

1709874

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PCB terminal block, nominal current: 32 A, rated voltage (III/2): 630 V, nominal cross section: 4 mm², number of potentials: 2, number of rows: 1, number of positions per row: 2, product range: ZFKDS(A) 4, pitch: 7.5 mm, connection method: Spring-cage connection, mounting: Wave soldering, conductor/PCB connection direction: 45 °, color: green, Pin layout: Linear pinning, Solder pin [P]: 4.6 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
- · Separate bridge shaft for easily connecting multiple positions to jumpers
- · Quick and convenient testing using integrated test option

#### Commercial data

Item number	1709874
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AA14
Product key	AANMAA
GTIN	4055626342610
Weight per piece (including packing)	9.2 g
Weight per piece (excluding packing)	9.2 g
Customs tariff number	85369010
Country of origin	PL



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### Technical data

### Product properties

Product line	COMBICON Terminals L
Product type	Printed circuit board terminal
Product family	ZFKDS(A) 4
Number of positions	2
Pitch	7.5 mm
Number of connections	2
Number of rows	1
Number of potentials	2
Pin layout	Linear pinning
Solder pins per potential	2

### Electrical properties

Nominal current I <sub>N</sub>	32 A
Nominal voltage U <sub>N</sub>	630 V
Degree of pollution	3
Rated voltage (III/3)	500 V
Rated surge voltage (III/3)	6 kV
Rated voltage (III/2)	630 V
Rated surge voltage (III/2)	6 kV
Rated voltage (II/2)	1000 V
Rated surge voltage (II/2)	6 kV

### Connection data

### Connection technology

Туре	PC terminal block can be aligned
Nominal cross section	4 mm²
Conductor connection	
Connection method	Spring-cage connection
Conductor cross section rigid	0.2 mm² 6 mm²
Conductor cross section flevible	$0.2 \text{ mm}^2 - 4 \text{ mm}^2$

Conductor cross section rigid	0.2 mm² 6 mm²
Conductor cross section flexible	0.2 mm² 4 mm²
Conductor cross section AWG	24 10
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² 4 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² 4 mm²
Stripping length	10 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	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

3		
0 1 /4 / " 1 "	(0004)	
Color (Actuating element)	green (6021)	

#### **Dimensions**

Dimensional drawing	n p
Pitch	7.5 mm
Width [w]	16.5 mm
Height [h]	27.6 mm
Length [I]	29 mm
Installed height	23 mm
Solder pin length [P]	4.6 mm
Pin dimensions	1 x 1.4 mm
PCB design	
Hole diameter	1.8 mm

#### Mechanical tests

#### Connection test

Specification	IEC 60998-2-2:1991-10
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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	0.2 mm <sup>2</sup> / solid / > 10 N
setpoint/actual value	0.2 mm² / flexible / > 10 N
	6 mm² / solid / > 80 N
	4 mm² / flexible / > 60 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 <sup>9</sup> Ω	
Air clearances and creepage distances		
Insulating material group	1	
Rated insulation voltage (III/3)	500 V	
Rated surge voltage (III/3)	6 kV	
Rated insulation voltage (III/2)	630 V	
Rated surge voltage (III/2)	6 kV	
Rated insulation voltage (II/2)	1000 V	

#### Environmental and real-life conditions

Rated surge voltage (II/2)

#### Vibration test

Specification	IEC 60068-2-6:1995-03
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 Hz 60.1 Hz)
Sweep speed	5g (60.1 Hz 150 Hz)
Test duration per axis	2.5 h

6 kV

#### Glow-wire test

Specification	IEC 60998-2-2:1991-10
Temperature	850 °C
Time of exposure	5 s

#### Ambient conditions



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	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

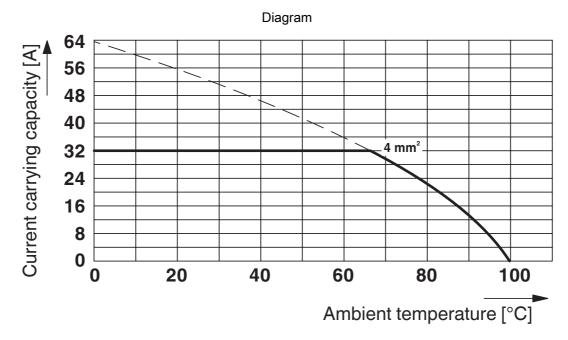
Type of packaging	packed in cardboard
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## **Drawings**



Type: ZFKDS 4-7,5 and ZFKDSA 4-9

Test following DIN EN 60512-5-2:2003-01

Reduction factor = 1 No. of positions: 5



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## **Approvals**

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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				
	300 V	30 A	24 - 10	-
Use group C				
	150 V	30 A	24 - 10	-
Use group D				
	300 V	10 A	24 - 10	-



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## Classifications

UNSPSC 21.0

#### **ECLASS**

	ECLASS-11.0	27460101
	ECLASS-12.0	27460101
	ECLASS-13.0	27460101
ETIM		
	ETIM 8.0	EC002643
UNS	SPSC	

39121400



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## Environmental product compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

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