PCB terminal block - SPT 16/ 6-V-10,0-ZB - 1735914

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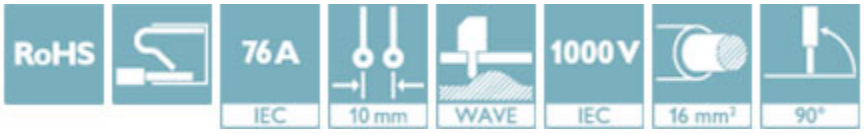
The figure shows a 5-position version

PCB terminal block, nominal current: 76 A, rated voltage (III/2): 1000 V, nominal cross section: 16 mm², pitch: 10 mm, number of positions: 6, connection method: Push-in spring connection, mounting: Wave soldering, conductor/PCB connection direction: 90 °, color: green, Pin layout: Zigzag pinning W, Solder pin [P]: 4.1 mm

Your advantages

- Time saving push-in connection, tools not required
- Defined contact force ensures that contact remains stable over the long term
- Clamping space opened by means of fixed screwdriver enables convenient conductor connection
- Unrestricted 600-V-UL approval thanks to compact zig-zag pinning
- Vertical connection enables multi-row arrangement on the PCB



Key Commercial Data

Packing unit	1 pc
Minimum order quantity	50 pc
GTIN	4 046356 179553
GTIN	4046356179553
Weight per Piece (excluding packing)	22.220 g
Custom tariff number	85369010
Country of origin	Bulgaria

Technical data

Item properties

Brief article description	PCB terminal block
Range of articles	SPT 16/..-V
Pitch	10 mm

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Technical data

Item properties

Number of positions	6
Connection method	Push-in spring connection
Mounting type	Wave soldering
Pin layout	Zigzag pinning W
Number of levels	1
Number of connections	6
Number of potentials	6

Electrical parameters

Nominal current	76 A
Nom. voltage	1000 V
Rated voltage	1000 V
Rated voltage (III/2)	1000 V
Rated voltage (II/2)	1000 V
Rated surge voltage (III/3)	8 kV
Rated surge voltage (III/2)	8 kV
Rated surge voltage (II/2)	6 kV

Connection capacity

Connection method	Push-in spring connection
pluggable	no
Conductor cross section solid	0.75 mm² ... 16 mm²
Conductor cross section flexible	0.75 mm² ... 16 mm²
Conductor cross section AWG / kcmil	20 ... 4
Conductor cross section flexible, with ferrule without plastic sleeve	0.75 mm² ... 16 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.75 mm² ... 10 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.75 mm² ... 4 mm²
Stripping length	18 mm

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

Housing color	green (6021)

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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]	24.7 mm
Width [w]	61.8 mm
Height [h]	35.4 mm
Pitch	10 mm
Height (without solder pin)	31.3 mm
Solder pin [P]	4.1 mm
Pin spacing	15 mm
Pin dimensions	1.2 x 1 mm

Dimensions for PCB design

Hole diameter	1.7 mm
Pin spacing	15 mm

Packaging information

Type of packaging	packed in cardboard
Pieces per package	50
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 ... 100 °C (Depending on the current carrying capacity/derating curve)

Termination and connection method

Connection test	IEC 60998-2-2:2002-12
Test result	Test passed
Test for conductor damage and slackening	IEC 60998-2-2:2002-12
	Test passed

Pull-out test

Pull-out test	IEC 60998-2-2:2002-12

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Pull-out test

	Test passed
Conductor cross section / conductor type / tensile force	0.75 mm² / solid / > 30 N
	0.75 mm² / flexible / > 30 N
	16 mm² / solid / > 100 N
	16 mm² / flexible / > 100 N

Mechanical tests according to standard

Test specification	IEC 60998-2-2 (in parts)

Electrical tests

Rated current	76 A
Conductor cross section	16 mm²
Rated voltage (III/2)	1000 V
Rated surge voltage (III/2)	8 kV

Air clearances and creepage distances

Clearances and creepage distances	IEC 60664-1:2007-04
Specification	IEC 60664-1:2007-04
Minimum clearance - inhomogeneous field (III/3)	8 mm
Minimum clearance - inhomogeneous field (III/2)	8 mm
Minimum clearance - inhomogeneous field (II/2)	5.5 mm
Minimum creepage distance value (III/3)	12.5 mm
Minimum creepage distance value (III/2)	8 mm
Minimum creepage distance value (II/2)	5.5 mm

Temperature-rise test

Result	Test passed
Specification	IEC 60998-2-1:2002-12

Current carrying capacity / derating curves

Specification	IEC 60998-2-2 (in parts)

Vibration test

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

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Technical data

Resistance to ageing, humidity and penetration of solids

Dry heat	168 h/100°C
Humid heat	48 h/30 °C/92 %

Standards and Regulations

Connection in acc. with standard	EN-VDE
	CUL
Flammability rating according to UL 94	V0

Environmental Product Compliance

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

Drawings

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Drilling diagram

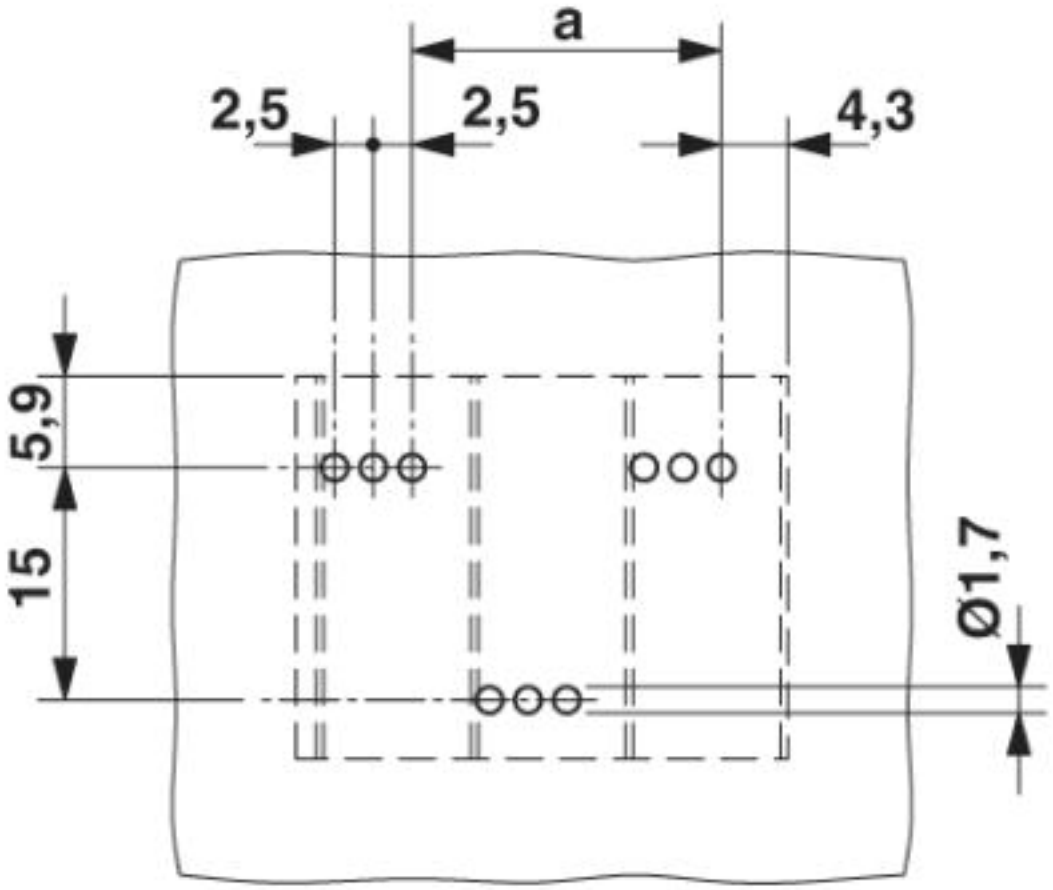

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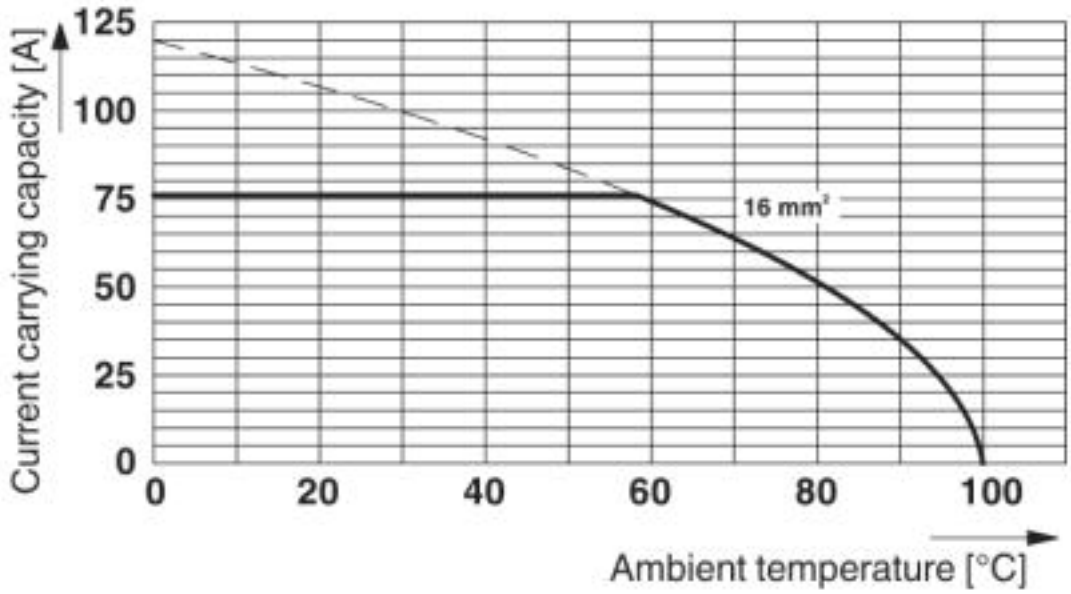
Diagram



Type: SPT 16/...-V-10,0-ZB
Test based on DIN EN 60512-5-2:2003-01
Reduction factor = 1
Number of positions: 5

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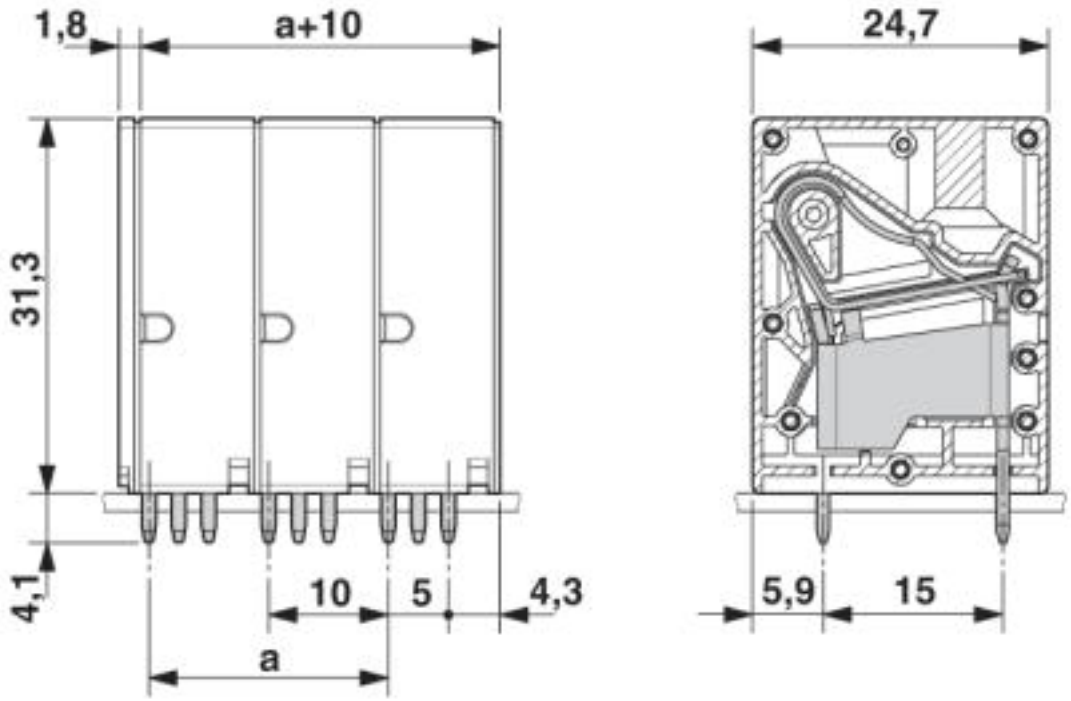
Dimensional drawing



Classifications

eCl@ss

eCl@ss 10.0.1	27440401
eCl@ss 4.0	27141100
eCl@ss 4.1	27141100
eCl@ss 5.0	27141100
eCl@ss 5.1	27261100
eCl@ss 6.0	27261100
eCl@ss 7.0	27440401
eCl@ss 8.0	27440401
eCl@ss 9.0	27440401

ETIM

ETIM 3.0	EC001121
ETIM 4.0	EC002643
ETIM 5.0	EC002643
ETIM 6.0	EC002643
ETIM 7.0	EC002643

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Classifications

UNSPSC

UNSPSC 6.01	30211801
UNSPSC 7.0901	39121432
UNSPSC 11	39121432
UNSPSC 12.01	39121432
UNSPSC 13.2	39121432
UNSPSC 18.0	39121432
UNSPSC 19.0	39121432
UNSPSC 20.0	39121432
UNSPSC 21.0	39121432

Approvals

Approvals

Approvals

EAC / SEV / SEV / cULus Recognized / IECEE CB Scheme / IECEE CB Scheme

Ex Approvals

Approval details

EAC		B.01687

SEV		https://www.eurofins.ch/de/	IK-3431

Nominal voltage UN	1000 V
Nominal current IN	76 A
mm²/AWG/kcmil	16

SEV		https://www.eurofins.ch/de/	IK-4498

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Approvals

cULus Recognized	c UL us	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-20061129

	B	C
Nominal voltage UN	600 V	600 V
Nominal current IN	66 A	66 A
mm²/AWG/kcmil	20-4	20-4

IECEE CB Scheme	CB scheme	http://www.iecee.org/	CH-8077

Nominal voltage UN	1000 V
Nominal current IN	76 A

IECEE CB Scheme	CB scheme	http://www.iecee.org/	CH-10802

Accessories

Accessories

Crimping tool

Crimping pliers - CRIMPFOX 6 - 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 mm² ... 6.0 mm², lateral entry, trapezoidal crimp

Crimping pliers - CRIMPFOX 16 S - 1207983

Crimping pliers for ferrules up to 16 mm²

Screwdriver tools

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Accessories

Screwdriver - SZF 2-0,8X4,0 - 1204520

Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.8 x 4.0 x 100 mm, 2-component grip, with non-slip grip

Terminal marking

Marker strip - SK 5,0 WH:REEL - 0805221

Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 5 mm, lettering field size: continuous x 5 mm, Number of individual labels: 90000