SL 7.62IT/05/90MF3 3.2SN BK BX SO

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

www.weidmueller.com

Product image





90° male header with soldered flange fastening with 7.62 pitch for 400 V IT power networks according to IEC 61800-5-1. UL approval as per UL840 600 V with leading PE contact.
Meets the increased requirements on touch safety for IT power networks as per IEC 61800-5-1 for 400 V to earth, when combined with female header BLZ 7.62 IT...,
Without a female header, the mating profile guarantees minimum touch safety of 1 mm with 20 N pressure on the test finger. The interlock in the middle flange reduces the space requirements in comparison with conventional solutions by one pitch width. On request: available with screw flange or without flange.

General ordering data

Version	PCB plug-in connector, male header, closed side, Middle flange, THT solder connection, 7.62 mm, Number of poles: 5, 90°, Solder pin length (l): 3.2 mm, tinned, black, Box
Order No.	1398820000
Type	SL 7.62IT/05/90MF3 3.2SN BK BX SO
GTIN (EAN)	4050118200478
Qty.	36 pc(s).
Product data	IEC: 630 V / 29 A UL: 300 V / 20 A
Packaging	Box

Creation date December 4, 2023 1:10:07 PM CET

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Technical data

Dimensions and weights

Depth	12.65 mm	Depth (inches)	0.498 inch
Height	11.6 mm	Height (inches)	0.457 inch
Height of lowest version	8.4 mm	Width	45.1 mm
Width (inches)	1.776 inch	Net weight	3.805 g

System specifications

Product family	OMNIMATE Power - series BL/SL 7.62IT	Type of connection	Board connection
Mounting onto the PCB	THT solder connection	Pitch in mm (P)	7.62 mm
Pitch in inches (P)	0.3 inch	Outgoing elbow	90°
Number of poles	5	Number of solder pins per pole	1
Solder pin length (l)	3.2 mm	Solder pin dimensions	1.0 x 1.0 mm
Solder pin dimensions = d tolerance	+0,01 / -0,03 mm	Solder eyelet hole diameter (D)	1.4 mm
Solder eyelet hole diameter tolerance (D)	+ 0,1 mm	L1 in mm	38.1 mm
L1 in inches	1.5 inch	Number of rows	1
Pin series quantity	2	Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch, plugged
Touch-safe protection acc. to DIN VDE 0470	IP20 plugged	Protection degree	IP20 in installed state
Can be coded	Yes	Plugging cycles	25

Material data

Insulating material	PBT GF	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	IIIa
Comparative Tracking Index (CTI)	≥ 200	UL 94 flammability rating	V-0
Contact material	Cu-alloy	Contact surface	tinned
Layer structure of solder connection	2...3 µm Ni / 2...4 µm Sn matt	Layer structure of plug contact	1...3 µm Ni / 2...4 µm Sn matt
Storage temperature, min.	-40 °C	Storage temperature, max.	70 °C
Operating temperature, min.	-50 °C	Operating temperature, max.	100 °C
Temperature range, installation, min.	-25 °C	Temperature range, installation, max.	100 °C

Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	29 A
Rated current, max. number of poles (Tu=20°C)	26 A	Rated current, min. number of poles (Tu=40°C)	25 A
Rated current, max. number of poles (Tu=40°C)	21 A	Rated voltage for surge voltage class / pollution degree II/2	630 V
Rated voltage for surge voltage class / pollution degree III/2	500 V	Rated voltage for surge voltage class / pollution degree III/3	400 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	6 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	6 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	6 kV	Short-time withstand current resistance	3 x 1s with 180 A
Clearance, min.	6.5 mm	Creepage distance, min.	8.1 mm

Rated data acc. to CSA

Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group C / CSA)	300 V
Rated voltage (Use group D / CSA)	600 V	Rated current (Use group B / CSA)	20 A
Rated current (Use group C / CSA)	20 A	Rated current (Use group D / CSA)	5 A

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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 voltage (Use group C / UL 1059)	300 V
Rated voltage (Use group D / UL 1059)	600 V	Rated current (Use group B / UL 1059)	20 A
Rated current (Use group C / UL 1059)	20 A	Rated current (Use group D / UL 1059)	5 A
Clearance distance, min.	6.5 mm	Creepage distance, min.	11.2 mm
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Packing

Packaging	Box	VPE length	340 mm
VPE width	133 mm	VPE height	21 mm

Classifications

ETIM 6.0	EC002637	ETIM 7.0	EC002637
ETIM 8.0	EC002637	ETIM 9.0	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	ECLASS 13.0	27460201

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 • Gold-plated contact surfaces on request • Rated current related to rated cross-section & min. No. of poles. • 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. • MFX and MSFX: X= Position of the middle flange e.g. MF2, MSF3 • In accordance with IEC 61984, OMNIMATE-connectors are connectors without breaking capacity (COC). During designated use, connectors are not allowed to be engaged or disengaged when live or under load • Long term storage of the product with average temperature of 50 °C and maximum 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
Product Change Notification	DE - Change of packaging EN - Change of packaging DE - Change of packaging Step 2 EN - Change of packaging Step 2
Catalogues	Catalogues in PDF-format
Brochures	FL DRIVES EN MB DEVICE MANUF. EN FL DRIVES DE 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

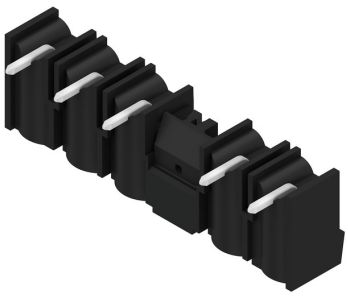
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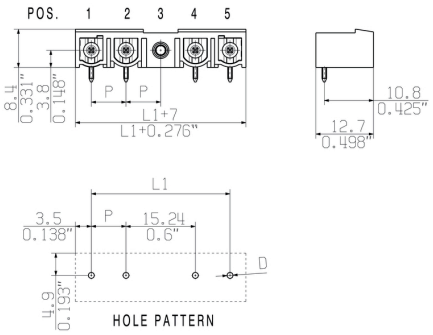
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Drawings

Product image



Dimensional drawing

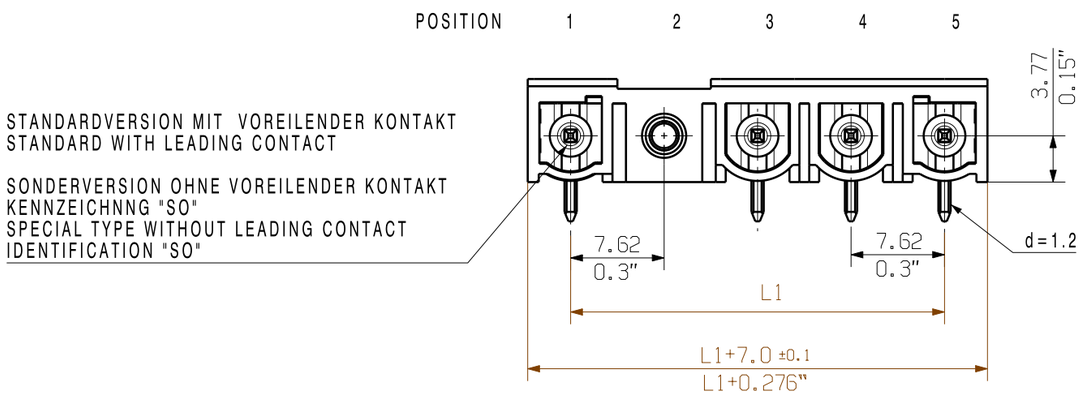


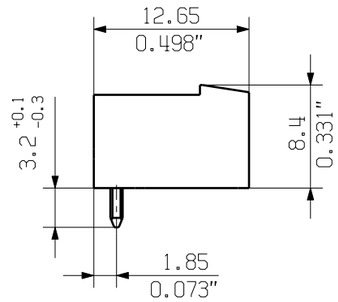
Similar to illustration

MASSE OHNE TOLERANZ SIND KEINE PRUEFMASSE
DIMS. WITHOUT TOLERANCE ARE NOT CONTROL DIMS.

DIE DEUTSCHE VERSION IST VERBINDLICH
THE GERMAN VERSION IS BINDING

WEITERGABE SOWIE VERVIELFAELTIGUNG DIESES DOKUMENTS, VERWERTUNG UND MITTEILUNG SEINES INHALTS SIND VERBOTEN, SOWEIT NICHT AUSDRUECKLICH GESTATTET.
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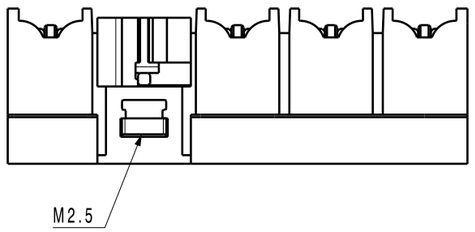




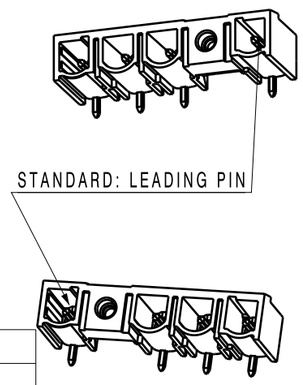
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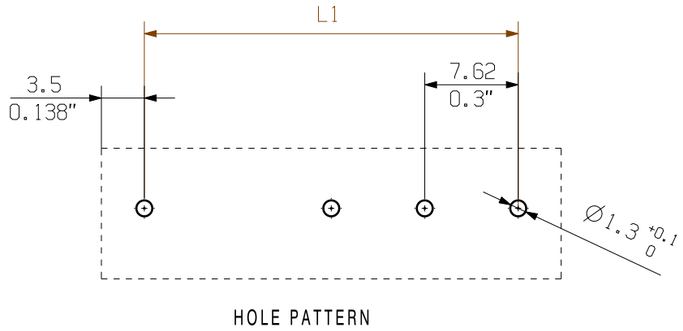
SL 7.62IT/03/90MF2





SL 7.62IT/04/90MF4





HOLE PATTERN

P=POL/POLES
MF= MITTELFLANSCH/MIDDLE FLANGE
PE=VOREILENDER KONTAKT/ LEADING PIN

3 MF 2	PE	MF	P	P			
3 MF 3	P	P	MF	PE			
4 MF 2	PE	MF	P	P	P		
4 MF 4	P	P	P	MF	PE		
5 MF 3	P	P	P	MF	P	P	
5 MF 4	P	P	MF	P	P	P	
6 MF 3	P	P	MF	P	P	P	P
6 MF 4	P	P	P	MF	P	P	P
6 MF 5	P	P	P	P	MF	P	P
6 MF 6	P	P	P	P	P	MF	P
POLE	1	2	3	4	5	6	7
NO OF POLES	POSITION						

n	L1 (mm)	L1 (inch)
6	45,72	1,80
5	38,10	1,50
4	30,48	1,20
3	22,86	0,90
2	15,24	0,60

For the mounting of PCBs, it should be noted that the rated data relates only to the PCB components alone.
The neccessary 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 occuring of electrical, mechanical, thermic and corrosive stress will be satisfied.

SHOWN: SL 7.62IT/04/90MF2

GENERAL TOLERANCE:
DIN ISO 2768-m

RoHS COMPLIANT

86757/5
10.03.16 HELIS_MA 00
MODIFICATION

CAT.NO.: .

Weidmüller

C 49983 10
DRAWING NO. ISSUE NO.
SHEET 02 OF 04 SHEETS

	DATE	NAME
DRAWN	18.02.2009	HERTEL_S
RESPONSIBLE		KRUG_M
CHECKED	04.04.2016	HELIS_MA
APPROVED		LANG_T

SCALE: 2/1
SUPERSEDES: .

SL 7.62IT/../90MLF.. 3.2
STIFTLEISTE
MALE HEADER

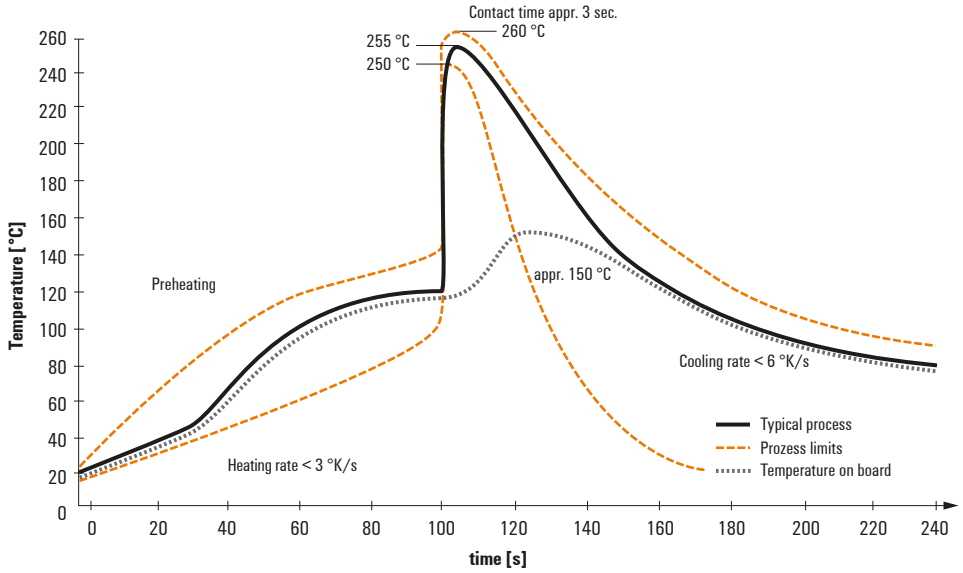
PRODUCT FILE: BLZ/SL7.62HP 7375

Wave Solder Profile

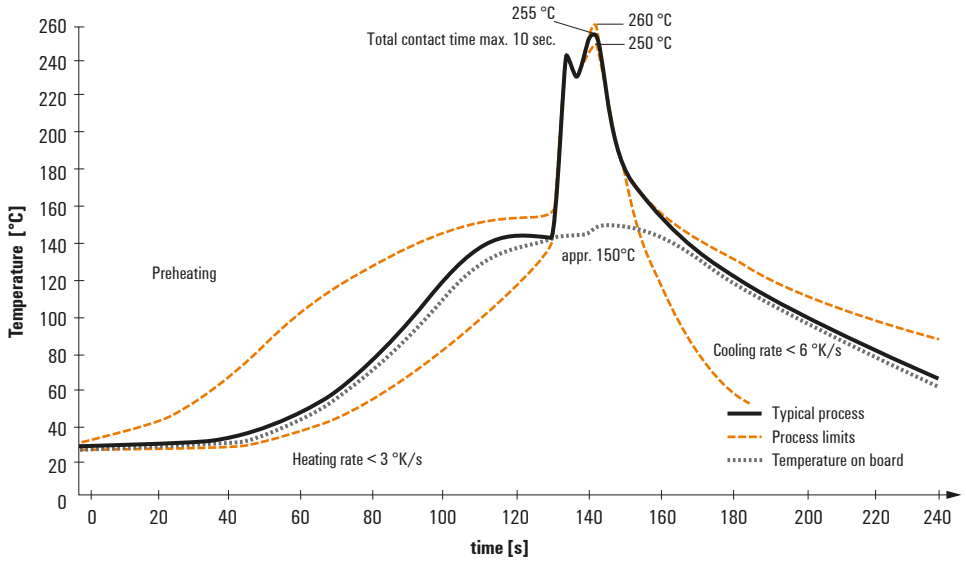
Recommended wave solderding profiles

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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.