

1869952

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Printed circuit board terminal, nominal current: 12 A, rated voltage (III/2): 400 V, nominal cross section: 1.5 mm<sup>2</sup>, number of potentials: 51, number of rows: 3, number of positions per row: 17, product range: ZFK3DS(A) 1,5, pitch: 5.08 mm, connection method: Spring-cage connection, mounting: Wave soldering, conductor/PCB connection direction: 45 °, color: light gray, Pin layout: Linear pinning, Solder pin [P]: 3.4 mm, number of solder pins per potential: 1, 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
- · 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	1869952	
Packing unit	10 pc	
Minimum order quantity	10 pc	
Product key	AALMDA	
GTIN	4017918234027	
Weight per piece (including packing)	83.38 g	
Weight per piece (excluding packing)	77.898 g	
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	17
Pitch	5.08 mm
Number of connections	51
Number of rows	3
Number of potentials	51
Pin layout	Linear pinning
Solder pins per potential	1

#### Electrical properties

#### 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 mm²	
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 mm² 1.5 mm²
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 mm <sup>2</sup> 1.5 mm <sup>2</sup>
Stripping length	7.5 mm

### Mounting



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Pin layout	Linear pinning	
laterial 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)	light gray (7035)	
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)	light gray (7035)	
imensions		
Dimensional drawing		
Difficusional drawing	h	

Length [I]	32.2 mm
Installed height	36.6 mm
Solder pin length [P]	3.4 mm
Pin dimensions	0.7 x 1 mm

5.08 mm

82.36 mm

40 mm

1.3 mm

## Electrical tests

Hole diameter

PCB design

Pitch

Width [w]

Height [h]

Air clearances and creepage distances |



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Specification	IEC 60664-1:2007-04
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)	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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### **Approvals**

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

c <b>911</b> vs	cULus Recognized Approval ID: E60425-19941111				
		Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
В					
		250 V	10 A	26 - 12	-
D					
		300 V	10 A	26 - 12	-



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## Classifications

#### **ECLASS**

	ECLASS-13.0	27460101			
	ECLASS-15.0	27460101			
ETIM					
	ETIM 9.0	EC002643			
UNSPSC					
	UNSPSC 21.0	39121400			



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## Environmental product compliance

#### EU RoHS

20.10.10				
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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