

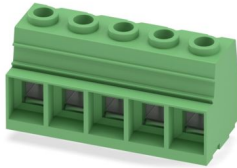
# MKDSP 25/ 5-15,00 - PCB terminal block



1932614

<https://www.phoenixcontact.com/us/products/1932614>

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: 125 A, rated voltage (III/2): 1000 V, nominal cross section: 35 mm<sup>2</sup>, number of potentials: 5, number of rows: 1, number of positions per row: 5, product range: MKDSP 25, pitch: 15 mm, connection method: Screw connection with tension sleeve, screw head form: Z2L Slotted Pozidriv, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: green, Pin layout: Linear pinning, Solder pin [P]: 4.5 mm, number of solder pins per potential: 4, type of packaging: packed in cardboard. Avoid placing permanent mechanical loads on the terminal

## Your advantages

- Well-known connection principle allows worldwide use
- Low temperature rise, thanks to maximum contact force
- Allows connection of two conductors
- Quick and convenient testing using integrated test option
- Integrated protective guide prevents incorrect insertion of the conductor underneath the tension sleeve

## Commercial data

|                                      |                     |
|--------------------------------------|---------------------|
| Item number                          | 1932614             |
| Packing unit                         | 10 pc               |
| Minimum order quantity               | 25 pc               |
| Sales key                            | AA15                |
| Product key                          | AAOIAA              |
| Catalog page                         | Page 455 (C-1-2013) |
| GTIN                                 | 4017918902117       |
| Weight per piece (including packing) | 108.028 g           |
| Weight per piece (excluding packing) | 104.684 g           |
| Customs tariff number                | 85369010            |
| Country of origin                    | SK                  |

# MKDSP 25/ 5-15,00 - PCB terminal block



1932614

<https://www.phoenixcontact.com/us/products/1932614>

## Technical data

### Product properties

|                           |                                |
|---------------------------|--------------------------------|
| Product type              | Printed circuit board terminal |
| Product family            | MKDSP 25                       |
| Product line              | COMBICON Terminals XL          |
| Type                      | Standard                       |
| Number of positions       | 5                              |
| Pitch                     | 15 mm                          |
| Number of connections     | 5                              |
| Number of rows            | 1                              |
| Number of potentials      | 5                              |
| Pin layout                | Linear pinning                 |
| Solder pins per potential | 4                              |

### Data management status

|                  |    |
|------------------|----|
| Article revision | 09 |
|------------------|----|

### Electrical properties

|                             |        |
|-----------------------------|--------|
| Nominal current $I_N$       | 125 A  |
| Nominal voltage $U_N$       | 1000 V |
| Rated voltage (III/3)       | 1000 V |
| Rated surge voltage (III/3) | 8 kV   |
| Rated voltage (III/2)       | 1000 V |
| Rated surge voltage (III/2) | 8 kV   |
| Rated voltage (II/2)        | 1000 V |
| Rated surge voltage (II/2)  | 8 kV   |

### Connection data

#### Connection technology

|                       |                    |
|-----------------------|--------------------|
| Type                  | Standard           |
| Nominal cross section | 35 mm <sup>2</sup> |

#### Conductor connection

|                                                                       |                                            |
|-----------------------------------------------------------------------|--------------------------------------------|
| Connection method                                                     | Screw connection with tension sleeve       |
| Conductor cross section rigid                                         | 0.5 mm <sup>2</sup> ... 35 mm <sup>2</sup> |
| Conductor cross section flexible                                      | 0.5 mm <sup>2</sup> ... 35 mm <sup>2</sup> |
| Conductor cross section AWG                                           | 20 ... 2                                   |
| Conductor cross section flexible, with ferrule without plastic sleeve | 1 mm <sup>2</sup> ... 35 mm <sup>2</sup>   |
| Conductor cross section, flexible, with ferrule, with plastic sleeve  | 1.5 mm <sup>2</sup> ... 35 mm <sup>2</sup> |
| 2 conductors with same cross section, solid                           | 0.5 mm <sup>2</sup> ... 6 mm <sup>2</sup>  |
| 2 conductors with same cross section, flexible                        | 0.5 mm <sup>2</sup> ... 6 mm <sup>2</sup>  |
| 2 conductors with same cross section, flexible, with ferrule          | 0.5 mm <sup>2</sup> ... 4 mm <sup>2</sup>  |

# MKDSP 25/ 5-15,00 - PCB terminal block



1932614

<https://www.phoenixcontact.com/us/products/1932614>

|                                                                                           |                                                          |
|-------------------------------------------------------------------------------------------|----------------------------------------------------------|
| without plastic sleeve                                                                    |                                                          |
| 2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve | 0.5 mm² ... 16 mm²                                       |
| Stripping length                                                                          | 18 mm                                                    |
| Drive form screw head                                                                     | Slotted Pozidriv (Z2L)                                   |
| Tightening torque                                                                         | 2.5 Nm ... 4.5 Nm (< 25 mm² = 2.5 Nm, ≥ 25 mm² = 4.5 Nm) |

## Information on the aluminum conductor

|                                            |                                                                                                                                                                                                                                                                                                                                        |
|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cross section / torque / form of conductor | Cable cross section:35 mm²; Torque:4.5 Nm; Form of cable:round, single-strand, class 1(re)                                                                                                                                                                                                                                             |
| Specification                              | DIN VDE 0276-603 (VDE 0276-603):2010-03                                                                                                                                                                                                                                                                                                |
| Note on conductor pretreatment             | The following measures are required for durable and reliable contacting of the aluminum conductor: the stripped end of the aluminum conductor must be separated from the oxide layer using a blade, and immediately dipped in non-acid and non-alkali Vaseline. The pretreatment must be repeated when connecting the conductors anew. |

## Mounting

|               |                |
|---------------|----------------|
| Mounting type | Wave soldering |
| Pin layout    | Linear pinning |

## Processing notes

|         |                |
|---------|----------------|
| Process | Wave soldering |
|---------|----------------|

## 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                  | Tin-plated                                                                       |
| 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

|                                                                   |              |
|-------------------------------------------------------------------|--------------|
| Color (Housing)                                                   | 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

# MKDSP 25/ 5-15,00 - PCB terminal block



1932614

<https://www.phoenixcontact.com/us/products/1932614>

|                       |                                                                                    |
|-----------------------|------------------------------------------------------------------------------------|
| Dimensional drawing   |  |
| Pitch                 | 15 mm                                                                              |
| Width [w]             | 75 mm                                                                              |
| Height [h]            | 43.5 mm                                                                            |
| Length [l]            | 31 mm                                                                              |
| Installed height      | 39 mm                                                                              |
| Solder pin length [P] | 4.5 mm                                                                             |
| Pin dimensions        | 1.2 x 1.2 mm                                                                       |

## PCB design

|               |        |
|---------------|--------|
| Hole diameter | 1.6 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 | 0.5 mm <sup>2</sup> / solid / > 20 N    |
|                                                                             | 0.5 mm <sup>2</sup> / flexible / > 20 N |
|                                                                             | 35 mm <sup>2</sup> / stranded / > 190 N |
|                                                                             | 35 mm <sup>2</sup> / flexible / > 190 N |

## Electrical tests

### Temperature-rise test

|                                   |                                                                                                                                |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Specification                     | IEC 60947-7-4:2013-08                                                                                                          |
| 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 60947-7-4:2013-08 |
|---------------|-----------------------|

### Insulation resistance

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

### Air clearances and creepage distances |

|                           |                     |
|---------------------------|---------------------|
| Specification             | IEC 60664-1:2007-04 |
| Insulating material group | I                   |

# MKDSP 25/ 5-15,00 - PCB terminal block



1932614

<https://www.phoenixcontact.com/us/products/1932614>

|                                                        |         |
|--------------------------------------------------------|---------|
| Comparative tracking index (IEC 60112)                 | CTI 600 |
| Rated insulation voltage (III/3)                       | 1000 V  |
| Rated surge voltage (III/3)                            | 8 kV    |
| minimum clearance value - non-homogenous field (III/3) | 8 mm    |
| minimum creepage distance (III/3)                      | 12.5 mm |
| Rated insulation voltage (III/2)                       | 1000 V  |
| Rated surge voltage (III/2)                            | 8 kV    |
| minimum clearance value - non-homogenous field (III/2) | 8 mm    |
| minimum creepage distance (III/2)                      | 8 mm    |
| Rated insulation voltage (II/2)                        | 1000 V  |
| Rated surge voltage (II/2)                             | 8 kV    |
| minimum clearance value - non-homogenous field (II/2)  | 8 mm    |
| minimum creepage distance (II/2)                       | 8 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           | 5g (60.1 Hz ... 150 Hz)     |
| Test duration per axis | 2.5 h                       |
| Test directions        | X-, Y- and Z-axis           |

### Glow-wire test

|                  |                        |
|------------------|------------------------|
| Specification    | IEC 60695-2-10:2000-10 |
| Temperature      | 850 °C                 |
| Time of exposure | 5 s                    |

### Aging

|               |                       |
|---------------|-----------------------|
| Specification | IEC 60947-7-4:2013-08 |
|---------------|-----------------------|

### Ambient conditions

|                                         |                                                                               |
|-----------------------------------------|-------------------------------------------------------------------------------|
| Ambient temperature (operation)         | -40 °C ... 100 °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 |
|-------------------|---------------------|

## MKDSP 25/ 5-15,00 - PCB terminal block

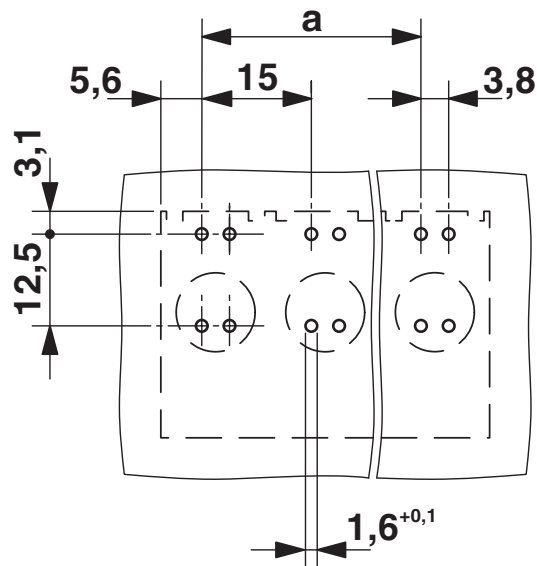
1932614

<https://www.phoenixcontact.com/us/products/1932614>

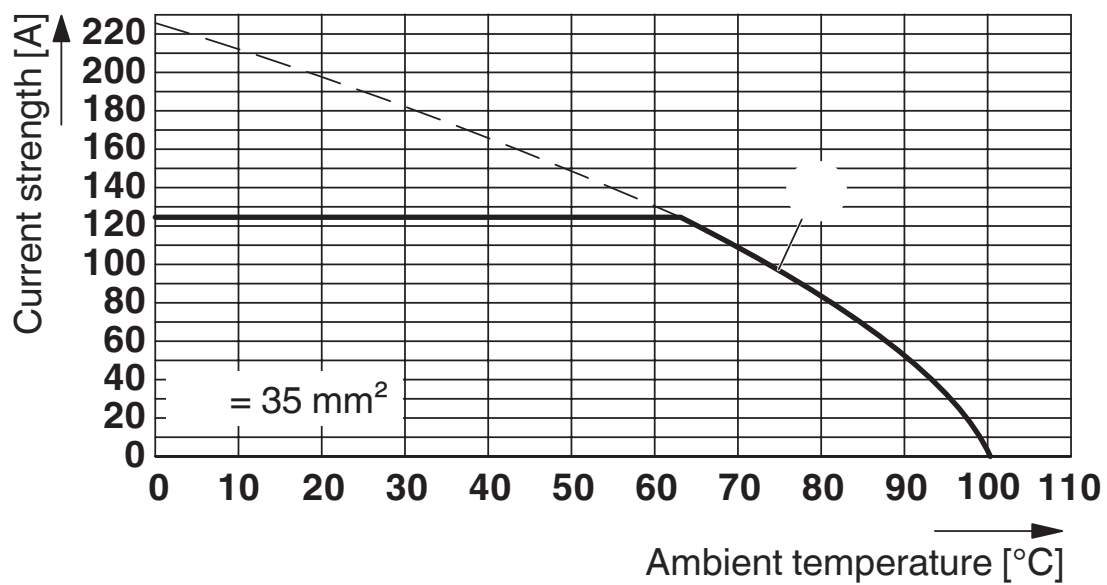


## Drawings

### Drilling plan/solder pad geometry



### Diagram



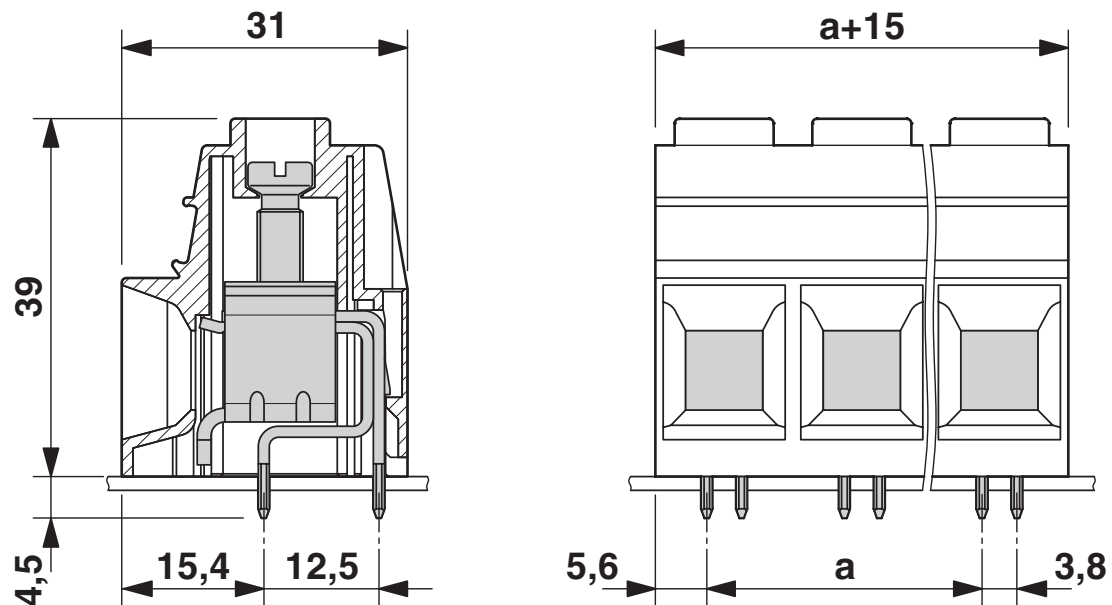
Type: MKDSP 25/...-15,00(-F)

# MKDSP 25/ 5-15,00 - PCB terminal block

1932614

<https://www.phoenixcontact.com/us/products/1932614>

Dimensional drawing



# MKDSP 25/ 5-15,00 - PCB terminal block



1932614

<https://www.phoenixcontact.com/us/products/1932614>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1932614>

|  <b>cULus Recognized</b><br>Approval ID: E60425-19770427 |                       |                       |                   |                             |
|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
|                                                                                                                                           | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
| Use group B                                                                                                                               | 600 V                 | 115 A                 | 20 - 2            | -                           |
| Use group C                                                                                                                               | 600 V                 | 115 A                 | 20 - 2            | -                           |

|  <b>VDE Zeichengenehmigung</b><br>Approval ID: 40041859 |                       |                       |                   |                             |
|------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
|                                                                                                                                          | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
|                                                                                                                                          | 1000 V                | 125 A                 | -                 | 0.5 - 35                    |

# MKDSP 25/ 5-15,00 - PCB terminal block



1932614

<https://www.phoenixcontact.com/us/products/1932614>

## Classifications

### ECLASS

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

### ETIM

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

### UNSPSC

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

# MKDSP 25/ 5-15,00 - PCB terminal block



1932614  
<https://www.phoenixcontact.com/us/products/1932614>

## 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 2024 © - 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)