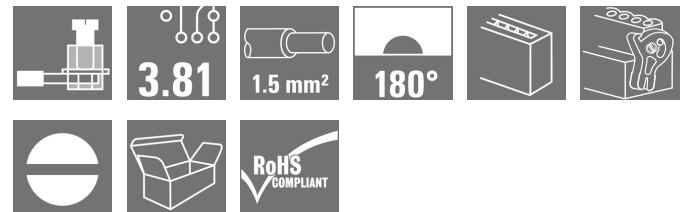


OMNIMATE Signal - series BC/SC 3.81 SCZ 3.81/05/180LRZE SN OR BX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
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Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
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Product image



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

Type	SCZ 3.81/05/180LRZE SN OR BX
Order No.	2444220000
Version	PCB plug-in connector, male plug, 3.81 mm, Number of poles: 5, 180°, Clamping yoke connection, Clamping range, max. : 1.5 mm², Box
GTIN (EAN)	4050118542585
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

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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	7.2 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°
Number of poles	5	L1 in mm	15.24 mm
L1 in inches	0.6 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	≤ 5mΩ	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
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
Layer structure of plug contact	4-8 μm Sn	Storage temperature, min.	-25 °C
Storage temperature, max.	50 °C	Max. relative humidity during storage	70 %
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, 0.2 mm ² min.	

Creation date May 2, 2020 3:03:52 PM CEST

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Technical data

w. wire end ferrule, DIN 46228 pt 1, max.	1.5 mm ²			
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	
	wire end ferrule	Stripping length	nominal	6 mm
		Recommended wire-end ferrule	H0.5/6	
	Cross-section for conductor connection	Type	fine-wired	
		nominal	0.75 mm ²	
	wire end ferrule	Stripping length	nominal	6 mm
		Recommended wire-end ferrule	H0,75/6	
Cross-section for conductor connection	Type	fine-wired		
	nominal	1 mm ²		
wire end ferrule	Stripping length	nominal	6 mm	
	Recommended wire-end ferrule	H1.0/6		
Cross-section for conductor connection	Type	fine-wired		
	nominal	1.5 mm ²		
wire end ferrule	Stripping length	nominal	7 mm	
	Recommended wire-end ferrule	H1.5/7		
Reference text	The outside diameter of the plastic collar should not be larger than the pitch (P). Length of ferrules is to be chosen depending on the product and the rated voltage.			
Max. clamping range	1.5 mm ²			

Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984		
Rated current, max. number of poles (Tu=20°C)	17.1 A	Rated current, min. number of poles (Tu=20°C)	17.5 A
Rated current, max. number of poles (Tu=40°C)	15.2 A	Rated current, min. number of poles (Tu=40°C)	17.5 A
Rated voltage for surge voltage class / pollution degree III/2	160 V	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	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 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 voltage (Use group C / CSA)	50 V
Rated current (Use group B / CSA)	11 A	Rated current (Use group C / CSA)	11 A
Wire cross-section, AWG, min.	AWG 28	Wire cross-section, AWG, max.	AWG 18

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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
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 length	165 mm
VPE width	120 mm	VPE height	50 mm

Classifications

ETIM 6.0	EC002638	ETIM 7.0	EC002638
eClass 9.0	27-44-03-09	eClass 9.1	27-44-03-09
eClass 10.0	27-44-03-09		

Notes

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.
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Approvals

Approvals



ROHS	Conform
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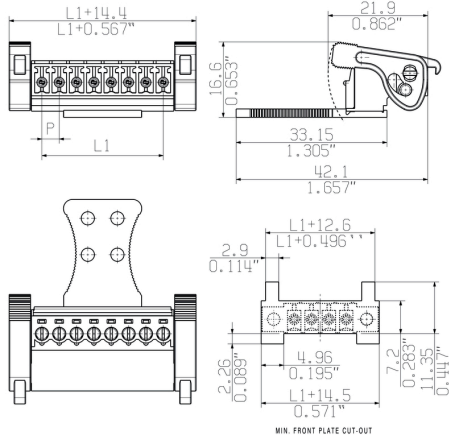
Downloads

Engineering Data	STEP
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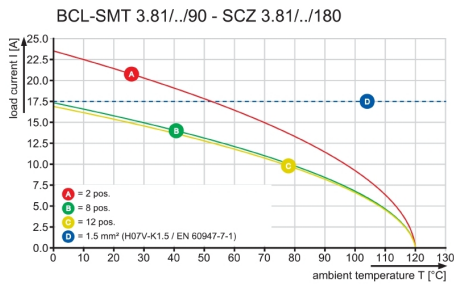
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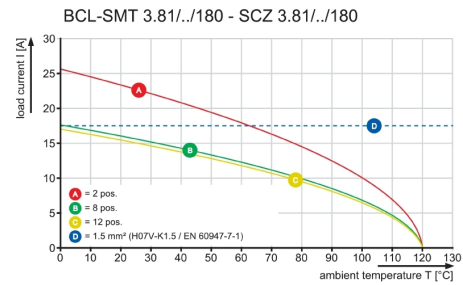
Drawings



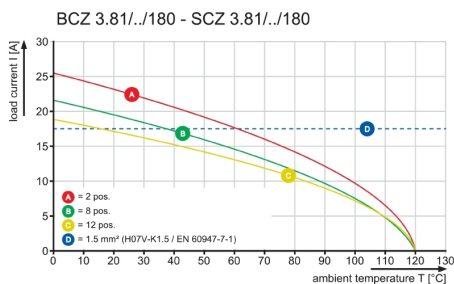
Graph

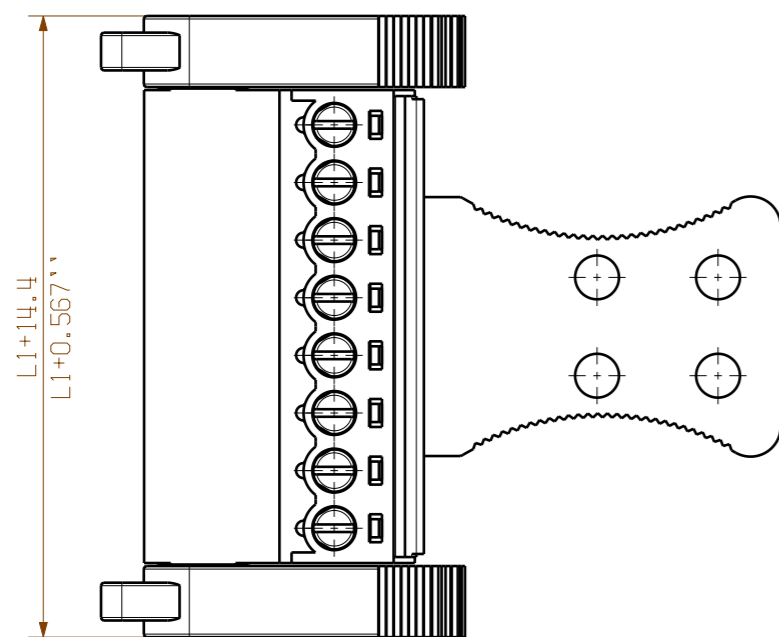
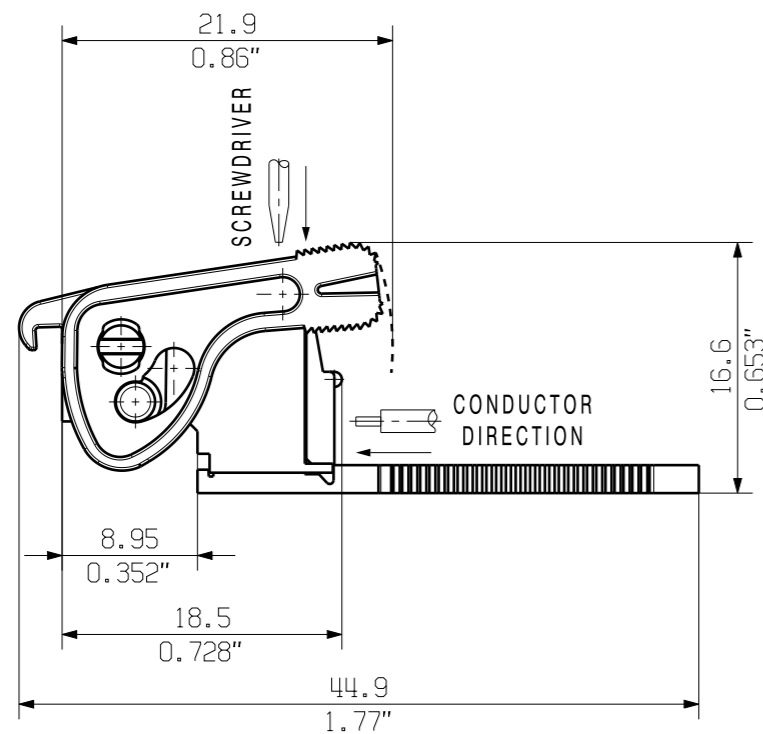


Graph

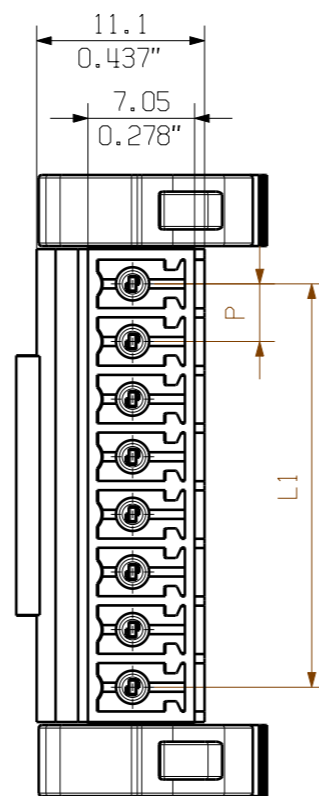


Graph

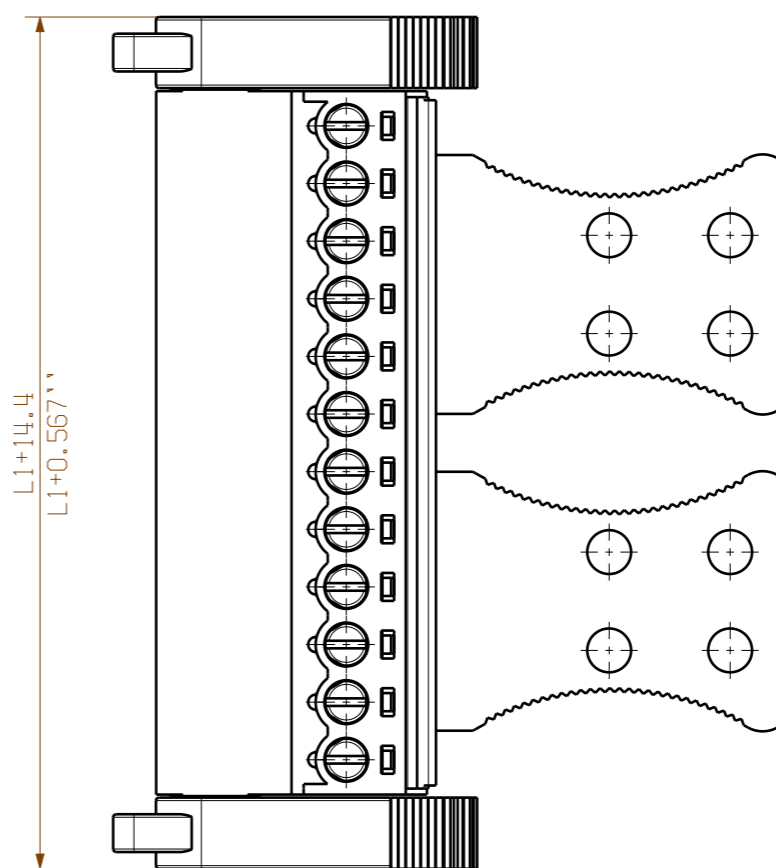




SCZ 3.81.../180LRZE SN...
ONE ZE FOR 4-9 POLE



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		Weidmüller	
Scale: 2/1		Drawn	Date	Name	C 63184 00 Drawing no. Issue no. Sheet 00 of 00 sheets
Supersedes:		Responsible	Date	Name	
Approved		Checked	Date	Name	
Product file: SCZ 3.81			7078		

SCZ 3.81...180LR...
 ZUGBUEGELANSCHLUSS STIFTLLEISTE
 CLAMPING YOKE CONNECTION PIN HEADER

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