

1774357

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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: 4, number of rows: 1, number of positions per row: 4, product range: ZFKDS(A) 10, pitch: 10 mm, connection method: Spring-cage connection, mounting: Wave soldering, conductor/PCB connection direction: 45 °, color: multicolored, Pin layout: Linear pinning, Solder pin [P]: 6.5 mm, number of solder pins per potential: 4, 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
- · Separate bridge shaft for easily connecting multiple positions to jumpers
- · Quick and convenient testing using integrated test option

Commercial data

Item number	1774357
Packing unit	50 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Product key	AANMBA
GTIN	4046356477086
Weight per piece (including packing)	42.2 g
Weight per piece (excluding packing)	41.24 g
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	4
Pitch	10 mm
Number of connections	4
Number of rows	1
Number of potentials	4
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 AWG	24 6

Conductor cross-section flexible, with ferrule without plastic		0.25 mm ² 10 mm ²	
sleeve			

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	Linear pinning
erial specifications	
aterial 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)
laterial data - housing Color (Housing)	multicolored ()
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
laterial data – actuating element	

Dimensions

Dimensional drawing	h h
Pitch	10 mm
Width [w]	41.7 mm
Height [h]	33.5 mm
Length [I]	33.4 mm
Installed height	27 mm
Solder pin length [P]	6.5 mm
Pin dimensions	1.2 x 1.4 mm
PCB design	
Pin spacing	15 mm
Hole diameter	2.2 mm

Mechanical tests



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(:0	nne	CTIC	n i	test

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
	10 mm² / flexible / > 90 N

Electrical tests

Temperature-rise test

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

Insulation resistance

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

Air clearances and creepage distances |

All clearances and creepage distances		
Specification	IEC 60664-1:2007-04	
Insulating material group	I	
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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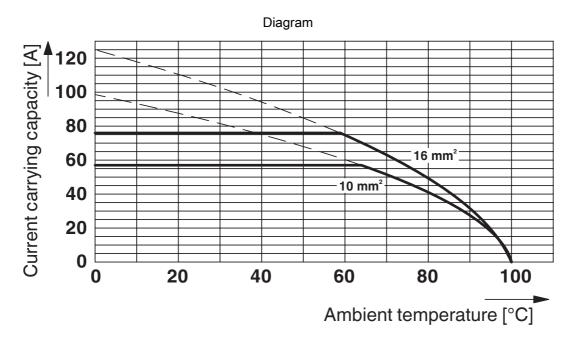
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 Hz 60.1 Hz)
Acceleration	5g (60.1 Hz 150 Hz)
Test duration per axis	2.5 h
Test directions	X-, Y- and Z-axis
low-wire test	
Specification	IEC 60998-2-2:1991-10
Temperature	850 °C
Time of exposure	5 s
mbient conditions Ambient temperature (operation)	-40 °C 100 °C (Depending on the current carrying capacity/derating curve)
Ambient temperature (storage/transport)	-40 °C 70 °C
Deletive humidity (storage/transport)	30 % 70 %
Relative humidity (storage/transport)	



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Drawings



Type: ZFKDS 10-10,00



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Approvals

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VDE.	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
ΕΊ	ТІМ	
	ETIM 9.0	EC002643
UNSPSC		
	UNSPSC 21.0	39121400



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Environmental product compliance

EU RoHS

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	0.774 kg CO2e

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