mm  |

## PCB design

|               |        |
|---------------|--------|
| Hole diameter | 1.2 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                  |

# SPTA-THR 2,5/ 7-5,0 P26 - PCB terminal block



1366010

<https://www.phoenixcontact.com/us/products/1366010>

|                                                        |       |
|--------------------------------------------------------|-------|
| 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  |

## 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)              |
| Acceleration           | 50 m/s <sup>2</sup> (60.1 Hz ... 150 Hz) |
| Test duration per axis | 2.5 h                                    |
| Test directions        | X-, Y- and Z-axis                        |

### 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 |
|-------------------|---------------------|

# SPTA-THR 2,5/ 7-5,0 P26 - PCB terminal block



1366010

<https://www.phoenixcontact.com/us/products/1366010>

## Drawings

Diagram



Type: SPTA-THR 2,5/...-5,0 P...

# SPTA-THR 2,5/ 7-5,0 P26 - PCB terminal block



1366010

<https://www.phoenixcontact.com/us/products/1366010>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1366010>

|  <b>cULus Recognized</b><br>Approval ID: E60425-20061129 |                       |                       |                   |                             |
|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
|                                                                                                                                           | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
| B                                                                                                                                         |                       |                       |                   |                             |
| Standard                                                                                                                                  | 300 V                 | 20 A                  | 24 - 12           | -                           |
| F                                                                                                                                         |                       |                       |                   |                             |
| USR application only                                                                                                                      | 300 V                 | 20 A                  | 24 - 12           | -                           |
| D                                                                                                                                         |                       |                       |                   |                             |
| Alternative 1                                                                                                                             | 300 V                 | 10 A                  | 24 - 12           | -                           |

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

# SPTA-THR 2,5/ 7-5,0 P26 - PCB terminal block



1366010

<https://www.phoenixcontact.com/us/products/1366010>

## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-13.0 | 27460101 |
| ECLASS-15.0 | 27460101 |

### ETIM

|          |          |
|----------|----------|
| ETIM 9.0 | EC002643 |
|----------|----------|

### UNSPSC

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

# SPTA-THR 2,5/ 7-5,0 P26 - PCB terminal block



1366010

<https://www.phoenixcontact.com/us/products/1366010>

## 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](mailto:info@phoenixcon.com)