

1800456

https://www.phoenixcontact.com/us/products/1800456

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PCB terminal block, nominal current: 16 A, rated voltage (III/2): 400 V, nominal cross section: 1.5 mm<sup>2</sup>, number of potentials: 1, number of rows: 1, number of positions per row: 1, product range: ZFKDS(A) 1,5C, pitch: 5 mm, connection method: Spring-cage connection, mounting: Wave soldering, conductor/PCB connection direction: 45 °, color: black, Pin layout: Linear pinning, Solder pin [P]: 3.5 mm, number of solder pins per potential: 2, type of packaging: packed in cardboard. End terminal block for terminating custom-grouped blocks.

### 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
- · Actuation shafts that are parallel and orthogonal to the conductor axis enable flexible PCB designs
- 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	1800456
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AA12
Product key	AALMBC
GTIN	4046356342322
Weight per piece (including packing)	1.228 g
Weight per piece (excluding packing)	1.22 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) 1,5C
Product line	COMBICON Terminals S
Туре	PC terminal block can be aligned
Number of positions	1
Pitch	5 mm
Number of connections	1
Number of rows	1
Number of potentials	1
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
Degree of pollution	3
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 mm <sup>2</sup>

#### Conductor 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 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)	black (9005)
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)	black (9005)
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#### **Dimensions**

Dimensional drawing	h h
Pitch	5 mm
Width [w]	6 mm
Height [h]	17.6 mm
Length [I]	14.1 mm
Installed height	13 mm
Solder pin length [P]	3.5 mm
Pin dimensions	0.7 x 0.7 mm
PCB design	
Pin spacing	5.08 mm
Hole diameter	1.1 mm

### Electrical tests

Air clearances and creepage distances |



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Insulating material group	I
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 packaging	packed in cardboard



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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				
	250 V	10 A	26 - 12	-
Use group D				
	300 V	10 A	26 - 12	-



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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
UNSPSC		

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%



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#### Accessories

SZF 1-0,6X3,5 - Screwdriver

1204517

https://www.phoenixcontact.com/us/products/1204517



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size:  $0.6 \times 3.5 \times 100$  mm, 2-component grip, with non-slip grip

### SK 5/3,8:FORTL.ZAHLEN - Marker card

0804183

https://www.phoenixcontact.com/us/products/0804183



Marker card, white, labeled, horizontal: consecutive numbers 1  $\dots$  10, 11  $\dots$  20, etc. up to 91  $\dots$  (99)100, mounting type: adhesive, for terminal block width: 5 mm, lettering field size: 5 x 3.8 mm



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### CRIMPFOX 6 - Crimping pliers

1212034

https://www.phoenixcontact.com/us/products/1212034



Crimping pliers, for ferrules without insulating collar according to DIN 46228 Part 1 and ferrules with insulating collar according to DIN 46228 Part 4, 0.25 mm<sup>2</sup> ... 6.0 mm<sup>2</sup>, lateral entry, trapezoidal crimp

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