

# FRONT 2,5-V/SA10/16 BK - 1810599

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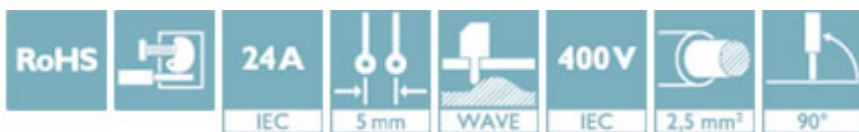


PCB terminal block, nominal current: 24 A, nom. voltage: 400 V, pitch: 5 mm, number of positions: 16, connection method: Front screw connection, mounting: Wave soldering, conductor/PCB connection direction: 90 °, color: black

The figure shows a 1-pos. version of the product

## Your advantages

- ✓ Well-known connection principle allows worldwide use
- ✓ Low temperature rise, thanks to maximum contact force
- ✓ Allows connection of two conductors
- ✓ Operation and conductor connection from one direction enable integration into front of device
- ✓ Two solder pins reduce the mechanical strain on the soldering spots
- ✓ The latching on the side enables various numbers of positions to be combined



## Key Commercial Data

Packing unit	10 pc
GTIN	
GTIN	4046356727204

## Technical data

### Item properties

Brief article description	PCB terminal block
Range of articles	FRONT 2,5-V/SA10
Pitch	5 mm
Number of positions	16
Connection method	Front screw connection
Screw thread	M2,5
Mounting type	Wave soldering
Pin layout	Linear double pinning
Number of levels	1

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## Technical data

### Electrical parameters

Rated current	24 A
Rated insulation voltage (III/2)	400 V
Rated surge voltage (III/2)	4 kV

### Connection capacity

Conductor cross section solid	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section AWG / kcmil	24 ... 14
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
2 conductors with same cross section, solid	0.2 mm <sup>2</sup> ... 0.75 mm <sup>2</sup>
2 conductors with same cross section, flexible	0.2 mm <sup>2</sup> ... 0.75 mm <sup>2</sup>
2 conductors with same cross section, stranded, ferrules without plastic sleeve	0.25 mm <sup>2</sup> ... 0.34 mm <sup>2</sup>
Stripping length	9 mm
Torque	0.4 Nm ... 0.5 Nm

### 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 (4 - 8 µm Sn)
Metal surface soldering area (top layer)	Tin (4 - 8 µm Sn)

### Material data - housing

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

### Dimensions for the product

Length [ l ]	18.5 mm
Height [ h ]	31 mm
Pitch	5 mm
Height (without solder pin)	20 mm
Solder pin [P]	3.5 mm
Pin spacing	10 mm
Pin dimensions	0.8 x 0.8 mm
Dimension a	75 mm

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## Technical data

### Dimensions for PCB design

Hole diameter	1.2 mm
Pin spacing	10 mm

### Packaging information

Type of packaging	packed in cardboard
Pieces per package	10
Denomination packing units	Pcs.

### Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 70 °C
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-40 °C

### Termination and connection method

Test for conductor damage and slackening	IEC 60999-1:1999-11
	Test passed

### Pull-out test

Pull-out test	IEC 60999-1:1999-11
	Test passed
Conductor cross section / conductor type / tensile force	0.2 mm <sup>2</sup> / solid / > 10 N
	0.2 mm <sup>2</sup> / flexible / > 10 N
	2.5 mm <sup>2</sup> / flexible / > 50 N
	2.5 mm <sup>2</sup> / solid / > 50 N

### Mechanical tests according to standard

Test specification	IEC 60947-7-4
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### Electrical tests

Rated current	24 A
Rated insulation voltage (III/2)	400 V
Rated surge voltage (III/2)	4 kV

### Air clearances and creepage distances

Insulating material group	I
Voltage	250 V
Rated insulation voltage (III/3)	250 V
Rated insulation voltage (III/2)	400 V
Rated insulation voltage (II/2)	630 V
Rated surge voltage (III/3)	4 kV
Rated surge voltage (III/2)	4 kV
Rated surge voltage (II/2)	4 kV

### Current carrying capacity / derating curves

Specification	IEC 60947-7-4
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## Technical data

### Standards and Regulations

Connection in acc. with standard	EN-VDE
	CSA

### Environmental Product Compliance

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

## Approvals


### Approvals


#### Approvals


CSA / EAC / cULus Recognized

#### Ex Approvals

### Approval details

CSA		<a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>	13631
	D	B	
Nominal voltage UN	300 V	300 V	
Nominal current IN	10 A	10 A	
mm <sup>2</sup> /AWG/kcmil	24-12	24-12	

EAC		B.01742
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cULus Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	E60425-19860303
	D	B	C
Nominal voltage UN	300 V	300 V	300 V
Nominal current IN	10 A	10 A	17 A
mm <sup>2</sup> /AWG/kcmil	30-12	30-12	30-12

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PHOENIX CONTACT GmbH & Co. KG  
Flachmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>

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