

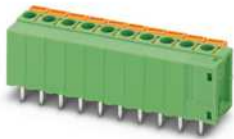
PCB terminal block - FFKDSA1/V1-5,08- 5



1751565

<https://www.phoenixcontact.com/pc/products/1751565>

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.



PCB terminal block, nominal current: 15 A, rated voltage (III/2): 400 V, nominal cross section: 1.5 mm², number of potentials: 5, number of rows: 1, number of positions per row: 5, product range: FFKDS(A)/V1, pitch: 5.08 mm, 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, 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 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

Commercial Data

| | |
|--------------------------------------|---------------|
| Item number | 1751565 |
| Packing unit | 50 pc |
| Minimum order quantity | 1 pc |
| Product Key | AALBAK |
| GTIN | 4017918259259 |
| Weight per Piece (including packing) | 5.787 g |
| Weight per Piece (excluding packing) | 5.5 g |
| Customs tariff number | 85369010 |
| Country of origin | DE |

1751565

<https://www.phoenixcontact.com/pc/products/1751565>

Technical Data

Product properties

| | |
|---------------------------|----------------------------------|
| Type | PC terminal block can be aligned |
| Product line | COMBICON Terminals S |
| Product type | Printed circuit board terminal |
| Number of positions | 5 |
| Pitch | 5.08 mm |
| Number of connections | 5 |
| Number of rows | 1 |
| Number of potentials | 5 |
| Pin layout | Linear pinning |
| Solder pins per potential | 2 |

Electrical properties

| | |
|-----------------------------|-------|
| Nominal current I_N | 15 A |
| Nominal voltage U_N | 400 V |
| Degree of pollution | 3 |
| Rated voltage (III/3) | 250 V |
| Rated surge voltage (III/3) | 4 kV |
| Rated voltage (III/2) | 400 V |
| Rated surge voltage (III/2) | 4 kV |

Connection data

Connection technology

| | |
|-----------------------|----------------------------------|
| Type | PC terminal block can be aligned |
| Nominal cross section | 1.5 mm ² |

Conductor connection

| | |
|---|---|
| Connection method | Push-in spring connection |
| Conductor cross section solid | 0.2 mm ² ... 1.5 mm ² |
| Conductor cross section flexible | 0.2 mm ² ... 1.5 mm ² |
| Conductor cross section AWG | 24 ... 16 |
| Conductor cross section flexible, with ferrule without plastic sleeve | 0.25 mm ² ... 0.75 mm ² |
| Conductor cross section, flexible, with ferrule, with plastic sleeve | 0.25 mm ² ... 0.75 mm ² |
| Stripping length | 10 mm |

Mounting

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

Material specifications

PCB terminal block - FFKDSA1/V1-5,08- 5

1751565

<https://www.phoenixcontact.com/pc/products/1751565>

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) |

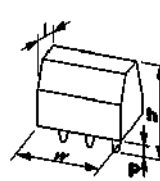
Material data - housing

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

Material data – actuating element

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

| | |
|---------------------|--|
| Dimensional drawing |  |
| Pitch | 5.08 mm |
| Width [w] | 27.94 mm |
| Height [h] | 17 mm |
| Length [l] | 12.7 mm |
| Installed height | 13.6 mm |

PCB terminal block - FFKDSA1/V1-5,08- 5



1751565

<https://www.phoenixcontact.com/pc/products/1751565>

| | |
|-----------------------|---------|
| Solder pin length [P] | 3.4 mm |
| PCB design | |
| Pin spacing | 7.62 mm |

Mechanical tests

Test for conductor damage and slackening

| | |
|---------------|---------------------|
| Specification | IEC 60999-1:1990-05 |
| Result | Test passed |

Pull-out test

| | |
|---|---|
| Specification | IEC 60999-1:1990-05 |
| Conductor cross section/conductor type/tractive force setpoint/actual value | 0.2 mm ² / solid / > 10 N |
| | 0.2 mm ² / flexible / > 10 N |
| | 1.5 mm ² / solid / > 40 N |
| | 1.5 mm ² / flexible / > 40 N |

Electrical tests

Temperature-rise test

| | |
|-----------------------------------|--------------------------------|
| Specification | IEC 60998-1:1990-04 |
| Requirement temperature-rise test | Increase in temperature ≤ 45 K |

Insulation resistance

| | |
|--|---------------------|
| Specification | IEC 60512-2:1985-00 |
| Insulation resistance, neighboring positions | 10 ¹² Ω |

Air clearances and creepage distances |

| | |
|--|---|
| Specification | IEC 60947-1:2007-06 + A1:2010-12 + A2:2014-09 |
| Insulating material group | I |
| Comparative tracking index (IEC 60112) | CTI 600 |
| Rated insulation voltage (III/3) | 250 V |
| Rated surge voltage (III/3) | 4 kV |
| minimum clearance value - non-homogenous field (III/3) | 3 mm |
| minimum creepage distance (III/3) | 3.2 mm |
| Rated insulation voltage (III/2) | 400 V |
| Rated surge voltage (III/2) | 4 kV |
| minimum clearance value - non-homogenous field (III/2) | 3 mm |
| minimum creepage distance (III/2) | 3 mm |
| Rated insulation voltage (II/2) | 630 V |
| Rated surge voltage (II/2) | 4 kV |
| minimum clearance value - non-homogenous field (II/2) | 3 mm |
| minimum creepage distance (II/2) | 3.2 mm |

Environmental and real-life conditions

Vibration test

PCB terminal block - FFKDSA1/V1-5,08- 5



1751565

<https://www.phoenixcontact.com/pc/products/1751565>

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

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

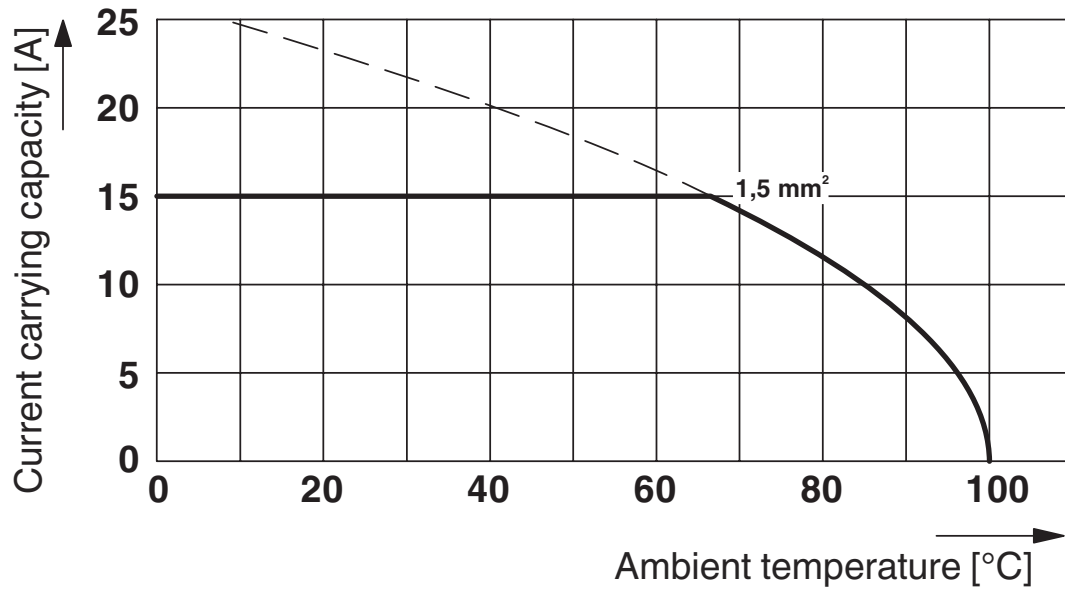
| | |
|-------------------|---------------------|
| Type of packaging | packed in cardboard |
|-------------------|---------------------|

1751565

<https://www.phoenixcontact.com/pc/products/1751565>

Drawings

Diagram



Type: FFKDS/V1-5,08

Test following DIN EN 60512-5-2:2003-01

Reduction factor = 1

No. of positions: 5

PCB terminal block - FFKDSA1/V1-5,08- 5



1751565

<https://www.phoenixcontact.com/pc/products/1751565>

Approvals



EAC

Approval ID: B.01687



cULus Recognized

Approval ID: E60425-19870330

| | Nominal Voltage U_N | Nominal Current I_N | Cross Section AWG | Cross Section mm^2 |
|-------------|-----------------------|-----------------------|-------------------|-----------------------------|
| Use group B | 300 V | 10 A | 24 - 16 | - |
| Use group D | 300 V | 10 A | 24 - 16 | - |

PCB terminal block - FFKDSA1/V1-5,08- 5



1751565

<https://www.phoenixcontact.com/pc/products/1751565>

Classifications

ECLASS

| | |
|---------------|----------|
| ECLASS-9.0 | 27440401 |
| ECLASS-10.0.1 | 27440401 |
| ECLASS-11.0 | 27460101 |

ETIM

| | |
|----------|----------|
| ETIM 8.0 | EC002643 |
|----------|----------|

UNSPSC

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

PCB terminal block - FFKDSA1/V1-5,08- 5



1751565

<https://www.phoenixcontact.com/pc/products/1751565>

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- 5



1751565

<https://www.phoenixcontact.com/pc/products/1751565>

Accessories

Marker card

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

<https://www.phoenixcontact.com/pc/products/0804293>



Marker 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

Screwdriver - SZF 1-0,6X3,5 - 1204517

<https://www.phoenixcontact.com/pc/products/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 2022 © - all rights reserved

<https://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG

Flachsmarktstraße 8

D-32825 Blomberg

+49 (0) 5235-3 00

info@phoenixcontact.com