

#### 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)

Туре	SC 3.81/06/180G 3.2SN GN BX
Order No.	<u>1793650000</u>
Version	PCB plug-in connector, male header, closed side, Solder connection, 3.81 mm, No. of poles: 6, 180°, Solder pin length (I): 3.2 mm, tinned, Pale green, Box
GTIN (EAN)	4032248230778
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**

Net weight	1.64 g	
System parameters		
Product family	OMNIMATE Signal - series	Mounting onto the PCB

Product family	OMNIMATE Signal - series	Mounting onto the PCB	
	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	6
Solder pin length (I)	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 tolerand	ce (D)+ 0,1 mm
L1 in mm	19.05 mm	L1 in inches	0.75 inch
Insulation resistance		Touch-safe protection acc. to DIN VI	DE
	10 <sup>6</sup> Ω	0470	IP 20
Touch-safe protection acc. to DIN VI	DE		

57 106 Safe from finger touch

## **Material data**

Insulating material	PA GF	Colour	Pale green
Insulating material group	II	UL 94 flammability rating	V-0
СТІ	≥ 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)	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

	Institute (CSA)	<b>⊕</b>	Rated voltage (Use group B)	
300 V		_		300 V
Rated current (use group B) 8 A	Rated current (use group B)	8 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	



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## **Technical data**

#### 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		

#### 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



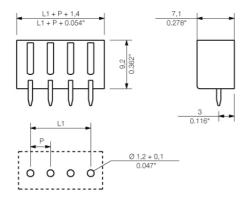
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## **Drawings**





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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)

Гуре	Order No.	Version GTIN (EAN) Qty.	Product data Packa
3CZ	<u>1941050000</u>	PCB plug-in connector, 403224865579350 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm <sup>2</sup> Box
3.81/06/	180F	female plug, 3.81 mm, No.	UL: 300 V / 10 A / AWG 28 - AWG 16
SN OR BX	(	of poles: 6, 180°, Clamping	
		yoke connection, Clamping	
		range, rated connection,	
		max.: 1.5 mm², Box	
CZ	<u>1792990000</u>	PCB plug-in connector, 4032248227075 50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm <sup>2</sup> Box
.81/06/	180F	female plug, 3.81 mm, No.	UL: 300 V / 10 A / AWG 28 - AWG 16
N BK BX		of poles: 6, 180°, Clamping	
		yoke connection, Clamping	
		range, rated connection,	
		max.: 1.5 mm², Box	
CZ	<u>1793080000</u>	PCB plug-in connector, 403224822716750 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm <sup>2</sup> Box
.81/06/	180F	female plug, 3.81 mm, No.	UL: 300 V / 10 A / AWG 28 - AWG 16
N GN BX	(	of poles: 6, 180°, Clamping	
		yoke connection, Clamping	
		range, rated connection,	
		max.: 1.5 mm², Box	



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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)

Гуре	Order No.	Version GTIN (EAN) Qty.	Product data Packa
CZ	<u>1798810000</u>	PCB plug-in connector, 4032248243495 50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm <sup>2</sup> Box
.81/06/	90F	female plug, 3.81 mm, No.	UL: 300 V / 10 A / AWG 28 - AWG 16
N BK BX		of poles: 6, 90°, Clamping	
		yoke connection, Clamping	
		range, rated connection,	
		max.: 1.5 mm², Box	
CZ	<u>1940020000</u>	PCB plug-in connector, 403224865680650 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm <sup>2</sup> Box
.81/06/	90F	female plug, 3.81 mm, No.	UL: 300 V / 10 A / AWG 28 - AWG 16
N OR BX		of poles: 6, 90°, Clamping	
		yoke connection, Clamping	
		range, rated connection,	
		max.: 1.5 mm², Box	
CZ	<u>1798890000</u>	PCB plug-in connector, 403224824357050 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm <sup>2</sup> Box
.81/06/	90F	female plug, 3.81 mm, No.	UL: 300 V / 10 A / AWG 28 - AWG 16
N GN BX	(	of poles: 6, 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.

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)

Гуре	Order No.	Version GTIN (EAN) Qty.	Product data Packa
3CZ	<u>1941630000</u>	PCB plug-in connector, 403224869855450 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm <sup>2</sup> Box
3.81/06/	′180LR	female plug, 3.81 mm, No.	UL: 300 V / 10 A / AWG 28 - AWG 16
SN GN BX	(	of poles: 6, 180°, Clamping	
		yoke connection, Clamping	
		range, rated connection,	
		max.: 1.5 mm², Box	
CZ	<u>1941820000</u>	PCB plug-in connector, 4032248698745 50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm <sup>2</sup> Box
.81/06/	180LR	female plug, 3.81 mm, No.	UL: 300 V / 10 A / AWG 28 - AWG 16
N BK BX		of poles: 6, 180°, Clamping	
		yoke connection, Clamping	
		range, rated connection,	
		max.: 1.5 mm², Box	
CZ	<u>1941440000</u>	PCB plug-in connector, 403224869836350 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm <sup>2</sup> Box
.81/06/	′180LR	female plug, 3.81 mm, No.	UL: 300 V / 10 A / AWG 28 - AWG 16
N OR BX	(	of poles: 6, 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.

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)

Туре	Order No.	Version GTIN (EAN) Oty.	Product data Packa
BCZ	1799130000	PCB plug-in connector, 4032248244027 50 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm <sup>2</sup> Box
3.81/06/270F		female plug, 3.81 mm, No.	UL: 300 V / 10 A / AWG 28 - AWG 16
SN BK BX		of poles: 6, 270°, Clamping	
		yoke connection, Clamping	
		range, rated connection,	
		max.: 1.5 mm², Box	
CZ	<u>1799210000</u>	PCB plug-in connector, 403224824410250 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm <sup>2</sup> Box
3.81/06/270F		female plug, 3.81 mm, No.	UL: 300 V / 10 A / AWG 28 - AWG 16
SN GN BX		of poles: 6, 270°, Clamping	
		yoke connection, Clamping	
		range, rated connection,	
		max.: 1.5 mm², Box	
CZ	<u>1940500000</u>	PCB plug-in connector, 403224865633250 pc(s).	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm <sup>2</sup> Box
.81/06/2	270F	female plug, 3.81 mm, No.	UL: 300 V / 10 A / AWG 28 - AWG 16
N OR BX		of poles: 6, 270°, Clamping	
		yoke connection, Clamping	
		range, rated connection,	
		max.: 1.5 mm², Box	

