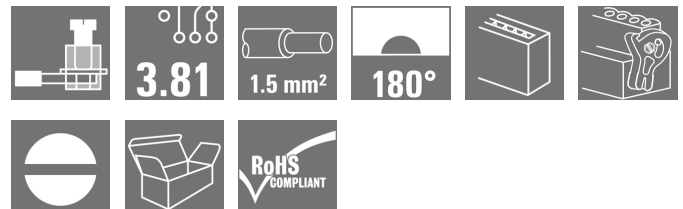
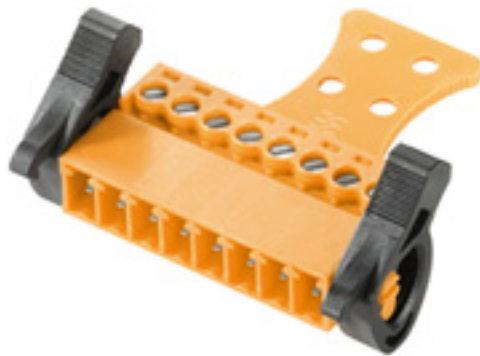


OMNIMATE Signal - series BC/SC 3.81 SCZ 3.81/12/180LRZE SN OR BX

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

Product image



Similar to illustration

The inverted SCZ pin plug with clamping-yoke screw connection is designed for straight wire outlet connections. It can be used in two ways:

- for wire-to-wire connections together with the BCZ
- As a mating plug for the touch-safe BCL-SMT socket block on the PCB.

The SCZ is available in four different versions:

- Without flange ("G", closed)
- With standard flange ("F", with nut) for wire-to-wire connections
- With inverted flange ("FI", with screw) for screw connection to the BCL-SMT LFI
- With Weidmüller's patented release latch (LR) for lock-and-release latching with the BCL-SMT LFI: no strain and no tools needed.

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
Available until	2017-12-31
Type	SCZ 3.81/12/180LRZE SN OR BX
Order No.	1237430000
Version	PCB plug-in connector, male plug, 3.81 mm, No. of poles: 12, 180°, Clamping yoke connection, Clamping range, max.: 1.5 mm², Box
GTIN (EAN)	4050118023176
Qty.	50 pc(s).
Product data	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm² UL: 300 V / 10 A / AWG 28 - AWG 16
Packaging	Box
Alternative product	2444280000

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Technical data

Dimensions and weights

Height	16.6 mm	Height (inches)	0.654 inch
Depth	42.1 mm	Depth (inches)	1.657 inch
Net weight	13.74 g		

Environmental Product Compliance

REACH SVHC Lead 7439-92-1

system parameters

Product family	OMNIMATE Signal - series BC/SC 3.81	Type of connection	Field connection
Wire connection method	Clamping yoke connection	Pitch in mm (P)	3.81 mm
Pitch in inches (P)	0.15 inch	Conductor outlet direction	180°
No. of poles	12	L1 in mm	41.91 mm
L1 in inches	1.65 inch	Number of rows	1
Pin series quantity	1	Rated cross-section	1 mm ²
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	6.00 mΩ	Can be coded	Yes
Stripping length	7 mm	Tightening torque, min.	0.2 Nm
Tightening torque, max.	0.25 Nm	Clamping screw	M 2
Screwdriver blade	0.4 x 2.5	Screwdriver blade standard	DIN 5264
Plugging cycles	25	Plugging force/pole, max.	8 N
Pulling force/pole, max.	5 N		

Material data

Insulating material	PA 66 GF 30	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	II
CTI	≥ 550	Insulation strength	≥ 10 ⁸ Ω
UL 94 flammability rating	V-0	GWFI	960 °C
Contact material	Copper alloy	Contact surface	tinned
Layer structure of plug contact	4-8 μm Sn	Storage temperature, min.	-25 °C
Storage temperature, max.	55 °C	Max. relative humidity during storage	80 %
Operating temperature, min.	-50 °C	Operating temperature, max.	120 °C
Temperature range, installation, min.	-25 °C	Temperature range, installation, max.	120 °C

Conductors suitable for connection

Clamping range, min.	0.08 mm ²
Clamping range, max.	1.5 mm ²
Wire connection cross section AWG, min.	AWG 28
Wire connection cross section AWG, max.	AWG 16
Solid, min. H05(07) V-U	0.2 mm ²
Solid, max. H05(07) V-U	1.5 mm ²
Flexible, min. H05(07) V-K	0.2 mm ²
Flexible, max. H05(07) V-K	1.5 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, 0.2 mm ² min.	
w. plastic collar ferrule, DIN 46228 pt 4, 1.5 mm ² max.	
w. wire end ferrule, DIN 46228 pt 1, min 0.2 mm ²	

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SCZ 3.81/12/180LRZE SN OR BX**

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Technical data

w. wire end ferrule, DIN 46228 pt 1, max. 1.5 mm²

Plug gauge in accordance with EN 60999 a x b; ø 2.4 mm x 1.5 mm ; 2.4 mm

Clampable conductor	Cross-section for conductor connection	Type	fine-wired	
		nominal	0.5 mm ²	
	AEH	Stripping length	nominal	6 mm
	Cross-section for conductor connection	Type	fine-wired	
		nominal	0.75 mm ²	
	AEH	Stripping length	nominal	6 mm
	Cross-section for conductor connection	Type	fine-wired	
		nominal	1 mm ²	
	AEH	Stripping length	nominal	6 mm
	Cross-section for conductor connection	Type	fine-wired	
		nominal	1.5 mm ²	
	AEH	Stripping length	nominal	7 mm

Reference text The outside diameter of the plastic collar should not be larger than the pitch (P).

Max. clamping range 1.5 mm²

Rated data acc. to IEC

tested acc. to standard

IEC 60664-1, IEC 61984

Rated current, max. no. of poles (Tu=20°C)

17.1 A

Rated current, max. no. of poles (Tu=40°C)

15.2 A

Rated voltage for surge voltage class / pollution degree III/2

160 V

Rated impulse voltage for surge voltage class/ pollution degree II/2

2.5 kV

Rated impulse voltage for surge voltage class/ contamination degree III/3

2.5 kV

Rated current, min. no. of poles (Tu=20°C)

17.5 A

Rated current, min. no. of poles (Tu=40°C)

17.5 A

Rated voltage for surge voltage class / pollution degree II/2

320 V

Rated voltage for surge voltage class / pollution degree III/3

160 V

Rated impulse voltage for surge voltage class/ pollution degree III/2

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) 11 A

Wire cross-section, AWG, min. AWG 28

Rated voltage (Use group C / CSA) 50 V

Rated current (Use group C / CSA) 11 A

Wire cross-section, AWG, max. AWG 16

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

Wire cross-section, AWG, min. AWG 28

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

Wire cross-section, AWG, max. AWG 16

Packing

Packaging Box

VPE width 0

VPE length 0

VPE height 0

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Technical data

Classifications

ETIM 4.0	EC002637	ETIM 5.0	EC002637
ETIM 6.0	EC002638	eClass 6.2	27-26-07-04
eClass 7.1	27-44-04-02	eClass 8.1	27-44-04-02
eClass 9.0	27-44-03-09	eClass 9.1	27-44-03-09

Notes

Notes	• Additional colours on request • Rated current related to rated cross-section & min. No. of poles. • Wire end ferrule with plastic collar to DIN 46228/4 • 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.
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](#)

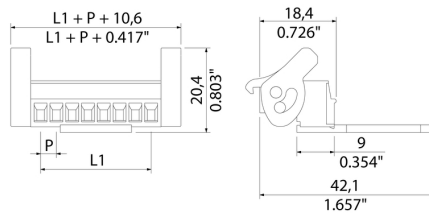
Brochure/Catalogue

[FL DRIVES EN](#)
[MB DEVICE MANUF. EN](#)
[FL DRIVES DE](#)
[CAT 2 PORTFOLIOGUIDE EN](#)
[FL BUILDING SAFETY EN](#)
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[FL POWER SUPPLY EN](#)
[FL 72H SAMPLE SER EN](#)
[PO OMNIMATE EN](#)

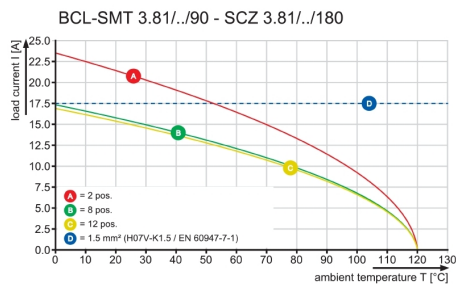
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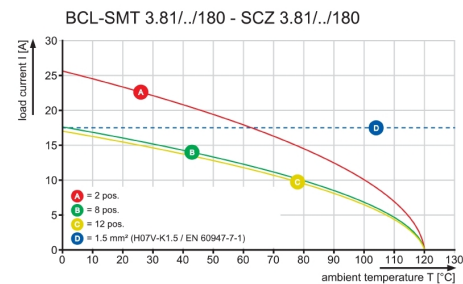
Drawings



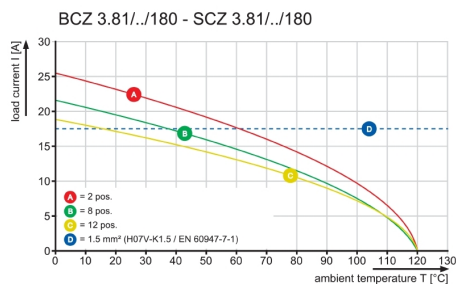
Graph



Graph



Graph

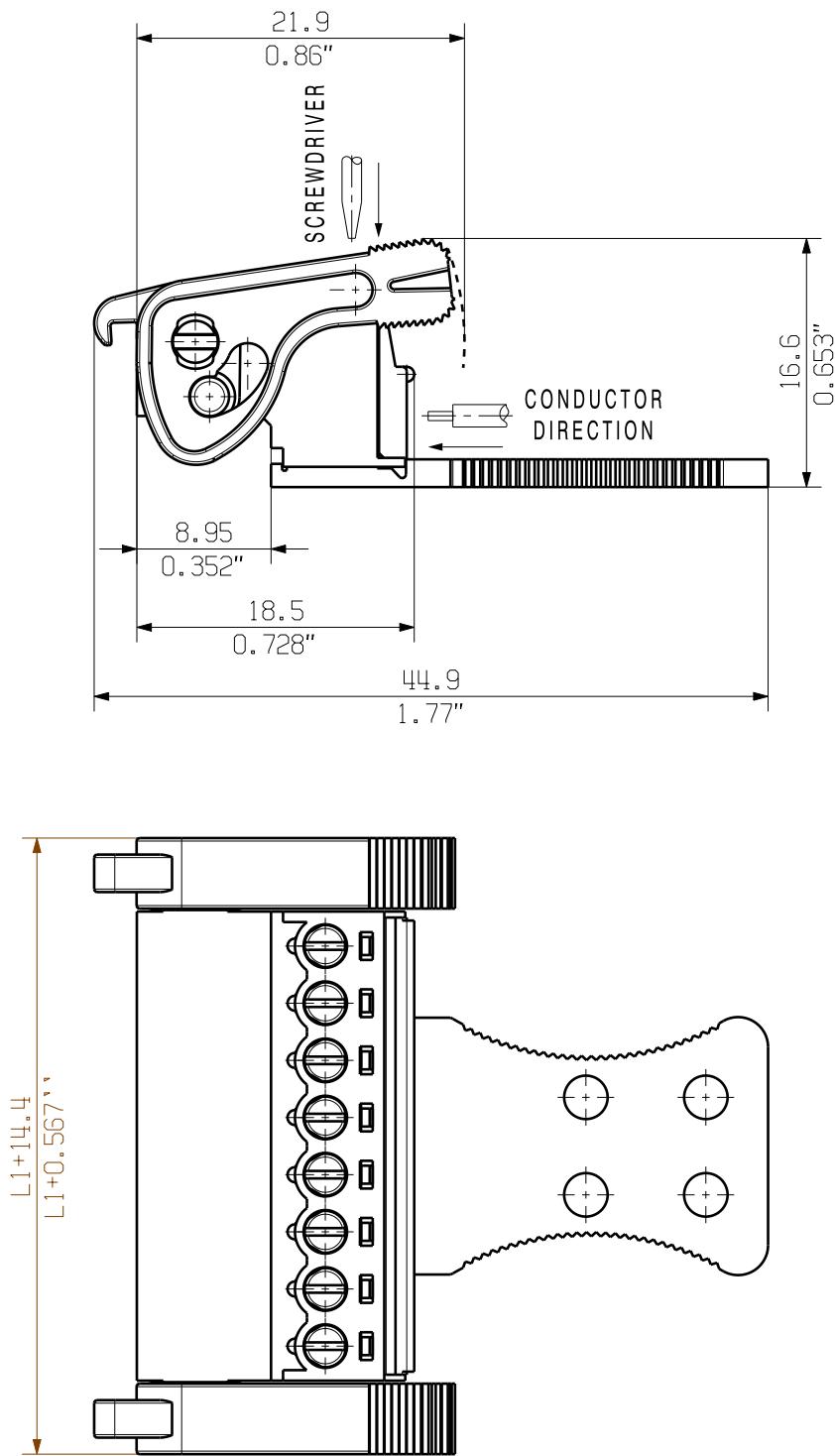


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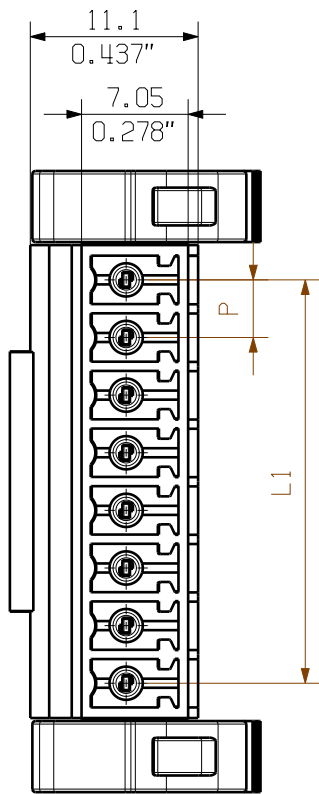
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Dimensions without tolerances are no check dimensions

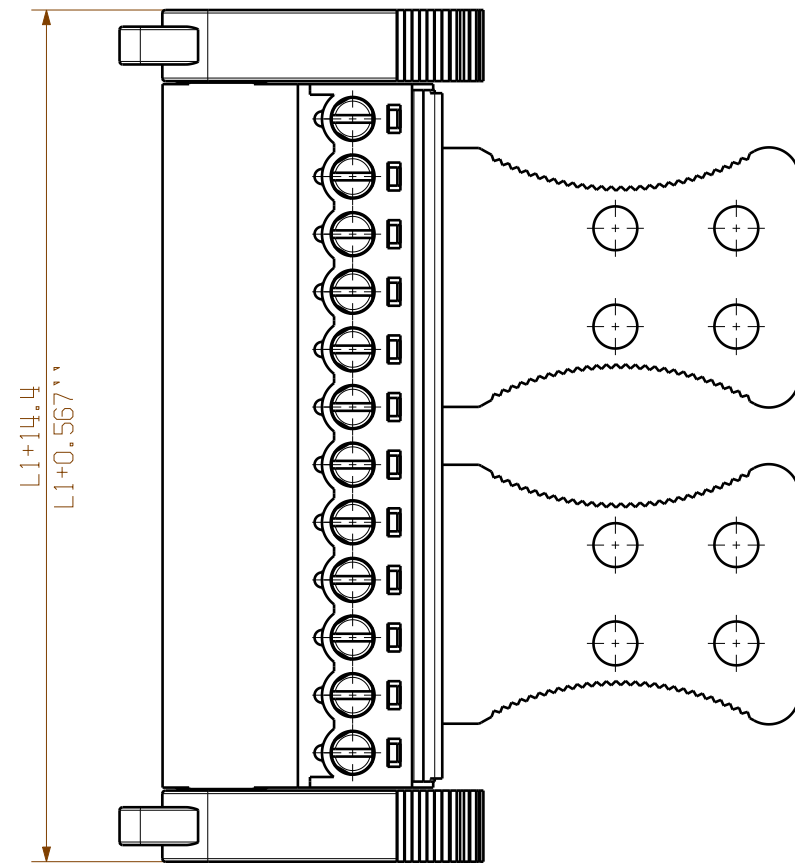
The English version is binding



SCZ 3.81/.../180LRZE SN...
ONE ZE FOR 4-9 POLE



KUNDENZEICHNUNG
CUSTOMER DRAWING



SCZ 3.81/.../180LRZE SN...
TWO ZE FOR 10-20 POLE

P = 3.81 RASTER
0.15" PITCH

12	41.91	1.651
11	38.10	1.501
10	34.29	1.351
9	30.48	1.201
8	26.67	1.051
7	22.86	0.901
6	19.05	0.751
5	15.24	0.600
4	-	-
3	-	-
2	-	-
N	L1 [mm]	L1 [inch]

GENERAL TOLERANCE: DIN ISO 2768-m		86251/0 26.05.16 XIANG_K		00	Cat.no.: .	
RoHS COMPLIANT		Max. nos.		Modification		
Scale: 2/1		Date		Name		
Supersedes: .		Approved		XU_S		
Drawn		17.02.2016		XIANG_K		
Responsible		Checked		26.05.2016 ZHOU_N		
Product file: SCZ 3.81		7078				

Weidmüller
ZUGBUEGELANSCHLUSS STIFTLEISTE
CLAMPING YOKE CONNECTION PIN HEADER

C 63184
Drawing no. Issue no.
Sheet 00 of 00 sheets