

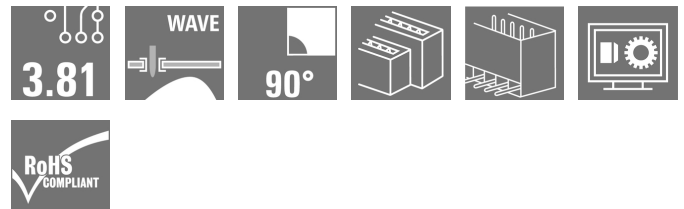
SCD 3.81/16/90G 3.2SN BK BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 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: 90° (recumbent)
- 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, closed side, THT solder connection, 3.81 mm, Number of poles: 16, 90°, Solder pin length (l): 3.2 mm, tinned, black, Box
Order No.	1973160000
Type	SCD 3.81/16/90G 3.2SN BK BX
GTIN (EAN)	4032248682720
Qty.	36 pc(s).
Product data	IEC: 320 V / 17.5 A UL: 300 V / 10 A
Packaging	Box

Creation date September 17, 2022 8:31:15 PM CEST

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Technical data

Dimensions and weights

Depth	21.9 mm	Depth (inches)	0.862 inch
Height	25.9 mm	Height (inches)	1.02 inch
Height of lowest version	22.7 mm	Width	31.87 mm
Width (inches)	1.255 inch	Net weight	13.18 g

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	90°
Number of poles	16	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	26.67 mm	L1 in inches	1.05 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

Material data

Insulating material	PA GF	Colour	black
Colour chart (similar)	RAL 9011	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

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)	13.9 A	Rated current, min. number of poles (Tu=40°C)	17 A
Rated current, max. number of poles (Tu=40°C)	12.3 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

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Technical data

Rated data acc. to CSA

Institute (CSA)



Certificate No. (CSA)

200039-1121690

Rated voltage (Use group B / CSA) 300 V

Rated current (Use group B / CSA) 11 A

Reference to approval values
Specifications are maximum values, details - see approval certificate.

Packing

Packaging	Box	VPE length	348 mm
VPE width	134 mm	VPE height	44 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

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

Approvals

Approvals



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

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Technical data

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

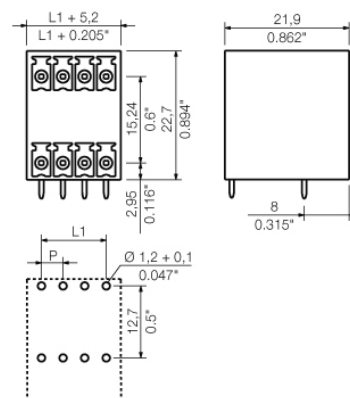
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Drawings

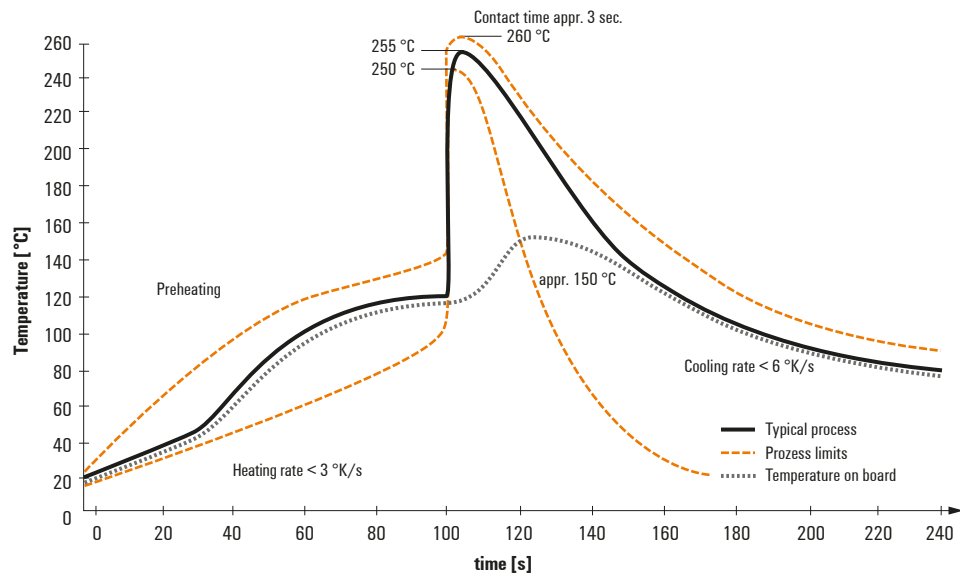
Dimensional drawing



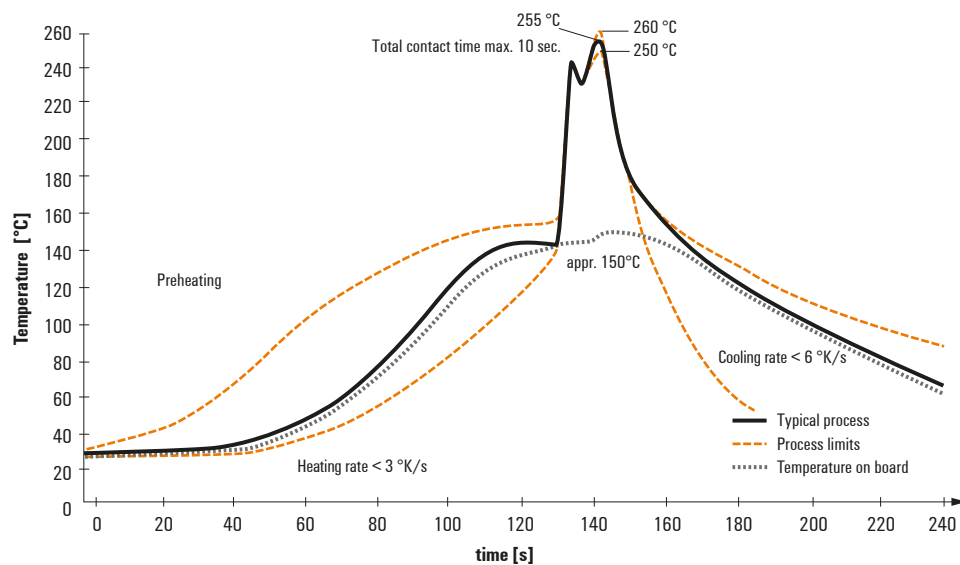
Recommended wave soldering profiles

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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.

We reserve the right to make technical changes.