

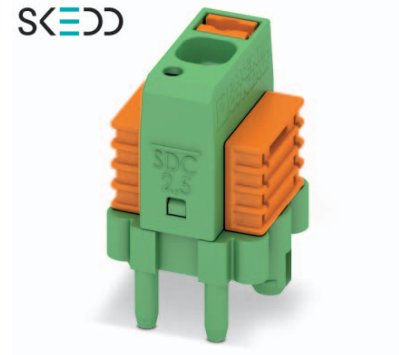
# Data sheet

Order No.: 1864024

Type: SDC 2,5/ 1-PV-5,0-ZB

Plug component, Push-in spring connection

SKEDD



## 1 Main features



- |                           |                           |                        |                     |
|---------------------------|---------------------------|------------------------|---------------------|
| • Number of positions     | 1                         | • Nominal current      | 12 A                |
| • Conductor cross section | 2.5 mm <sup>2</sup>       | • Nominal voltage      | 200 V               |
| • Color                   | green                     | • Connection direction | 0°                  |
| • Pitch                   | 5.00 mm                   | • Type of packaging    | packed in cardboard |
| • Connection method       | Push-in spring connection |                        |                     |

## 2 Your advantages

- ✓ SKEDD direct plug-in technology enables flexible positioning on the PCB
- ✓ Reduced component and process costs: simple insertion by hand and vibration-resistant connection
- ✓ Time saving push-in connection, tools not required
- ✓ Intuitive use through colour coded actuation lever
- ✓ Quick and convenient testing using integrated test option



Make sure you always use the latest documentation.

It can be downloaded at: [phoenixcontact.net/product/1864024](http://phoenixcontact.net/product/1864024)

**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
	5.3 Dimensions .....	4
6	Series drawing.....	5
7	Packaging information .....	6
8	Application.....	6
	8.1 Temperature limit values .....	6
9	Mechanical tests.....	7
	9.1 Air and creepage distances .....	7
10	Electrical tests .....	8
	10.1 Electrical data .....	8
	10.2 Current carrying capacity/derating curves .....	8
11	Type approval and special tests .....	8
12	Approvals .....	8
13	Commercial data .....	8
	13.1 Combination tests.....	9

1864024 SDC 2,5/ 1-PV-5,0-ZB

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



**1864024 SDC 2,5/ 1-PV-5,0-ZB****5 Item properties**

Order No.	1864024
Type	SDC 2,5/ 1-PV-5,0-ZB
Range of articles	SDC 2,5/...-PV
Pitch	5.00 mm
Number of positions	1
Connection method	Push-in spring connection
Mounting type	SKEDD - Direct plug-in technology
Pin layout	ZB - Zig-zag back pinning W
Note	WEEE/RoHS-compliant, whisker-free acc. to IEC 60068-2-82/JEDEC JESD 201

**5.1 Connection capacity**

Conductor cross section, solid	0.2 mm <sup>2</sup> to 2.5 mm <sup>2</sup>
Conductor cross section, flexible	0.2 mm <sup>2</sup> to 2.5 mm <sup>2</sup>
Conductor cross section AWG/kcmil	24 to 12
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm <sup>2</sup> to 2.5 mm <sup>2</sup> Ferrule see above
Conductor cross section flexible, with ferrule with plastic sleeve	0.25 mm <sup>2</sup> to 2.5 mm <sup>2</sup> Ferrule see above
Stripping length	10 mm

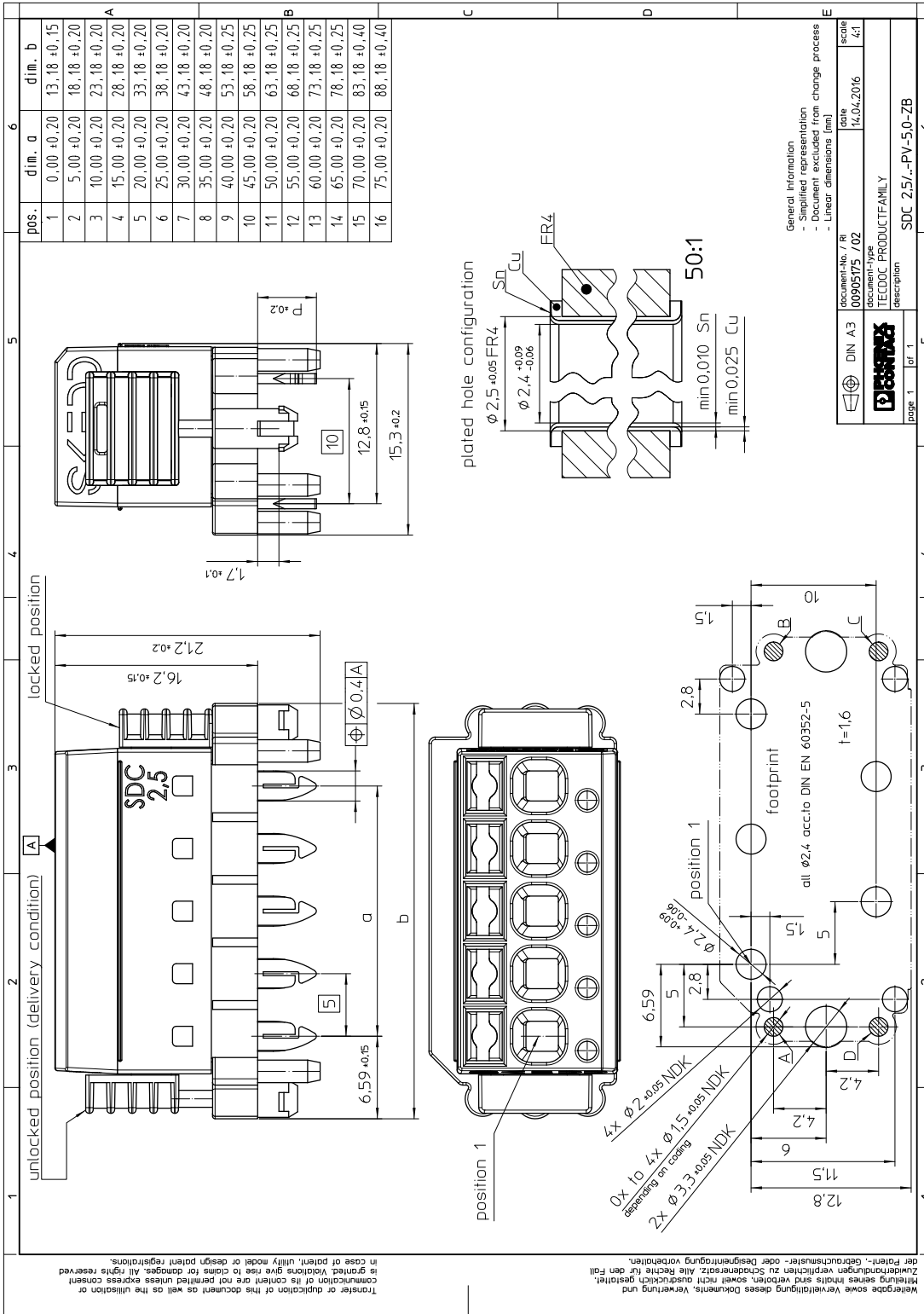
**5.2 Material data**

<b>Material of metal parts</b>		
Contact material	Cu alloy	
Surface contact area	Ni 1.5 µm ... 4 µm , Sn 4 µm ... 8 µm	
Soldering area surface		
Surface characteristics	Tin-plated	
<b>Insulating material data</b>	<b>Housing</b>	<b>Actuation element</b>
Insulating material	PA	PBT
CTI according to IEC 60112	600	275
Flammability rating according to UL 94	V0	V0
Color	green (6021)	orange (2003)

**5.3 Dimensions**

Dimension a	0 mm
Length	15.3 mm
Width	13.18 mm
Constructional height	21.2 mm
Height	21.2 mm
Length of the solder pin [P]	4.7 mm
Pin spacing	10.00 mm
Hole diameter	2.4 mm

6 Series drawing



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

Wiedergabe sowie Vervielfältigung dieses Dokuments, Verwertung und Zuhilfenahme sind verboten, soweit nicht ausdrücklich gestattet. Zustimmungsgenommen verpflichtet zu Schadensersatz. Alle Rechte für den Fall der Patent-, Gebrauchsmuster- oder Designanmeldung vorbehalten.

General Information

- Simplified representation
- Document excluded from change process
- Linear dimensions (mm)

document-No. / RI	date	scale
00905175 / 02	14.04.2016	4:1
document-type		
TECDOC PRODUCTFAMILY		
description		
	SDC 2,5/...PV-5,0-ZB	

page 1 | of 1

**1864024 SDC 2,5/ 1-PV-5,0-ZB**

---

**7 Packaging information**

Type of packaging	packed in cardboard
-------------------	---------------------

**8 Application****8.1 Temperature limit values**

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

**1864024 SDC 2,5/ 1-PV-5,0-ZB****9 Mechanical tests**

Mechanical test group A	
Specification	IEC 61984:2008-10
Visual test	Test passed
Specification	IEC 60512-1-1:2002-02
Dimensional test	Test passed
Specification	IEC 60512-1-2:2002-02
Resistance of marking	Test passed
Specification	IEC 60068-2-70:1995-12
Insertion and withdrawal force	Test passed
Specification	IEC 60512-13-2:2006-02
No. of cycles	25
Insertion strength per pos. approx.	8 N ( )
Withdraw strength per pos. approx.	6 N ( )
Polarization and coding	Test passed
Specification	IEC 60512-13-5:2006-02
Test force	20 N
Contact retention in insert	Test passed
Specification	IEC 60512-15-1:2008-05
Test force per pos.	20 N

**9.1 Air and creepage distances**

Component			
Specification	IEC 60664-1:2007-04		
Mains type	unearthed mains		
Insulating material group			
Comparative tracking index (IEC 60112:2003-01)	CTI 275		
Rated insulation voltage	200 V	320 V	320 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	3.2 mm	3.2 mm

**1864024 SDC 2,5/ 1-PV-5,0-ZB****10 Electrical tests****10.1 Electrical data**

Rated current/rated insulation voltage/rated surge voltage/degree of pollution	12 A			2
--------------------------------------------------------------------------------	------	--	--	---

**10.2 Current carrying capacity/derating curves**

Specification	
Note	Representation based on IEC 60512-5-2:2002-02
Reduction factor	
Number of positions	See diagram
Conductor cross section	
Note	

**11 Type approval and special tests****12 Approvals****13 Commercial data**

Order No.	1864024
Type	SDC 2,5/ 1-PV-5,0-ZB
GTIN	4055626210322
Pieces per package	50
Net weight (SAP)	2.22 g
Customs tariff number	
Country of origin	



**1864024 SDC 2,5/ 1-PV-5,0-ZB****13.1 Combination tests****SDC 2,5/..-PV**

Specification	IEC 61984			
<b>Mechanical tests</b>				
Insertion/withdrawal force per position	8 N / 6 N			
	Test passed			
Contact holder in insert Requirements > 24 N	Test passed			
	1.1 mΩ			
Insertion/withdrawal cycles	25			
	Test passed			
	Test passed			
Rated voltage (III/2)	320 V			
	16			
	2.5 mm <sup>2</sup>			
Test current				
	Test passed			
	-40 °C/2 h			
	100 °C/168 h			
	0.2 dm <sup>3</sup> SO <sub>2</sub> on 300 dm <sup>3</sup> / 40 °C/1 cycle			
	Test passed			
	Test passed			
	Test passed			
<b>Environmental and durability tests</b>				
Result, degree of protection, IP code	Finger safety (IP20 test finger) in acc. with IEC 60529:1989-11 + AMD 1:1999-11 + AMD 2:2013-08			