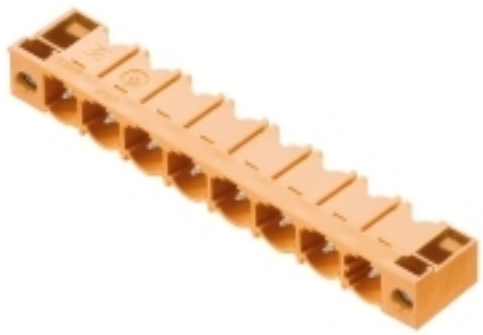
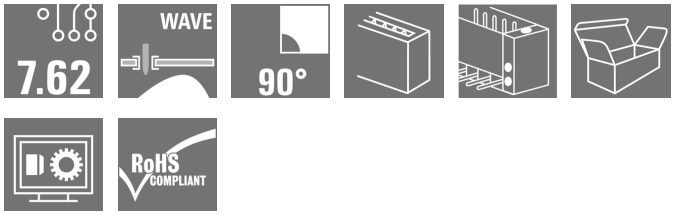
OMNIMATE Power - series BL/SL 7.62HP
SL 7.62HP/10/90F 3.2 SN OR BX

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





Power on board - 100% safety, 100% integration, 100% cost-effectiveness:
The compact, efficient solution for UL-600V applications in the lower performance range up to 12 kVA
- 29 A at 400 V (IEC)
- 20 A at 600 V (UL)
- Single compartment mating profile
- Clamping range: 0.08 - 4 mm² / AWG 28 - 12

Assisting in device approval:
- Meets the requirements for 600 V according to UL 508 / UL840.
- Meets the increased requirements on touch safety as per IEC68100-5-1

The slimming diet for multiple-stage device series:
Reduce the size and cut costs in the high-volume lower performance range without compromising device approval!
Male header, 90° outlet angle with screw flanges

General ordering data

Type	SL 7.62HP/10/90F 3.2 SN OR BX
Order No.	1124380000
Version	PCB plug-in connector, male header, Flange, THT solder connection, 7.62 mm, No. of poles: 10, 90°, Solder pin length (l): 3.2 mm, tinned, Orange, Box
GTIN (EAN)	4032248906093
Qty.	50 pc(s).
Product data	IEC: 630 V / 29 A UL: 300 V / 20 A
Packaging	Box

OMNIMATE Power - series BL/SL 7.62HP
SL 7.62HP/10/90F 3.2 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

Technical data

Dimensions and weights

Height of lowest version	8.4 mm	Depth	11.8 mm
Depth (inches)	0.465 inch	Net weight	6.22 g

System specifications

Product family	OMNIMATE Power - series BL/SL 7.62HP	Mounting onto the PCB	THT solder connection
Pitch in mm (P)	7.62 mm	Pitch in inches (P)	0.3 inch
Outgoing elbow	90°	No. of poles	10
Number of solder pins per pole	1	Solder pin length (l)	3.2 mm
Tolerance of solder pin position	± 0.15 mm	Solder pin dimensions	1.0 x 1.0 mm
Solder eyelet hole diameter (D)	1.3 mm	Solder eyelet hole diameter tolerance (D)	+ 0,1 mm
L1 in mm	68.58 mm	L1 in inches	2.7 inch
Number of rows	1	Pin series quantity	1
Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch, plugged	Touch-safe protection acc. to DIN VDE 0470	IP20 plugged
Can be coded	Yes	push-in force/pole	10 N

Material data

Insulating material	PBT	Colour	Orange
Colour chart (similar)	RAL 2000	Insulating material group	IIIa
CTI	≥ 200	Insulation resistance	≥ 10^8 Ω
UL 94 flammability rating	V-0	Contact material	Copper alloy
Contact surface	tinned	Layer structure of solder connection	2-3 µm Ni / 2-4 µm Sn matt
Layer structure of plug contact	2-3 µm Ni / 2-4 µm Sn matt	Storage temperature, min.	-25 °C
Storage temperature, max.	55 °C	Max. relative humidity during storage	80 %
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. no. of poles (Tu=20°C)	29 A
Rated current, max. no. of poles (Tu=20°C)	29 A	Rated current, min. no. of poles (Tu=40°C)	25 A
Rated current, max. no. 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)	300 V	Rated voltage (Use group C)	300 V
Rated voltage (use group D)	600 V	Rated current (use group B)	20 A
Rated current (use group C)	20 A	Rated current (use group D)	5 A

OMNIMATE Power - series BL/SL 7.62HP
SL 7.62HP/10/90F 3.2 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

Technical data

Rated data acc. to UL 1059

Institute (cURus)		Certificate No. (cURus)	E60693
Rated voltage (use group B)	300 V	Rated voltage (use group C)	300 V
Rated voltage (use group D)	600 V	Rated current (use group B)	20 A
Rated current (use group C)	20 A	Rated current (use group D)	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.		

Classifications

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

Notes

Notes	• Additional colours 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.
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

Creation date July 30, 2018 8:02:30 AM CEST

OMNIMATE Power - series BL/SL 7.62HP
SL 7.62HP/10/90F 3.2 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

Technical data

Downloads

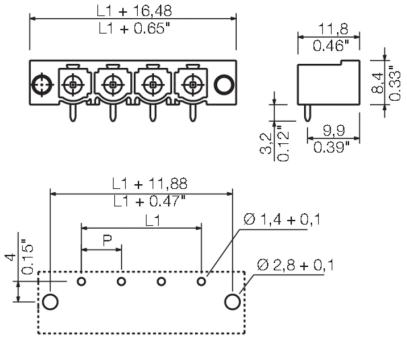
Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Brochure/Catalogue	FL DRIVES EN MB DEVICE MANUF. EN FL DRIVES DE FL HEATING ELECTR EN FL APPL_INVERTER EN FL_BASE_STATION_EN FL ELEVATOR EN FL POWER SUPPLY EN FL 72H SAMPLE SER EN PO OMNIMATE EN
Engineering Data	EPLAN, WSCAD
Motion controllers white paper	Download Whitepaper
White Paper UL 600 V	Download Whitepaper

OMNIMATE Power - series BL/SL 7.62HP
SL 7.62HP/10/90F 3.2 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

Drawings

Dimensional drawing

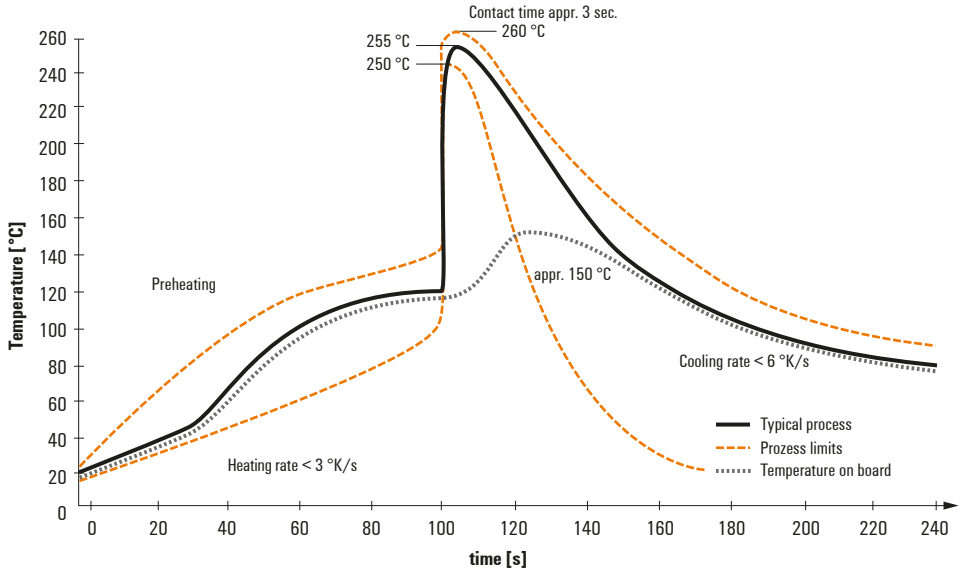


Wave Solder Profile

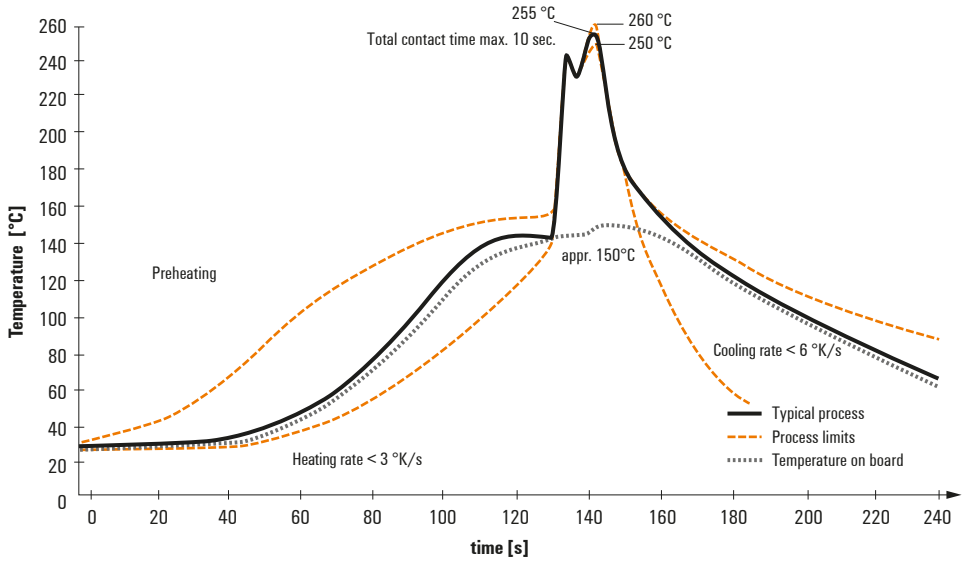
Recommended wave solderding profiles

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 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.