

1891331

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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: 18, number of rows: 2, number of positions per row: 9, product range: ZFKKDS(A) 1,5, 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: 1, 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
- · 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	1891331
Packing unit	10 pc
Minimum order quantity	1 pc
Product key	AALMCA
GTIN	4017918413750
Weight per piece (including packing)	25.58 g
Weight per piece (excluding packing)	23.606 g
Country of origin	IN



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### Technical data

### Product properties

Product type	Printed circuit board terminal
Product family	ZFKKDS(A) 1,5
Product line	COMBICON Terminals S
Туре	PC terminal block can be aligned
Number of positions	9
Pitch	5.08 mm
Number of connections	18
Number of rows	2
Number of potentials	18
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
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

Connection method	Spring-cage connection
Conductor cross section rigid	0.2 mm² 2.5 mm²
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)	green (6021)
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)	green (6021)
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### Dimensions

Dimensional drawing	h P
Pitch	5.08 mm
Width [w]	46.72 mm
Height [h]	29 mm
Length [I]	24 mm
Installed height	25.5 mm
Solder pin length [P]	3.5 mm
Pin dimensions	0.7 x 1 mm
PCB design	
Pin spacing	15.24 mm

1.3 mm

### Electrical tests

Hole diameter

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
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)	2 mm
minimum creepage distance (III/2)	2 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

UNSPSC 21.0

### **ECLASS**

ECLASS-11.0	27460101
ECLASS-12.0	27460101
ECLASS-13.0	27460101
ETIM	
ETIM 9.0	EC002643
UNSPSC	

39121400



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## Environmental product compliance

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

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

0804293

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