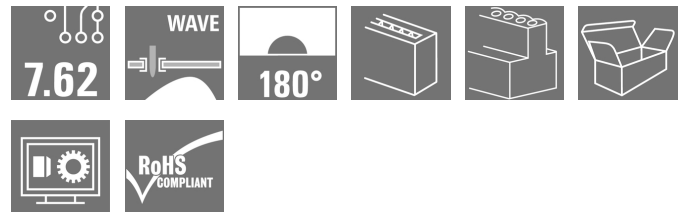


**OMNIMATE Power - series BL/SL 7.62HP
BLL 7.62HP/04/180 3.2SN BK BX**

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

Product image

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/04/180 3.2SN BK BX
Order No.	1122090000
Version	PCB plug-in connector, female header, closed side, THT solder connection, 7.62 mm, Number of poles: 4, 180°, Solder pin length (l): 3.2 mm, tinned, black, Box
GTIN (EAN)	4032248903153
Qty.	60 pc(s).
Product data	IEC: 630 V / 24 A UL: 300 V / 20 A
Packaging	Box

Creation date May 1, 2020 9:08:14 PM CEST

**OMNIMATE Power - series BL/SL 7.62HP
BLL 7.62HP/04/180 3.2SN BK BX**

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Technical data**Dimensions and weights**

Net weight	6.23 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	4	L1 in mm	22.86 mm
L1 in inches	0.9 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

Data sheet

**OMNIMATE Power - series BL/SL 7.62HP
BLL 7.62HP/04/180 3.2SN BK BX**

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
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 / 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	28 mm
VPE width	133 mm	VPE height	348 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

Data sheet**OMNIMATE Power - series BL/SL 7.62HP
BLL 7.62HP/04/180 3.2SN BK BX**

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Technical data**Downloads**

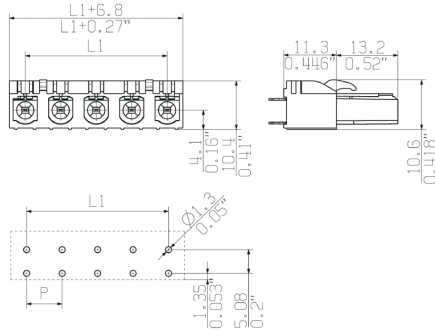
Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Brochure/Catalogue	FL DRIVES EN MB DEVICE MANUF. EN FL DRIVES DE CAT 2 PORTFOLIOGUIDE EN FL HEATING ELECTR EN FL APPL INVERTER EN FL_BASE_STATION_EN FL ELEVATOR EN FL POWER SUPPLY EN FL 72H SAMPLE SER EN PO OMNIMATE EN
Engineering Data	EPLAN, WSCAD
Engineering Data	STEP
White paper power electronics connected correctly	Download Whitepaper
White paper UL 600 V	Download Whitepaper

**OMNIMATE Power - series BL/SL 7.62HP
BLL 7.62HP/04/180 3.2SN BK BX**

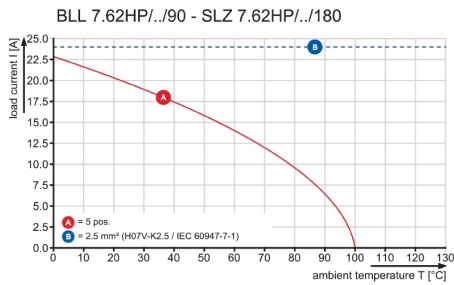
Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Drawings

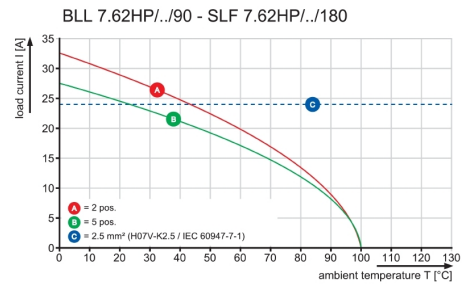
Dimensional drawing



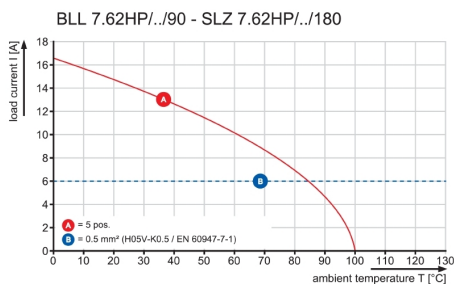
Graph



Graph



Graph



**OMNIMATE Power - series BL/SL 7.62HP
BLL 7.62HP/04/180 3.2SN BK BX**

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

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 UL 1059 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/04/180G SN B ...	Version	Product data	Packaging
Order No.	1043370000	PCB plug-in connector, male plug, 7.62 mm, Number of poles: 4,	IEC: 1000 V / 20 A / 0.5 - 2.5 mm ²	Box
GTIN (EAN)	4032248774944	Clamping yoke connection, Clamping range, max.: 2.5 mm ² , Box	UL: 600 V / 17 A / AWG 20 - AWG 12	
Qty.	60 pc(s).			
Type	SLZ 7.62HP/04/180G SN O ...	Version	Product data	Packaging
Order No.	1122690000	PCB plug-in connector, male plug, 7.62 mm, Number of poles: 4,	IEC: 1000 V / 20 A / 0.5 - 2.5 mm ²	Box
GTIN (EAN)	4032248904853	Clamping yoke connection, Clamping range, max.: 2.5 mm ² , Box	UL: 600 V / 17 A / AWG 20 - AWG 12	
Qty.	60 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 UL 1059 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/04/180G SN B ...	Version	Product data	Packaging
Order No.	1043610000	PCB plug-in connector, male plug, 7.62 mm, Number of poles: 4,	IEC: 1000 V / 24 A / 0.5 - 2.5 mm ²	Box
GTIN (EAN)	4032248775187	PUSH IN, Clamping range, max.: 2.5 mm ² , Box	UL: 600 V / 20 A / AWG 20 - AWG 12	
Qty.	60 pc(s).			
Type	SLF 7.62HP/04/180G SN O ...	Version	Product data	Packaging
Order No.	1043570000	PCB plug-in connector, male plug, 7.62 mm, Number of poles: 4,	IEC: 1000 V / 24 A / 0.5 - 2.5 mm ²	Box
GTIN (EAN)	4032248775149	PUSH IN, Clamping range, max.: 2.5 mm ² , Box	UL: 600 V / 20 A / AWG 20 - AWG 12	
Qty.	60 pc(s).			

**OMNIMATE Power - series BL/SL 7.62HP
BLL 7.62HP/04/180 3.2SN BK BX**

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

Mating connector (fully pluggable)**SLF 7.62HP/180LRSH**

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. Including pre-assembled pluggable shield connection for large area shielding in your application.

General ordering data

Type	SLF 7.62HP/04/180LRSH18 ...	Version	Product data	Packaging
Order No.	2614190000	PCB plug-in connector, male plug, 7.62 mm, Number of poles: 4,	IEC: 1000 V / 24 A / 0.5 - 2.5 mm ²	Box
GTIN (EAN)	4050118618051	180°, PUSH IN, Clamping range, max.: 2.5 mm ² , Box	UL: 600 V / 20 A / AWG 20 - AWG 12	
Qty.	40 pc(s).			
Type	SLF 7.62HP/04/180LRSH16 ...	Version	Product data	Packaging
Order No.	2632780000	PCB plug-in connector, male plug, 7.62 mm, Number of poles: 4,	IEC: 1000 V / 24 A / 0.5 - 2.5 mm ²	Box
GTIN (EAN)	4050118647204	180°, PUSH IN, Clamping range, max.: 2.5 mm ² , Box	UL: 600 V / 20 A / AWG 20 - AWG 12	
Qty.	40 pc(s).			
Type	SLF 7.62HP/04/180LRSH20 ...	Version	Product data	Packaging
Order No.	2632790000	PCB plug-in connector, male plug, 7.62 mm, Number of poles: 4,	IEC: 1000 V / 24 A / 0.5 - 2.5 mm ²	Box
GTIN (EAN)	4050118647211	180°, PUSH IN, Clamping range, max.: 2.5 mm ² , Box	UL: 600 V / 20 A / AWG 20 - AWG 12	
Qty.	40 pc(s).			

SLF 7.62HP/180FSH

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. Including pre-assembled pluggable shield connection for large area shielding in your application.

General ordering data

Type	SLF 7.62HP/04/180FSH180 ...	Version	Product data	Packaging
Order No.	2614140000	PCB plug-in connector, male plug, 7.62 mm, Number of poles: 4,	IEC: 1000 V / 24 A / 0.5 - 2.5 mm ²	Box
GTIN (EAN)	4050118618044	180°, PUSH IN, Clamping range, max.: 2.5 mm ² , Box	UL: 600 V / 20 A / AWG 20 - AWG 12	
Qty.	40 pc(s).			
Type	SLF 7.62HP/04/180FSH160 ...	Version	Product data	Packaging
Order No.	2632730000	PCB plug-in connector, male plug, 7.62 mm, Number of poles: 4,	IEC: 1000 V / 24 A / 0.5 - 2.5 mm ²	Box
GTIN (EAN)	4050118647020	180°, PUSH IN, Clamping range, max.: 2.5 mm ² , Box	UL: 600 V / 20 A / AWG 20 - AWG 12	
Qty.	40 pc(s).			
Type	SLF 7.62HP/04/180FSH200 ...	Version	Product data	Packaging
Order No.	2632770000	PCB plug-in connector, male plug, 7.62 mm, Number of poles: 4,	IEC: 1000 V / 24 A / 0.5 - 2.5 mm ²	Box
GTIN (EAN)	4050118646993	180°, PUSH IN, Clamping range, max.: 2.5 mm ² , Box	UL: 600 V / 20 A / AWG 20 - AWG 12	
Qty.	40 pc(s).			

Data sheet

OMNIMATE Power - series BL/SL 7.62HP BLL 7.62HP/04/180 3.2SN BK BX

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

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

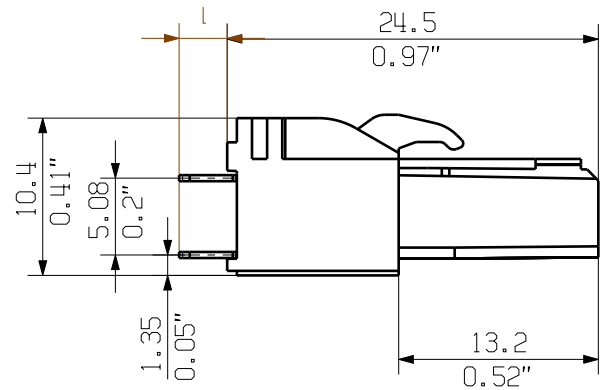
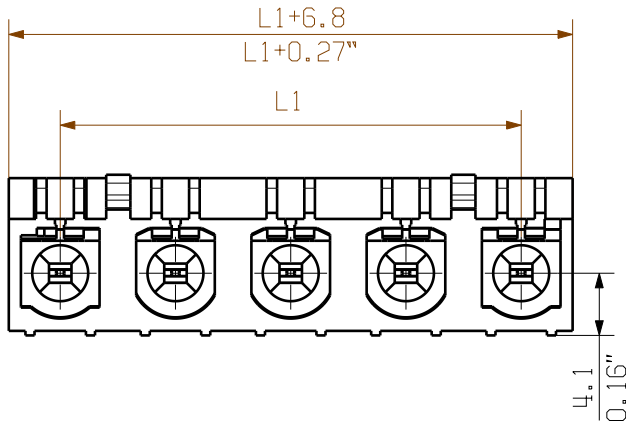
The coding elements and locking devices are inserted prior to assembly or during the cable assembly phase. The Weidmüller alternative: configure online using the variant configurator to precode prior to delivery.

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.

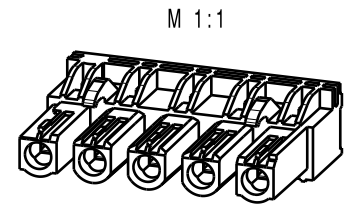
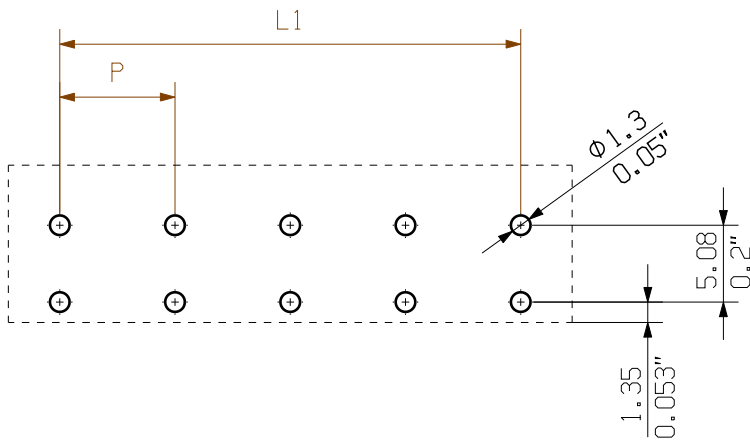
General ordering data

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



KUNDENZEICHUNG
CUSTOMER DRAWING

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

3,2
4,5
pin length l

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
n	L1 (mm)	L1 (inch)

The reproduction, distribution and utilization of this document as well as the communication of its contents without explicit authorization is prohibited. Offenders will be held liable for the payment of damages. Weidmüller exclusively reserves the right to file for patents, utility models or designs.

© Weidmüller Interface GmbH & Co. KG

	DIN ISO 2768-m	94360/4 11.05.17 HELIS_MA 00		Cat.no.: .	
	Modification			3 50817 05	Drawing no.
	Date	Name	Sheet 01 of 03 sheets		
Scale: 2:1	Drawn	21.09.2009	HECKERT_M	BLL 7.62HP/.../180... BUCHSENLEISTE SOCKET BLOCK	
Supersedes: .	Responsible		KRUG_M		
	Checked	08.06.2018	HELIS_MA		
	Approved		LANG_T	Product file: BLL7.62HP	7373

Recommended wave soldering 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.