

1904969

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PCB terminal block, nominal current: 24 A, rated voltage (III/2): 400 V, nominal cross section: 2.5 mm², number of potentials: 1, number of rows: 1, number of positions per row: 1, product range: ZFKDS(A) 2,5, pitch: 5.08 mm, connection method: Spring-cage connection, mounting: Wave soldering, conductor/PCB connection direction: 45 °, color: green, Pin layout: Linear pinning, Solder pin [P]: 3.5 mm, number of solder pins per potential: 2, type of packaging: packed in cardboard. The article can be aligned to create different nos. of positions!

## 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
- 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	1904969
Packing unit	50 pc
Minimum order quantity	50 pc
Sales Key	AAM
Product Key	AAMMAB
Catalog Page	Page 135 (C-1-2013)
GTIN	4017918188719
Weight per Piece (including packing)	1.343 g
Weight per Piece (excluding packing)	1.256 g
Customs tariff number	85369010
Country of origin	IN



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# **Technical Data**

## Product properties

Туре	PC terminal block can be aligned
Product line	COMBICON Terminals M
Product type	Printed circuit board terminal
Product family	ZFKDS(A) 2,5
Number of positions	1
Pitch	5.08 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 <sub>N</sub>	24 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	2.5 mm²

### Conductor connection

Connection method	Spring-cage connection
Conductor cross section rigid	0.2 mm² 4 mm²
Conductor cross section flexible	0.2 mm² 2.5 mm²
Conductor cross section AWG	24 12
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² 2.5 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	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)	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

3	
Color (Actuating element)	green (6021)
oolor (rictading olomont)	9.0011 (002.1)

## Dimensions

Dimensional drawing	h p
Pitch	5.08 mm
Width [w]	5.08 mm
Height [h]	17.7 mm
Length [I]	16.85 mm
Installed height	14.2 mm
Solder pin length [P]	3.5 mm

### Electrical tests

### Air clearances and creepage distances |

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Specification	IEC 60664-1:2007-04
Insulating material group	1
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	250 V



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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

### 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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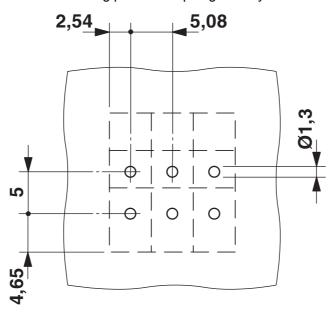


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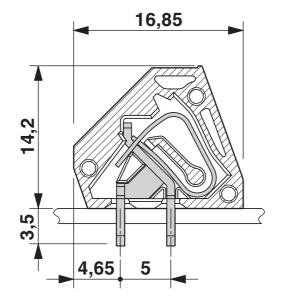


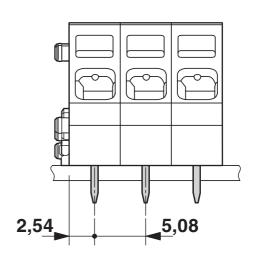
# Drawings

Drilling plan/solder pad geometry



Dimensional drawing







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# Approvals



EAC

Approval ID: B.01687

c <b>911</b> us	cULus Recognized Approval ID: E60425-19941110				
		Nominal Voltage $U_N$	Nominal Current I <sub>N</sub>	Cross Section AWG	Cross Section mm <sup>2</sup>
		250 V	10 A	26 - 12	-
		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			
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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## **Mandatory Accessories**

### ZFKDSA 2,5-6,08 R - PCB terminal block

1905010

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### Accessories

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

0804293

https://www.phoenixcontact.com/in/products/0804293



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

1204517

https://www.phoenixcontact.com/in/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

### ZFKDS 2,5-5,08 L - PCB terminal block

1905214

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### ZFKDSA 2,5-6,08 R - PCB terminal block

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### SK 5,08/3,8:UNBEDRUCKT - Marker card

0805412

https://www.phoenixcontact.com/in/products/0805412

Marker card, white, unlabeled, can be labeled with: Marker pen, mounting type: adhesive, for terminal block width: 5.08 mm, lettering field size: 5.08 x 3.8 mm





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SK 5,08/3,8: 0-9 - Marker card

0804303

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Marker card, white, labeled, horizontal: consecutive numbers 0  $\dots$  9, mounting type: adhesive, for terminal block width: 5.08 mm, lettering field size: 5.08 x 3.8 mm

### ZFKDS 2,5-5,08 L - PCB terminal block

1905214

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