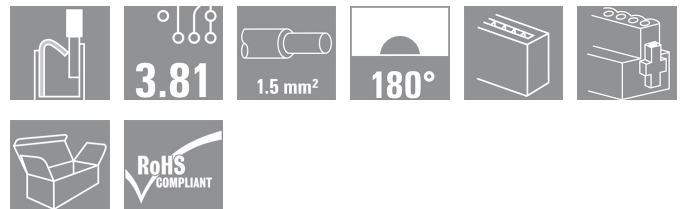


BC/SC 3.81 series
BCF 3.81/18/180F SN OR BX

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



PUSH IN - Weidmüller's innovative connection system simplifies wire connections.

The benefits for users and applications:

- High component density because of very low height. Simply insert prepared wire and you're ready to go.
- High component density with the compact SCDN / SCDN-THR two-tier pin header
- Simplified processing, featuring integrated push buttons for opening the wire-terminal point
- Intuitive handling – since the wire-entry area and handling area are clearly separated.
- Lock and release requires no tools when using Weidmüller's patented (LR) release latch.

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.

- 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.	1970890000
Type	BCF 3.81/18/180F SN OR BX
Version	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 18, 180°, PUSH IN, Clamping range, rated connection, max.: 1.5 mm ² , Box
GTIN (EAN)	4032248680177
Qty.	50 pc(s).
Product data	IEC: 320 V / 17.5 A / 0.14 - 1.5 mm ² UL: 300 V / 10 A / AWG 24 - AWG 16
Packaging	Box

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Technical data

Dimensions

Net weight 12.4 g

System parameters

Product family	BC/SC 3.81 series	Conductor connection system	PUSH IN
Outgoing direction of conductor	180°	Pitch in mm (P)	3.81 mm
Pitch in inches (P)	0.15 inch	No. of poles	18
Number of rows	1	Screwdriver blade	0.4 x 2.5
Screwdriver blade standard	DIN 5264	Stripping length	8 mm
L1 in mm	64.77 mm	L1 in inches	2.55 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.	0.14 mm ²	Clamping range, rated connection, max.	1.5 mm ²
Wire connection cross section AWG, min.	AWG 26	Wire connection cross section AWG, max.	AWG 16
Solid, min. H05(07) V-U	0.14 mm ²	Solid, max. H05(07) V-U	1.5 mm ²
Flexible, min. H05(07) V-K	0.14 mm ²	Flexible, max. H05(07) V-K	1.5 mm ²
w. wire end ferrule, DIN 46228 pt 1, min.	0.25 mm ²	w. wire end ferrule, DIN 46228 pt 1, max.	1.5 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, min.	0.25 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; 1.9mm		

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)	17.5 A
Rated current, number of poles (Tu=40°C), min	17.5 A	Rated current, number of poles (Tu=40°C), max.	16.3 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 24

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 24

Wire cross-section, AWG, max. AWG 16

Classifications

UNSPSC 30-21-18-10

eClass 5.1

27-26-07-04

eClass 6.0 27-26-07-04

eClass 7.0

27-44-04-02

Notes

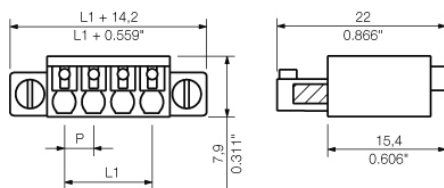
Notes

- Additional colours on request
- Gold-plated contact surfaces on request
- We recommend crimp shape A for wire-end ferrules with crimping tools PZ 1,5 (order no. 9005990000) or PZ 6/5 (order no. 9011460000) for the larger wire cross-sections.
- Rated current related to rated cross-section and min. No. of poles.
- Wire end ferrule without plastic collar to DIN 46228/1
- 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.

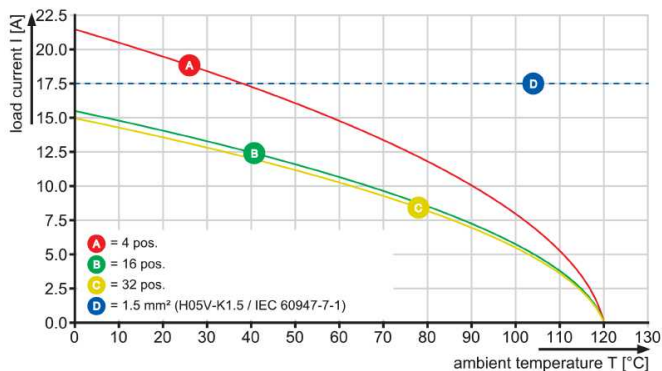
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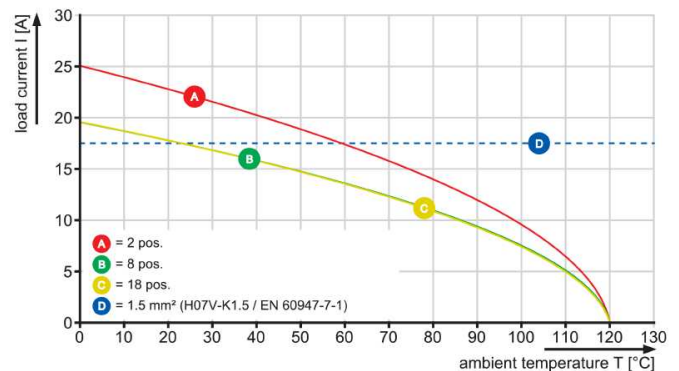
Drawings



BCF 3.81/..180 - SCDN-THR 3.81/..90



BCF 3.81/..180 - SC 3.81/..90



BCF 3.81/..180 - SC 3.81/..180

