

## PCB terminal block - SMKDS 5/ 2-9,5 - 1720017

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: 32 A, rated voltage (III/2): 1000 V, nominal cross section: 4 mm<sup>2</sup>, pitch: 9.52 mm, number of positions: 2, connection method: Screw connection with tension sleeve, mounting: Wave soldering, conductor/PCB connection direction: 35 °, color: green, Pin layout: Linear pinning, Solder pin [P]: 5 mm. The article can be aligned to create different nos. of positions!

### Your advantages

- ✓ Well-known connection principle allows worldwide use
- ✓ Low temperature rise, thanks to maximum contact force
- ✓ Allows connection of two conductors
- ✓ The latching on the side enables various numbers of positions to be combined
- ✓ Angled connection enables multi-row arrangement on the PCB



### Key Commercial Data

|                        |                                                                                      |
|------------------------|--------------------------------------------------------------------------------------|
| Packing unit           | 50 pc                                                                                |
| Minimum order quantity | 50 pc                                                                                |
| GTIN                   |  |
| GTIN                   | 4017918024970                                                                        |

### Technical data

#### Item properties

|                           |                                      |
|---------------------------|--------------------------------------|
| Brief article description | PCB terminal block                   |
| Range of articles         | SMKDS 5                              |
| Pitch                     | 9.52 mm                              |
| Number of positions       | 2                                    |
| Connection method         | Screw connection with tension sleeve |
| Drive form screw head     | Slotted (L)                          |
| Screw thread              | M3                                   |
| Mounting type             | Wave soldering                       |
| Pin layout                | Linear pinning                       |
| Number of levels          | 1                                    |

# PCB terminal block - SMKDS 5/ 2-9,5 - 1720017

## Technical data

### Item properties

|                       |   |
|-----------------------|---|
| Number of connections | 2 |
| Number of potentials  | 2 |

### Electrical parameters

|                             |        |
|-----------------------------|--------|
| Nominal current             | 32 A   |
| Nom. voltage                | 1000 V |
| Rated voltage               | 690 V  |
| Rated voltage (III/2)       | 1000 V |
| Rated voltage (II/2)        | 1000 V |
| Rated surge voltage (III/3) | 6 kV   |
| Rated surge voltage (III/2) | 6 kV   |
| Rated surge voltage (II/2)  | 6 kV   |

### Connection capacity

|                                                                                           |                                               |
|-------------------------------------------------------------------------------------------|-----------------------------------------------|
| Connection method                                                                         | Screw connection with tension sleeve          |
| pluggable                                                                                 | Yes                                           |
| Conductor cross section solid                                                             | 0.2 mm <sup>2</sup> ... 6 mm <sup>2</sup>     |
| Conductor cross section flexible                                                          | 0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>     |
| Conductor cross section AWG / kcmil                                                       | 24 ... 10                                     |
| Conductor cross section flexible, with ferrule without plastic sleeve                     | 0.25 mm <sup>2</sup> ... 4 mm <sup>2</sup>    |
| Conductor cross section, flexible, with ferrule, with plastic sleeve                      | 0.25 mm <sup>2</sup> ... 4 mm <sup>2</sup>    |
| 2 conductors with same cross section, solid                                               | 0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>   |
| 2 conductors with same cross section, flexible                                            | 0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>   |
| 2 conductors with same cross section, flexible, with ferrule without plastic sleeve       | 0.25 mm <sup>2</sup> ... 0.75 mm <sup>2</sup> |
| 2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve | 0.5 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>   |
| Stripping length                                                                          | 8 mm                                          |
| Torque                                                                                    | 0.5 Nm ... 0.6 Nm                             |

### Material data - contact

|                                          |                                                                                   |
|------------------------------------------|-----------------------------------------------------------------------------------|
| Note                                     | WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/ JEDEC JESD 201 |
| Contact material                         | Cu alloy                                                                          |
| Metal surface terminal point (top layer) | Tin (5 - 7 µm Sn)                                                                 |
| Metal surface soldering area (top layer) | Tin (5 - 7 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          |

# PCB terminal block - SMKDS 5/ 2-9,5 - 1720017

## Technical data

### Material data - housing

|                                                                   |        |
|-------------------------------------------------------------------|--------|
| 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 ]                | 18.5 mm      |
| Width [ w ]                 | 19.04 mm     |
| Height [ h ]                | 26.5 mm      |
| Pitch                       | 9.52 mm      |
| Height (without solder pin) | 21.5 mm      |
| Solder pin [P]              | 5 mm         |
| Pin dimensions              | 0.9 x 0.9 mm |

### Dimensions for PCB design

|               |        |
|---------------|--------|
| Hole diameter | 1.3 mm |
|---------------|--------|

### Packaging information

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

### General product information

|              |                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Type of note | Note on application                                                                                                                                                                                                                                                                                                                                                |
| Note         | For safe conductor connection, always adhere to a defined tightening torque. Particularly in the case of PCB terminal blocks with two or three positions, the individual solder pin for each contact point cannot compensate for this. That is why the terminal blocks must be supported during conductor connection (held with one hand, support on the housing). |

### Processing notes

|               |                                  |
|---------------|----------------------------------|
| Process       | Wave soldering                   |
| Specification | Following IEC 61760-1:2006-04    |
|               | Following IEC 60068-2-54:2006-04 |

### Electrical tests

|                             |                   |
|-----------------------------|-------------------|
| Rated current               | 32 A              |
| Conductor cross section     | 4 mm <sup>2</sup> |
| Rated voltage (III/2)       | 1000 V            |
| Rated surge voltage (III/2) | 6 kV              |

### Standards and Regulations

|                                        |        |
|----------------------------------------|--------|
| Connection in acc. with standard       | EN-VDE |
|                                        | CSA    |
| Flammability rating according to UL 94 | V2     |

### Environmental Product Compliance

|            |                |
|------------|----------------|
| REACH SVHC | Lead 7439-92-1 |
|------------|----------------|

## PCB terminal block - SMKDS 5/ 2-9,5 - 1720017

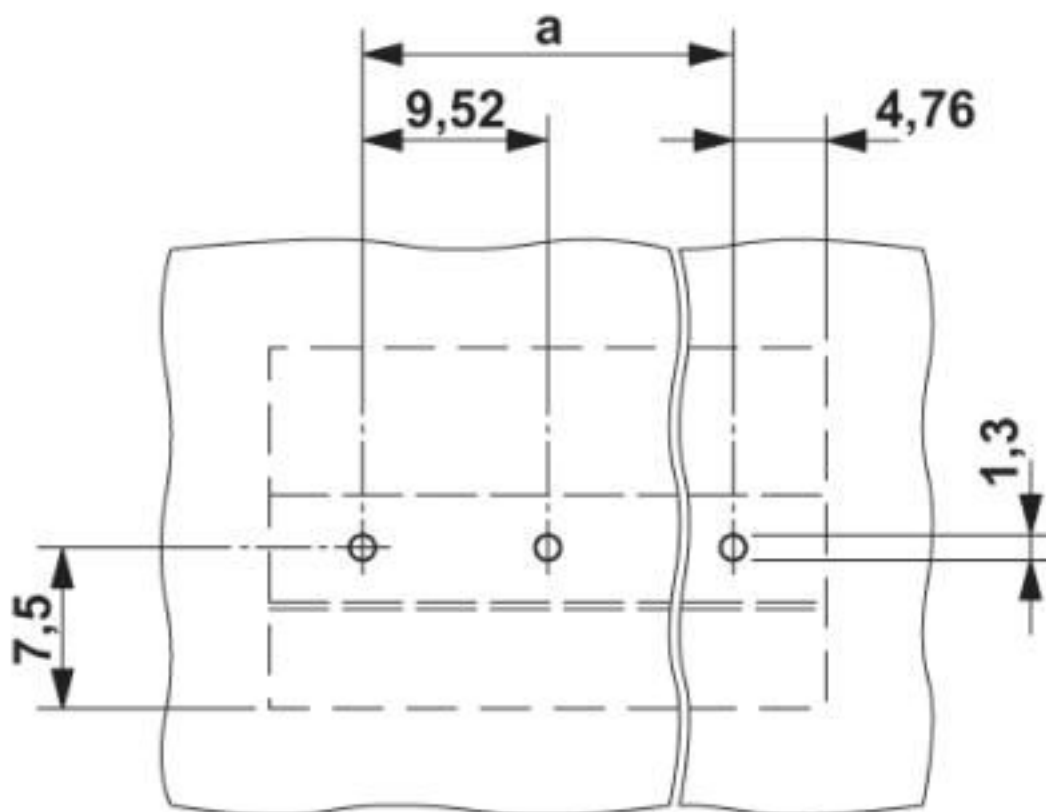
### Technical data

#### Environmental Product Compliance

|            |                                                                                                     |
|------------|-----------------------------------------------------------------------------------------------------|
| China RoHS | Environmentally Friendly Use Period = 50 years                                                      |
|            | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

### Drawings

Drilling diagram



### 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 |

## PCB terminal block - SMKDS 5/ 2-9,5 - 1720017

### Classifications

#### 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

CSA / SEV / EAC / cULus Recognized / IECEx CB Scheme

#### Ex Approvals

#### Approval details

|                    |                                                                                     |                                                                                                                                         |       |
|--------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|-------|
| CSA                |  | <a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a> | 13631 |
|                    | B                                                                                   | C                                                                                                                                       |       |
| Nominal voltage UN | 300 V                                                                               | 300 V                                                                                                                                   |       |
| Nominal current IN | 30 A                                                                                | 30 A                                                                                                                                    |       |
| mm²/AWG/kcmil      | 28-10                                                                               | 28-10                                                                                                                                   |       |

## PCB terminal block - SMKDS 5/ 2-9,5 - 1720017

### Approvals

|                    |                                                                                   |                                                                       |         |
|--------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------|---------|
| SEV                |  | <a href="https://www.eurofins.ch/de/">https://www.eurofins.ch/de/</a> | IK-4497 |
| Nominal voltage UN |                                                                                   | 690 V                                                                 |         |
| Nominal current IN |                                                                                   | 32 A                                                                  |         |
| mm²/AWG/kcmil      |                                                                                   | 6                                                                     |         |

|     |                                                                                   |         |
|-----|-----------------------------------------------------------------------------------|---------|
| EAC |  | B.01687 |
|-----|-----------------------------------------------------------------------------------|---------|

|                    |                                                                                   |                                                                                                                                                       |                 |
|--------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| 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> | E60425-19870331 |
|                    | B                                                                                 | C                                                                                                                                                     |                 |
| Nominal voltage UN | 250 V                                                                             | 300 V                                                                                                                                                 |                 |
| Nominal current IN | 30 A                                                                              | 30 A                                                                                                                                                  |                 |
| mm²/AWG/kcmil      | 30-10                                                                             | 30-10                                                                                                                                                 |                 |

|                    |                                                                                     |                                                           |          |
|--------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------|----------|
| IECEE CB Scheme    |  | <a href="http://www.iecee.org/">http://www.iecee.org/</a> | CH-10787 |
| Nominal voltage UN |                                                                                     | 690 V                                                     |          |
| Nominal current IN |                                                                                     | 32 A                                                      |          |
| mm²/AWG/kcmil      |                                                                                     | 6                                                         |          |

### Accessories

#### Accessories

#### Screwdriver tools

Screwdriver - SZS 0,6X3,5 - 1205053



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

### Terminal marking

## PCB terminal block - SMKDS 5/ 2-9,5 - 1720017

### Accessories

Marker strip - SK 5,0 WH:REEL - 0805221



Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMaster 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 5 mm, lettering field size: continuous x 5#mm, Number of individual labels: 90000

---

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>

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Phoenix Contact:](#)

[1720017](#)