

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 16 D-32758 Detmold

Germany

Fon: +49 5231 14-0 Fax: +49 5231 14-292083 www.weidmueller.com



















High-temperature-resistant pin header (SC-SMT 180G) in 3.81-mm pitch (0.15 inch)

- Plugging direction is perpendicular to PCB (standing)
- Closed (G).
- Packed either in box (BX) or on anti-static roll (tape-onreel, RL)
- Pin length of either 1.5 mm or 3.2 mm

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

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

Order No.	<u>1862940000</u>
Туре	SC-SMT 3.81/03/180G 3.2SN BK BX
Version	PCB plug-in connector, male header, closed side, Reflow solder connection, 3.81 mm, No. of poles: 3, 180°, Solder pin length (I): 3.2 mm, tinned, Black, Box
GTIN (EAN)	4032248428120
Qty.	50 pc(s).
Product data	IEC: 320 V / 17.5 A UL: 300 V / 10 A
Packaging	Вох



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Technical data

Dimensions and weights

System parameters

Product family	OMNIMATE Signal - series	Mounting onto the PCB	
	BC/SC 3.81		Reflow solder connection
Outgoing elbow	180°	Pitch in mm (P)	3.81 mm
Pitch in inches (P)	0.15 inch	No. of poles	3
Solder pin length (I)	3.2 mm	Pin dimensions	d = 1.0 mm, Octagonal
Can be coded	Yes	Number of rows	1
Number of solder pins per pole	1	Solder eyelet hole diameter (D)	1.3 mm
Solder eyelet hole diameter tolerance	e (D)+ 0,1 mm	L1 in mm	7.62 mm
L1 in inches	0.3 inch	Insulation resistance	10 ³ Ω
Touch-safe protection acc. to DIN VD	E	Touch-safe protection acc. to DIN VDE	
0470	IP 20	57 106	Safe from finger touch

Material data

Insulating material	LCP GF	Colour	Black
Insulating material group	Illa	UL 94 flammability rating	V-0
CTI	≥ 175	Contact material	Cu-Leg
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		Rated current, max. no. of poles	
(TU=20°C)	17.5 A	(Tu=20°C)	13.9 A
Rated current, number of poles (Tu=40°C), min	17 A	Rated current, number of poles (Tu=40°C), max.	12.4 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 D)

Institute (CSA)	Rated v		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 current (use group D)

300 V

10 A



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Classifications

ETIM 3.0	EC001284	UNSPSC	30-21-18-10
eClass 4.1	27-26-07-01	eClass 5.1	27-26-07-04
eClass 6.2	27-26-07-04	eClass 7.1	27-44-04-02

Notes

Notes

- · Gold-plated contact surfaces on request
- · Rated current related to rated cross-section & min. No. of poles.
- 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.
- P on drawing = pitch

Approvals

Approvals



ROHS Conform



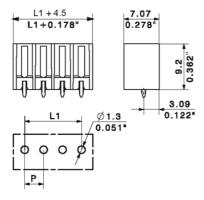
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Drawings





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Mating connector (conditionally pluggable)

BCZ 3.81/90F



Female socket connectors with clamping-yoke screw system for connecting wires.

Three wire-outlet directions are available and provide flexible connection-level design options:

- 180° wire parallel to plugging direction
- 90° wire perpendicular and above plugging direction
- 270° wire perpendicular and below plugging direction

There are three housing shapes, covering many different requirements, to choose from:

- Standard housing without flange
- Flange with screw (F)
- Flange featuring Weidmüller's patented release latch (LR) for lock-and-release latching with no strain and no tools needed.

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)

Order No. Type	Version GTIN (EAN) Qty.	Product data Packa			
1798860000 BCZ 3.81/03/90F SN GN BX	PCB plug-in connector, 4032248243549 50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm ² Box			
	female plug, 3.81 mm, No.	UL: 300 V / 10 A / AWG 28 - AWG 16			
	of poles: 3, 90°, Clamping				
	yoke connection, Clamping				
	range, rated connection,				
	max.: 1.5 mm², Box				
1939990000 BCZ 3.81/03/90F SN OR BX	PCB plug-in connector, 403224865683750 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm ² Box			
	female plug, 3.81 mm, No.	UL: 300 V / 10 A / AWG 28 - AWG 16			
	of poles: 3, 90°, Clamping				
	yoke connection, Clamping				
	range, rated connection,				
	max.: 1.5 mm², Box				
798140000 BCZ 3.81/03/90F SN BK BX	PCB plug-in connector, 403224824133050 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm ² Box			
	female plug, 3.81 mm, No.	UL: 300 V / 10 A / AWG 28 - AWG 16			
	of poles: 3, 90°, Clamping				
	yoke connection, Clamping				
	range, rated connection,				
	max.: 1.5 mm², Box				



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Mating connector (conditionally pluggable)

BCZ 3.81/180LR



Female socket connectors with clamping-yoke screw system for connecting wires.

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- 90° wire perpendicular and above plugging direction
- 270° wire perpendicular and below plugging direction

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- 17.5 A (IEC) / 10 A (UL)

Order No. Type	Version GTIN (EAN) Qty.	Product data Packa			
1941410000 BCZ 3.81/03/180LR SN OR BX	PCB plug-in connector, 403224869833250 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm ² Box			
	female plug, 3.81 mm, No.	UL: 300 V / 10 A / AWG 28 - AWG 16			
	of poles: 3, 180°, Clamping				
	yoke connection, Clamping				
	range, rated connection,				
	max.: 1.5 mm², Box				
941790000 BCZ 3.81/03/180LR SN BK BX	PCB plug-in connector, 403224869871450 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm ² Box			
	female plug, 3.81 mm, No.	UL: 300 V / 10 A / AWG 28 - AWG 16			
	of poles: 3, 180°, Clamping				
	yoke connection, Clamping				
	range, rated connection,				
	max.: 1.5 mm², Box				
941600000 BCZ 3.81/03/180LR SN GN BX	PCB plug-in connector, 403224869852350 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm ² Box			
	female plug, 3.81 mm, No.	UL: 300 V / 10 A / AWG 28 - AWG 16			
	of poles: 3, 180°, Clamping				
	yoke connection, Clamping				
	range, rated connection,				
	max.: 1.5 mm², Box				



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Mating connector (conditionally pluggable)

BCZ 3.81/180F



Female socket connectors with clamping-yoke screw system for connecting wires.

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- 270° wire perpendicular and below plugging direction

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

Order No. Type	Version GTIN (EAN) Qty.	Product data Packag			
1792960000 BCZ 3.81/03/180F SN BK BX	PCB plug-in connector, 403224822704450 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm ² Box			
	female plug, 3.81 mm, No.	UL: 300 V / 10 A / AWG 28 - AWG 16			
	of poles: 3, 180°, Clamping				
	yoke connection, Clamping				
	range, rated connection,				
	max.: 1.5 mm², Box				
1793050000 BCZ 3.81/03/180F SN GN BX	PCB plug-in connector, 4032248227136 50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm ² Box			
	female plug, 3.81 mm, No.	UL: 300 V / 10 A / AWG 28 - AWG 16			
	of poles: 3, 180°, Clamping				
	yoke connection, Clamping				
	range, rated connection,				
	max.: 1.5 mm², Box				
1941020000 BCZ 3.81/03/180F SN OR BX	PCB plug-in connector, 403224865582350 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm ² Box			
	female plug, 3.81 mm, No.	UL: 300 V / 10 A / AWG 28 - AWG 16			
	of poles: 3, 180°, Clamping				
	yoke connection, Clamping				
	range, rated connection,				
	max.: 1.5 mm², Box				



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Mating connector (conditionally pluggable)

BCZ 3.81/270F



Female socket connectors with clamping-yoke screw system for connecting wires.

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- 270° wire perpendicular and below plugging direction

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

Order No. Type	Version GTIN (EAN) Qty.	Product data Packag			
1940470000 BCZ 3.81/03/270F SN OR BX	PCB plug-in connector, 403224865636350 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm ² Box			
	female plug, 3.81 mm, No.	UL: 300 V / 10 A / AWG 28 - AWG 16			
	of poles: 3, 270°, Clamping				
	yoke connection, Clamping				
	range, rated connection,				
	max.: 1.5 mm², Box				
1799180000 BCZ 3.81/03/270F SN GN BX	PCB plug-in connector, 4032248244072 50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm ² Box			
	female plug, 3.81 mm, No.	UL: 300 V / 10 A / AWG 28 - AWG 16			
	of poles: 3, 270°, Clamping				
	yoke connection, Clamping				
	range, rated connection,				
	max.: 1.5 mm², Box				
1798180000 BCZ 3.81/03/270F SN BK BX	PCB plug-in connector, 4032248241378 50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm ² Box			
	female plug, 3.81 mm, No.	UL: 300 V / 10 A / AWG 28 - AWG 16			
	of poles: 3, 270°, Clamping				
	yoke connection, Clamping				
	range, rated connection,				
	max.: 1.5 mm², Box				



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Accessories

Coding elements



Only connects what is supposed to be connected: the right connection at the right place.

Coding elements and locking devices clearly assign connecting elements during the manufacturing process and operation

The coding elements and locking devices are inserted prior to assembly or during the cable assembly phase. The Weidmüller alternative: configure online using the variant configurator to precode prior to delivery. Incorrect assembly on the circuit board and incorrect plugging of connecting elements is no longer possible. The advantage: no troubleshooting during manufacture and no operational errors by the user.

Order No.	Туре	Version	GTIN (EAN)	Qty.	Product data
1968900000	SC-SMT 3.81 KO GY BX	PCB plug-in connector,	403224877286	5 100 pc(s).	
		Accessories, Coding			
		element, Grey, No. of poles	:		
		6			