# ZFKDSA 1,5C-6,0 WH - PCB terminal block

1700784

https://www.phoenixcontact.com/us/products/1700784

PHŒNIX CONTACT

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PCB terminal block, nominal current: 16 A, rated voltage (III/2): 400 V, nominal cross section: 1.5 mm$^2$, number of potentials: 1, number of rows: 1, number of positions per row: 1, product range: ZFKDS(A) 1,5C, pitch: 5 mm, connection method: Spring-cage connection, mounting: Wave soldering, conductor/PCB connection direction: 45 °, color: white, Pin layout: Linear pinning, Solder pin [P]: 3.5 mm, number of solder pins per potential: 2, type of packaging: packed in cardboard. End terminal block for terminating custom-grouped blocks.

## Your advantages

• Defined contact force ensures that contact remains stable over the long term

• Clamping space opened by means of fixed screwdriver enables convenient conductor connection

• Angled connection enables multi-row arrangement on the PCB

• Actuation shafts that are parallel and orthogonal to the conductor axis enable flexible PCB designs

• The latching on the side enables various numbers of positions to be combined

• Two solder pins reduce the mechanical strain on the soldering spots

## Commercial data

| | |
|---|---|
| Item number | 1700784 |
| Packing unit | 50 pc |
| Minimum order quantity | 50 pc |
| Sales key | AA12 |
| Product key | AALMBC |
| GTIN | 4046356500470 |
| Weight per piece (including packing) | 1.215 g |
| Weight per piece (excluding packing) | 1.215 g |
| Customs tariff number | 85369010 |
| Country of origin | IN |

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## Technical data

### Product properties

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

### Electrical properties

| | |
|---|---|
| Nominal current $I_N$ | 16 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 |
| Rated voltage (II/2) | 630 V |
| Rated surge voltage (II/2) | 4 kV |

### Connection data

#### Connection technology

| | |
|---|---|
| Type | PC terminal block can be aligned |
| Nominal cross section | 1.5 mm² |

#### Conductor connection

| | |
|---|---|
| Connection method | Spring-cage connection |
| Conductor cross section rigid | 0.2 mm² ... 2.5 mm² |
| Conductor cross section flexible | 0.2 mm² ... 1.5 mm² |
| Conductor cross section AWG | 24 ... 14 |
| Conductor cross section flexible, with ferrule without plastic sleeve | 0.25 mm² ... 1.5 mm² |
| Conductor cross section, flexible, with ferrule, with plastic sleeve | 0.25 mm² ... 1.5 mm² |
| Stripping length | 7 mm |

### Mounting

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

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## 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 | hot-dip tin-plated |
| Metal surface terminal point (top layer) | Tin (10 - 16 µm Sn) |
| Metal surface soldering area (top layer) | Tin (10 - 16 µm Sn) |

### Material data - housing

| | |
|---|---|
| Color (Housing) | white (9010) |
| 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 (Actuating element) | white (9010) |

## Dimensions

| | |
|---|---|
| Dimensional drawing |  |
| Pitch | 5 mm |
| Width [w] | 6 mm |
| Height [h] | 17.6 mm |
| Length [l] | 14.1 mm |
| Installed height | 13 mm |
| Solder pin length [P] | 3.5 mm |
| Pin dimensions | 0.7 x 0.7 mm |

### PCB design

| | |
|---|---|
| Pin spacing | 5.08 mm |
| Hole diameter | 1.1 mm |

## Electrical tests

Air clearances and creepage distances |

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

## Environmental and real-life conditions

### 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 |
|---|---|

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## Approvals

☼ To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1700784

### cULus Recognized
Approval ID: E60425-19941110

|  | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $mm^2$ |
|---|---|---|---|---|
| Use group B |  |  |  |  |
|  | 250 V | 10 A | 26 - 12 | - |
| Use group D |  |  |  |  |
|  | 300 V | 10 A | 26 - 12 | - |

# ZFKDSA 1,5C-6,0 WH - PCB terminal block

## Classifications

### ECLASS

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

### ETIM

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

### UNSPSC

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

## 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% |

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## Accessories

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

1204517

https://www.phoenixcontact.com/us/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

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

0804183

https://www.phoenixcontact.com/us/products/0804183

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 mm, lettering field size: 5 x 3.8 mm

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## CRIMPFOX 6 - Crimping pliers

1212034

https://www.phoenixcontact.com/us/products/1212034



Crimping pliers, for ferrules without insulating collar according to DIN 46228 Part 1 and ferrules with insulating collar according to DIN 46228 Part 4, 0.25 mm$^2$ ... 6.0 mm$^2$, lateral entry, trapezoidal crimp

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