

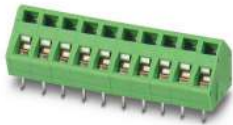
# ZFKDSA 1,5C-5,0- 7 SO RD-GN - PCB terminal block



1991493

<https://www.phoenixcontact.com/us/products/1991493>

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PCB terminal block, nominal current: 16 A, rated voltage (III/2): 400 V, nominal cross section: 1.5 mm<sup>2</sup>, number of potentials: 7, number of rows: 1, number of positions per row: 7, product range: ZFKDS(A) 1,5C, pitch: 5 mm, connection method: Spring-cage connection, mounting: Wave soldering, conductor/PCB connection direction: 45 °, color: multicolored, Pin layout: Linear pinning, Solder pin [P]: 3.5 mm, number of solder pins per potential: 2, type of packaging: packed in cardboard

## 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	1991493
Packing unit	1 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Sales key	AA12
Product key	AALMBC
GTIN	4017918959364
Weight per piece (including packing)	6.8 g
Weight per piece (excluding packing)	6.8 g
Customs tariff number	85369010
Country of origin	PL

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## Technical data

### Product properties

Type	PC terminal block can be aligned
Product line	COMBICON Terminals S
Product type	Printed circuit board terminal
Product family	ZFKDS(A) 1,5C
Number of positions	7
Pitch	5 mm
Number of connections	7
Number of rows	1
Number of potentials	7
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 mm <sup>2</sup>

#### Conductor connection

Connection method	Spring-cage connection
Conductor cross section rigid	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross section AWG	24 ... 14
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Stripping length	7 mm

### Mounting

Mounting type	Wave soldering
Pin layout	Linear pinning

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Connection method	Spring-cage connection
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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)	multicolored ()
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)	multicolored ()
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## Dimensions

Dimensional drawing	
Pitch	5 mm
Width [w]	36 mm
Height [h]	16.25 mm
Length [l]	14.1 mm
Installed height	12.75 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

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## 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

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## Approvals

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**EAC**

Approval ID: B.01687



**cULus Recognized**

Approval ID: E60425-19941110

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

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## Classifications

### ECLASS

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

### ETIM

ETIM 8.0	EC002643
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### UNSPSC

UNSPSC 21.0	39121400
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## Environmental product compliance

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

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