

1987054

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Printed circuit board terminal, nominal current: 76 A, rated voltage (III/2): 400 V, nominal cross section: 10 mm², number of potentials: 1, number of rows: 1, number of positions per row: 1, product range: ZFKDS(A) 10, pitch: 10 mm, connection method: Spring-cage connection, mounting: Wave soldering, conductor/PCB connection direction: 45 °, color: green, Pin layout: Linear pinning, Solder pin [P]: 6.5 mm, number of solder pins per potential: 4, 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
- · Separate bridge shaft for easily connecting multiple positions to jumpers
- · Quick and convenient testing using integrated test option

Commercial data

Item number	1987054
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AA14
Product key	AANMBA
GTIN	4017918973162
Weight per piece (including packing)	11.712 g
Weight per piece (excluding packing)	11.47 g
Customs tariff number	85369010
Country of origin	PL



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Technical data

Product properties

Product type	Printed circuit board terminal
Product family	ZFKDS(A) 10
Product line	COMBICON Terminals L
Туре	PC terminal block can be aligned
Number of positions	1
Pitch	10 mm
Number of connections	1
Number of rows	1
Number of potentials	1
Pin layout	Linear pinning
Solder pins per potential	4

Electrical properties

Properties

Nominal current I _N	76 A
Nominal voltage U _N	400 V
Rated voltage (III/3)	320 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)	800 V
Rated surge voltage (II/2)	4 kV

Connection data

Connection technology

Туре	PC terminal block can be aligned
Nominal cross section	10 mm²
Conductor connection	
Connection method	Spring-cage connection
Conductor cross-section rigid	0.2 mm² 16 mm²
Conductor cross-section flexible	0.2 mm² 16 mm²

Conductor cross-section flexible	0.2 mm² 16 mm²
Conductor cross-section AWG	24 6
Conductor cross-section flexible, with ferrule without plastic sleeve	0.25 mm² 10 mm²

Conductor cross-section, flexible, with ferrule, with plastic sleeve 0.25 mm² ... 10 mm² Stripping length 12 mm

Mounting



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Pin layout

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terial specifications	
laterial 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	ı
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)
nensions	
Dimensional drawing	h
Pitch	10 mm
Width [w]	11.7 mm
Height [h]	33.5 mm

Linear pinning

PCB design	
Pin spacing	15 mm
Hole diameter	2.2 mm

33.4 mm

27 mm

6.5 mm

1.2 x 1.4 mm

Mechanical tests

Length [I]

Installed height

Pin dimensions

Solder pin length [P]



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Specification	IEC 60998-2-2:1991-10
Result	Test passed
Test for conductor damage and slackening	
Specification	IEC 60998-2-2:1991-10
Result	Test passed
Pull-out test	
Specification	IEC 60998-2-2:1991-10
Conductor cross-section/conductor type/tractive force setpoint/actual value	0.2 mm² / solid / > 10 N
	0.2 mm² / flexible / > 10 N
	16 mm² / solid / > 100 N

Electrical tests

Temperature-rise test

Specification	IEC 60998-2-1:1990-04
Requirement temperature-rise test	Increase in temperature ≤ 45 K

 10 mm^2 / flexible / > 90 N

Insulation resistance

Specification	IEC 60998-2-2:1991-10
Insulation resistance, neighboring positions	10 ⁹ Ω

Air clearances and creepage distances |

741 dicultances and dicepage distances		
Specification	IEC 60664-1:2007-04	
Insulating material group	T .	
Comparative tracking index (IEC 60112)	CTI 600	
Rated insulation voltage (III/3)	320 V	
Rated surge voltage (III/3)	4 kV	
minimum clearance value - non-homogenous field (III/3)	3 mm	
minimum creepage distance (III/3)	4 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)	800 V	
Rated surge voltage (II/2)	4 kV	
minimum clearance value - non-homogenous field (II/2)	3 mm	
minimum creepage distance (II/2)	4 mm	

Environmental and real-life conditions

Vibration test

Specification	IEC 60068-2-6:1995-03
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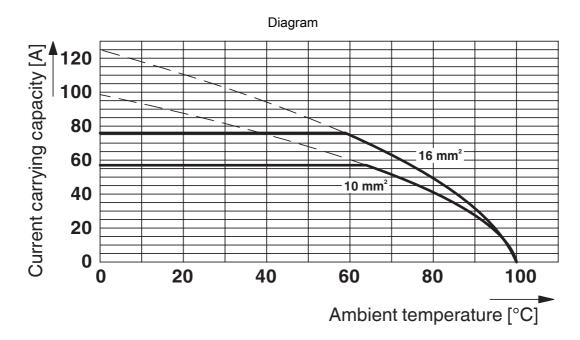
requency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 Hz 60.1 Hz)
Acceleration	5g (60.1 Hz 150 Hz)
Test duration per axis	2.5 h
Test directions	X-, Y- and Z-axis
ow-wire test	
Specification	IEC 60998-2-2:1991-10
Temperature	850 °C
Time of exposure	5 s
nbient conditions	
Ambient temperature (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 %
	-5 °C 55 °C



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Drawings



Type: ZFKDS 10-10,00



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Approvals

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cULus Recognized Approval ID: E60425-19941111				
	Nominal voltage U_N	Nominal current I _N	Cross section AWG	Cross section mm ²
В				
	300 V	65 A	24 - 6	-
D				
	300 V	10 A	24 - 6	-

₹	VDE report with production monitoring Approval ID: 40036082				
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
keine					
		320 V	76 A	-	0.2 - 16



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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 1.0.10			
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%		
EF3.0 Climate Change			
CO2e kg	0.197 kg CO2e		

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