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Order No.: 1864037

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

Plug component, Push-in spring connection

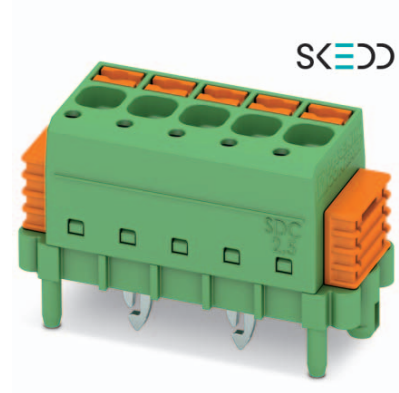


Figure shows the 5-pos. version

## 1 Main features



- |                           |                           |                        |                     |
|---------------------------|---------------------------|------------------------|---------------------|
| • Number of positions     | 2                         | • 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



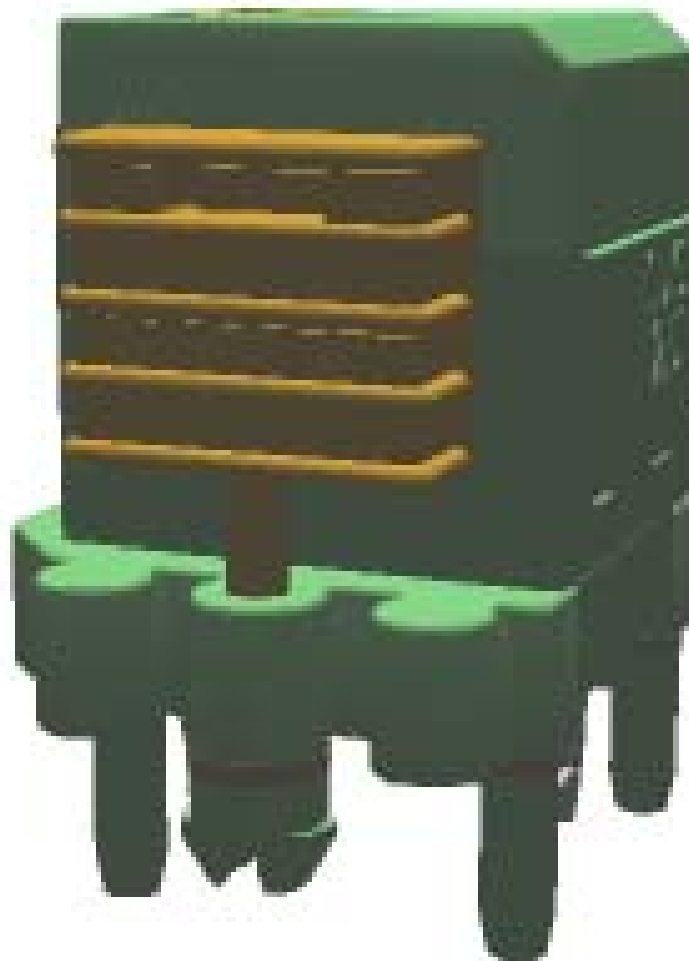
Make sure you always use the latest documentation.  
It can be downloaded at: [phoenixcontact.net/product/1864037](http://phoenixcontact.net/product/1864037)

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1864037 SDC 2,5/ 2-PV-5,0-ZB

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



**1864037 SDC 2,5/ 2-PV-5,0-ZB****5 Item properties**

Order No.	1864037
Type	SDC 2,5/ 2-PV-5,0-ZB
Range of articles	SDC 2,5/...-PV
Pitch	5.00 mm
Number of positions	2
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**

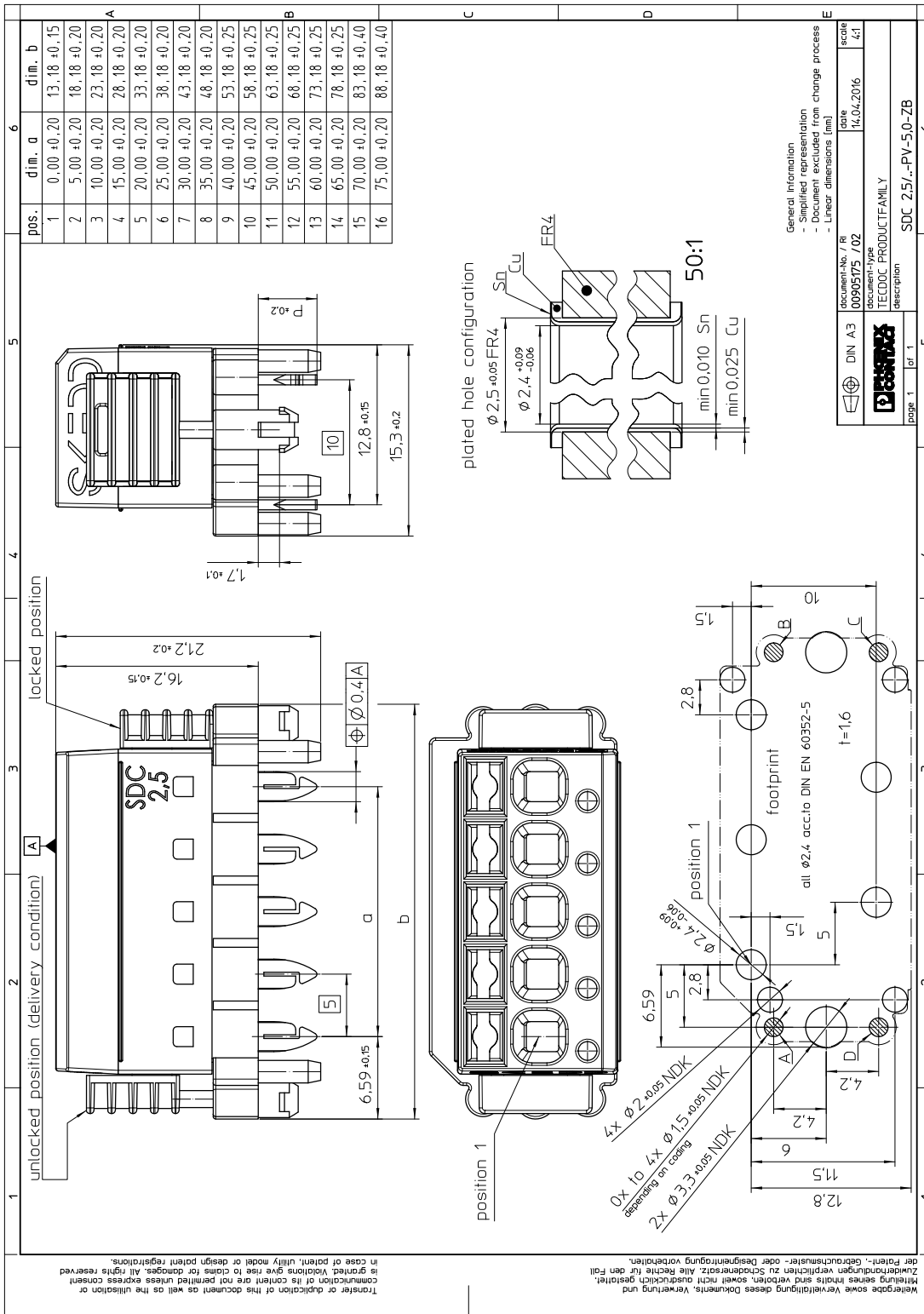
<b>Material of metal parts</b>		
Contact material	Cu alloy	
Surface contact area	Ni 1.5 µm ... 4 µm , Sn 4 µm ... 8 µm	
Soldering area surface		
Surface characteristics	Tin-plated	
<b>Insulating material data</b>	<b>Housing</b>	<b>Actuation element</b>
Insulating material	PA	PBT
CTI according to IEC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

**5.3 Dimensions**

Dimension a	5 mm
Length	15.3 mm
Width	18.18 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

1864037 SDC 2,5/ 2-PV-5,0-ZB

6 Series drawing



**1864037 SDC 2,5/ 2-PV-5,0-ZB**

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**7 Packaging information**

Type of packaging	packed in cardboard
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**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 )



**1864037 SDC 2,5/ 2-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



**1864037 SDC 2,5/ 2-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
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**10.2 Current carrying capacity/derating curves**

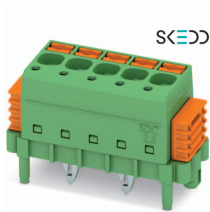
Specification	
Note	Representation based on IEC 60512-5-2:2002-02
Reduction factor	
Number of positions	See diagram
Conductor cross section	
Note	

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

Order No.	1864037
Type	SDC 2,5/ 2-PV-5,0-ZB
GTIN	4055626210339
Pieces per package	50
Net weight (SAP)	3.597 g
Customs tariff number	
Country of origin	

**1864037 SDC 2,5/ 2-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			