

1907937

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PCB terminal block, nominal current: 12 A, rated voltage (III/2): 400 V, nominal cross section: 1.5 mm², number of potentials: 3, number of rows: 3, number of positions per row: 1, product range: ZFK3DS(A) 1,5, pitch: 5.08 mm, connection method: Spring-cage connection, mounting: Wave soldering, conductor/PCB connection direction: 45 °, color: black, Pin layout: Linear pinning, Solder pin [P]: 3.4 mm, number of solder pins per potential: 1, type of packaging: packed in cardboard. Single module for the custom grouping of different numbers of positions. An end terminal block is also needed to terminate the block (see accessories). Blocked items with different numbers of positions are also available.

### 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
- · Conductor connection on several levels enables higher contact density
- The latching on the side enables various numbers of positions to be combined

#### Commercial data

Item number	1907937
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AA12
Product key	AALMDA
GTIN	4017918318260
Weight per piece (including packing)	4.977 g
Weight per piece (excluding packing)	4.477 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	ZFK3DS(A) 1,5
Product line	COMBICON Terminals S
Туре	PC terminal block can be aligned
Number of positions	1
Pitch	5.08 mm
Number of connections	3
Number of rows	3
Number of potentials	3
Pin layout	Linear pinning
Solder pins per potential	1

### Electrical properties

Nominal current I <sub>N</sub>	12 A
Nominal voltage U <sub>N</sub>	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

Туре	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 mm² 1.5 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² 1.5 mm²
Stripping length	7.5 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)	black (9005)
Insulating material	PA
Insulating material group	1
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) black (9005)		Color (Actuating element)	black (9005)
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#### **Dimensions**

Dimensional drawing	n p
Pitch	5.08 mm
Width [w]	6.08 mm
Height [h]	40 mm
Length [I]	32.2 mm
Installed height	36.6 mm
Solder pin length [P]	3.4 mm
Pin dimensions	0.7 x 1 mm
PCB design	
Hole diameter	1.3 mm

### Electrical tests

### Air clearances and creepage distances |

Specification	IEC 60664-1:2007-04
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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)	1.6 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

#### 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**

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CSA Approval ID: 13631				
	Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
Use group B				
	300 V	10 A	28 - 12	-
Use group D				
	300 V	10 A	28 - 12	-

CULus Recognized Approval ID: E60425-19941110				
	Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
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	
ΕT	ETIM		
	ETIM 8.0	EC002643	
UN	NSPSC		
	UNSPSC 21.0	39121400	



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# Environmental product compliance

REACH candidate substance (CAS No.)

EU RoHS Fulfills EU RoHS substance requirements	Yes, No exemptions
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China RoHS	
Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

No substance above 0.1 wt%



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### Mandatory accessories

ZFK3DSA 1,5-6,08 - PCB terminal block

1704554

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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:  $0.6 \times 3.5 \times 100$  mm, 2-component grip, with non-slip grip



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

0804293

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

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