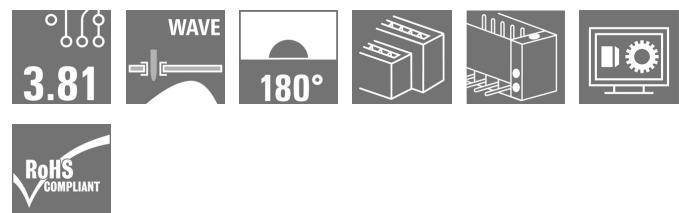
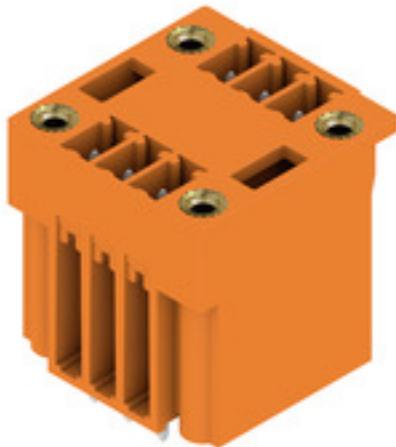


SCD 3.81/06/180F 3.2SN OR BX

Weidmüller Interface GmbH & Co. KG
 Klingenbergsstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com

Product image

Two-tier SCD pin header for wave soldering.

- It allows you to use two interfaces on only one surface and with only one step in the work flow.
- Outlet direction: 180° (standing).
- Connections at the same level and with access that is flush over the front board.
- Space for labelling and coding
- Packed in cardboard box.

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

Version	PCB plug-in connector, male header, Flange, THT solder connection, 3.81 mm, Number of poles: 6, 180°, Solder pin length (l): 3.2 mm, tinned, orange, Box
Order No.	1030450000
Type	SCD 3.81/06/180F 3.2SN OR BX
GTIN (EAN)	4032248759590
Qty.	52 pc(s).
Product data	IEC: 320 V / 17.5 A UL: 300 V / 10 A
Packaging	Box

Creation date September 15, 2022 9:54:24 PM CEST

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Technical data

Dimensions and weights

Depth	22.7 mm	Depth (inches)	0.894 inch
Height	25.1 mm	Height (inches)	0.988 inch
Height of lowest version	21.9 mm	Width	21.82 mm
Width (inches)	0.859 inch	Net weight	8.335 g

Environmental Product Compliance

REACH SVHC	SCIP	30ed36e8-ca63-4b0f-aea5-d68a63970d36
	Lead 7439-92-1	

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	180°										
Number of poles	6										
Number of solder pins per pole	1										
Solder pin length (l)	3.2 mm										
Solder pin length tolerance	+0,02 / -0,2 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	7.62 mm										
L1 in inches	0.3 inch										
Number of rows	2										
Pin series quantity	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	≤5 mΩ										
Can be coded	Yes										
Plugging force/pole, max.	8 N										
Pulling force/pole, max.	5.5 N										
Tightening torque	<table> <tr> <td>Torque type</td> <td>Mounting screw, PCB</td> </tr> <tr> <td>Usage information</td> <td> <table> <tr> <td>Tightening torque</td> <td>min. 0.1 Nm</td> </tr> <tr> <td></td> <td>max. 0.15 Nm</td> </tr> <tr> <td>Recommended screw</td> <td>Part number PTSC KA 2.2X4.5 WN1412</td> </tr> </table> </td> </tr></table>	Torque type	Mounting screw, PCB	Usage information	<table> <tr> <td>Tightening torque</td> <td>min. 0.1 Nm</td> </tr> <tr> <td></td> <td>max. 0.15 Nm</td> </tr> <tr> <td>Recommended screw</td> <td>Part number PTSC KA 2.2X4.5 WN1412</td> </tr> </table>	Tightening torque	min. 0.1 Nm		max. 0.15 Nm	Recommended screw	Part number PTSC KA 2.2X4.5 WN1412
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	max. 0.15 Nm										
Recommended screw	Part number PTSC KA 2.2X4.5 WN1412										

Material data

Insulating material	PA GF	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	II
Comparative Tracking Index (CTI)	≥ 550	UL 94 flammability rating	V-0
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

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Technical data

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, min. number of poles (Tu=40°C)	17 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)	11 A
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Packing

Packaging	Box	VPE length	241 mm
VPE width	132 mm	VPE height	28 mm

Classifications

ETIM 6.0	EC002637	ETIM 7.0	EC002637
ETIM 8.0	EC002637	ECLASS 9.0	27-44-04-02
ECLASS 9.1	27-44-04-02	ECLASS 10.0	27-44-04-02
ECLASS 11.0	27-46-02-01	ECLASS 12.0	27-46-02-01

Important note

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.
Notes	<ul style="list-style-type: none"> • Additional variants 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 • 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. • For additional mechanical support for male connectors with screw flange (...F), we recommend an additional cable gland with fastening screws (sheet metal screw ISO 1481-ST 2.2x4.5 C or ISO 7049-ST 2.2x4.5 C – see Accessories). Cable gland only permitted before soldering. • Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months

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Technical data**Approvals**

Approvals



ROHS	Conform
UL File Number Search	UL Website
Certificate No. (cURus)	E60693

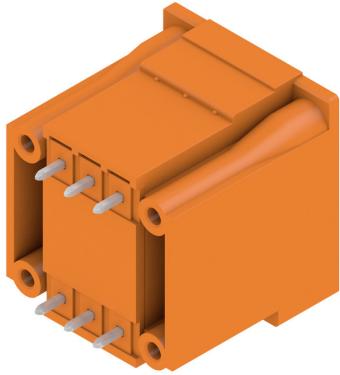
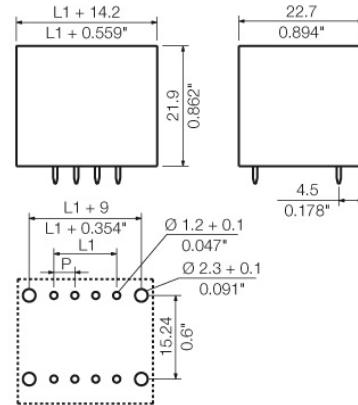
Downloads

Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Engineering Data	CAD data – STEP
Engineering Data	EPLAN, WSCAD
Product Change Notification	Change of packaging - DE Change of packaging - EN
Catalogues	Catalogues in PDF-format
Brochures	FL DRIVES EN MB DEVICE MANUF. EN FL DRIVES DE FL BUILDING SAFETY EN FL APPL LED LIGHTING EN FL INDUSTR.CONTROLS EN FL MACHINE SAFETY EN FL HEATING ELECTR EN FL APPL_INVERTER EN FL BASE_STATION EN FL ELEVATOR EN FL POWER SUPPLY EN FL 72H SAMPLE SER EN PO OMNIMATE EN PO OMNIMATE EN

SCD 3.81/06/180F 3.2SN OR BX

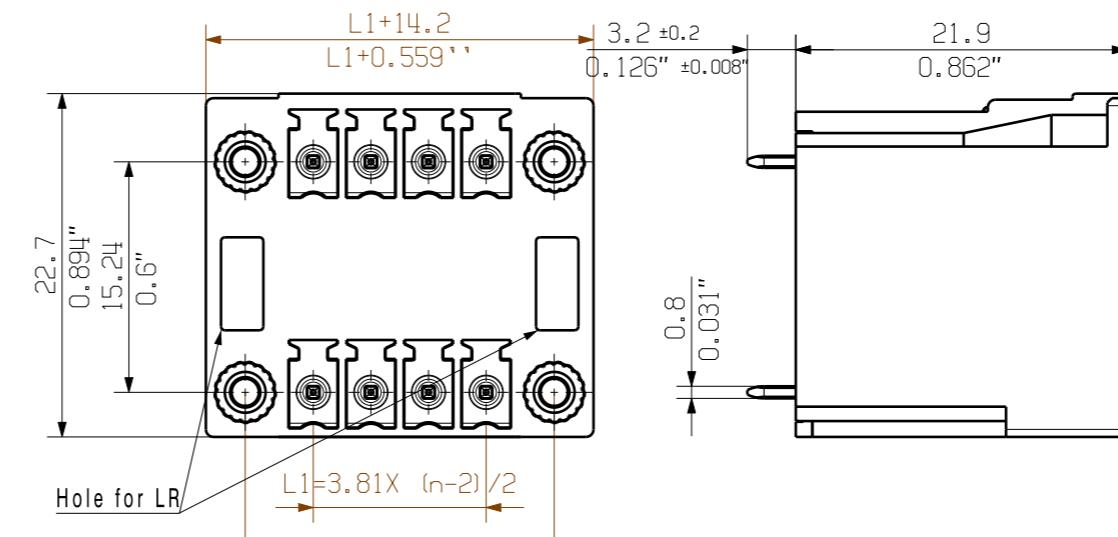
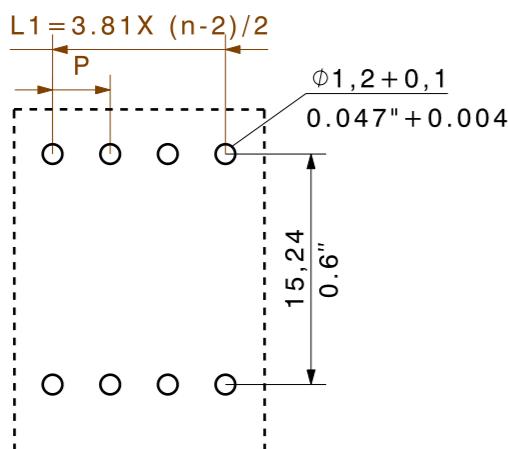
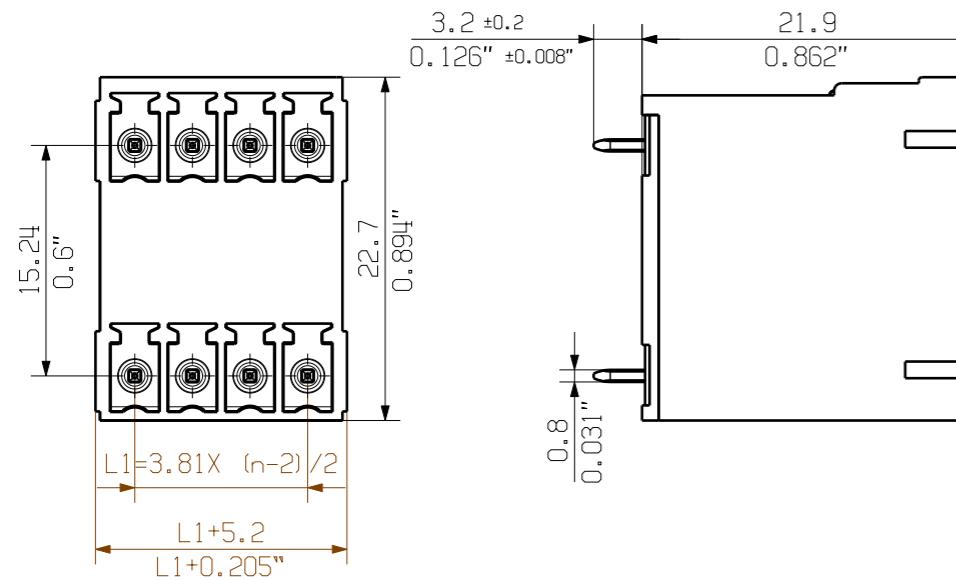
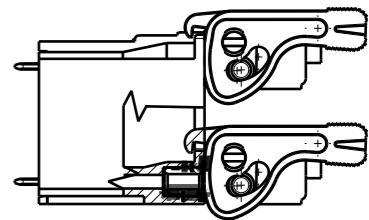
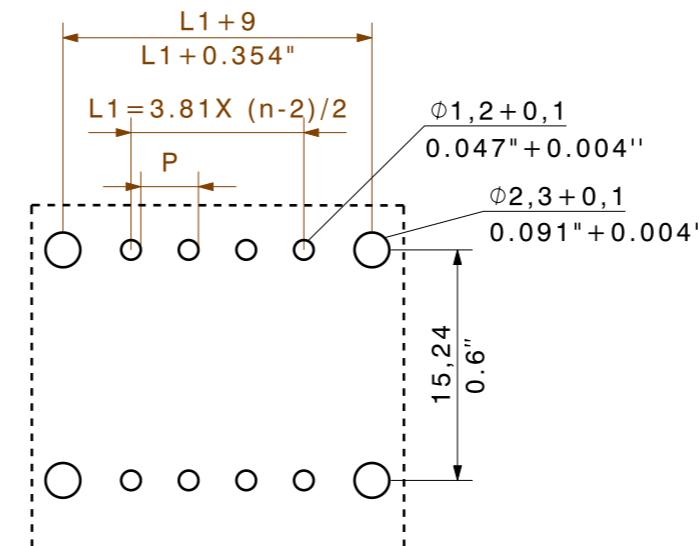
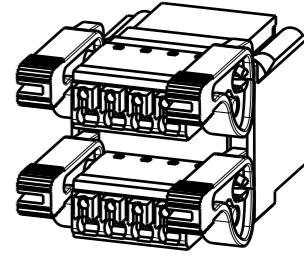
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Drawings**Product image****Dimensional drawing**

04

SCD 3.81/.../180G 3.2...

SCD 3.81/.../180F 3.2...
WITH
BCF 3.81/.../180 LRSCD 3.81/.../180F 3.2...
WITH
BCF 3.81/.../180 LR
M 1/1

NOTE:

n=NO OF POLES
P=PITCHKUNDENZEICHNUNG
CUSTOMER DRAWING

16	57.15	2.250
15	53.34	2.100
14	49.53	1.950
13	45.72	1.800
12	41.91	1.650
11	38.10	1.500
10	34.29	1.350
9	30.48	1.200
8	26.67	1.050
7	22.86	0.900
6	19.05	0.750
5	15.24	0.600
4	11.43	0.450
3	7.62	0.300
2	3.81	0.150
n	L1 [mm]	L1 [inch]

Cat. no.:

C 46286 04

Drawing no. Issue no.

Sheet 01 of 02 sheets

GENERAL TOLERANCE:
DIN ISO 2768-mRoHS
COMPLIANT

Max. nos.

99958/4 06.03.18 MA_J	01	
Modification		
	Date	Name
Drawn	08.01.2009	GE_G
Responsible		MA_J
Scale: 5/1	Checked	14.03.2018 ZHOU_N
Supersedes: .	Approved	XU_S
Product file: SCD 3.81		

Weidmüller

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.

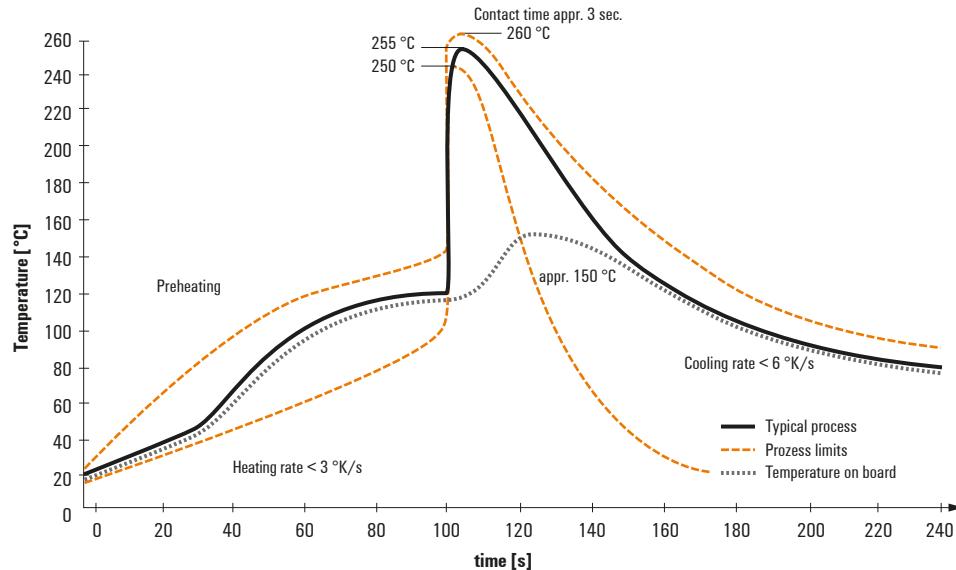
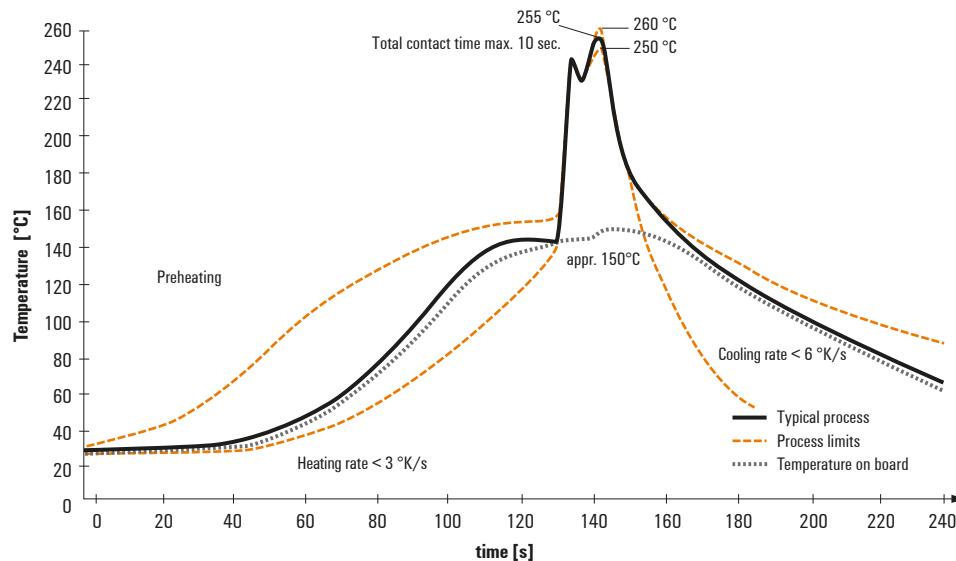
The current-carrying capacity and pitch tolerance is to be determined according to DIN IEC 326 part 3 very fine.

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.

SCD... 3.81/.../180...
THR-LOETANSCHLUSS STIFTLEISTE
THR SOLDER CONNECTION PIN HEADER

Recommended wave soldering profiles

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

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.