

**BC/SC 3.81 series**  
**BCL-SMT 3.81/05/180 1.5SN BK BX**

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergstraße 16  
 D-32758 Detmold  
 Germany  
 Fon: +49 5231 14-0  
 Fax: +49 5231 14-2083  
 www.weidmueller.com



The inverted BCL-SMT socket block for the PCB offers three significant advantages:

- The BCL-SMT offers touch-safe security on the PCB which makes it ideal for live, current-carrying outputs.
- The BCL-SMT widens the range of applications with board-to-board connections between component assemblies.
- The BCL-SMT is reflow-compatible and can be seamlessly integrated into the automatic assembly and soldering process.

Two outlet directions give you a choice of position and thus more design flexibility.

- 180° standing
- 90° recumbent

Two housing variants are available for the BCL-SMT:

- Without flange
- With inverted solder flange ("LFI", with nut)
- Fastened to PCB without additional screw
- Fastened with screw to the SCZ FI

Weidmüller's 3.81-mm-pitch (0.15 inch) plug-in connectors are compatible with the layouts of customary connectors and offer space for labelling and coding.

- 320 V (IEC) / 300 V (UL)
- 17.5 A (IEC) / 10 A (UL)

**General ordering data**

Order No.	<a href="#">1976530000</a>
Type	BCL-SMT 3.81/05/180 1.5SN BK BX
Version	PCB plug-in connector, female header, closed side, Reflow solder connection, 3.81 mm, No. of poles: 5, 180°, Solder pin length (l): 1.5 mm, tinned, Black, Box
GTIN (EAN)	4032248679010
Qty.	50 pc(s).
Product data	IEC: 320 V / 17.5 A UL: 300 V / 10 A
Packaging	Box

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**Technical data**
**Dimensions**

Net weight 2.24 g

**System parameters**

Product family	BC/SC 3.81 series	Mounting onto the PCB	Reflow solder connection
Outgoing elbow	180°	Pitch in mm (P)	3.81 mm
Pitch in inches (P)	0.15 inch	No. of poles	5
Solder pin length (l)	1.5 mm	Pin dimensions	d = 0.8 mm
Can be coded	Yes	Number of rows	1
Number of solder pins per pole	2	Solder eyelet hole diameter (D)	1.2 mm
Solder eyelet hole diameter tolerance (D)+ 0,1 mm		L1 in mm	15.24 mm
L1 in inches	0.6 inch	Insulation resistance	10 <sup>3</sup> Ω
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	LCP GF	Colour	Black
Insulating material group	IIla	Flammability class UL 94	V-0
CTI	≥ 175	Contact material	Copper alloy
Contact surface	tinned	Continuous operating temp., min.	-25 °C
Continuous operating temp., max.	120 °C	Max. relative humidity during storage	85 %

**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)	15.4 A
Rated current, number of poles (Tu=40°C), min	17.5 A	Rated current, number of poles (Tu=40°C), max.	13.8 A
Rated voltage for surge voltage class / pollution degree III/3	160 V	Rated impulse voltage for surge voltage class/ contamination degree III/3	2.5 kV
Rated voltage for surge voltage class / pollution degree III/2	160 V	Rated impulse voltage for surge voltage class/ pollution degree III/2	2.5 kV
Rated voltage for surge voltage class / pollution degree II/2	320 V	Rated impulse voltage for surge voltage class/ pollution degree II/2	2.5 kV
Short-time withstand current resistance	3 x 1s with 76 A		

**CSA 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

**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

**Classifications**

UNSPSC	30-21-18-01	eClass 6.0	27-26-07-04
eClass 7.0	27-44-04-02		

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## Technical data

### Notes

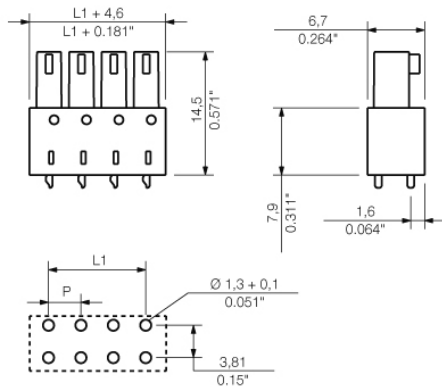
Notes

- Additional colours on request
- Gold-plated contact surfaces on request
- Rated current related to rated cross-section and min. No. of poles.
- 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.

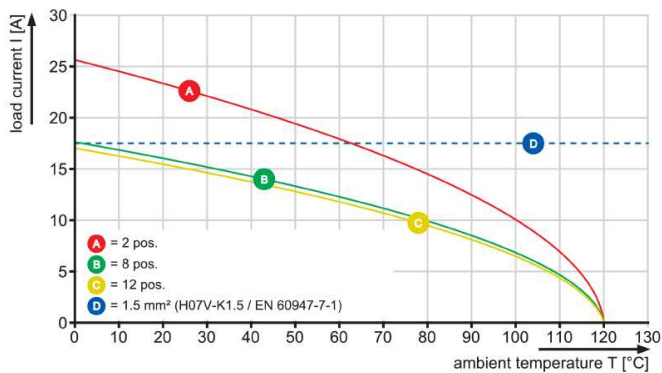
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## Drawings



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



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

