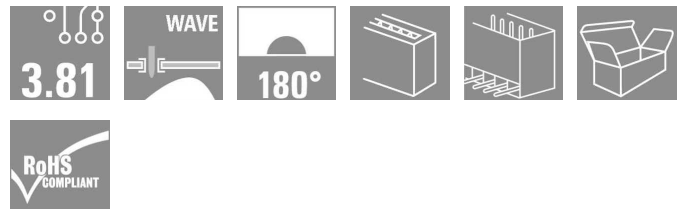


**OMNIMATE Signal - series BC/SC 3.81  
SC 3.81/05/180G 3.2SN GN BX**

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergstraße 16  
 D-32758 Detmold  
 Germany  
 Fon: +49 5231 14-0  
 Fax: +49 5231 14-292083  
 www.weidmueller.com



The SC pin header has a perpendicular (standing) plugging direction in relation to the PCB. It is available in closed (G) and screw flange (F) versions.

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

**General ordering data**

Type	SC 3.81/05/180G 3.2SN GN BX
Order No.	<a href="#">1793640000</a>
Version	PCB plug-in connector, male header, closed side, Solder connection, 3.81 mm, No. of poles: 5, 180°, Solder pin length (l): 3.2 mm, tinned, Pale green, Box
GTIN (EAN)	4032248230761
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 1.34 g

**System parameters**

Product family		Mounting onto the PCB	
Product family	OMNIMATE Signal - series BC/SC 3.81		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)	3.2 mm	Pin dimensions	d = 1.0 mm, Octagonal
Can be coded	Yes	Number of solder pins per pole	1
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>6</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		Colour	
Insulating material	PA GF	Colour	Pale green
Insulating material group	II	UL 94 flammability rating	V-0
CTI	≥ 550	Contact material	Cu-Leg
Contact surface	tinned	Operating temperature, min.	-50 °C
Operating temperature, max.	120 °C	Temperature range, installation, min.	-25 °C
Temperature range, installation, max.	120 °C	Max. relative humidity during storage	80 %

**DIN IEC rating data**

Rated current, min. no. of poles (Tu=20°C)		Rated current, max. no. of poles (Tu=20°C)	
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.	17.1 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)	8 A
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**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**

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

**Data sheet****OMNIMATE Signal - series BC/SC 3.81  
SC 3.81/05/180G 3.2SN GN BX**

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**Technical data****Notes**

- Notes
- Additional colours on request
  - P on drawing = 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.

**Approvals**

Approvals



ROHS

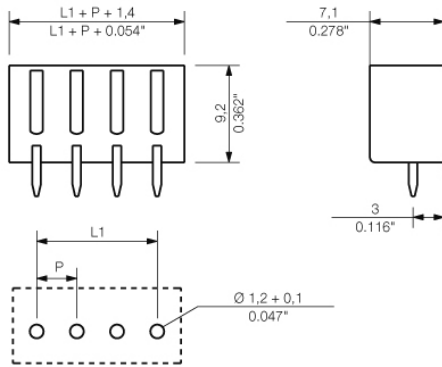
Conform

**Data sheet**

**OMNIMATE Signal - series BC/SC 3.81  
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**Drawings**



## OMNIMATE Signal - series BC/SC 3.81 SC 3.81/05/180G 3.2SN GN BX

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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:

- 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

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
BCZ 3.81/05/180F SN GN BX	<a href="#">1793070000</a>	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 5, 180°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm <sup>2</sup> , Box	4032248227150	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
BCZ 3.81/05/180F SN BK BX	<a href="#">1792980000</a>	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 5, 180°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm <sup>2</sup> , Box	4032248227068	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
BCZ 3.81/05/180F SN OR BX	<a href="#">1941040000</a>	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 5, 180°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm <sup>2</sup> , Box	4032248655809	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

**OMNIMATE Signal - series BC/SC 3.81  
SC 3.81/05/180G 3.2SN GN BX**

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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**

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
BCZ 3.81/05/90F SN BK BX	<a href="#">1798800000</a>	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 5, 90°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm <sup>2</sup> , Box	4032248243488	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
BCZ 3.81/05/90F SN GN BX	<a href="#">1798800000</a>	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 5, 90°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm <sup>2</sup> , Box	4032248243563	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
BCZ 3.81/05/90F SN OR BX	<a href="#">1940010000</a>	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 5, 90°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm <sup>2</sup> , Box	4032248656813	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

## OMNIMATE Signal - series BC/SC 3.81 SC 3.81/05/180G 3.2SN GN BX

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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:

- 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

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
BCZ 3.81/05/180LR SN GN BX	<a href="#">1941620000</a>	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 5, 180°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm <sup>2</sup> , Box	4032248698547	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
BCZ 3.81/05/180LR SN OR BX	<a href="#">1941430000</a>	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 5, 180°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm <sup>2</sup> , Box	4032248698356	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
BCZ 3.81/05/180LR SN BK BX	<a href="#">1941810000</a>	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 5, 180°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm <sup>2</sup> , Box	4032248698738	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

**OMNIMATE Signal - series BC/SC 3.81  
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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:

- 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**

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
BCZ 3.81/05/270F SN BK BX	<a href="#">1799120000</a>	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 5, 270°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm <sup>2</sup> , Box	4032248244010	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
BCZ 3.81/05/270F SN OR BX	<a href="#">1940490000</a>	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 5, 270°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm <sup>2</sup> , Box	4032248656349	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
BCZ 3.81/05/270F SN GN BX	<a href="#">1799200000</a>	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 5, 270°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm <sup>2</sup> , Box	4032248244096	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

