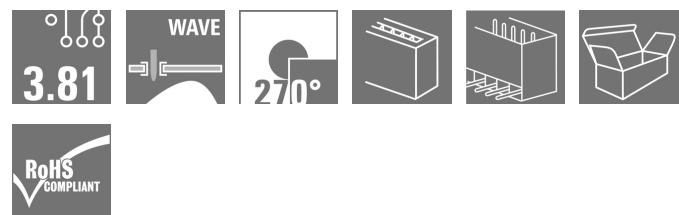


OMNIMATE Signal - series BC/SC 3.81 SC 3.81/08/270G 3.2AU BK BX

Weidmüller Interface GmbH & Co. KG
Klingenbergsstraße 26
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Product image



Similar to illustration

The SC pin header in 270°-outlet direction: the 270° angle exists between the plugging direction and the solder pin. The plugging direction is then parallel to the PCB. Sockets blocks, however, have an overhead plugging angle.

- More freedom when designing components and devices.
- A high component density when multiple PCBs are arranged in parallel within one housing
- The housing design is application-friendly because of the additional optional wire outlet direction.
- 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.

General ordering data

Delivery status	Discontinued
Type	SC 3.81/08/270G 3.2AU BK BX
Order No.	1921620000
Version	PCB plug-in connector, male header, closed side, THT solder connection, 3.81 mm, Number of poles: 8, 270°, Solder pin length (l): 3.2 mm, tinned, black, Box
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

Width	31.87	Width (inches)	1.255 inch
Height	10.3 mm	Height (inches)	0.406 inch
Height of lowest version	7.1 mm	Depth	9.2 mm
Depth (inches)	0.362 inch		

System specifications

Product family	OMNIMATE Signal - series BC/SC 3.81	Type of connection	Board connection
Mounting onto the PCB	THT solder connection	Pitch in mm (P)	3.81 mm
Pitch in inches (P)	0.15 inch	Outgoing elbow	270°
Number of poles	8	Number of solder pins per pole	1
Solder pin length (l)	3.2 mm	Solder pin length tolerance	0 / -0.2 mm
Tolerance of solder pin position	± 0.1 mm	Solder pin dimensions	d = 1.0 mm, Octagonal
Solder pin dimensions = d tolerance	0 / -0.03 mm	Solder eyelet hole diameter (D)	1.2 mm
Solder eyelet hole diameter tolerance (D)+ 0.1 mm		L1 in mm	26.67 mm
L1 in inches	1.05 inch	Number of rows	1
Pin series quantity	1	Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch
Touch-safe protection acc. to DIN VDE 0470	IP 20	Volume resistance	≤ 5mΩ
Can be coded	Yes	Plugging cycles	25
Plugging force/pole, min.	4.5 N	Plugging force/pole, max.	7 N
Pulling force / pole, min.	3 N	Pulling force/pole, max.	5 N

Material data

Insulating material	PA GF	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	II
Comparative Tracking Index (CTI)	≥ 550	Insulation strength	≥ 10 ⁸ Ω
UL 94 flammability rating	V-0	GWFI	960 °C
Contact material	Copper alloy	Contact surface	tinned
Storage temperature, min.	-40 °C	Storage temperature, max.	70 °C
Operating temperature, min.	-50 °C	Operating temperature, max.	120 °C
Temperature range, installation, min.	-25 °C	Temperature range, installation, max.	120 °C

Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	17.5 A
Rated current, max. number of poles (Tu=20°C)	17 A	Rated current, min. number of poles (Tu=40°C)	17.5 A
Rated current, max. number of poles (Tu=40°C)	15.1 A	Rated voltage for surge voltage class / pollution degree II/2	320 V
Rated voltage for surge voltage class / pollution degree III/2	160 V	Rated voltage for surge voltage class / pollution degree III/3	160 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	2.5 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	2.5 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	2.5 kV	Short-time withstand current resistance	3 x 1s with 76 A

Rated data acc. to CSA

Rated voltage (Use group B / CSA)	300 V	Rated current (Use group B / CSA)	8 A
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Data sheet**OMNIMATE Signal - series BC/SC 3.81
SC 3.81/08/270G 3.2AU BK BX**

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Technical data**Rated data acc. to UL 1059**

Institute (cURus)



Certificate No. (cURus)

E60693

Rated voltage (Use group B / UL 1059) 300 V

Rated current (Use group B / UL 1059) 10 A

Reference to approval values

Specifications are maximum values, details - see approval certificate.

Rated voltage (Use group D / UL 1059) 300 V

Rated current (Use group D / UL 1059) 10 A

Packing

Packaging

Box

Classifications

ETIM 6.0

EC002637

eClass 9.0

27-44-04-02

eClass 10.0

27-44-04-02

ETIM 7.0

EC002637

eClass 9.1

27-44-04-02

Notes

Notes

- Additional colours 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
- Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months

IPC conformity

Conformity: The products are developed, manufactured and delivered according international recognized standards and norms and comply with the assured properties in the data sheet resp. fulfill decorative properties in accordance with IPC-A-610 "Class 2". Further claims on the products can be evaluated on request.

Approvals

Approvals



ROHS

Conform

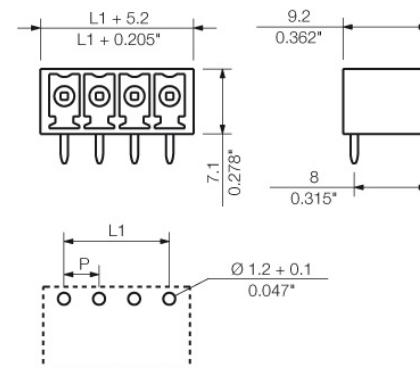
Downloads

Approval/Certificate/Document of Conformity

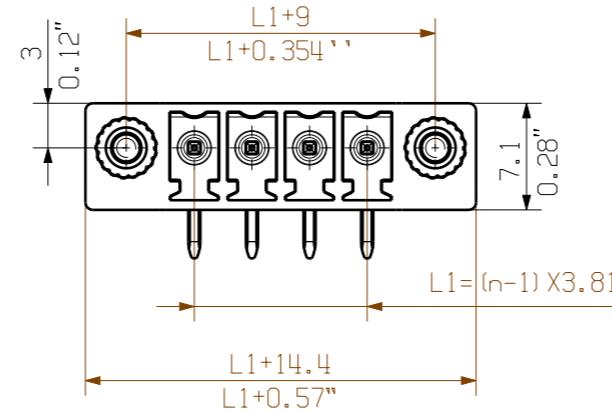
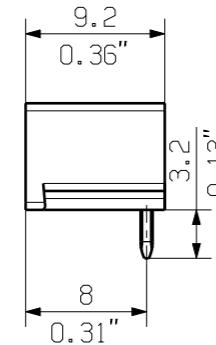
[Declaration of the Manufacturer](#)

**OMNIMATE Signal - series BC/SC 3.81
SC 3.81/08/270G 3.2AU BK BX**

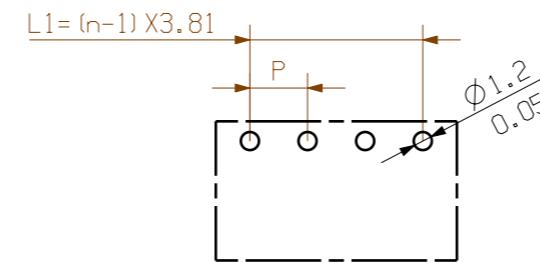
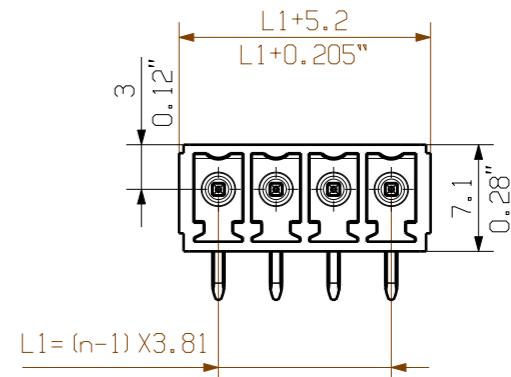
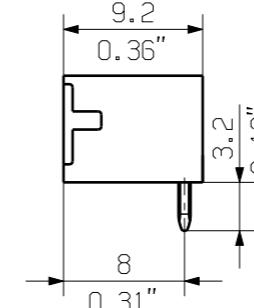
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Drawings**Dimensional drawing**

SC 3.81/.../270F 3.2 SN...



SC 3.81/.../270G 3.2 SN...



LAYOUT FINISHED HOLES

**KUNDENZEICHNUNG
CUSTOMER DRAWING**

NOTE:

n=NO OF POLES
P=PITCH

For the mounting of PCBs, it should be noted that the rated data stated here relates only to the PCB components alone.

The necessary creepage and clearance paths must be observed in connection with the respective applicant in accordance to IEC 664 / VDE 0110.

The current-carrying capacity and pitch tolerance is to be determined according to DIN IEC 326 part 3 very fine.

Weidmüller PCB components are tested to the DIN EN 61984 standard, and are valid for its field of application. Provided that the components are used to the intended purpose, all requirements with respect to the occurring of electrical, mechanical, thermic and corrosive stress will be satisfied.

 MAX. NRN./NOS.	<small>70834/5 03.07.13 ZHANG_E 01</small>		<small>CAT. NO.: . . .</small>
	<small>MODIFICATION</small>		
	<small>DRAWN</small>	<small>DATE</small>	<small>NAME</small>
	<small>RESPONSIBLE</small>	<small></small>	<small>XU_S</small>
	<small>SCALE: 5/1</small>	<small>CHECKED</small>	<small>ZHOU_N</small>
	<small>SUPERSEDES: .</small>	<small>APPROVED</small>	<small>XU_S</small>
<small>PRODUCT FILE: SC 3.81</small>			<small>7069</small>

Weidmüller

DRAWING NO. C 46284 03 ISSUE NO. 01 OF 04 SHEETS

SC... 3.81/.../270...
STIFTLEISTE RASTER 3.81 GESCHLOSSEN
PIN HEADER PITCH 3.81CLOSED ENDS

Recommended wave soldering profiles

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Single Wave:**Double Wave:****Wave soldering profiles**

Wired connection elements should be processed in accordance with the DIN EN 61760-1 standard. We have included two recommendations for practical wave soldering profiles, with which Weidmüller PCB terminals and connectors are qualified.

When choosing a suitable profile for your application, the following factors also need to be considered:

- PCB thickness
- Proportion of Cu in the layers
- Single/double-sided assembly
- Product range
- Heating and cooling rates

The single and double wave profiles each indicate the recommended operating range, including the maximum soldering temperature of 260°C. In practice, the maximum soldering temperature is quite often well below the above maximum profile.