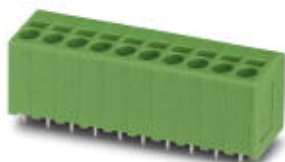


## SPT 2,5/ 6-V-5,0 MIX RD, YE, GN - 1709598

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>)

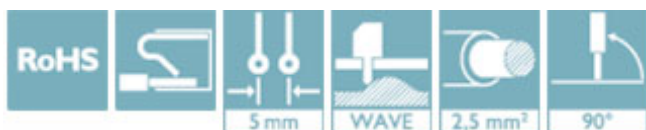
PCB terminal block, nom. voltage: 400 V, pitch: 5 mm, number of positions: 6, connection method: Push-in spring connection, mounting: Wave soldering, color: multi-color



The figure shows a 10-position version of the product

### 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
- ✓ Two solder pins reduce the mechanical strain on the soldering spots



### Key Commercial Data

|              |               |
|--------------|---------------|
| Packing unit | 50 pc         |
| GTIN         |               |
| GTIN         | 4055626077055 |

### Technical data

#### Item properties

|                           |                           |
|---------------------------|---------------------------|
| Brief article description | PCB terminal block        |
| Range of articles         | SPT 2,5/..-V              |
| Pitch                     | 5 mm                      |
| Number of positions       | 6                         |
| Connection method         | Push-in spring connection |
| Mounting type             | Wave soldering            |
| Pin layout                | Linear double pinning     |
| Number of levels          | 1                         |

#### Electrical parameters

|               |      |
|---------------|------|
| Rated current | 24 A |
|---------------|------|

## SPT 2,5/ 6-V-5,0 MIX RD,YE,GN - 1709598

### Technical data

#### Electrical parameters

|                                  |       |
|----------------------------------|-------|
| Rated insulation voltage (III/2) | 400 V |
| Rated surge voltage (III/2)      | 4 kV  |

#### Connection capacity

|                                                                       |                                                                      |
|-----------------------------------------------------------------------|----------------------------------------------------------------------|
| Conductor cross section solid                                         | 0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>                            |
| Conductor cross section flexible                                      | 0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>                          |
| Conductor cross section AWG / kcmil                                   | 24 ... 12                                                            |
| Conductor cross section flexible, with ferrule without plastic sleeve | 0.25 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> (Stripping length 8 mm) |
| Conductor cross section, flexible, with ferrule, with plastic sleeve  | 0.25 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> (Stripping length 8 mm) |
| 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

|                                                                   |        |
|-------------------------------------------------------------------|--------|
| 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 ]                | 13.5 mm      |
| Width [ w ]                 | 31.4 mm      |
| Height [ h ]                | 16.9 mm      |
| Pitch                       | 5 mm         |
| Height (without solder pin) | 14.4 mm      |
| Solder pin [P]              | 2.5 mm       |
| Pin spacing                 | 8.2 mm       |
| Pin dimensions              | 0.8 x 0.8 mm |
| Dimension a                 | 25 mm        |

#### Dimensions for PCB design

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

#### Packaging information

# SPT 2,5/ 6-V-5,0 MIX RD,YE,GN - 1709598

## 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)         | -40 °C           |

### Termination and connection method

|                 |                       |
|-----------------|-----------------------|
| Connection test | IEC 60998-2-2:2002-12 |
| Test result     | 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 <sup>2</sup> / solid / > 10 N    |
|                                                          | 0.2 mm <sup>2</sup> / flexible / > 10 N |
|                                                          | 4 mm <sup>2</sup> / solid / > 60 N      |
|                                                          | 2.5 mm <sup>2</sup> / flexible / > 50 N |

### Mechanical tests according to standard

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

### Electrical tests

|                                  |       |
|----------------------------------|-------|
| Rated current                    | 24 A  |
| Rated insulation voltage (III/2) | 400 V |
| Rated surge voltage (III/2)      | 4 kV  |

### Air clearances and creepage distances

|                                  |       |
|----------------------------------|-------|
| Insulating material group        | I     |
| Rated insulation voltage (III/3) | 250 V |
| Rated insulation voltage (III/2) | 400 V |
| Rated insulation voltage (II/2)  | 630 V |
| Rated surge voltage (III/3)      | 4 kV  |
| Rated surge voltage (III/2)      | 4 kV  |
| Rated surge voltage (II/2)       | 4 kV  |

### Current carrying capacity / derating curves

|               |                          |
|---------------|--------------------------|
| Specification | IEC 60998-2-2 (in parts) |
|---------------|--------------------------|

### Vibration test

|                                                                                                           |                                                             |
|-----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| Resistance to ageing, to humidity conditions, to ingress of solid objects and to harmful ingress of water | Test passed IEC 60998-1:2002-12 168 h/100°C 48 h/30 °C/92 % |
| Test result                                                                                               | Test passed                                                 |
| Test specification                                                                                        | IEC 60998-1:2002-12                                         |

## SPT 2,5/ 6-V-5,0 MIX RD,YE,GN - 1709598

### Technical data

#### Vibration test

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

#### Resistance to ageing, humidity and penetration of solids

|                    |                     |
|--------------------|---------------------|
| Test result        | Test passed         |
| Test specification | IEC 60998-1:2002-12 |
| Dry heat           | 168 h/100°C         |
| Humid heat         | 48 h/30 °C/92 %     |

#### Environmental Product Compliance

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

### Approvals

#### Approvals

#### Approvals

IECEE CB Scheme / SEV / EAC / cULus Recognized

#### Ex Approvals

#### Approval details

|                    |                                                                                     |                                                           |         |
|--------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------|---------|
| IECEE CB Scheme    |  | <a href="http://www.iecee.org/">http://www.iecee.org/</a> | CH-7429 |
| Nominal voltage UN | 250 V                                                                               |                                                           |         |
| Nominal current IN | 24 A                                                                                |                                                           |         |
| mm²/AWG/kcmil      | 2.5                                                                                 |                                                           |         |

|                    |                                                                                     |                                                                                                                                                     |         |
|--------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| SEV                |  | <a href="https://www.electrosuisse.ch/de/meta/shop/produktezertifikate.html">https://www.electrosuisse.ch/de/meta/shop/produktezertifikate.html</a> | IK-3150 |
| Nominal voltage UN | 250 V                                                                               |                                                                                                                                                     |         |
| Nominal current IN | 24 A                                                                                |                                                                                                                                                     |         |
| mm²/AWG/kcmil      | 2.5                                                                                 |                                                                                                                                                     |         |

## SPT 2,5/ 6-V-5,0 MIX RD,YE,GN - 1709598

### Approvals

|     |                                                                                   |         |
|-----|-----------------------------------------------------------------------------------|---------|
| EAC |  | B.01742 |
|-----|-----------------------------------------------------------------------------------|---------|

|                    |                                                                                   |                                                                                                                                                       |                 |
|--------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| cULus Recognized   |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | E60425-20061129 |
|                    | D                                                                                 | B                                                                                                                                                     |                 |
| Nominal voltage UN | 300 V                                                                             | 300 V                                                                                                                                                 |                 |
| Nominal current IN | 10 A                                                                              | 20 A                                                                                                                                                  |                 |
| mm²/AWG/kcmil      | 24-12                                                                             | 24-12                                                                                                                                                 |                 |

Phoenix Contact 2018 © - 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>