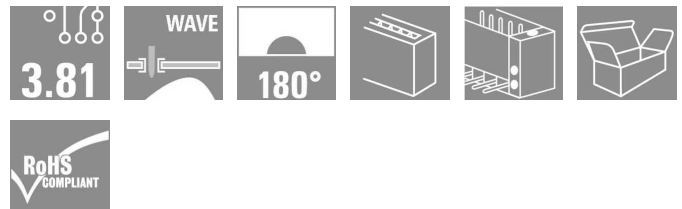


OMNIMATE Signal - series BC/SC 3.81
SC 3.81/02/180F 3.2SN GN BX

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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 3.81/02/180F 3.2SN GN BX
Order No.	1793790000
Version	PCB plug-in connector, male header, Flange, Solder connection, 3.81 mm, No. of poles: 2, 180°, Solder pin length (l): 3.2 mm, tinned, Pale green, Box
GTIN (EAN)	4032248230914
Qty.	50 pc(s).
Product data	IEC: 320 V / 17.5 A UL: 300 V / 10 A
Packaging	Box

**OMNIMATE Signal - series BC/SC 3.81
SC 3.81/02/180F 3.2SN GN BX**

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Technical data
Dimensions and weights

Net weight 1.9 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	2
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	3.81 mm	L1 in inches	0.15 inch
Insulation resistance	10 ⁶ 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
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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

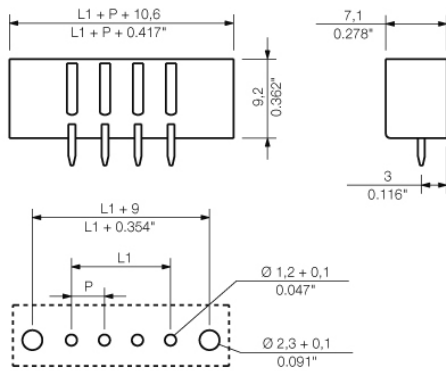
Conform

Data sheet

**OMNIMATE Signal - series BC/SC 3.81
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Drawings



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Mating connector (fully 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 mm² (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 3.81/02/180F SN GN BX	1793040000	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 2, 180°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm ² , Box	4032248227129	50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm ² UL: 300 V / 10 A / AWG 28 - AWG 16	Box
BCZ 3.81/02/180F SN BK BX	1792950000	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 2, 180°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm ² , Box	4032248227037	50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm ² UL: 300 V / 10 A / AWG 28 - AWG 16	Box
BCZ 3.81/02/180F SN OR BX	1941010000	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 2, 180°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm ² , Box	4032248655830	50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm ² UL: 300 V / 10 A / AWG 28 - AWG 16	Box

**OMNIMATE Signal - series BC/SC 3.81
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Mating connector (fully 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)

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
BCZ 3.81/02/90F SN GN BX	1798850000	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 2, 90°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm ² , Box	4032248243532	50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm ² UL: 300 V / 10 A / AWG 28 - AWG 16	Box
BCZ 3.81/02/90F SN OR BX	1939980000	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 2, 90°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm ² , Box	4032248656844	50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm ² UL: 300 V / 10 A / AWG 28 - AWG 16	Box
BCZ 3.81/02/90F SN BK BX	1798780000	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 2, 90°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm ² , Box	4032248243464	50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm ² UL: 300 V / 10 A / AWG 28 - AWG 16	Box

**OMNIMATE Signal - series BC/SC 3.81
SC 3.81/02/180F 3.2SN GN BX**

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Mating connector (fully 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 mm² (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 3.81/02/180LR SN GN BX	1941590000	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 2, 180°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm ² , Box	4032248698516	50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm ² UL: 300 V / 10 A / AWG 28 - AWG 16	Box
BCZ 3.81/02/180LR SN OR BX	1941400000	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 2, 180°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm ² , Box	4032248698325	50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm ² UL: 300 V / 10 A / AWG 28 - AWG 16	Box
BCZ 3.81/02/180LR SN BK BX	1941780000	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 2, 180°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm ² , Box	4032248698707	50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm ² UL: 300 V / 10 A / AWG 28 - AWG 16	Box

**OMNIMATE Signal - series BC/SC 3.81
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Mating connector (fully 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 mm² (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 3.81/02/270F SN BK BX	1799100000	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 2, 270°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm ² , Box	4032248243990	50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm ² UL: 300 V / 10 A / AWG 28 - AWG 16	Box
BCZ 3.81/02/270F SN OR BX	1940460000	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 2, 270°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm ² , Box	4032248656370	50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm ² UL: 300 V / 10 A / AWG 28 - AWG 16	Box
BCZ 3.81/02/270F SN GN BX	1799170000	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 2, 270°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm ² , Box	4032248244065	50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm ² UL: 300 V / 10 A / AWG 28 - AWG 16	Box

**OMNIMATE Signal - series BC/SC 3.81
SC 3.81/02/180F 3.2SN GN BX**

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Mating connector (conditionally pluggable)
BCZ 3.81/180


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)
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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

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
BCZ 3.81/02/180 SN OR BX	1940730000	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 2, 180°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm ² , Box	4032248656103	50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm ² UL: 300 V / 10 A / AWG 28 - AWG 16	Box
BCZ 3.81/02/180 SN GN BX	1792860000	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 2, 180°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm ² , Box	4032248226948	50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm ² UL: 300 V / 10 A / AWG 28 - AWG 16	Box
BCZ 3.81/02/180 SN BK BX	1792770000	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 2, 180°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm ² , Box	4032248226757	50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm ² UL: 300 V / 10 A / AWG 28 - AWG 16	Box

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Mating connector (conditionally pluggable)
BCZ 3.81/90


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)
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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

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
BCZ 3.81/02/90 SN BK BX	1798500000	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 2, 90°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm ² , Box	4032248243006	50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm ² UL: 300 V / 10 A / AWG 28 - AWG 16	Box
BCZ 3.81/02/90 SN OR BX	1939820000	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 2, 90°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm ² , Box	4032248653966	50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm ² UL: 300 V / 10 A / AWG 28 - AWG 16	Box
BCZ 3.81/02/90 SN GN BX	1798680000	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 2, 90°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm ² , Box	4032248243273	50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm ² UL: 300 V / 10 A / AWG 28 - AWG 16	Box

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Mating connector (conditionally pluggable)
BCZ 3.81/270


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)

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
BCZ 3.81/02/270 SN BK BX	1798940000	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 2, 270°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm ² , Box	4032248243723	50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm ² UL: 300 V / 10 A / AWG 28 - AWG 16	Box
BCZ 3.81/02/270 SN OR BX	1940190000	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 2, 270°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm ² , Box	4032248656646	50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm ² UL: 300 V / 10 A / AWG 28 - AWG 16	Box
BCZ 3.81/02/270 SN GN BX	1799010000	PCB plug-in connector, female plug, 3.81 mm, No. of poles: 2, 270°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm ² , Box	4032248243808	50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm ² UL: 300 V / 10 A / AWG 28 - AWG 16	Box

