

BC/SC 3.81 series
SCZ 3.81/10/180FI SN OR BX
Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 16

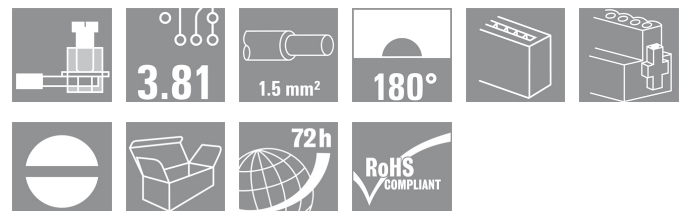
D-32758 Detmold

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www.weidmueller.com



The inverted SCZ pin plug with clamping-yoke screw connection is designed for straight wire connections in 3.81-mm pitch. It can be used in two ways:

- for wire-to-wire connections together with the BCZ
- as a mating plug for the touch-safe BCL socket block on the PCB.

The SCZ is available in four different versions:

- Without flange ("G", closed)
- With standard flange ("F", with socket nut)
- With inverted flange ("FI", with screw)
- and with Weidmüller's patented release latch for a tool-free, no-strain disconnect

The SCZ provides space for labelling and can be coded.

- 0.20 - 1.5 mm² (IEC) / 28 - 16 AWG (UL)
- 250 V (IEC) / 300 V (UL)
- 17.5 A (IEC) / 10 A (UL)

General ordering data

Order No.	1970410000
Type	SCZ 3.81/10/180FI SN OR BX
Version	PCB plug-in connector, male plug, 3.81 mm, No. of poles: 10, 180°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm ² , Box
GTIN (EAN)	4032248679768
Qty.	50 pc(s).
Product data	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm ² UL: 300 V / 10 A / AWG 28 - AWG 16
Packaging	Box

Creation date June 30, 2012 7:21:34 AM CEST

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Technical data

Dimensions

Net weight 10.1 g

System parameters

Product family	BC/SC 3.81 series	Conductor connection system	Clamping yoke connection
Outgoing direction of conductor	180°	Pitch in mm (P)	3.81 mm
Pitch in inches (P)	0.15 inch	No. of poles	10
Number of rows	1	Screwdriver blade	0.4 x 2.5
Screwdriver blade standard	DIN 5264	Tightening torque, min.	0.2 Nm
Tightening torque, max.	0.25 Nm	Clamping screw	M 2
Stripping length	7 mm	L1 in mm	34.29 mm
L1 in inches	1.35 inch	Touch-safe protection acc. to DIN VDE 0470	IP 20
Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch		

Material data

Insulating material	PA GF	Colour	Orange
Colour chart	Similar to RAL 2000	Flammability class UL 94	V-0
CTI	≥ 550	Contact material	Copper alloy
Contact surface	tinned	Continuous operating temp., min.	-25 °C
Continuous operating temp., max.	120 °C		

Connectable conductors

Clamping range, rated connection, min.	0.08 mm ²	Clamping range, rated connection, max.	1.5 mm ²
Wire connection cross section AWG, min.	AWG 28	Wire connection cross section AWG, max.	AWG 16
Solid, min. H05(07) V-U	0.2 mm ²	Solid, max. H05(07) V-U	1.5 mm ²
Flexible, min. H05(07) V-K	0.2 mm ²	Flexible, max. H05(07) V-K	1.5 mm ²
w. wire end ferrule, DIN 46228 pt 1, min.	0.2 mm ²	w. wire end ferrule, DIN 46228 pt 1, max.	1.5 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, min.	0.2 mm ²	w. plastic collar ferrule, DIN 46228 pt 4, max.	1.5 mm ²
Plug gauge acc. to EN 60999 a x b; Ø	2.4 mm x 1.5 mm ; 2.4 mm		

DIN IEC rating data

Rated current, min. no. of poles (Tu=20°C)	17.5 A	Rated current, max. no. of poles (Tu=20°C)	17.1 A
Rated current, number of poles (Tu=40°C), min	17.5 A	Rated current, number of poles (Tu=40°C), max.	15.2 A
Rated voltage for surge voltage class / pollution degree II/2	320 V	Rated voltage for surge voltage class / pollution degree III/2	160 V
Rated voltage for surge voltage class / pollution degree III/3	160 V	Rated impulse voltage for surge voltage class/ pollution degree II/2	2.5 kV
Rated impulse voltage for surge voltage class/ pollution degree III/2	2.5 kV	Rated impulse voltage for surge voltage class/ contamination degree III/3	2.5 kV
Short-time withstand current resistance	3 x 1s with 76 A		

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Technical data
CSA rating data

Institute (CSA)



Rated voltage (Use group B)

300 V

Rated current (use group B) 10 A

Rated voltage (use group D) 300 V

Rated current (use group D) 10 A

Wire cross-section, AWG, min. AWG 28

Wire cross-section, AWG, max. AWG 16

UL 1059 rating data

Rated voltage (use group B) 300 V

Rated current (use group B) 10 A

Rated voltage (use group D) 300 V

Rated current (use group D) 10 A

Wire cross-section, AWG, min. AWG 28

Wire cross-section, AWG, max. AWG 16

Classifications

UNSPSC 30-21-18-01

eClass 6.0

27-26-07-04

eClass 7.0 27-44-04-02

Notes

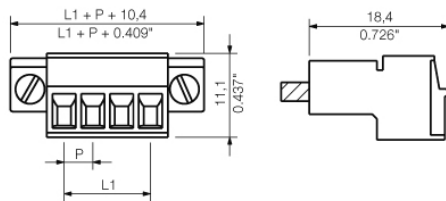
Notes

- Additional colours on request
- Gold-plated contact surfaces on request
- Rated current related to rated cross-section and min. No. of poles.
- Wire end ferrule with plastic collar to DIN 46228/4
- P on drg. = pitch
- Rated data refer only to the component itself. Clearance and creepage distances to other components are to be designed in accordance with the relevant application standards.

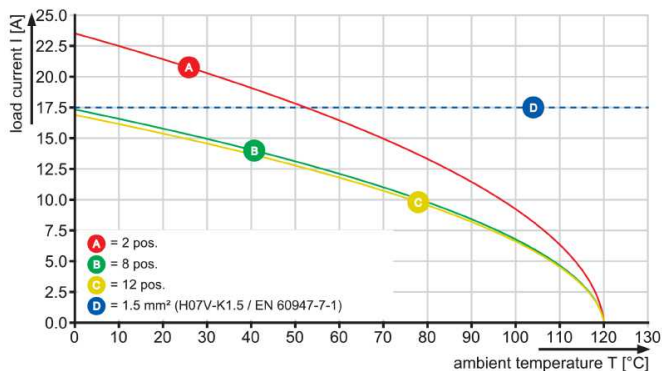
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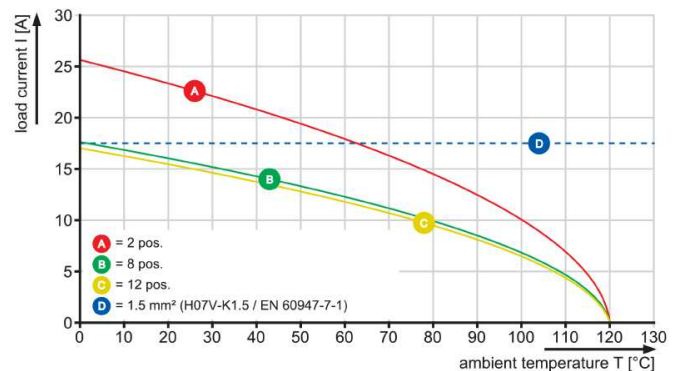
Drawings



BCL-SMT 3.81/./90 - SCZ 3.81/./180



BCL-SMT 3.81/./180 - SCZ 3.81/./180



BCZ 3.81/./180 - SCZ 3.81/./180

