

1905984

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Printed circuit board terminal, nominal current: 16 A, rated voltage (III/2): 400 V, nominal cross section: 1.5 mm², number of potentials: 12, number of rows: 1, number of positions per row: 12, product range: ZFKDS(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: 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
- 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	1905984
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	AA12
Product key	AALMBA
GTIN	4017918173791
Weight per piece (including packing)	15.42 g
Weight per piece (excluding packing)	13.92 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) 1,5
Product line	COMBICON Terminals S
Туре	PC terminal block can be aligned
Number of positions	12
Pitch	5.08 mm
Number of connections	12
Number of rows	1
Number of potentials	12
Pin layout	Linear pinning
Solder pins per potential	2

## Electrical properties

Nominal current I <sub>N</sub>	16 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 mm²
Conductor connection	
Connection method	Spring-cage connection

Spring-cage connection
0.2 mm <sup>2</sup> 2.5 mm <sup>2</sup>
0.2 mm² 1.5 mm²
24 14
0.25 mm² 1.5 mm²
0.25 mm² 1.5 mm²
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 h
Pitch	5.08 mm
Width [w]	63.5 mm
Height [h]	17.7 mm
Length [I]	16.9 mm
Installed height	14.2 mm
Solder pin length [P]	3.5 mm
Pin dimensions	0.7 x 1 mm
PCB design	
Pin spacing	5.08 mm
Hole diameter	1.3 mm

### Electrical tests

Air clearances and creepage distances |



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Insulating material group	T
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 package	ging	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	-

KEMA-KEUR Approval ID: 2160724.01				
	Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
Only flexible conductors	250 V	-	-	0.2 - 1.5
Only rigid conductors	250 V	-	-	0.2 - 2.5



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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	
UNS	SPSC		

39121400



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# Environmental product compliance

#### EU RoHS

Yes, No exemptions
EFUP-E
No hazardous substances above the limits
No substance above 0.1 wt%

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Phoenix Contact USA 586 Fulling Mill Road Middletown, PA 17057, United States (+717) 944-1300 info@phoenixcon.com