PCB terminal block - SPTAF 1/ 8-3,5-IL - 1861991

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The figure shows a 10-position version of the product

PCB terminal block, nominal current: 16 A, rated voltage (III/2): 160 V, Nominal cross section: 1.5 mm², pitch: 3.5 mm, number of positions: 8, connection method: Push-in spring connection, mounting: Wave soldering, conductor/PCB connection direction: 45 °, color: green, Pin layout: Linear double pinning, Solder pin [P]: 2.6 mm

Your advantages

- Time saving push-in connection, tools not required
- Defined contact force ensures that contact remains stable over the long term
- Intuitive use through colour coded actuation lever
- Small component size for applications where space is at a premium
- Quick and convenient testing using integrated test option



Key Commercial Data

Packing unit	55 pc
Minimum order quantity	55 pc
GTIN	4 055626 135038
GTIN	4055626135038

Technical data

Item properties

Brief article description	PCB terminal block
Range of articles	SPTAF 1/..-IL
Pitch	3.5 mm
Number of positions	8
Connection method	Push-in spring connection
Mounting type	Wave soldering
Pin layout	Linear double pinning
Number of levels	1
Number of connections	8

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Technical data

Item properties

Number of potentials	8

Electrical parameters

Nom. voltage	160 V

Connection capacity

Connection method	Push-in spring connection
Conductor cross section solid	0.2 mm² ... 1.5 mm² (When connecting and possibly adjusting a solid conductor of 1.5 mm², the mechanical lateral forces, which can affect the terminal block, have to be absorbed by lateral support.)
Conductor cross section flexible	0.2 mm² ... 1.5 mm²
Conductor cross section AWG / kcmil	24 ... 16
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² ... 0.75 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² ... 0.75 mm²
Stripping length	8 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 (2 - 4 µm Sn)
Metal surface soldering area (top layer)	Tin (2 - 4 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

Dimensions for the product

Length [l]	11 mm
Width [w]	29.5 mm
Height [h]	10.6 mm
Pitch	3.5 mm
Height (without solder pin)	8 mm
Solder pin [P]	2.6 mm
Pin spacing	5 mm
Pin dimensions	0.75 x 0.3 mm
Dimension a	24.5 mm

Dimensions for PCB design

Hole diameter	1.1 mm
Pin spacing	5 mm

Packaging information

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Packaging information

Type of packaging	packed in cardboard
Pieces per package	55
Denomination packing units	Pcs.

General product information

Type of note	Note on application
Note	Maximum permissible outer diameter of the wire insulation ≤ 3 mm

Processing notes

Process	Wave soldering
Specification	Following IEC 61760-1:2006-04
	Following IEC 60068-2-54:2006-04

Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 70 °C
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-40 °C ... 100 °C (dependent on the derating curve)

Termination and connection method

Test – repeated connection and release	IEC 60999-1:1999-11
	Test passed
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 mm² / solid / > 10 N
	0.25 mm² / flexible / > 10 N
	1.5 mm² / solid / > 40 N
	1.5 mm² / flexible / > 40 N

Electrical tests

Rated current	16 A
Conductor cross section	1.5 mm²
Rated voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV

Air clearances and creepage distances

Clearances and creepage distances	IEC 60947-1:2007-06 + A1:2010-12
Specification	IEC 60947-1:2007-06 + A1:2010-12
Rated insulation voltage (III/3)	160 V
Rated insulation voltage (III/2)	160 V
Rated insulation voltage (II/2)	320 V
Rated surge voltage (III/3)	2.5 kV

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Air clearances and creepage distances

Rated surge voltage (III/2)	2.5 kV
Rated surge voltage (II/2)	2.5 kV
Minimum clearance - inhomogeneous field (III/3)	1.5 mm
Minimum clearance - inhomogeneous field (III/2)	1.5 mm
Minimum clearance - inhomogeneous field (II/2)	1.5 mm
Minimum creepage distance value (III/3)	2 mm
Minimum creepage distance value (III/2)	0.8 mm
Minimum creepage distance value (II/2)	1.6 mm

Vibration test

Specification	IEC 60068-2-6:2007-12
Result	Test passed
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 - 60.1 Hz)
Test duration per axis	2.5 h

Standards and Regulations

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

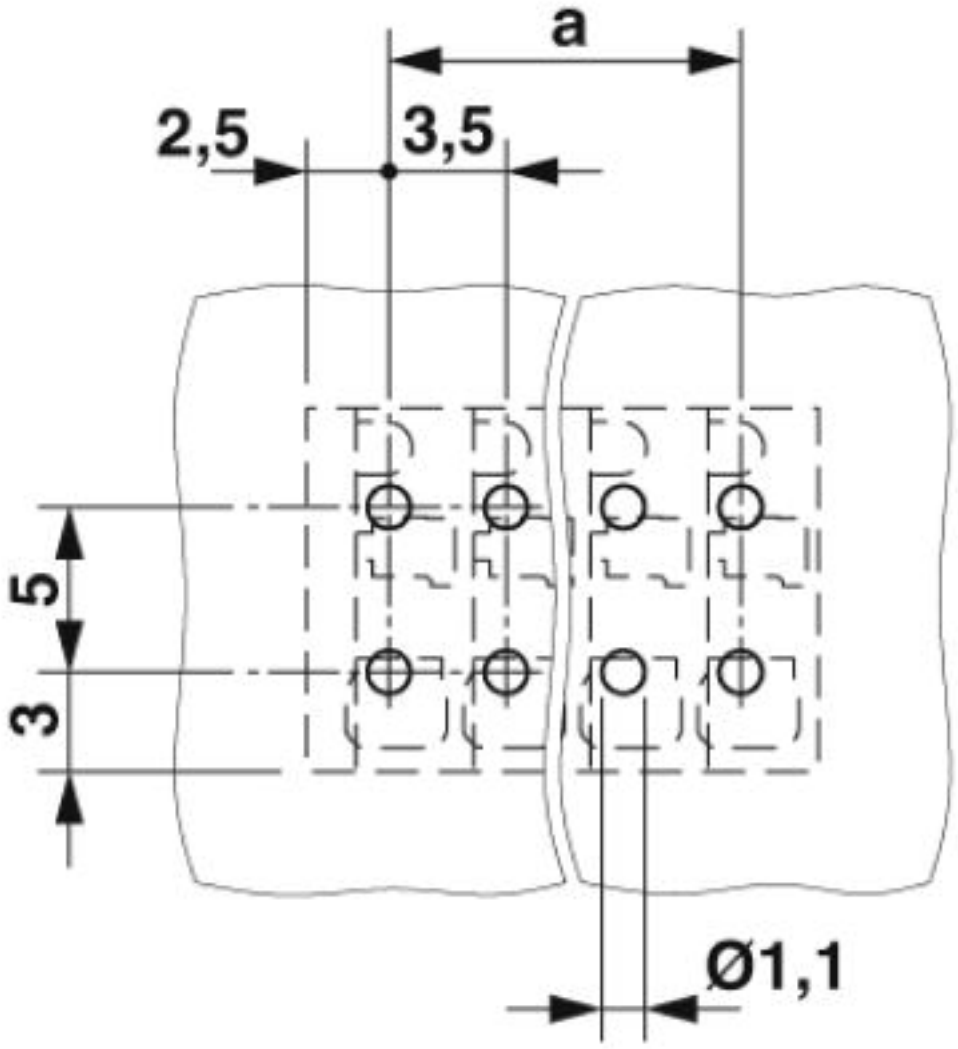
Environmental Product Compliance

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

Drawings

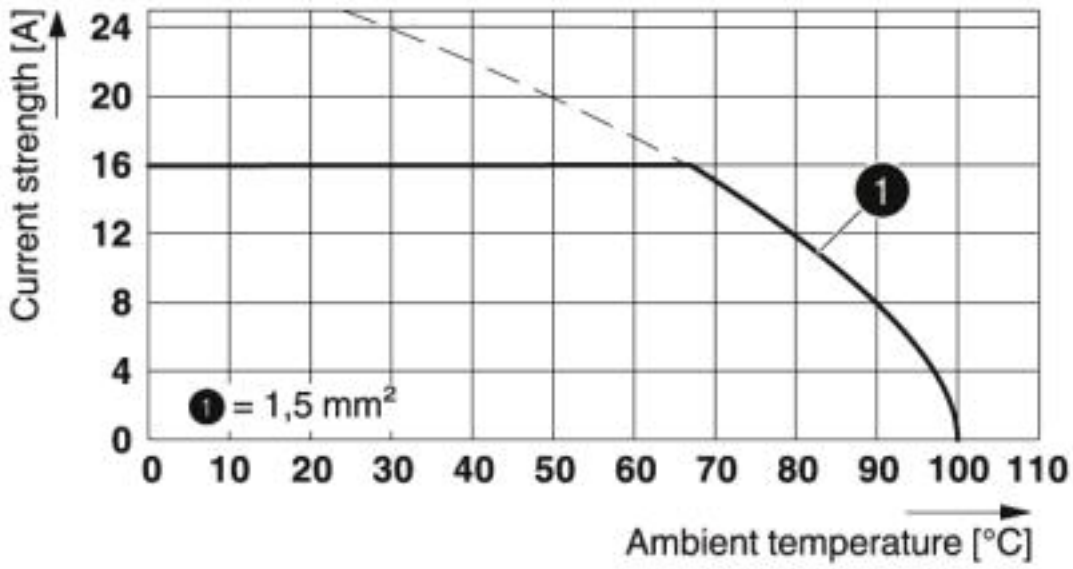
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Drilling diagram



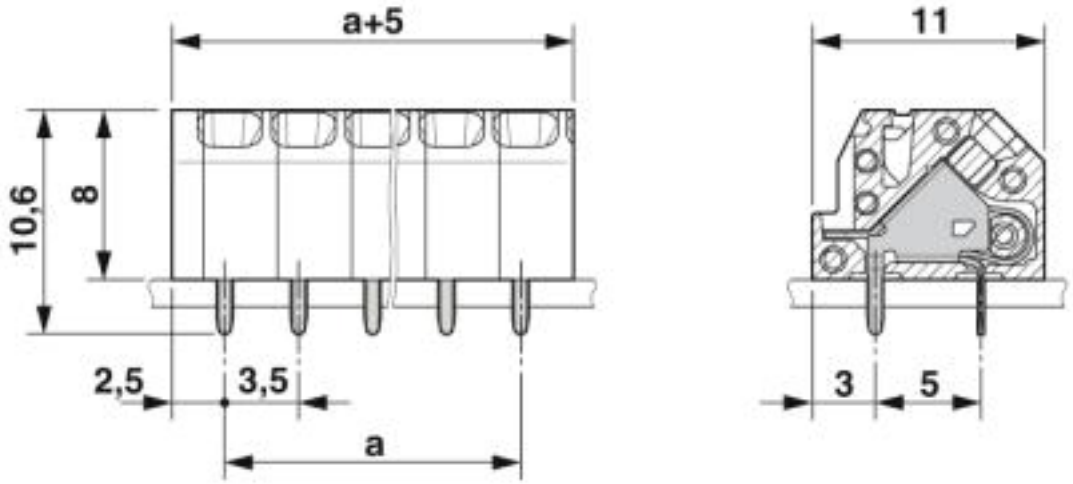
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Diagram



Type: SPTAF 1/...-3,5-IL(EL)

Dimensional drawing



Approvals

Approvals

Approvals

IECEE CB Scheme / VDE Zeichengenehmigung / cULus Recognized

Ex Approvals

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Approvals

Approval details

IECEE CB Scheme		http://www.iecee.org/	DE1-61914

Nominal voltage UN	160 V
Nominal current IN	16 A
mm²/AWG/kcmil	0.2-1.5

VDE Zeichengenehmigung		http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx	40047107

Nominal voltage UN	160 V
Nominal current IN	16 A
mm²/AWG/kcmil	0.2-1.5

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

	B	D
Nominal voltage UN	300 V	300 V
Nominal current IN	8 A	8 A
mm²/AWG/kcmil	24-16	24-16

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