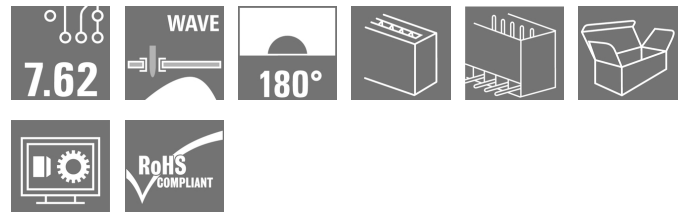
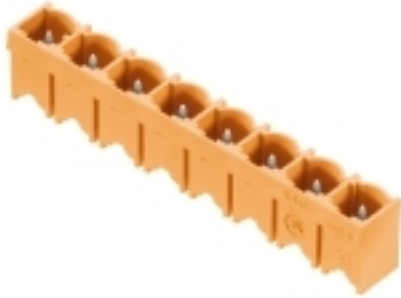


**OMNIMATE Power - series BL/SL 7.62HP
SL 7.62HP/02/180G 3.2SN OR BX**

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 16
 D-32758 Detmold
 Germany
 Fon: +49 5231 1429-0
 Fax: +49 5231 14292083
 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.

High-performance male header for applications up to 12 kVA:

- 29 A at 400 V (IEC)
- 20 A at 600 V (UL)
- Single compartment mating profile

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 when combined with female header BLZ 7.62 HP

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, 180° outlet direction, without flange

General ordering data

Type	SL 7.62HP/02/180G 3.2SN OR BX
Order No.	1048870000
Version	PCB plug-in connector, male header, closed side, THT solder connection, 7.62 mm, No. of poles: 2, 180°, Solder pin length (l): 3.2 mm, tinned, Orange, Box
GTIN (EAN)	4032248786848
Qty.	100 pc(s).
Product data	IEC: 630 V / 29 A UL: 300 V / 20 A
Packaging	Box

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Technical data
Dimensions and weights

Net weight 1.11 g

System specifications

Product family		Mounting onto the PCB	
OMNIMATE Power - series BL/SL 7.62HP		THT solder connection	
Pitch in mm (P)	7.62 mm	Pitch in inches (P)	0.3 inch
Outgoing elbow	180°	No. of poles	2
Number of solder pins per pole	1	Solder pin length (l)	3.2 mm
Tolerance of solder pin position	± 0.1 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	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, plugged	Touch-safe protection acc. to DIN VDE 0470	IP20 plugged
Can be coded	Yes	push-in force/pole	10 N
Packaging	Box		

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 (Ta = 20°C)	29 A
Rated current, max. no. of poles (Ta = 20°C)	26 A	Rated current, min. no. of poles (Ta = 40°C)	25 A
Rated current, max. no. of poles (Ta = 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

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Technical data**Rated data acc. to CSA**

Institute (CSA)



Certificate No. (CSA)

200039-1121690

Rated voltage (Use group B)	300 V
Rated voltage (use group D)	600 V
Rated current (use group C)	20 A

Rated voltage (Use group C)	300 V
Rated current (use group B)	20 A
Rated current (use group D)	5 A

Reference to approval values

Specifications are maximum values, details - see approval certificate.

Rated data acc. to UL 1059

Institute (cURus)



Certificate No. (cURus)

E60693

Rated voltage (use group B)	300 V
Rated voltage (use group D)	600 V
Rated current (use group C)	20 A
Clearance distance, min.	6.5 mm

Rated voltage (use group C)	300 V
Rated current (use group B)	20 A
Rated current (use group D)	5 A
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	UNSPSC	30-21-18-01
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

The products are developed, manufactured and delivered according to the internationally recognised IPC-A-610 standard, category "permissible". More extensive demands on the products can be evaluated on request.

Approvals

Approvals



ROHS

Conform

Creation date November 23, 2017 4:50:04 PM CET

Data sheet**OMNIMATE Power - series BL/SL 7.62HP
SL 7.62HP/02/180G 3.2SN OR BX**

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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 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

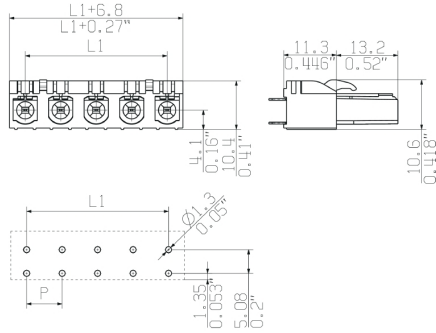
Data sheet

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Drawings

Dimensional drawing



**OMNIMATE Power - series BL/SL 7.62HP
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Mating connector (conditionally pluggable)
BLF 7.62HP/180F


180° female header with PUSH-IN connection technology for field wiring in 2.5 mm² with a 7.62 pitch. Meets the requirements as per UL1059 600 V class C and IEC 61800-5-1
Variants: without flange, external flange, release latch.

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
BLF 7.62HP/02/180F SN OR BX	1043870000	PCB plug-in connector, female plug, 7.62 mm, No. of poles: 2, 180°, PUSH IN, Clamping range, rated connection, max.: 2.5 mm ² , Box	4032248775415 72 pc(s).		IEC: 1000 V / 24 A / 0.5 - 2.5 mm ² UL: 600 V / 20 A / AWG 20 - AWG 12	Box
BLF 7.62HP/02/180F SN BK BX	1043910000	PCB plug-in connector, female plug, 7.62 mm, No. of poles: 2, 180°, PUSH IN, Clamping range, rated connection, max.: 2.5 mm ² , Box	4032248775453 72 pc(s).		IEC: 1000 V / 24 A / 0.5 - 2.5 mm ² UL: 600 V / 20 A / AWG 20 - AWG 12	Box

BLF 7.62HP/180LR


180° female header with PUSH-IN connection technology for field wiring in 2.5 mm² with a 7.62 pitch. Meets the requirements as per UL1059 600 V class C and IEC 61800-5-1
Variants: without flange, external flange, release latch.

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
BLF 7.62HP/02/180LR SN BK BX	1043990000	PCB plug-in connector, female plug, 7.62 mm, No. of poles: 2, 180°, PUSH IN, Clamping range, rated connection, max.: 2.5 mm ² , Box	4032248775538 72 pc(s).		IEC: 1000 V / 24 A / 0.5 - 2.5 mm ² UL: 600 V / 20 A / AWG 20 - AWG 12	Box
Discontinued	2014-05-20T00:00:00+02:00	BLF 7.62HP/02/180LR SN OR BX	1043950000	PCB plug-in connector, female plug, 7.62 mm, No. of poles: 2, 180°, PUSH IN, Clamping range,	4032248775491	72 pc(s).

**OMNIMATE Power - series BL/SL 7.62HP
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Mating connector (conditionally pluggable)

rated connection,
max.: 2.5 mm²,
Box

BLZ 7.62HP/180LR

**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 12kVA.

- 29 A at 630 V (IEC)
- 20 A at 600 V (UL)
- Single compartment mating profile
- Clamping range: 0.08 - 4 mm² / AWG 28 - 12

Assistance with device approval:

- meets the requirements for 600 V in accordance with UL508/UL840
- meets the more stringent touch-safety requirements of IEC68100-5-1

The slimming cure for multiple-stage device series: reduced size and cut costs in the high-volume lower performance range without compromising device approval!

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
BLZ 7.62HP/02/180LR SN BK BX	1093430000	PCB plug-in connector, female plug, 7.62 mm, No. of poles: 2, 180°, Clamping yoke connection, Clamping range, rated connection, max.: 4 mm ² , Box	4032248864423	60 pc(s).	IEC: 630 V / 29 A / 0.2 - 4 mm ² UL: 600 V / 20 A / AWG 20 - AWG 12	Box
BLZ 7.62HP/02/180LR SN OR BX	1093470000	PCB plug-in connector, female plug, 7.62 mm, No. of poles: 2, 180°, Clamping yoke connection, Clamping range, rated connection, max.: 4 mm ² , Box	4032248864454	60 pc(s).	IEC: 630 V / 29 A / 0.2 - 4 mm ² UL: 600 V / 20 A / AWG 20 - AWG 12	Box

**OMNIMATE Power - series BL/SL 7.62HP
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Mating connector (conditionally pluggable)
BLZ 7.62HP/180F

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General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
BLZ 7.62HP/02/180F SN BK BX	1095680000	PCB plug-in connector, female plug, 7.62 mm, No. of poles: 2, 180°, Clamping yoke connection, Clamping range, rated connection, max.: 4 mm ² , Box	4032248868629	60 pc(s).	IEC: 630 V / 29 A / 0.2 - 4 mm ² UL: 600 V / 20 A / AWG 28 - AWG 12	Box
BLZ 7.62HP/02/180F SN OR BX	1095790000	PCB plug-in connector, female plug, 7.62 mm, No. of poles: 2, 180°, Clamping yoke connection, Clamping range, rated connection, max.: 4 mm ² , Box	4032248868681	60 pc(s).	IEC: 630 V / 29 A / 0.2 - 4 mm ² UL: 600 V / 20 A / AWG 28 - AWG 12	Box

**OMNIMATE Power - series BL/SL 7.62HP
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Mating connector (fully pluggable)
BLF 7.62HP/180


180° female header with PUSH-IN connection technology for field wiring in 2.5 mm² with a 7.62 pitch. Meets the requirements as per UL1059 600 V class C and IEC 61800-5-1
Variants: without flange, external flange, release latch.

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
BLF 7.62HP/02/180 SN OR BX	1043790000	PCB plug-in connector, female plug, 7.62 mm, No. of poles: 2, 180°, PUSH IN, Clamping range, rated connection, max.: 2.5 mm ² , Box	4032248774739	120 pc(s).	IEC: 1000 V / 24 A / 0.5 - 2.5 mm ² UL: 600 V / 20 A / AWG 20 - AWG 12	Box
BLF 7.62HP/02/180 SN BK BX	1043830000	PCB plug-in connector, female plug, 7.62 mm, No. of poles: 2, 180°, PUSH IN, Clamping range, rated connection, max.: 2.5 mm ² , Box	4032248774777	120 pc(s).	IEC: 1000 V / 24 A / 0.5 - 2.5 mm ² UL: 600 V / 20 A / AWG 20 - AWG 12	Box

**OMNIMATE Power - series BL/SL 7.62HP
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Mating connector (fully pluggable)
BLZ 7.62HP/180

Power on board - 100% safety, 100% integration, 100% cost-effectiveness:

The compact, efficient solution for UL-600V applications in the lower performance range.

High-performance female header for applications up to 12 kVA:

- 29 A with 400 V (IEC)
- 20 A at 600 V (UL)
- 0.08 - 4 mm² / AWG 28 - 12

Assisting in device approval:

- Meets the requirements of 600 V according to UL 508 / UL 840.
- When plugged, meets the increased requirements on touch safety as per IEC 68100-5-1

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!

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
BLZ 7.62HP/02/180 SN OR BX	1980480000	PCB plug-in connector, female plug, 7.62 mm, No. of poles: 2, 180°, Clamping yoke connection, Clamping range, rated connection, max.: 4 mm ² , Box	4032248675531	100 pc(s).	IEC: 630 V / 29 A / 0.2 - 4 mm ² UL: 600 V / 20 A / AWG 20 - AWG 12	Box
BLZ 7.62HP/02/180 SN BK BX	1059580000	PCB plug-in connector, female plug, 7.62 mm, No. of poles: 2, 180°, Clamping yoke connection, Clamping range, rated connection, max.: 4 mm ² , Box	4032248807529	100 pc(s).	IEC: 630 V / 29 A / 0.2 - 4 mm ² UL: 600 V / 20 A / AWG 20 - AWG 12	Box

Data sheet

**OMNIMATE Power - series BL/SL 7.62HP
SL 7.62HP/02/180G 3.2SN OR BX**

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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.

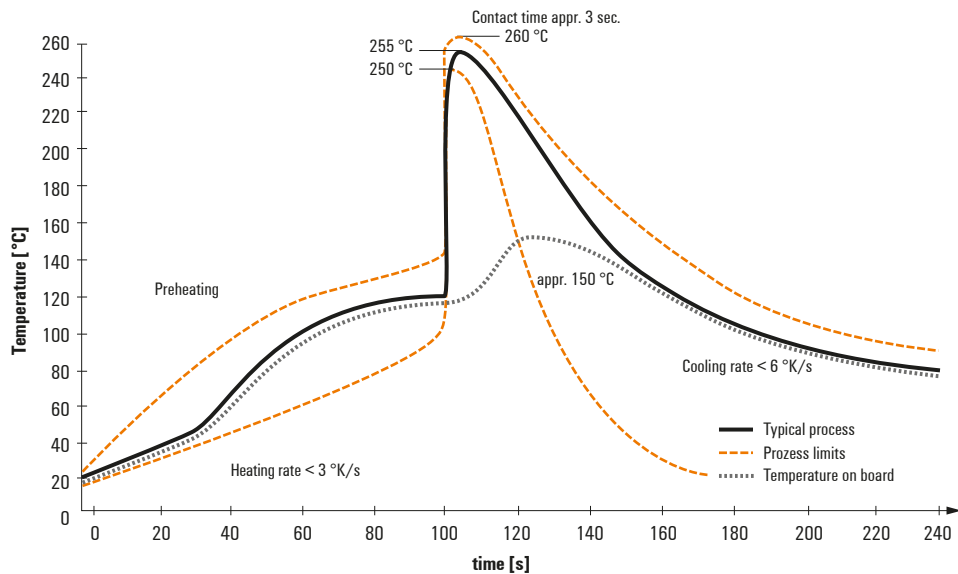
General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
BLZ/SL KO OR BX	1573010000	PCB plug-in connector, Accessories, Coding element, Orange, No. of poles: 1	4008190048396	100 pc(s).	UL:	Box
BLZ/SL KO BK BX	1545710000	PCB plug-in connector, Accessories, Coding element, Black, No. of poles: 1	4008190087142	50 pc(s).	UL:	Box

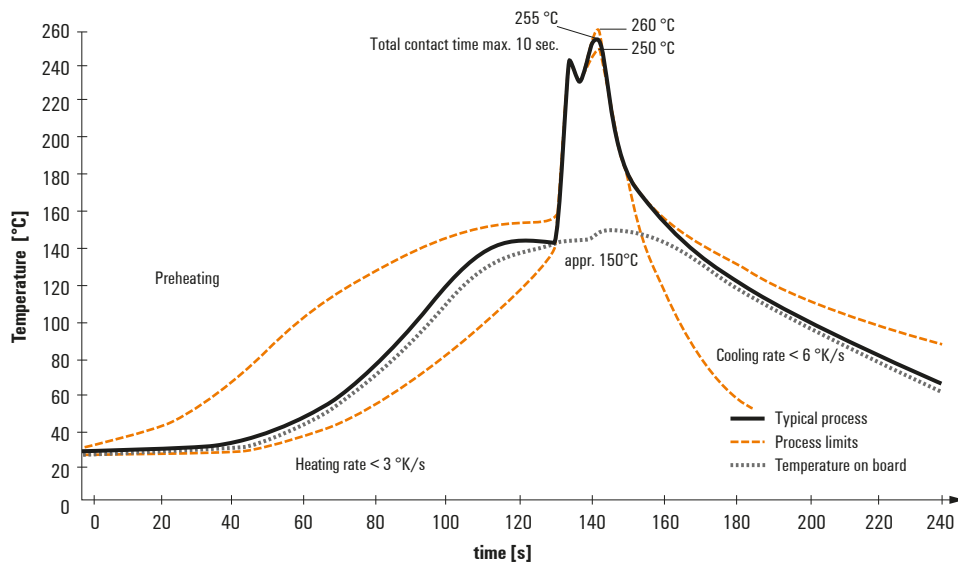
Recommended wave soldering profiles

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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.