SPT 35/ 1-H-15,00 - PCB terminal block

1587109

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PCB terminal block, nominal current: 125 A, rated voltage (III/2): 1000 V, nominal cross section: 35 mm^2, number of potentials: 1, number of rows: 1, number of positions per row: 1, product range: SPT 35/..-H, pitch: 15 mm, connection method: Push-in spring connection, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: green, Pin layout: Linear pinning, Solder pin [P]: 5.9 mm, type of packaging: packed in cardboard

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
- The horizontal conductor connection enables integration into the device front

Commercial data

Item number	1587109
Packing unit	20 pc
Minimum order quantity	20 pc
Note	Made to order (non-returnable)
Sales key	AA15
Product key	AAOBDB
GTIN	4067923140974
Weight per piece (including packing)	25.95 g
Weight per piece (excluding packing)	23 g
Customs tariff number	85369010
Country of origin	CN

Technical data

Product properties

Product type	PCB terminal block
Product family	SPT 35/..-H
Product line	COMBICON Terminals XL
Number of positions	1
Pitch	15 mm
Number of connections	1
Number of rows	1
Number of potentials	1
Pin layout	Linear pinning

Electrical properties

Properties

Nominal current I_N	125 A
Nominal voltage U_N	1000 V
Rated voltage (III/3)	1000 V
Rated surge voltage (III/3)	8 kV
Rated voltage (III/2)	1000 V
Rated surge voltage (III/2)	8 kV
Rated voltage (II/2)	1000 V
Rated surge voltage (II/2)	6 kV

Connection data

Connection technology

Nominal cross section	35 mm²

Conductor connection

Connection method	Push-in spring connection
Conductor cross-section rigid	1.5 mm² ... 16 mm² (Conductor connection with open terminal point)
	4 mm² ... 35 mm² (Push-in connection)
Single-conductor/terminal point multi-stranded	1.5 mm² ... 35 mm²
Conductor cross-section flexible	2.5 mm² ... 35 mm²
Conductor cross-section, flexible, with ferrule, without plastic sleeve	1.5 mm² ... 35 mm²
Conductor cross-section, flexible, with ferrule, with plastic sleeve	1.5 mm² ... 35 mm²
Stripping length	25 mm

Conductor connection

Connection method	Push-in spring connection
Stripping length	25 mm

Mounting

Mounting type	Wave soldering
Pin layout	Linear pinning

Material specifications

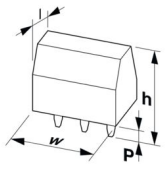
Material data - contact

Note	WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/JEDEC JESD 201
Contact material	Cu alloy
Surface characteristics	Tin-plated
Metal surface terminal point (top layer)	Tin (10 µm - 16 µm Sn)
Metal surface soldering area (top layer)	Tin (10 µm - 16 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

Dimensions

Dimensional drawing	
Pitch	15 mm
Width [w]	17.75 mm
Height [h]	42.5 mm
Length [l]	35.6 mm
Installed height	36.6 mm
Solder pin length [P]	5.9 mm

PCB design

Pin spacing	16 mm
Hole diameter	2.2 mm

Mechanical tests

Test for conductor damage and slackening

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	1.5 mm² / solid / > 40 N
	2.5 mm² / flexible / > 50 N
	35 mm² / stranded / > 190 N
	35 mm² / flexible / > 190 N
	4 mm² / solid / > 60 N

Electrical tests

Temperature-rise test

Specification	IEC 60947-7-4:2019-01
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 60947-7-4:2019-01

Insulation resistance

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

Air clearances and creepage distances |

Specification	IEC 60947-7-4:2019-01
Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	1000 V
Rated surge voltage (III/3)	8 kV
minimum clearance value - non-homogenous field (III/3)	8 mm
minimum creepage distance (III/3)	12.5 mm
Rated insulation voltage (III/2)	1000 V
Rated surge voltage (III/2)	8 kV
minimum clearance value - non-homogenous field (III/2)	8 mm
minimum creepage distance (III/2)	8 mm
Rated insulation voltage (II/2)	1000 V
Rated surge voltage (II/2)	6 kV
minimum clearance value - non-homogenous field (II/2)	5.5 mm
minimum creepage distance (II/2)	5.5 mm

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	50 m/s² (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 60947-7-4:2019-01

Ambient conditions

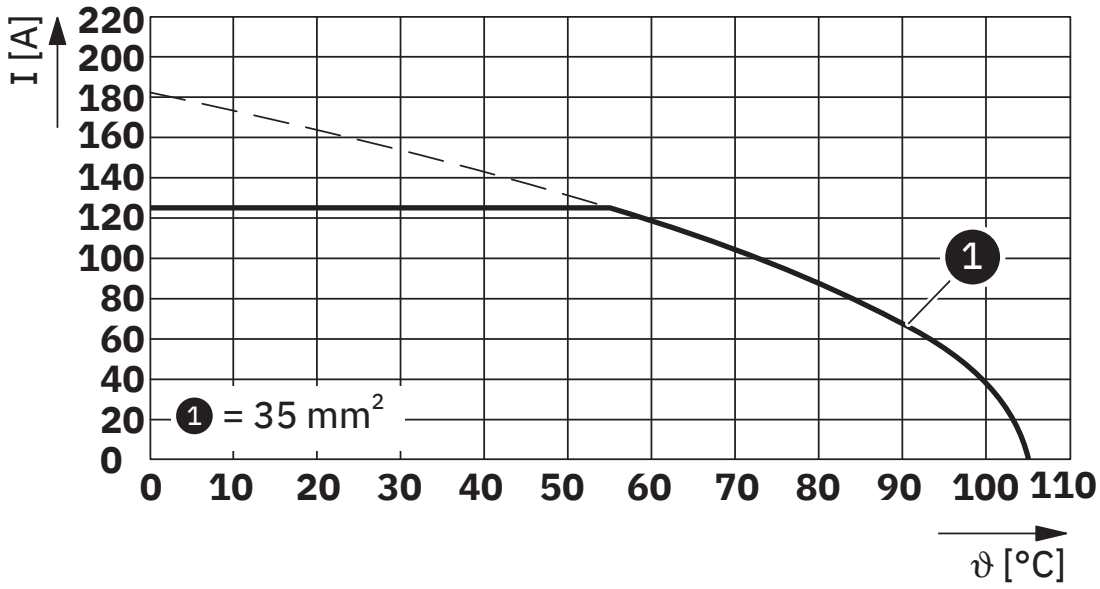
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-40 °C ... 105 °C (Depending on the current carrying capacity/derating curve)

Packaging specifications

Type of packaging	packed in cardboard
Outer packaging type	Carton

Drawings

Diagram



Type: SPT 35/...-H-15,00

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1587109

cULus Recognized
Approval ID: E60425-20061129

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B				
	600 V	101 A	14 - 2	-
C				
	600 V	101 A	14 - 2	-

VDE Zeichengenehmigung
Approval ID: 40042909

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	1000 V	125 A	-	1.5 - 35

Classifications

ECLASS

ECLASS-13.0	27460101
ECLASS-15.0	27460101

ETIM

ETIM 10.0	EC002643

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%

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com