OMNIMATE Power - series BL/SL 7.62HP
BLL 7.62HP/02/180 3.2SN BK BX

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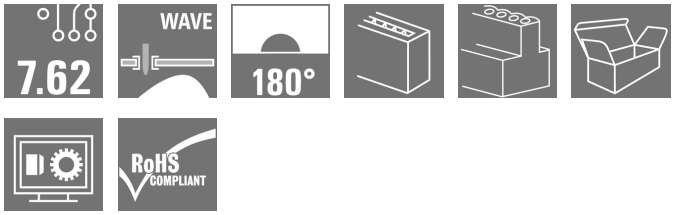
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Product image

Similar to illustration



180° female header for the PCB with a pitch of 7.62. Meets IEC 61800-5-1 requirements and enables UL approval as per UL840 600 V. Ideal touch-safe solution for the power output and intermediate circuit applications.
The mating profile guarantees touch safety of >3 mm as per IEC61800-5-1.
Variants: without flange, with screw flange or with soldered flange.

General ordering data

Type	BLL 7.62HP/02/180 3.2SN BK BX
Order No.	1122070000
Version	PCB plug-in connector, female header, closed side, THT solder connection, 7.62 mm, Number of poles: 2, 180°, Solder pin length (l): 3.2 mm, tinned, black, Box
GTIN (EAN)	4032248902972
Qty.	126 pc(s).
Product data	IEC: 630 V / 24 A UL: 300 V / 20 A
Packaging	Box

Creation date May 1, 2020 9:07:24 PM CEST

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Technical data

Dimensions and weights

Net weight	3.11 g

System Parameters

Product family	OMNIMATE Power - series BL/SL 7.62HP	Type of connection	Board connection
Pitch in mm (P)	7.62 mm	Pitch in inches (P)	0.3 inch
Number of poles	2	L1 in mm	7.62 mm
L1 in inches	0.3 inch	Number of rows	1
Pin series quantity	1	Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch
Touch-safe protection acc. to DIN VDE 0470	IP 20	Can be coded	Yes
Plugging force/pole, max.	10 N	Pulling force/pole, max.	7 N

Material data

Insulating material	PA GF	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	IIIa
Comparative Tracking Index (CTI)	≥ 200	Insulation strength	≥ 10^8 Ω
UL 94 flammability rating	V-0	GWFI	960 °C
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	4-8 µm Sn hot-dip tinned
Storage temperature, min.	-25 °C	Storage temperature, max.	50 °C
Max. relative humidity during storage	70 %	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)	24 A
Rated current, max. number of poles (Tu=20°C)	24 A	Rated current, min. number of poles (Tu=40°C)	24 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	630 V	Rated voltage for surge voltage class / pollution degree III/3	400 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	4 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.	7.2 mm	Creepage distance, min.	7.8 mm

Rated data acc. to CSA

Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group C / CSA)	150 V
Rated voltage (Use group D / CSA)	300 V	Rated current (Use group B / CSA)	20 A
Rated current (Use group C / CSA)	20 A	Rated current (Use group D / CSA)	10 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)	150 V
Rated voltage (Use group D / UL 1059)	300 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)	10 A
Clearance distance, min.	7.2 mm	Creepage distance, min.	7.8 mm
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Packing

Packaging	Box	VPE length	30 mm
VPE width	135 mm	VPE height	350 mm

Classifications

ETIM 6.0	EC002637	ETIM 7.0	EC002637
eClass 9.0	27-44-04-02	eClass 9.1	27-44-04-02
eClass 10.0	27-44-04-02		

Notes

Notes	• Additional colours on request • Gold-plated contact surfaces on request • Spacing between rows: see hole layout • 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

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Technical data

Downloads

Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Brochure/Catalogue	FL DRIVES EN MB DEVICE MANUF. EN FL DRIVES DE CAT 2 PORTFOLIOGUIDE 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
Engineering Data	EPLAN, WSCAD
Engineering Data	STEP
White paper power electronics connected correctly	Download Whitepaper
White paper UL 600 V	Download Whitepaper

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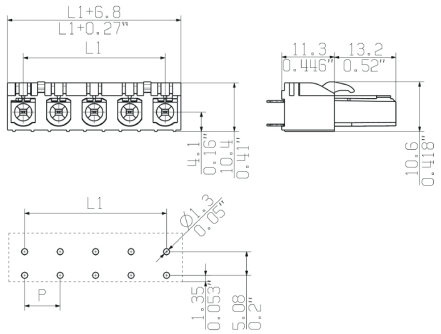
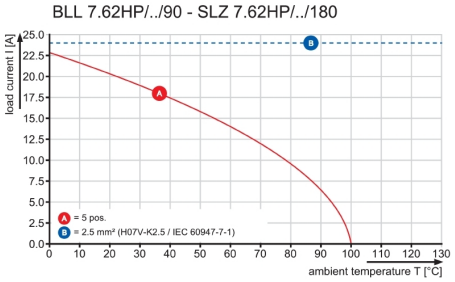
Drawings

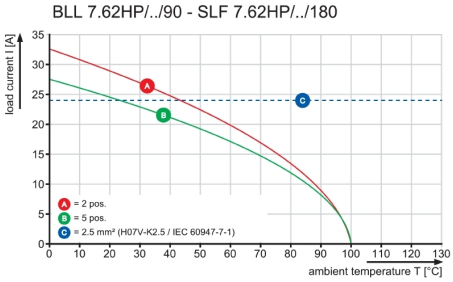
Dimensional drawing



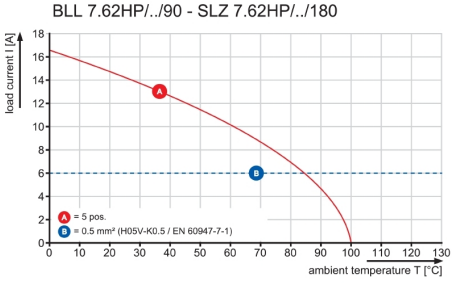
Graph



Graph



Graph



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Mating connector (fully pluggable)

SLZ 7.62HP/180G

180° inverted male header with clamping yoke connection for field wiring in 2.5 mm² with a 7.62 pitch. Also ideal as a touch-safe solution for inverse voltages. Meets the requirements of UL1059 600 V class C and IEC 61800-5-1.
Variants: available without flange, with external flange or with release latch.

General ordering data

Type	SLZ 7.62HP/02/180G SN B ...	Version	Product data	Packaging
Order No.	1043350000	PCB plug-in connector, male plug, 7.62 mm, Number of poles: 2,	IEC: 1000 V / 20 A / 0.5 - 2.5 mm²	Box
GTIN (EAN)	4032248774920	Clamping yoke connection, Clamping range, max. : 2.5 mm², Box	UL: 600 V / 17 A / AWG 20 - AWG 12	
Qty.	126 pc(s).			

Type	SLZ 7.62HP/02/180G SN O ...	Version	Product data	Packaging
Order No.	1122670000	PCB plug-in connector, male plug, 7.62 mm, Number of poles: 2,	IEC: 1000 V / 20 A / 0.5 - 2.5 mm²	Box
GTIN (EAN)	4032248904686	Clamping yoke connection, Clamping range, max. : 2.5 mm², Box	UL: 600 V / 17 A / AWG 20 - AWG 12	
Qty.	126 pc(s).			

SLF 7.62HP/180G

180° inverted male header with PUSH-IN connection technology for field wiring in 2.5 mm² with a 7.62 pitch. Also ideal as a touch-safe solution for inverse voltages. Meets the requirements of UL1059 600 V class C and IEC 61800-5-1.
Variants: available without flange, with external flange, with release latch.

General ordering data

Type	SLF 7.62HP/02/180G SN B ...	Version	Product data	Packaging
Order No.	1043590000	PCB plug-in connector, male plug, 7.62 mm, Number of poles: 2,	IEC: 1000 V / 24 A / 0.5 - 2.5 mm²	Box
GTIN (EAN)	4032248775163	PUSH IN, Clamping range, max. : 2.5 mm², Box	UL: 600 V / 20 A / AWG 20 - AWG 12	
Qty.	126 pc(s).			

Type	SLF 7.62HP/02/180G SN O ...	Version	Product data	Packaging
Order No.	1043550000	PCB plug-in connector, male plug, 7.62 mm, Number of poles: 2,	IEC: 1000 V / 24 A / 0.5 - 2.5 mm²	Box
GTIN (EAN)	4032248775125	PUSH IN, Clamping range, max. : 2.5 mm², Box	UL: 600 V / 20 A / AWG 20 - AWG 12	
Qty.	126 pc(s).			

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Accessories

Coding elements

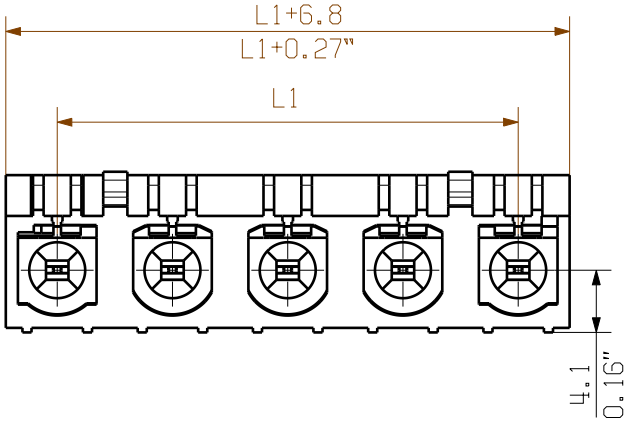
Only connects what is supposed to be connected: the right connection at the right place.
Coding elements and locking devices clearly assign connecting elements during the manufacturing process and operation
The coding elements and locking devices are inserted prior to assembly or during the cable assembly phase.
The Weidmüller alternative: configure online using the variant configurator to precode prior to delivery.
Incorrect assembly on the circuit board and incorrect plugging of connecting elements is no longer possible.
The advantage: no troubleshooting during manufacture and no operational errors by the user.

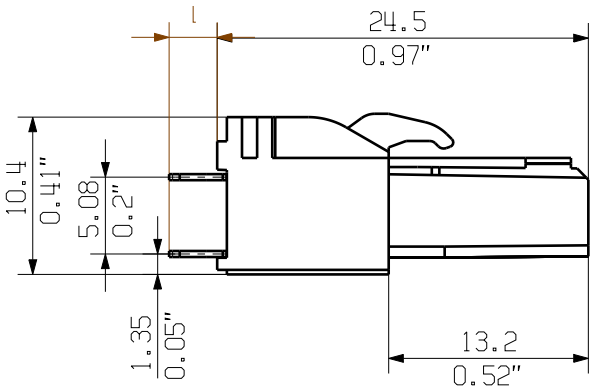
General ordering data

Type	BLZ/SL KO BK BX	Version	Product data	Packaging
Order No.	1545710000	PCB plug-in connector, Accessories, Coding element, black, Number		Box
GTIN (EAN)	4008190087142	of poles: 1		
Qty.	50 pc(s).			

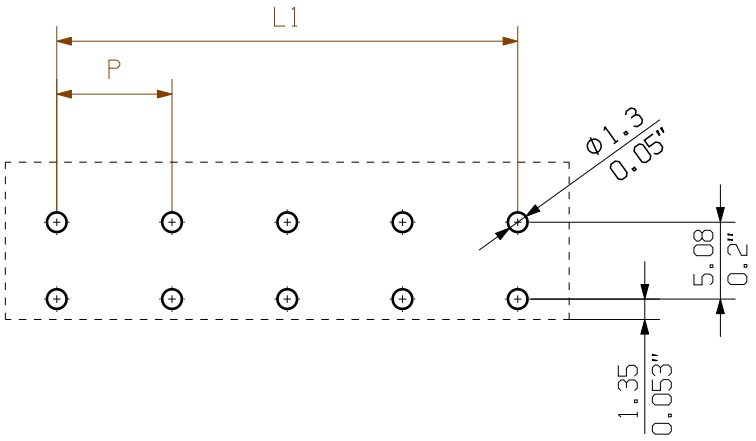
Type	BLZ/SL KO OR BX	Version	Product data	Packaging
Order No.	1573010000	PCB plug-in connector, Accessories, Coding element, orange, Number		Box
GTIN (EAN)	4008190048396	of poles: 1		
Qty.	100 pc(s).			

SHOWN: BLL7.62HP/05/180 3.2 SN





HOLE PATTERN



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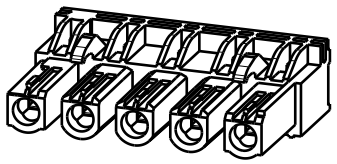

KUNDENZEICHNUNG
CUSTOMER DRAWING

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.

3,2
4,5
pin length l

n	L1 (mm)	L1 (inch)
12	83,82	3,30
11	76,20	3,00
10	68,58	2,70
9	60,96	2,40
8	53,34	2,10
7	45,72	1,80
6	38,10	1,50
5	30,48	1,20
4	22,86	0,90
3	15,24	0,60
2	7,62	0,30

RoHS COMPLIANT

DIN ISO 2768-m

94360/4
11.05.17 HELIS_MA
00
Modification

Weidmüller

Cat.no.: .

3 50817 05
Drawing no. Issue no.

Sheet 01 of 03 sheets

	Date	Name
Drawn	21.09.2009	HECKERT_M
Responsible		KRUG_M
Checked	08.06.2018	HELIS_MA
Approved		LANG_T

Scale: 2:1

Supersedes: .

BLL 7.62HP/../180...

BUCHSENLEISTE
SOCKET BLOCK

Product file: BLL7.62HP 7373

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Wave Solder Profile

Recommended wave solderding profiles

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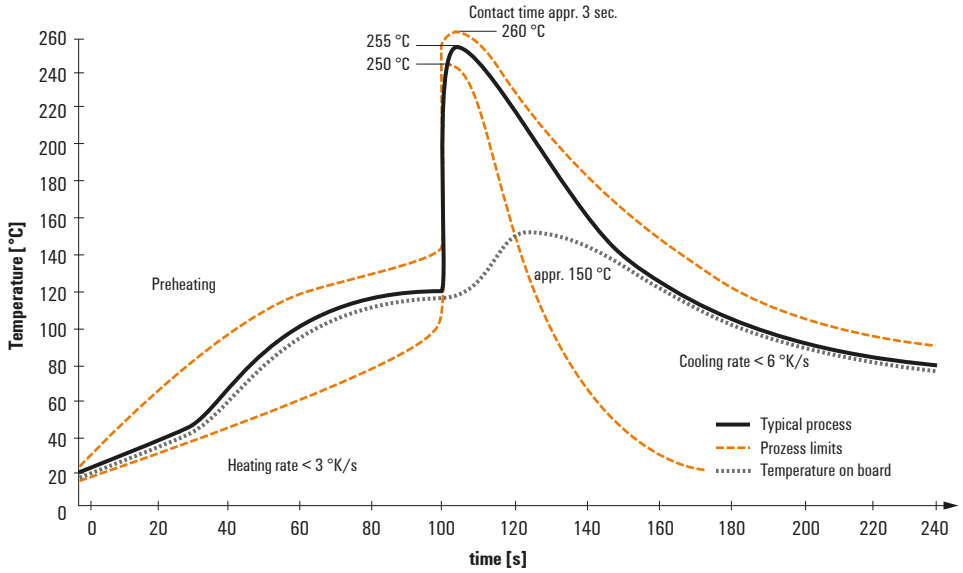
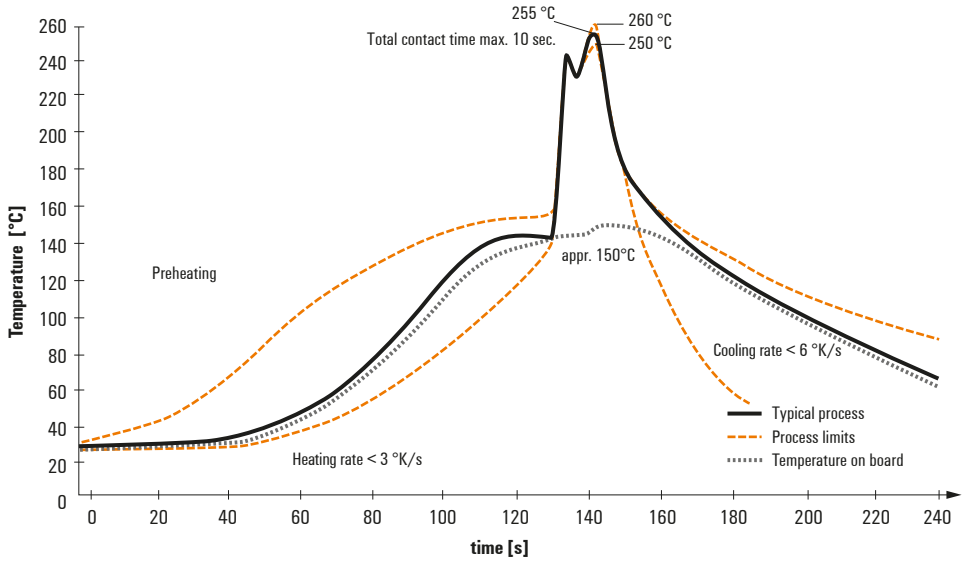
Single Wave:



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.