SPTAF 1/ 6-5,0-EL-EX - PCB terminal block

1071050

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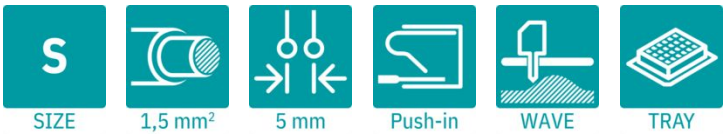
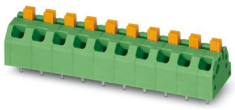




The figure shows 10-pos. standard item (without EX marking)

PCB terminal block, nominal current: 16 A, nominal cross section: 1.5 mm^2, number of rows: 1, number of positions per row: 6, product range: SPTAF 1/..-EL-EX, pitch: 5 mm, connection method: Push-in spring connection, mounting: Wave soldering, conductor/PCB connection direction: 45 °, color: green, Pin layout: Linear pinning, Solder pin [P]: 2.6 mm, number of solder pins per potential: 2, type of packaging: Tray

Your advantages

- Time saving push-in connection, tools not required
- Defined contact force ensures that contact remains stable over the long term
- Finger-operated release button for very convenient operation
- Small component size for applications where space is at a premium
- Satisfies the more stringent safety requirements of “Ex eb” protection according to IEC 60079-7 for potentially explosive areas
- Quick and convenient testing using integrated test option

Commercial data

Item number	1071050
Packing unit	50 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Sales key	AA12
Product key	AALBGB
GTIN	4063151100926
Weight per piece (including packing)	4.276 g
Weight per piece (excluding packing)	4.09 g
Customs tariff number	85369010
Country of origin	PL

Technical data

Product properties

Product type	PCB terminal block
Product family	SPTAF 1/..-EL-EX
Product line	COMBICON Terminals S
Number of positions	6
Pitch	5 mm
Number of rows	1
Pin layout	Linear pinning
Solder pins per potential	2

Electrical properties

Properties

Nominal current I_N	16 A
Nominal voltage U_N	137 V

Ex data

Ex approval

Identification	0344 Ex II 2G Ex eb IIC T6...T1 Gb
EU-type examination certificate	SEV 19 ATEX 0159 U
IECEx certificate	IECEx SEV 19.0026U

Connection data

Connection technology

Nominal cross section	1.5 mm²

Conductor connection

Connection method	Push-in spring connection
Conductor cross-section rigid	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.)
	0.34 mm² ... 1.5 mm² (Push-in connection)
Conductor cross-section flexible	0.2 mm² ... 1.5 mm²
Conductor cross-section AWG	24 ... 16
Conductor cross-section, flexible, with ferrule, without plastic sleeve	0.25 mm² ... 0.75 mm² (Conductor connection with open terminal point)
	0.5 mm² ... 0.75 mm² (Push-in connection)
Conductor cross-section, flexible, with ferrule, with plastic sleeve	0.25 mm² ... 0.75 mm² (Conductor connection with open terminal point)
	0.5 mm² ... 0.75 mm² (Push-in connection)
Stripping length	8 mm

Mounting

Mounting type	Wave soldering
Pin layout	Linear pinning

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 (2 µm - 4 µm Sn)
Metal surface soldering area (top layer)	Tin (2 µm - 4 µm Sn)

Material data - housing

Color (Housing)	green (6021)
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

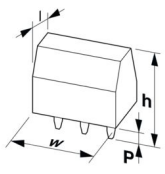
Material data – actuating element

Color (Actuating element)	orange (2003)
Insulating material	PBT
Insulating material group	IIIa
CTI according to IEC 60112	275
Flammability rating according to UL 94	V0

Notes

Note on application	Maximum permissible outer diameter of the wire insulation ≤ 3 mm
Note on Ex protection	Certificate of conformity and EX certificate available upon request
Note on Ex protection	Further information is to be found in the installation notes.

Dimensions

Dimensional drawing	

Pitch	5 mm
Width [w]	30 mm
Height [h]	12.8 mm
Length [l]	11 mm
Installed height	10.2 mm
Solder pin length [P]	2.6 mm
Pin dimensions	0.75 x 0.3 mm

PCB design

Hole diameter	1.1 mm

Mechanical tests

Test for conductor damage and slackening

Specification	IEC 60999-1:1999-11
Result	Test passed

Repeated connection and disconnection

Specification	IEC 60999-1:1999-11
Result	Test passed

Pull-out test

Specification	IEC 60999-1:1999-11
Conductor cross-section/conductor type/tractive force setpoint/actual value	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

Temperature-rise test

Specification	IEC 60947-7-4:2013-08
Requirement temperature-rise test	The sum of ambient temperature and temperature rise of the PCB terminal block shall not exceed the upper limiting temperature.

Short-time withstand current

Specification	IEC 60947-7-4:2013-08

Insulation resistance

Specification	IEC 60512-3-1:2002-02
Insulation resistance, neighboring positions	> 5 MΩ

Environmental and real-life conditions

Vibration test

Specification	IEC 60068-2-6:2007-12
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min

Amplitude	0.35 mm (10 Hz ... 60.1 Hz)
Acceleration	5g (60.1 Hz ... 150 Hz)
Test duration per axis	2.5 h
Test directions	X-, Y- and Z-axis

Glow-wire test

Specification	IEC 60695-2-10:2013-04
Temperature	850 °C
Time of exposure	5 s

Aging

Specification	IEC 60947-7-4:2013-08

Ambient conditions

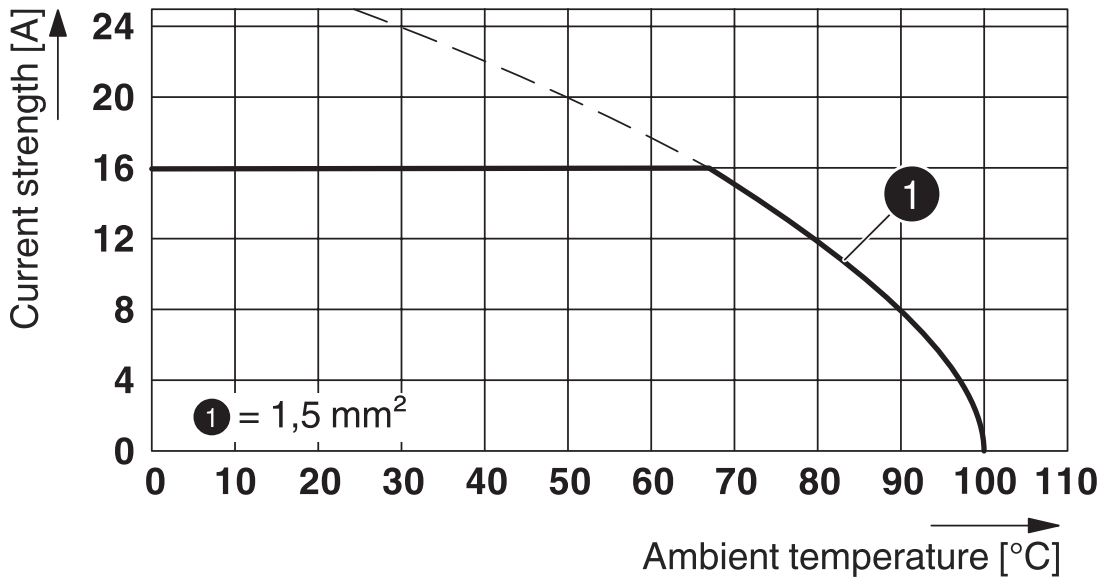
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-60 °C ... 100 °C

Packaging specifications

Type of packaging	Tray

Drawings

Diagram



Type: SPTAF 1/...-5,0-IL(EL)

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1071050

IECEx
Approval ID: IECEx SEV 19.0026U

ATEX
Approval ID: SEV 19 ATEX 0159 U

Classifications

ECLASS

ECLASS-13.0	27460101
ECLASS-15.0	27460101

ETIM

ETIM 10.0	EC002643

UNSPSC

UNSPSC 21.0	39121400

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%

EF3.1 Climate Change

CO2e kg	0.053 kg CO2e

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