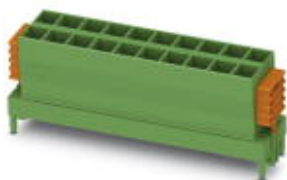


# PCB direct plug - CDDC 2,5/12-PV-5,0 - 1016277

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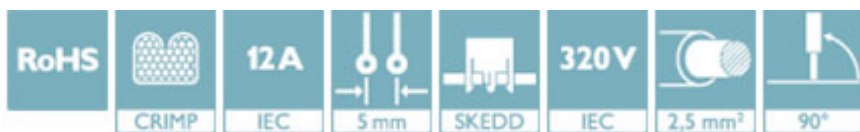
PCB direct plug, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm<sup>2</sup>, number of positions: 12, pitch: 5 mm, connection method: Crimp connection, color: green, contact surface: Tin, mounting: SKEDD - Direct plug-in technology



The figure shows a 10-pos. version with 20 contacts

## 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
- ✓ Contacts arranged in a double row enable high packing density in a compact area
- ✓ Wide range of applications, thanks to suitability for PCBs with chemically tin-plated or Hot Air Leveling (HAL) surface
- ✓ Cost-effective connection of crimped conductors in large quantities
- ✓ Tools for manual and automatic crimping available as an option



## Key Commercial Data

Packing unit	1
GTIN	
GTIN	4055626497518
Custom tariff number	85472000

## Technical data

### Item properties

Brief article description	Direct connector
Plug-in system	SKEDD
Range of articles	CDDC 2,5/...-PV
Pitch	5 mm
Number of positions	12
Connection method	Crimp connection
Mounting type	SKEDD - Direct plug-in technology
Locking	Self-locking flange

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## Technical data

### Item properties

Number of levels	2
Number of connections	24
Number of potentials	24

### Electrical parameters

Nominal current	12 A
Nom. voltage	320 V
Rated voltage	250 V
Rated voltage (III/2)	320 V
Rated voltage (II/2)	630 V
Rated surge voltage (III/3)	4 kV
Rated surge voltage (III/2)	4 kV
Rated surge voltage (II/2)	4 kV

### Connection capacity

Connection method	Crimp connection
Conductor cross section flexible	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section AWG / kcmil	26 ... 14

### Material data - housing

Housing color	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

### Material data – actuating element

Insulating material	PA
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 for the product

Length [ l ]	13 mm
Width [ w ]	65.8 mm
Height [ h ]	19.6 mm
Pitch	5 mm
Height (without solder pin)	16 mm

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## Technical data

### Dimensions for the product

Pin spacing	7.00 mm
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### Packaging information

Type of packaging	packed in cardboard
Pieces per package	50
Denomination packing units	Pcs.

### General product information

Type of note	Note on the contact
	Note on application
	Note on application
	Note on application
	Note on application
Note	The information on the basic material and the finish properties of the crimp contacts is to be found in the E-Shop in the technical data for the respective crimp contact.
	All laboratory tests are performed in combination with the crimp contacts specified as accessories.
	The current depends on the crimp contact and conductor cross section used.
	The corresponding crimp contacts are to be found in the "Accessories" tab.
	The crimp contacts may only be processed with approved crimping tools.

### Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 70 °C
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-55 °C ... 105 °C (dependent on the derating curve)

### Termination and connection method

### Mechanical tests according to standard

Test specification	IEC 61984
Visual examination	Test passed IEC 60512-1-1:2002-02
Dimensional test	Test passed IEC 60512-1-2:2002-02
Resistance of marking	Test passed IEC 60068-2-70:1995-12
Result	Test passed
Specification	IEC 60512-13-2:2006-02
No. of cycles	25
Insertion strength per pos. approx.	4 N
Withdraw strength per pos. approx.	3 N
Polarization and coding	Test passed IEC 60512-13-5:2006-02
Result	Test passed
Specification	IEC 60512-15-1:2008-05
Test force per pos.	20 N

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## Technical data

### Air clearances and creepage distances

Clearances and creepage distances	IEC 60664-1:2007-04
Specification	IEC 60664-1:2007-04
Minimum clearance - inhomogeneous field (III/3)	3 mm
Minimum clearance - inhomogeneous field (III/2)	3 mm
Minimum clearance - inhomogeneous field (II/2)	3 mm
Minimum creepage distance value (III/3)	3.2 mm
Minimum creepage distance value (III/2)	3 mm
Minimum creepage distance value (II/2)	3.2 mm

### Current carrying capacity / derating curves

Specification	IEC 61984
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### Mechanical tests (A)

Test specification	IEC 61984
Insertion strength per pos. approx.	4 N
Withdraw strength per pos. approx.	3 N
Polarization when inserted requirement >20 N	Test passed
Contact holder in insert requirements >20 N	Test passed

### Durability tests (B)

Specification	IEC 60512-9-1:2010-03
Contact resistance R <sub>1</sub>	1.4 mΩ
Insertion/withdrawal cycles	25
Contact resistance R <sub>2</sub>	1.4 mΩ
Impulse withstand voltage at sea level	4.8 kV
Power-frequency withstand voltage	2.21 kV
Insulation resistance, neighboring positions	> 1.6 TΩ

### Climatic tests (D)

Specification	ISO 6988:1985-02
Cold stress	-55 °C/2 h
Thermal stress	105 °C/168 h
Corrosive stress	0.2 dm <sup>3</sup> SO <sub>2</sub> on 300 dm <sup>3</sup> /40 °C/1 cycle
Impulse withstand voltage at sea level	4.8 kV
Power-frequency withstand voltage	2.21 kV

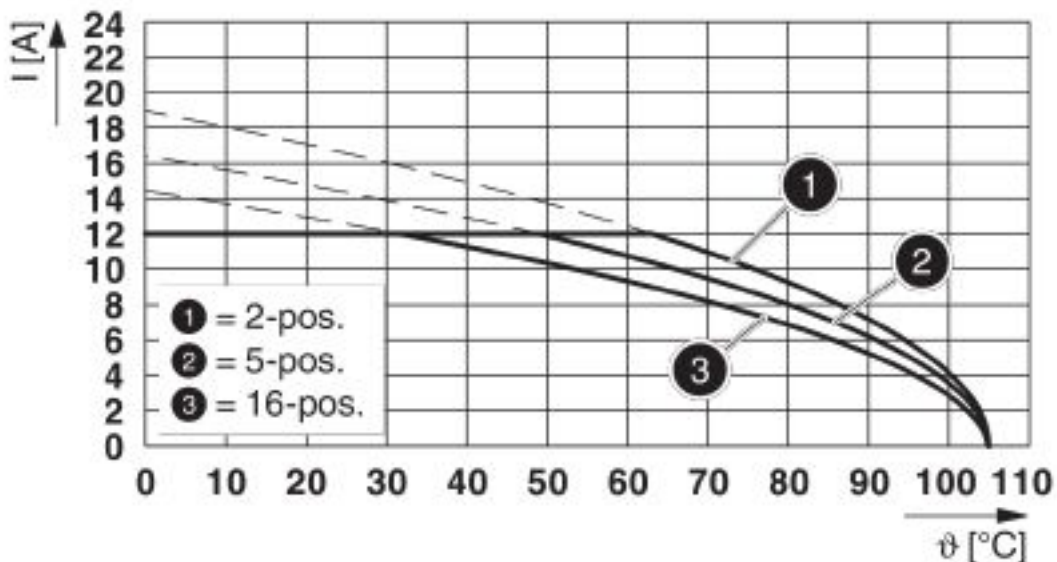
### Environmental and durability tests (E)

Specification	IEC 61984:2008-10
Result, degree of protection, IP code	Finger safety with IP20 test finger

## Drawings

# PCB direct plug - CDDC 2,5/12-PV-5,0 - 1016277

Diagram



Type: CDDC 2,5/...-PV-5,0

## Classifications

eCl@ss

eCl@ss 4.0	27260700
eCl@ss 4.1	27260700
eCl@ss 5.0	27260700
eCl@ss 5.1	27260700
eCl@ss 6.0	27260700
eCl@ss 7.0	27440309
eCl@ss 8.0	27440309
eCl@ss 9.0	27440309

ETIM

ETIM 5.0	EC002637
ETIM 6.0	EC002638
ETIM 7.0	EC002638

## Approvals

Approvals

Approvals

cULus Recognized / VDE Zeichengenehmigung / IECCE CB Scheme

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## Approvals

Ex Approvals

### Approval details

cULus Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	E60425-20160718
	B	D	
Nominal voltage UN	300 V	300 V	
Nominal current IN	12 A	10 A	
mm <sup>2</sup> /AWG/kcmil	26-12	26-12	

VDE Zeichengenehmigung		<a href="http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx">http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx</a>	40044617
Nominal voltage UN	320 V		
Nominal current IN	12 A		
mm <sup>2</sup> /AWG/kcmil	0.14-2.5		

IECEE CB Scheme		<a href="http://www.iecee.org/">http://www.iecee.org/</a>	DE1-63213
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## Accessories

Accessories

Coding element

Coding profile - CP-PT 1,5 - 1985564

Coding profile, inserted into the hole on the plug, made from red insulating material, diameter: 1.35 mm



## Additional products

## PCB direct plug - CDDC 2,5/12-PV-5,0 - 1016277

### Accessories

Crimp contact - CDC-MP 0,14-0,5 - 1016664



Crimp contact

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Crimp contact - CDC-MP 0,14-0,5-R - 1016663



Crimp contact

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Crimp contact - CDC-MP 0,5-1,5 - 1016662



Crimp contact

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Crimp contact - CDC-MP 0,5-1,5-R - 1016661



Crimp contact

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Crimp contact - CDC-MP 1,5-2,5 - 1016660



Crimp contact

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## PCB direct plug - CDDC 2,5/12-PV-5,0 - 1016277

### Accessories

Crimp contact - CDC-MP 1,5-2,5-R - 1016659



Crimp contact