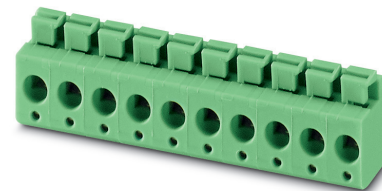


Order No.: 1792876

Type: PTS 1,5/ 3-5,0-H

PCB terminal block, Push-in spring connection



The figure shows the 10-position version

1 Main features



- | | | | |
|---------------------------|---------------------------|------------------------|---------------------|
| • No. of pos. | 3 | • Nominal current | 16 A |
| • Conductor cross section | 1.5 mm ² | • Nominal voltage | 400 V |
| • Color | green (6021) | • Connection direction | 0 ° |
| • Pitch | 5 mm | • Type of packaging | packed in cardboard |
| • Connection method | Push-in spring connection | | |

2 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
- ✓ Quick and convenient testing using integrated test option
- ✓ Largest possible clamping space in a small component size



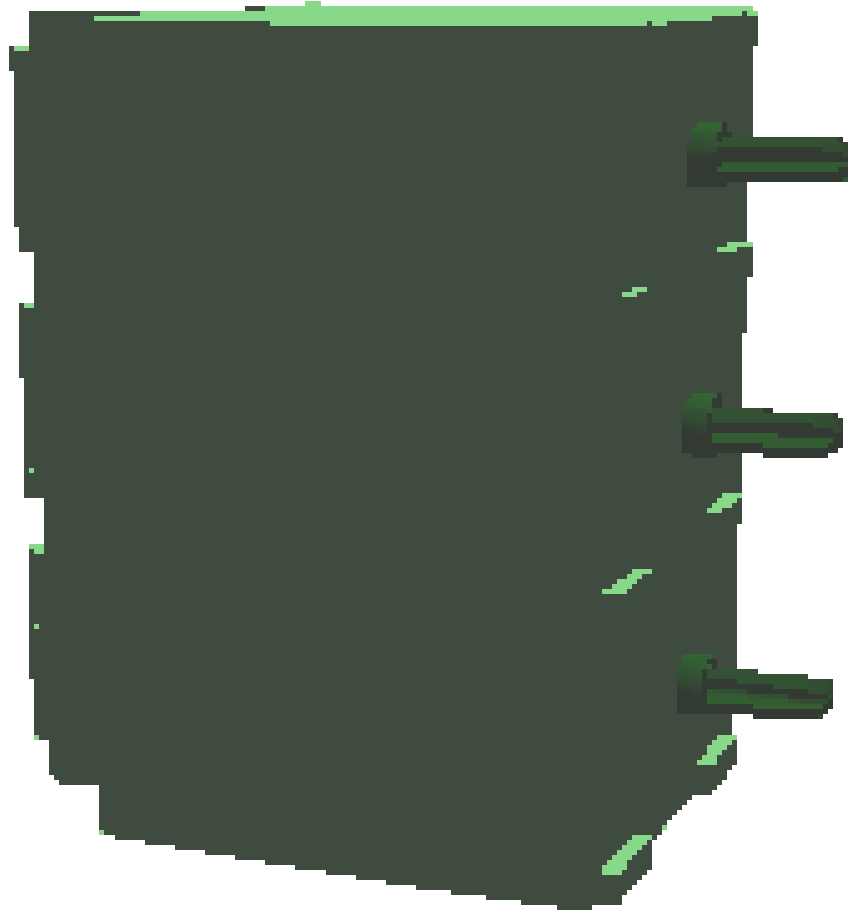
Make sure you always use the latest documentation.
It can be downloaded at: phoenixcontact.net/product/1792876

3 Table of contents

1	Main features.....	1
2	Your advantages	1
3	Table of contents	2
4	3D model in PDF can be activated (Acrobat Reader only).....	3
5	General Technical Data	4
6	Material properties.....	4
7	Dimensions.....	6
8	Series drawing.....	7
9	Application.....	8
10	Packaging information	8
11	Mechanical tests.....	9
12	Electrical tests	10
13	Current carrying capacity/derating curves	12
14	Environmental and durability tests	13
15	Approvals / Certificates.....	14
16	Commercial Data.....	15

1792876 PTS 1,5/ 3-5,0-H

4 3D model in PDF can be activated (Acrobat Reader only)



1792876 PTS 1,5/ 3-5,0-H**5 General Technical Data****5.1 item properties**

Order No.	1792876
Type	PTS 1,5/ 3-5,0-H
Product type	PCB terminal block
Range of articles	PTS 1,5/...-H
Pitch	5 mm
Number of positions	3
Number of levels	1
Number of connections	3
Number of potentials	3
Connection method	Push-in spring connection
Mounting type	Wave soldering
Connection direction of the conductor to the PCB	0 °
Pin layout	Linear pinning
Solder pins per potential	1
Type	PC termination block

5.2 Connection capacity

Conductor cross section, rigid	0.14 mm ² ... 2.5 mm ²
Conductor cross section, flexible	0.14 mm ² ... 2.5 mm ²
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm ² ... 1.5 mm ²
Conductor cross section flexible, with ferrule with plastic sleeve	0.25 mm ² ... 1.5 mm ²
Stripping length	8 mm

5.3 Connection capacity AWG

Conductor cross section AWG	26 ... 14
-----------------------------	-----------

6 Material properties**6.1 Material of metal parts**

Note	WEEE/RoHS-compliant, whisker-free acc. to IEC 60068-2-82/JEDEC JESD 201
Contact material	Cu alloy
Terminal point surface	, Tin (4 - 8 μm Sn)
Soldering area surface	, Tin (4 - 8 μm Sn)
Surface characteristics	hot-dip tin-plated

6.2 Material of plastic parts

	Housing
Color	green (6021)
Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600

1792876 PTS 1,5/ 3-5,0-H

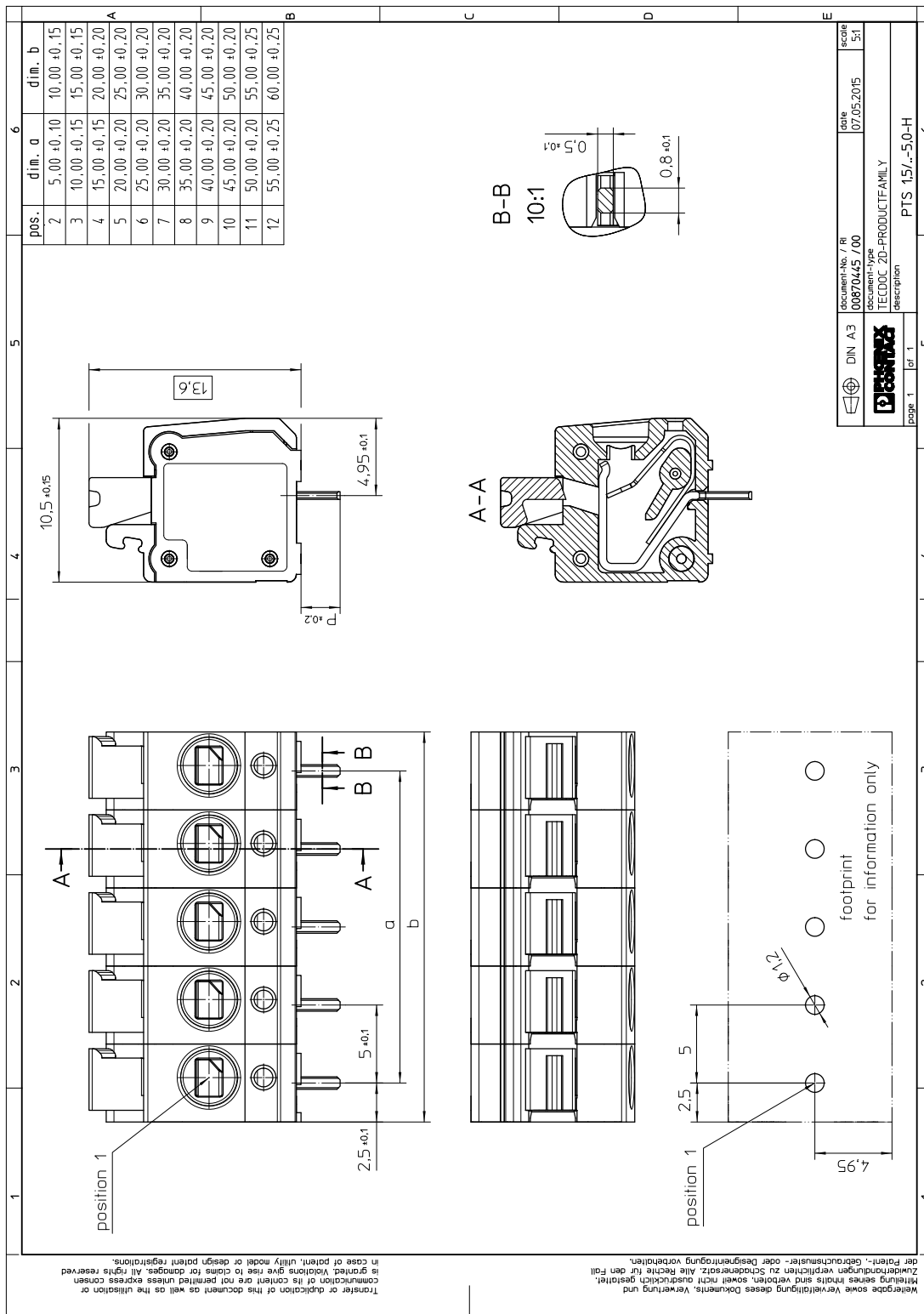
	Housing
Flammability rating according to UL 94	V0
Glow wire flammability index GWFI according to EN 60695-2-12	850
Glow wire ignition temperature GWIT according to EN 60695-2-13	775
Temperature for the ball pressure test according to EN 60695-10-2	125 °C

1792876 PTS 1,5/ 3-5,0-H**7 Dimensions****7.1 Dimensions for the product**

Length	10.5 mm
Width	15 mm
Height (without solder pin)	13.6 mm
Total height	16.1 mm
Solder pin [P]	2.5 mm

1792876 PTS 1,5/ 3-5,0-H

8 Series drawing



DIN A3	document-No. / Ri 00870445 / 00	date 07/05/2015	scale 1:5:1
TECDOC	document-type TECDOC 2D-PRODUCTFAMILY		
page 1	of 1	description PTS 1,5/-5,0-H	

Transfer or duplication of this document as well as the utilisation or communication of its content are not permitted unless express consent is granted. Violations give rise to claims for damages. All rights reserved in case of patent, utility model or design patent registrations.

Weißgabe sowie Vervielfältigung dieses Dokuments, Verwertung und Zerkleinerung sind verboten, soweit nicht ausdrücklich gestattet. Weitergabe oder Kommunikation des Inhalts ist ohne schriftliche Genehmigung der Phoenix Contact AG. Alle Rechte vorbehalten.

1792876 PTS 1,5/ 3-5,0-H**8.1 Dimensions for PCB design**

Hole diameter	1.2 mm
Pin dimensions	0.83 x 0.5 mm

9 Application**10 Packaging information**

Type of packaging	packed in cardboard
Pieces per package	250

10.1 Temperature limit values

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)

1792876 PTS 1,5/ 3-5,0-H**11 Mechanical tests****11.1 Pull-out test**

Specification	IEC 60999-1:1999-11
Result	Test passed
Conductor cross section/conductor type/tractive force actual value	0.14 mm ² / solid / > 10 N
Conductor cross section/conductor type/tractive force actual value	0.14 mm ² / flexible / > 10 N
Conductor cross section/conductor type/tractive force actual value	2.5 mm ² / solid / > 50 N
Conductor cross section/conductor type/tractive force actual value	2.5 mm ² / flexible / > 50 N

11.2 Check for damage to conductor or loosening

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

1792876 PTS 1,5/ 3-5,0-H**12 Electrical tests****12.1 Electrical data**

Rated current / conductor cross section	16 A / 1.5 mm ²
Rated insulation voltage (III/2)	400 V
Rated surge voltage (III/2)	4 kV
Contact resistance	0.75 mΩ
Degree of pollution	2

12.2 Air and creepage distances

Component	PCB terminal block		
Specification	IEC 60947-1:2007-06 + A1:2010-12 + A2:2014-09		
Mains type	unearthed mains		
Insulating material group	I		
Comparative tracking index (IEC 60112:2003-01)	CTI 600		
Rated insulation voltage	250 V	400 V	630 V
Rated surge voltage	4 kV	4 kV	4 kV
Degree of pollution	3	2	2
Overvoltage category	III	III	II
Minimum clearance case A (inhomogeneous field)	3 mm	3 mm	3 mm
Minimum value of the creepage path requirement in acc. with table	3.2 mm	3 mm	3.2 mm

12.3 Short-time withstand current test

Specification	IEC 60947-7-4:2013-08
Result	Test passed
Conductor cross section/short-time current	2.5 mm ² / 48 A

12.4 Aging test (climatic impact and corrosion testing)

Specification	IEC 60947-7-4:2013-08
Result	Test passed
Contact resistance R ₁	0.75 mΩ / 2.5 mm ²
Test sequence 1: low temperature storage	-40 °C / 2 h
Test sequence 2: heat storage	168 h/100°C
Test sequence 3: noxious gas storage (ISO 6988)	KFW 0.2 S/1 cycle
Contact resistance R ₂	0.93 mΩ / 2.5 mm ²
Rated impulse voltage at sea level Voltage waveform ≥ (1.2/50 μs)	4.8 kV
Power-frequency withstand voltage Voltage waveform ≥ (50/60 Hz)	3.1 kV

12.5 Insulation resistance

1792876 PTS 1,5/ 3-5,0-H

Specification	IEC 60512-3-1:2002-02
Result	Test passed
Insulation resistance, neighboring positions	> 2 TΩ

12.6 Mechanical connection test for the PCB terminal block

Specification	IEC 60947-7-4:2013-08
Result	Test passed

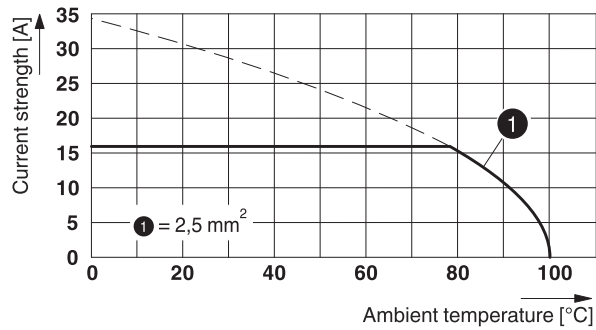
12.7 Temperature rise test

Specification	IEC 60947-7-4:2013-08
Result	Test passed
Requirement temperature-rise test	The sum of ambient temperature and temperature rise of the PCB terminal block shall not exceed the upper limiting temperature.
Conductor cross section/test current/temperature rise	2.5 mm ² / 16 A / 22.1 K

1792876 PTS 1,5/ 3-5,0-H

13 Current carrying capacity/derating curves

Specification	IEC 60947-7-4:2013-08
Note	Representation based on IEC 60512-5-2:2002-02
Reduction factor	1
Number of positions	4
Conductor cross section	1.5 mm ²

Type: PTS 1,5/ 4-5,0-H**Tested according to DIN EN 60512-5-2:2003-01****Reduction factor = 1****Number of positions: 4**

1792876 PTS 1,5/ 3-5,0-H**14 Environmental and durability tests****14.1 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)
Acceleration	5 g (60.1 - 150 Hz)
Test duration per axis	2.5 h
Test directions	X-, Y- and Z-axis
Note	The connected conductor loops were guided to the test sample at a distance of approx. 10 cm.





14.2 Assessment of fire risk (glow wire test)

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

14.3 Shock protection

Specification	IEC 60529:1989-11 + AMD 1:1999-11 + AMD 2:2013-08
Back of the hand protection (Ball ø 50)	guaranteed
Finger protection (movable test finger)	guaranteed

1792876 PTS 1,5/ 3-5,0-H**15 Approvals / Certificates**

IECEE CB Scheme 	Voltage [V]	Current [A]	Cross section [AWG]	Cross section [mm ²]
	400 V	16 A	-	0.14 - 2.5
EAC 				
VDE Zeichengenehmigung 	Voltage [V]	Current [A]	Cross section [AWG]	Cross section [mm ²]
	400 V	16 A	-	0.14 - 2.5
cULus Recognized 	Voltage [V]	Current [A]	Cross section [AWG]	Cross section [mm ²]
Usegroup B				
Factory wiring	300 V	16 A	26 - 14	-
	300 V	15 A	26 - 14	-
Usegroup D				
	300 V	10 A	26 - 14	-

1792876 PTS 1,5/ 3-5,0-H**16 Commercial Data**

Order No.	1792876
Type	PTS 1,5/ 3-5,0-H
Pieces per package	250
Net weight	2.446 g
GTIN	4046356615358
	Information that applies locally, see link on page 1
Country of origin	Information that applies locally, see link on page 1