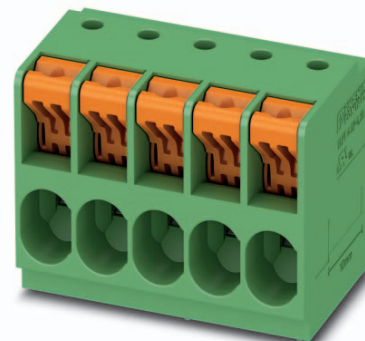


Order No.: 1017523

Type: TDPT 4/ 4-SP-6,35-ZB

PCB terminal block, Push-in spring connection



The figure shows a 5-pos. version of the product

1 Main features



- | | | | |
|---------------------------|---------------------------|------------------------|---------------------|
| • No. of pos. | 4 | • Nominal current | 41 A |
| • Conductor cross section | 4 mm ² | • Nominal voltage | 1000 V |
| • Color | green | • Connection direction | 0 ° |
| • Pitch | 6.35 mm | • Type of packaging | packed in cardboard |
| • Connection method | Push-in spring connection | | |

2 Your advantages

- ✓ Easy to adapt, thanks to their identical size and the same pinning for Push-in spring connections as for screw connections
- ✓ 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



Make sure you always use the latest documentation.
It can be downloaded at: phoenixcontact.net/product/1017523

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	item properties	4
	5.1 Connection capacity	4
	5.2 Material data	4
6	Dimensions	4
	6.1 Dimensions for the product	4
	6.2 Dimensions for PCB design	5
7	Series drawing	6
8	Packaging information	7
9	Application	7
	9.1 Temperature limit values	7
	9.2 Termination and connection method	7
	9.3 Pull-out test	7
10	Electrical tests	8
	10.1 Electrical data	8
	10.2 Short-time withstand current test	8
	10.3 Aging test (climatic impact and corrosion testing)	8
	10.4 Insulation resistance	8
	10.5 Mechanical connection test for the PCB terminal block	8
	10.6 Temperature-rise test	8
11	Current carrying capacity/derating curves	9
12	Environmental and durability tests	10
	12.1 Assessment of fire risk (glow wire test)	10
	12.2 Vibration test	10
13	Approvals	10
14	Commercial Data	11
15	Accessories	11

1017523 TDPT 4/ 4-SP-6,35-ZB

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



1017523 TDPT 4/ 4-SP-6,35-ZB**5 item properties**

Order No.	1017523
Type	TDPT 4/ 4-SP-6,35-ZB
Range of articles	TDPT 4/...-SP
Pitch	6.35 mm
Number of positions	4
Connection method	Push-in spring connection
Mounting type	Wave soldering
Pin layout	Zigzag pinning W

5.1 Connection capacity

Conductor cross section, solid	0.2 mm ² to 6 mm ²
Conductor cross section, flexible	0.2 mm ² to 6 mm ²
Conductor cross section AWG/kcmil	24 to 10
Conductor cross section flexible, with ferrule without plastic sleeve	0.2 mm ² to 4 mm ²
Conductor cross section flexible, with ferrule with plastic sleeve	0.2 mm ² to 4 mm ²
2 conductors with same cross section, stranded, with TWIN ferrules with plastic sleeve	0.5 mm ² to 1.5 mm ²
Stripping length	10 mm

5.2 Material data

Material of metal parts		
Note	WEEE/RoHS-compliant, whisker-free acc. to IEC 60068-2-82/JEDEC JESD 201	
Contact material	Cu alloy	
Surface characteristics	hot-dip tin-plated	
Insulating material data	Housing	Actuation element
Insulating material	PA	PA
CTI according to IEC 60112	600	600
Flammability rating according to UL 94	V0	V0
Color	green (6021)	
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	

6 Dimensions**6.1 Dimensions for the product**

Length	20.75 mm
Width	26.2 mm
Height (without solder pin)	23.4 mm
Total height	26.9 mm
Solder pin [P]	3.5 mm
Dimension a	19.05 mm

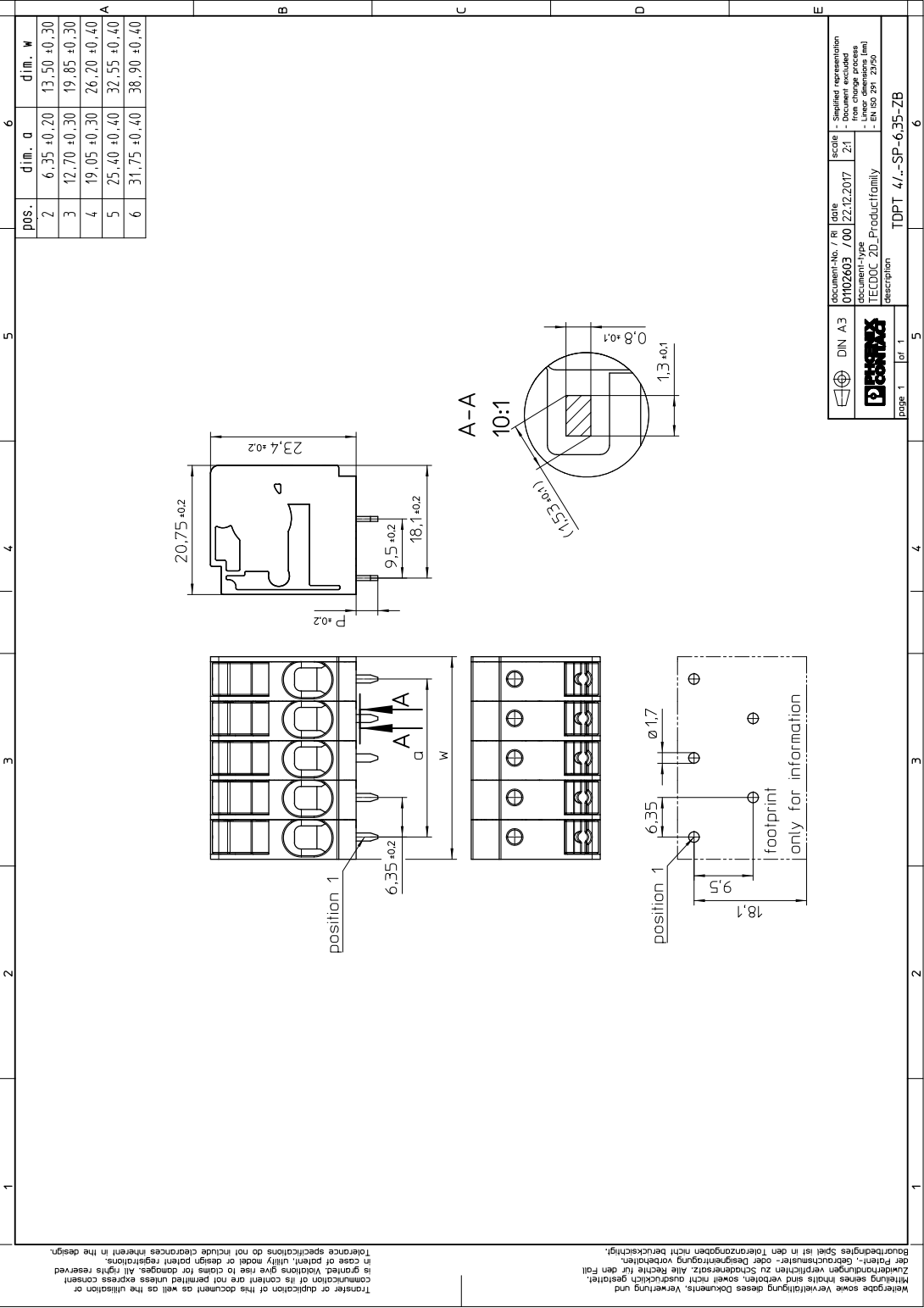
1017523 TDPT 4/ 4-SP-6,35-ZB

6.2 Dimensions for PCB design

Hole diameter

1.7 mm

7 Series drawing



1017523 TDPT 4/ 4-SP-6,35-ZB**8 Packaging information**

Type of packaging	packed in cardboard
Pieces per package	50

9 Application**9.1 Temperature limit values**

Ambient temperature (storage/transport)	-40 °C ... 70 °C
Ambient temperature (assembly)	-5 °C ... 105 °C
Ambient temperature (operation)	-40 °C (dependent on the derating curve)

9.2 Termination and connection method

Specification	IEC 60999-1:1999-11
Check for damage to conductor or loosening	Test passed

9.3 Pull-out test

Termination and connection method: pull-out test	
Specification	IEC 60999-1:1999-11
Result	Test passed
Conductor cross section/conductor type/tractive force actual value	0.2 mm ² / solid / > 10 N
Conductor cross section/conductor type/tractive force actual value	0.2 mm ² / stranded / > 10 N
Conductor cross section/conductor type/tractive force actual value	6 mm ² / solid / > 80 N
Conductor cross section/conductor type/tractive force actual value	6 mm ² / stranded / > 80 N

1017523 TDPT 4/ 4-SP-6,35-ZB**10 Electrical tests****10.1 Electrical data**

Rated current / conductor cross section	41 A / 4 mm ²
Rated insulation voltage (III/2)	1000 V
Rated surge voltage (III/2)	8 kV
Contact resistance	0.85 mΩ
Degree of pollution	2

10.2 Short-time withstand current test

Specification	IEC 60947-7-4:2013-08
Result	Test passed
Conductor cross section/short-time current	6 mm ² / 124.8 A

10.3 Aging test (climatic impact and corrosion testing)

Specification	IEC 60947-7-4:2013-08
Result	Test passed
Contact resistance R ₁	0.85 mΩ / 6 mm ²
Test sequence 1: low temperature storage	-40 °C / 2 h
Test sequence 2: heat storage	168 h/105 °C
Test sequence 3: noxious gas storage (ISO 6988)	KFW 0.2 S/1 cycle
Contact resistance R ₂	0.32 mΩ / 6 mm ²
Rated impulse voltage at sea level Voltage waveform ≥ (1.2/50 μs)	9.8 kV
Power-frequency withstand voltage Voltage waveform ≥ (50/60 Hz)	4.2 kV

10.4 Insulation resistance

Specification	IEC 60512-3-1:2002-02
Result	Test passed

10.5 Mechanical connection test for the PCB terminal block

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

10.6 Temperature-rise test

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

1017523 TDPT 4/ 4-SP-6,35-ZB**11 Current carrying capacity/derating curves**

Specification

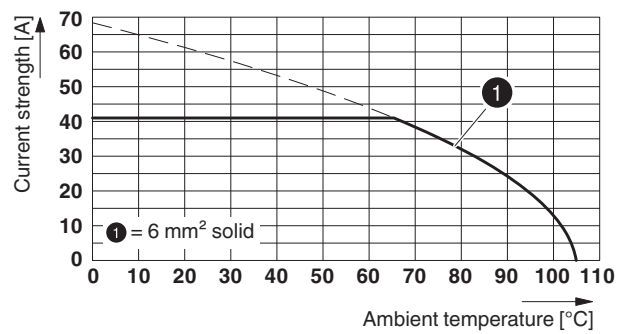
IEC 60512-5-2:2002-02

Reduction factor

1

Number of positions

4

Type: TDPT 4/...-SP-6,35-ZB

1017523 TDPT 4/ 4-SP-6,35-ZB**12 Environmental and durability tests****12.1 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		

12.2 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
Contact interruption	

Shock	
Specification	IEC 60068-2-27:2008-02
Result	Test passed
Pulse shape	Semi-sinusoidal
Peak acceleration	30g
Shock duration	18 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
Contact interruption	

Test for materials that impair paint application	
Specification	WN-CS 21-1:2010-09
Result	Test passed
Testing	Inspection for substances that impair surface wetting according to VW/AUDI test specification 3.10.7 February 2005

13 Approvals

cULus Recognized 			
Use group	B	C	D
mm ² /AWG/kcmil	24-10	24-10	24-10
Voltage	600 V	600 V	300 V
Current	30 A	30 A	10 A

cULus Recognized 			
Use group	B	C	D
mm ² /AWG/kcmil	24-10	24-10	24-10
Voltage	600 V	600 V	300 V
Current	30 A	30 A	10 A

1017523 TDPT 4/ 4-SP-6,35-ZB**14 Commercial Data**

Order No.	1017523
Type	TDPT 4/ 4-SP-6,35-ZB
Pieces per package	50
Net weight	13.91 g
GTIN	4055626501550
	Information that applies locally, see link on page 1
Country of origin	Information that applies locally, see link on page 1

15 Accessories

Description	Order No.	Type
Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 1.0 x 5.5 x 150 mm, 2-component grip, with non-slip grip	1206612	SZF 3-1,0X5,5