

## OMNIMATE Signal - series BC/SC 3.81 SC-SMT 3.81/03/180G 3.2SN BK BX

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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-on-reel, 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)

### General ordering data

Order No.	<a href="#">1862940000</a>
Type	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 (l): 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	Box

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**Technical data****Dimensions and weights**

Net weight	0.68 g
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**System parameters**

Product family		Mounting onto the PCB	
Product family	OMNIMATE Signal - series 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 (l)	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 (D)+ 0,1 mm		L1 in mm	7.62 mm
L1 in inches	0.3 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	IIIa	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 (Tu=20°C)	17.5 A	Rated current, max. no. of poles (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**

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		

**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

**Data sheet...**

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**Technical data**

**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



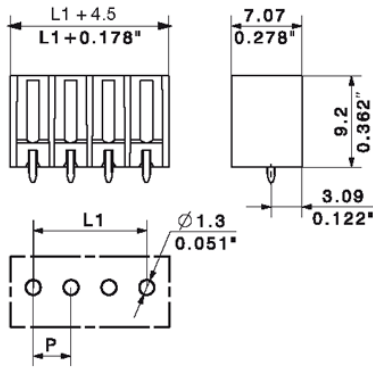
ROHS

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 mm<sup>2</sup> (IEC) / 28 - 16 AWG (UL)
- 250 V (IEC) / 300 V (UL)
- 17.5 A (IEC) / 10 A (UL)

**General ordering data**

Order No.	Type	Version	GTIN (EAN)	Qty.	Product data	Packaging
<a href="#">1798860000</a>	BCZ 3.81/03/90F SN GN BX	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 3, 90°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm <sup>2</sup> , Box	4032248243549	50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm <sup>2</sup> UL: 300 V / 10 A / AWG 28 - AWG 16	Box
<a href="#">1939990000</a>	BCZ 3.81/03/90F SN OR BX	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 3, 90°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm <sup>2</sup> , Box	4032248656837	50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm <sup>2</sup> UL: 300 V / 10 A / AWG 28 - AWG 16	Box
<a href="#">1798140000</a>	BCZ 3.81/03/90F SN BK BX	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 3, 90°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm <sup>2</sup> , Box	4032248241330	50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm <sup>2</sup> UL: 300 V / 10 A / AWG 28 - AWG 16	Box

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**Mating connector (conditionally pluggable)**
**BCZ 3.81/180LR**


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:

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- Flange featuring Weidmüller's patented release latch (LR) for lock-and-release latching with no strain and no tools needed.

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- 0.20 - 1.5 mm<sup>2</sup> (IEC) / 28 - 16 AWG (UL)
- 250 V (IEC) / 300 V (UL)
- 17.5 A (IEC) / 10 A (UL)

**General ordering data**

Order No.	Type	Version	GTIN (EAN)	Qty.	Product data	Packaging
<a href="#">1941410000</a>	BCZ 3.81/03/180LR SN OR BX	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 3, 180°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm <sup>2</sup> , Box	4032248698332	50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm <sup>2</sup> UL: 300 V / 10 A / AWG 28 - AWG 16	Box
<a href="#">1941790000</a>	BCZ 3.81/03/180LR SN BK BX	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 3, 180°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm <sup>2</sup> , Box	4032248698714	50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm <sup>2</sup> UL: 300 V / 10 A / AWG 28 - AWG 16	Box
<a href="#">1941600000</a>	BCZ 3.81/03/180LR SN GN BX	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 3, 180°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm <sup>2</sup> , Box	4032248698523	50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm <sup>2</sup> UL: 300 V / 10 A / AWG 28 - AWG 16	Box

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**Mating connector (conditionally pluggable)**
**BCZ 3.81/180F**


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:

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- 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 mm<sup>2</sup> (IEC) / 28 - 16 AWG (UL)
- 250 V (IEC) / 300 V (UL)
- 17.5 A (IEC) / 10 A (UL)

**General ordering data**

Order No.	Type	Version	GTIN (EAN)	Qty.	Product data	Packaging
<a href="#">1792960000</a>	BCZ 3.81/03/180F SN BK BX	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 3, 180°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm <sup>2</sup> , Box	4032248227044	50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm <sup>2</sup> UL: 300 V / 10 A / AWG 28 - AWG 16	Box
<a href="#">1793050000</a>	BCZ 3.81/03/180F SN GN BX	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 3, 180°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm <sup>2</sup> , Box	4032248227136	50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm <sup>2</sup> UL: 300 V / 10 A / AWG 28 - AWG 16	Box
<a href="#">1941020000</a>	BCZ 3.81/03/180F SN OR BX	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 3, 180°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm <sup>2</sup> , Box	4032248655823	50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm <sup>2</sup> UL: 300 V / 10 A / AWG 28 - AWG 16	Box

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**Mating connector (conditionally pluggable)**
**BCZ 3.81/270F**


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:

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- 0.20 - 1.5 mm<sup>2</sup> (IEC) / 28 - 16 AWG (UL)
- 250 V (IEC) / 300 V (UL)
- 17.5 A (IEC) / 10 A (UL)

**General ordering data**

Order No.	Type	Version	GTIN (EAN)	Qty.	Product data	Packaging
<a href="#">1940470000</a>	BCZ 3.81/03/270F SN OR BX	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 3, 270°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm <sup>2</sup> , Box	4032248656363	50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm <sup>2</sup> UL: 300 V / 10 A / AWG 28 - AWG 16	Box
<a href="#">1799180000</a>	BCZ 3.81/03/270F SN GN BX	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 3, 270°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm <sup>2</sup> , Box	4032248244072	50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm <sup>2</sup> UL: 300 V / 10 A / AWG 28 - AWG 16	Box
<a href="#">1798180000</a>	BCZ 3.81/03/270F SN BK BX	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 3, 270°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm <sup>2</sup> , Box	4032248241378	50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm <sup>2</sup> UL: 300 V / 10 A / AWG 28 - AWG 16	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.

**General ordering data**

Order No.	Type	Version	GTIN (EAN)	Qty.	Product data
<a href="#">1968900000</a>	SC-SMT 3.81 KO GY BX	PCB plug-in connector, Accessories, Coding element, Grey, No. of poles: 6	4032248772865	100 pc(s).	