

## PCB terminal block - FFKDSA1/V1-5,08-13 - 1700635

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: 15 A, rated voltage (III/2): 400 V, nominal cross section: 1.5 mm<sup>2</sup>, pitch: 5.08 mm, number of positions: 13, connection method: Push-in spring connection, mounting: Wave soldering, conductor/PCB connection direction: 90 °, color: green, Pin layout: Linear pinning, Solder pin [P]: 3.4 mm




The figure shows the 10-position version

### 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
- ✓ Two solder pins reduce the mechanical strain on the soldering spots
- ✓ The latching on the side enables various numbers of positions to be combined
- ✓ Vertical connection enables multi-row arrangement on the PCB



### Key Commercial Data

|              |   |
|--------------|---|
| Packing unit | 50 pc   |
| GTIN         | <br>4 017918 986094 |
| GTIN         | 4017918986094   |

### Technical data

#### Item properties

|                           |                           |
|---------------------------|---------------------------|
| Brief article description | PCB terminal block        |
| Range of articles         | FFKDS(A)/V1               |
| Pitch                     | 5.08 mm                   |
| Number of positions       | 13                        |
| Connection method         | Push-in spring connection |
| Mounting type             | Wave soldering            |
| Pin layout                | Linear pinning            |
| Number of levels          | 1                         |

# PCB terminal block - FFKDSA1/V1-5,08-13 - 1700635

## Technical data

### Item properties

|                       |    |
|-----------------------|----|
| Number of connections | 13 |
| Number of potentials  | 13 |

### Electrical parameters

|                             |       |
|-----------------------------|-------|
| Nominal current             | 15 A  |
| Nom. voltage                | 400 V |
| Rated voltage               | 250 V |
| Rated voltage (III/2)       | 400 V |
| Rated 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  |

### Connection capacity

|   |   |
|---|---|
| Connection method   | Push-in spring connection                     |
| pluggable   | Yes   |
| Conductor cross section solid   | 0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>   |
| Conductor cross section flexible                                      | 0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>   |
| Conductor cross section AWG / kcmil                                   | 24 ... 16                                     |
| Conductor cross section flexible, with ferrule without plastic sleeve | 0.25 mm <sup>2</sup> ... 0.75 mm <sup>2</sup> |
| Conductor cross section, flexible, with ferrule, with plastic sleeve  | 0.25 mm <sup>2</sup> ... 0.75 mm <sup>2</sup> |
| 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                     | Tin-plated  |
| Metal surface terminal point (top layer)    | Tin (5 - 7 µm Sn)   |
| Metal surface terminal point (middle layer) | Nickel (2 - 3 µm Ni)  |
| Metal surface soldering area (top layer)    | Tin (5 - 7 µm Sn)   |
| Metal surface soldering area (middle layer) | Nickel (2 - 3 µm Ni)  |

### 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          |
| 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

# PCB terminal block - FFKDSA1/V1-5,08-13 - 1700635

## Technical data

### Dimensions for the product

|                             |            |
|-----------------------------|------------|
| Length [ l ]                | 12.7 mm    |
| Width [ w ]                 | 68.54 mm   |
| Height [ h ]                | 17 mm      |
| Pitch                       | 5.08 mm    |
| Height (without solder pin) | 13.6 mm    |
| Solder pin [P]              | 3.4 mm     |
| Pin spacing                 | 7.62 mm    |
| Pin dimensions              | 0.5 x 1 mm |

### Dimensions for PCB design

|               |         |
|---------------|---------|
| Hole diameter | 1.3 mm  |
| Pin spacing   | 7.62 mm |

### 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 ... 100 °C (Depending on the current carrying capacity/derating curve) |

### Termination and connection method

|  |                     |
|--|---------------------|
| Test for conductor damage and slackening | IEC 60999-1:1990-05 |
|  | Test passed         |

### Pull-out test

|  |   |
|--|---|
| Pull-out test  | IEC 60999-1:1990-05                     |
|  | 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 |
|  | 1.5 mm <sup>2</sup> / solid / > 40 N    |
|  | 1.5 mm <sup>2</sup> / flexible / > 40 N |

### Mechanical tests according to standard

|                    |                        |
|--------------------|------------------------|
| Test specification | IEC 60999-1 (in parts) |
|--------------------|------------------------|

### Electrical tests

|                             |                     |
|-----------------------------|---------------------|
| Rated current               | 15 A                |
| Conductor cross section     | 1.5 mm <sup>2</sup> |
| Rated voltage (III/2)       | 400 V               |
| Rated surge voltage (III/2) | 4 kV                |

### Air clearances and creepage distances

# PCB terminal block - FFKDSA1/V1-5,08-13 - 1700635

## Technical data

### Air clearances and creepage distances

|   |   |
|---|---|
| Clearances and creepage distances               | IEC 60947-1:2007-06 + A1:2010-12 + A2:2014-09 |
| Specification                                   | IEC 60947-1:2007-06 + A1:2010-12 + A2:2014-09 |
| Minimum clearance - inhomogeneous field (III/3) | 3 mm  |
| Minimum clearance - inhomogeneous field (III/2) | 3 mm  |
| Minimum clearance - inhomogeneous field (II/2)  | 3 mm  |
| Minimum creepage distance value (III/3)         | 3.2 mm  |
| Minimum creepage distance value (III/2)         | 3 mm  |
| Minimum creepage distance value (II/2)          | 3.2 mm  |

### Temperature-rise test

|                                   |                                     |
|-----------------------------------|-------------------------------------|
| Specification                     | IEC 60998-1:1990-04                 |
| Result                            | Test passed                         |
| Requirement temperature-rise test | Increase in temperature $\leq 45$ K |

### Current carrying capacity / derating curves

|                     |   |
|---------------------|---|
| Caption             | Type: FFKDS/V1-5,08<br>Test following DIN EN 60512-5-2:2003-01<br>Reduction factor = 1<br>No. of positions: 5 |
| Specification       | Following IEC 60512-5-2:2002-02   |
| Number of positions | 5   |
| Reduction factor    | 1   |

### Vibration test

|                        |                                 |
|------------------------|---------------------------------|
| Specification          | IEC 60068-2-6:1982 + AMD 2:1985 |
| Result                 | Test passed                     |
| Frequency              | 10 - 150 - 10 Hz                |
| Sweep speed            | 1 octave/min                    |
| Amplitude              | 0.35 mm (10 - 60.1 Hz)          |
| Acceleration           | 5 g (60.1 - 150 Hz)             |
| Test duration per axis | 2.5 h                           |

### Insulation resistance

|  |                     |
|--|---------------------|
| Specification                                | IEC 60512-2:1985-00 |
| Result                                       | Test passed         |
| Insulation resistance, neighboring positions | $10^{12} \Omega$    |

### Standards and Regulations

|                                  |        |
|----------------------------------|--------|
| Connection in acc. with standard | EN-VDE |
|                                  | CUL    |

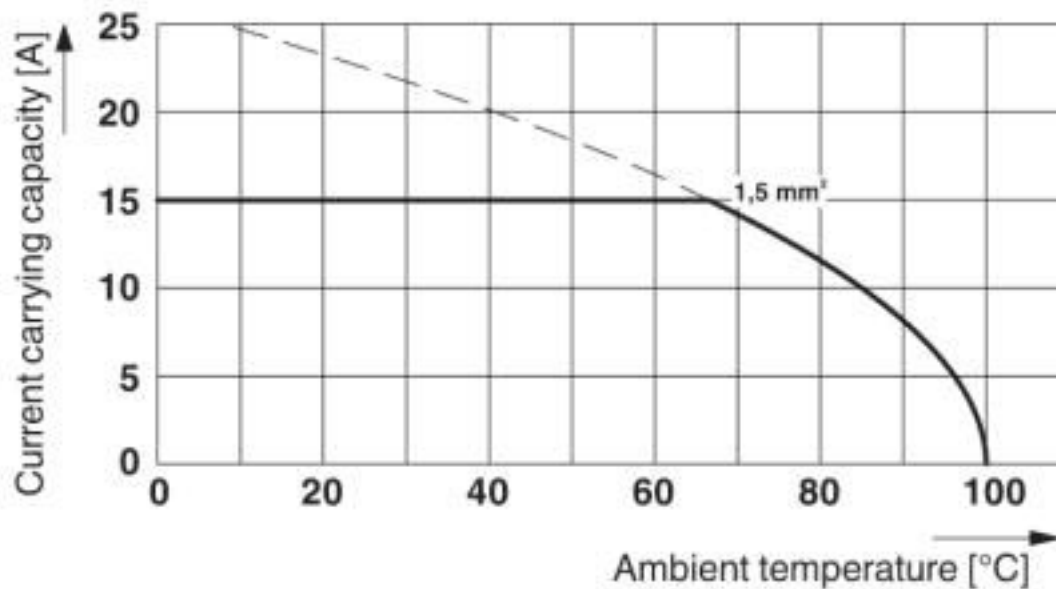
### Environmental Product Compliance

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

# PCB terminal block - FFKDSA1/V1-5,08-13 - 1700635

## Drawings

Diagram



Type: FFKDS/V1-5,08  
 Test following DIN EN 60512-5-2:2003-01  
 Reduction factor = 1  
 No. of positions: 5

## 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 |

ETIM

|          |          |
|----------|----------|
| ETIM 3.0 | EC001121 |
| ETIM 4.0 | EC002643 |
| ETIM 5.0 | EC002643 |
| ETIM 6.0 | EC002643 |
| ETIM 7.0 | EC002643 |

# PCB terminal block - FFKDSA1/V1-5,08-13 - 1700635

## Classifications

### 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

EAC / cULus Recognized

Ex Approvals

### Approval details

|     |   |         |
|-----|---|---------|
| 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> | E60425-19870330 |
|                            | B   | D   |                 |
| Nominal voltage UN         | 300 V   | 300 V   |                 |
| Nominal current IN         | 10 A  | 10 A  |                 |
| mm <sup>2</sup> /AWG/kcmil | 24-16   | 24-16   |                 |

## Accessories

Accessories

Labeled terminal marker

## PCB terminal block - FFKDSA1/V1-5,08-13 - 1700635

### Accessories

Marker card - SK 5,08/3,8:FORTL.ZAHLEN - 0804293



Marker card, Card, white, labeled, horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... (99)100, mounting type: adhesive, for terminal block width: 5.08 mm, lettering field size: 5.08 x 3.8 mm

---

### Screwdriver tools

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

---

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>

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Fixed Terminal Blocks](#) category:*

*Click to view products by [Phoenix Contact](#) manufacturer:*

Other Similar products are found below :

[MBE-1512](#) [MBE-154](#) [MBE-156](#) [MBES-153](#) [MBES-156](#) [MH-2512](#) [MHE-132](#) [MHE-163](#) [MI-254 \(35\)](#) [MI-272](#) [880507](#) [MPT-275](#)  
[15602-04-08-21](#) [BA311TU](#) [BA411SU](#) [MV-152](#) [MV-252-D](#) [MV-253/NCNOC](#) [MV-254-D](#) [MV-255](#) [MV-462](#) [MV-493](#) [MVE-252](#) [MVE-253](#)  
[MVE-273](#) [MVEB-153](#) [1700096](#) [1705142](#) [1712417](#) [1713020](#) [1713088](#) [1745195](#) [1760594](#) [1776118-2](#) [1790852](#) [1-796689-8](#) [1-796692-6](#)  
[1800001](#) [1800114](#) [1995279](#) [20020314-C121B01LF](#) [CB2-12](#) [KP03215000J0G](#) [KP04215000J0G](#) [S451](#) [282802-2](#) [29.007](#) [29.116](#) [30.103](#)  
[30.106](#)