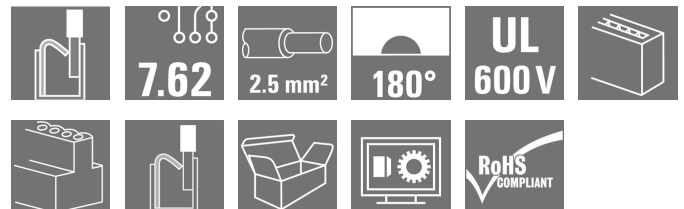


## OMNIMATE Power - series BL/SL 7.62HP SLF 7.62HP/02/180G SN BK BX

**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



Similar to illustration

180° inverted male header with PUSH-IN connection technology for field wiring in 2.5 mm<sup>2</sup> 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 BK BX
Order No.	<a href="#">1043590000</a>
Version	PCB plug-in connector, male plug, 7.62 mm, Number of poles: 2, PUSH IN, Clamping range, max.: 2.5 mm <sup>2</sup> , Box
GTIN (EAN)	4032248775163
Qty.	126 pc(s).
Product data	IEC: 1000 V / 24 A / 0.5 - 2.5 mm <sup>2</sup> UL: 600 V / 20 A / AWG 20 - AWG 12
Packaging	Box

Creation date May 1, 2020 10:36:51 AM CEST

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**Technical data****Dimensions and weights**

Net weight	6.246 g
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**System Parameters**

Product family	OMNIMATE Power - series BL/SL 7.62HP	Type of connection	Field connection
Wire connection method	PUSH IN	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
Rated cross-section	2.5 mm <sup>2</sup>	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
Stripping length	10 mm	Tightening torque for screw flange, min.	0.15 Nm
Tightening torque for screw flange, max.	0.25 Nm	Screwdriver blade	0.6 x 3.5
Screwdriver blade standard	DIN 5264		

**Material data**

Insulating material	PBT	Colour	black
Colour of operational elements	orange	Material of operational elements	PBT
Colour chart (similar)	RAL 9011	Insulating material group	IIIa
Comparative Tracking Index (CTI)	≥ 200	Insulation strength	≥ 10 <sup>8</sup> Ω
UL 94 flammability rating	V-0	GWFI	960 °C
Contact material	Copper alloy	Contact surface	tinned
Layer structure of plug contact	2-3 μm Ni / 2-4 μm Sn matt	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

**Conductors suitable for connection**

Clamping range, min.	0.08 mm <sup>2</sup>
Clamping range, max.	2.5 mm <sup>2</sup>
Wire connection cross section AWG, min.	AWG 20
Wire connection cross section AWG, max.	AWG 14
Solid, min. H05(07) V-U	0.5 mm <sup>2</sup>
Solid, max. H05(07) V-U	2.5 mm <sup>2</sup>
Flexible, min. H05(07) V-K	0.5 mm <sup>2</sup>
Flexible, max. H05(07) V-K	2.5 mm <sup>2</sup>
w. plastic collar ferrule, DIN 46228 pt 4, min.	0.5 mm <sup>2</sup>
w. plastic collar ferrule, DIN 46228 pt 4, max.	1.5 mm <sup>2</sup>
w. wire end ferrule, DIN 46228 pt 1, min.	0.5 mm <sup>2</sup>
w. wire end ferrule, DIN 46228 pt 1, max.	1.5 mm <sup>2</sup>
Plug gauge in accordance with EN 60999 a x b; ø	2.8 mm x 2.0 mm

Creation date May 1, 2020 10:36:51 AM CEST

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**Technical data**

Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	0.5 mm <sup>2</sup>
wire end ferrule		Stripping length	nominal 12 mm
		Recommended wire-end ferrule	<a href="#">H0.5/16 OR</a>
		Stripping length	nominal 10 mm
		Recommended wire-end ferrule	<a href="#">H0.5/10</a>
Cross-section for conductor connection	Type	fine-wired	
	nominal	0.75 mm <sup>2</sup>	
wire end ferrule		Stripping length	nominal 12 mm
		Recommended wire-end ferrule	<a href="#">H0.75/16 W</a>
		Stripping length	nominal 10 mm
		Recommended wire-end ferrule	<a href="#">H0.75/10</a>
Cross-section for conductor connection	Type	fine-wired	
	nominal	1 mm <sup>2</sup>	
wire end ferrule		Stripping length	nominal 12 mm
		Recommended wire-end ferrule	<a href="#">H1.0/16D R</a>
		Stripping length	nominal 10 mm
		Recommended wire-end ferrule	<a href="#">H1.0/10</a>
Cross-section for conductor connection	Type	fine-wired	
	nominal	1.5 mm <sup>2</sup>	
wire end ferrule		Stripping length	nominal 12 mm
		Recommended wire-end ferrule	<a href="#">H1.5/16 R</a>
		Stripping length	nominal 10 mm
		Recommended wire-end ferrule	<a href="#">H1.5/10</a>
Reference text	The outside diameter of the plastic collar should not be larger than the pitch (P). Length of ferrules is to be chosen depending on the product and the rated voltage.		
Max. clamping range	2.5 mm <sup>2</sup>		

**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)	23.8 A
Rated current, max. number of poles (Tu=40°C)	21 A	Rated voltage for surge voltage class / pollution degree II/2	1,000 V
Rated voltage for surge voltage class / pollution degree III/2	1,000 V	Rated voltage for surge voltage class / pollution degree III/3	630 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	8 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.	10.7 mm	Creepage distance, min.	10.7 mm

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

Institute (CSA)



Certificate No. (CSA)

200039-1121690

Rated voltage (Use group B / CSA)	600 V
Rated voltage (Use group D / CSA)	600 V
Rated current (Use group C / CSA)	20 A
Wire cross-section, AWG, min.	AWG 20
Reference to approval values	Specifications are maximum values, details - see approval certificate.

Rated voltage (Use group C / CSA)	600 V
Rated current (Use group B / CSA)	20 A
Rated current (Use group D / CSA)	5 A
Wire cross-section, AWG, max.	AWG 12

**Rated data acc. to UL 1059**

Institute (cURus)



Certificate No. (cURus)

E60693

Rated voltage (Use group B / UL 1059)	600 V
Rated voltage (Use group D / UL 1059)	600 V
Rated current (Use group C / UL 1059)	20 A
Wire cross-section, AWG, min.	AWG 20
Reference to approval values	Specifications are maximum values, details - see approval certificate.

Rated voltage (Use group C / UL 1059)	600 V
Rated current (Use group B / UL 1059)	20 A
Rated current (Use group D / UL 1059)	5 A
Wire cross-section, AWG, max.	AWG 12

**Packing**

Packaging	Box	VPE length	45 mm
VPE width	135 mm	VPE height	350 mm

**Classifications**

ETIM 6.0	EC002638	ETIM 7.0	EC002638
eClass 9.0	27-44-03-09	eClass 9.1	27-44-03-09
eClass 10.0	27-44-03-09	UNSPSC	30-21-18-01

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**Technical data**
**Notes**

Notes	<ul style="list-style-type: none"> <li>• Additional colours on request</li> <li>• Gold-plated contact surfaces on request</li> <li>• Rated current related to rated cross-section &amp; min. No. of poles.</li> <li>• Wire end ferrule without plastic collar to DIN 46228/1</li> <li>• Wire end ferrule with plastic collar to DIN 46228/4</li> <li>• P on drawing = pitch</li> <li>• 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.</li> </ul>
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

**Downloads**

Approval/Certificate/Document of Conformity	<a href="#">Declaration of the Manufacturer</a>
Brochure/Catalogue	<a href="#">FL DRIVES EN</a> <a href="#">MB DEVICE MANUF. EN</a> <a href="#">FL DRIVES DE</a> <a href="#">CAT 2 PORTFOLIOGUIDE EN</a> <a href="#">FL HEATING ELECTR EN</a> <a href="#">FL APPL_INVERTER EN</a> <a href="#">FL_BASE_STATION_EN</a> <a href="#">FL ELEVATOR EN</a> <a href="#">FL POWER SUPPLY EN</a> <a href="#">FL 72H SAMPLE SER EN</a> <a href="#">PO OMNIMATE EN</a>
Engineering Data	<a href="#">EPLAN_WSCAD</a>
Engineering Data	<a href="#">STEP</a>
White paper power electronics connected correctly	<a href="#">Download Whitepaper</a>
User Documentation	<a href="#">QR-Code product handling video</a>
White paper UL 600 V	<a href="#">Download Whitepaper</a>
White paper PUSH IN wire connection	<a href="#">Download Whitepaper</a>

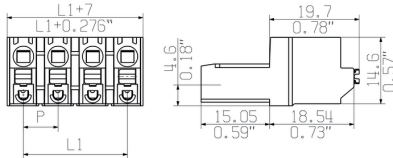
**Data sheet**

**OMNIMATE Power - series BL/SL 7.62HP  
SLF 7.62HP/02/180G SN BK BX**

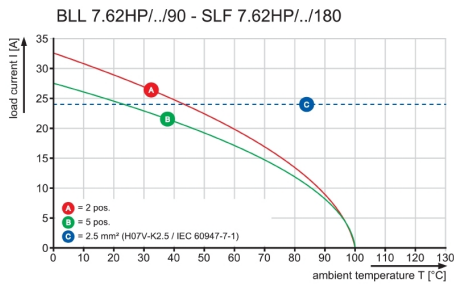
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**Drawings**

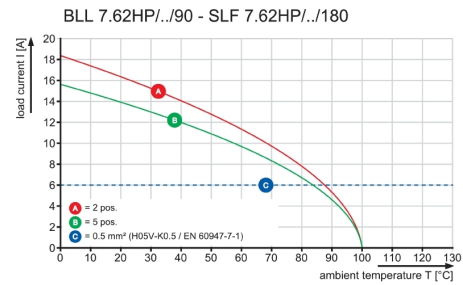
**Dimensional drawing**



**Graph**



**Graph**



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**Mating connector (fully pluggable)**
**BLL 7.62HP/90G**


90° 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, flange version, soldered flange version.

**General ordering data**

Type	BLL 7.62HP/02/90 3.2SN ...	Version	Product data	Packaging
Order No.	<a href="#">1043230000</a>	PCB plug-in connector, female header, closed side, THT solder connection, 7.62 mm, Number of poles: 2, 90°, Solder pin length (l): 3.2 mm, tinned, black, Box	IEC: 630 V / 24 A UL: 300 V / 20 A	Box
GTIN (EAN)	4032248774708			
Qty.	126 pc(s).			
Type	BLL 7.62HP/02/90 3.2SN ...	Version	Product data	Packaging
Order No.	<a href="#">1021930000</a>	PCB plug-in connector, female header, closed side, THT solder connection, 7.62 mm, Number of poles: 2, 90°, Solder pin length (l): 3.2 mm, tinned, orange, Box	IEC: 630 V / 24 A UL: 300 V / 20 A	Box
GTIN (EAN)	4032248735839			
Qty.	126 pc(s).			

**BLL 7.62HP/180G**


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 ...	Version	Product data	Packaging
Order No.	<a href="#">1122020000</a>	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, orange, Box	IEC: 630 V / 24 A UL: 300 V / 20 A	Box
GTIN (EAN)	4032248903139			
Qty.	126 pc(s).			
Type	BLL 7.62HP/02/180 3.2SN ...	Version	Product data	Packaging
Order No.	<a href="#">1122070000</a>	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	IEC: 630 V / 24 A UL: 300 V / 20 A	Box
GTIN (EAN)	4032248902972			
Qty.	126 pc(s).			

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**Accessories**

**PZ**



**Crimping tools for wire end ferrules, with and without plastic collars**

- Ratchet guarantees precise crimping
- Release option in the event of incorrect operation

**General ordering data**

Type	PZ 6/5	Version	
Order No.	<a href="#">9011460000</a>	Pressing tool, Crimping tool for wire-end ferrules, 0.25mm <sup>2</sup> , 6mm <sup>2</sup> ,	
GTIN (EAN)	4008190165352	Trapezoidal indentation crimp	
Qty.	1 pc(s).		

**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.	<a href="#">1545710000</a>	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.	<a href="#">1573010000</a>	PCB plug-in connector, Accessories, Coding element, orange, Number		Box
GTIN (EAN)	4008190048396	of poles: 1		
Qty.	100 pc(s).			



**Data sheet**

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**Accessories**

**Slotted screwdriver**

Slotted screwdriver with rounded blade SD DIN 5265, ISO 2380/2, output to DIN 5264, ISO 2380/1. ChromTop tip, SoftFinish grip



**General ordering data**

Type	SDS 0.6X3.5X100	Version
Order No.	<a href="#">9008330000</a>	Screwdriver, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade thickness (A): 0.6 mm
GTIN (EAN)	4032248056286	
Qty.	1 pc(s).	

**Slotted screwdriver**

VDE insulated slot-head screwdriver, SDI DIN 7437, ISO 2380/2, drive output acc. to DIN 5264, ISO 2380/1. SoftFinish grip

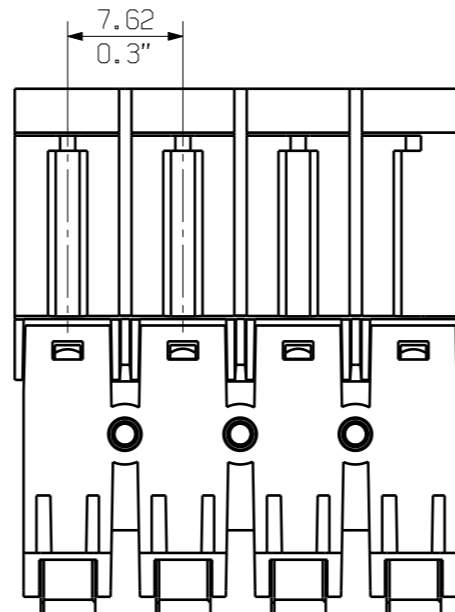
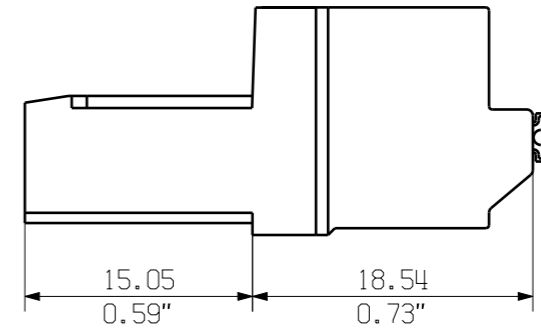
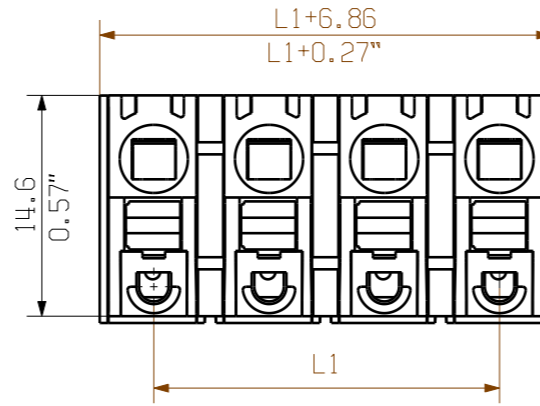


**General ordering data**

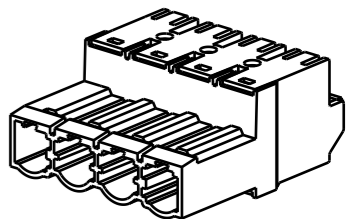
Type	SDIS 0.6X3.5X100	Version
Order No.	<a href="#">9008390000</a>	Screwdriver, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade thickness (A): 0.6 mm
GTIN (EAN)	4032248056354	
Qty.	1 pc(s).	

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M 1/1



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)

DARGESTELLT/ SHOWN: SLF7.62HP/04/180

For the mounting of PCBs, it should be noted that the rated data given in the catalogue relates only to the connection elements. The necessary creepage and clearance paths must be observed in connection with the respective applicant in accordance to VDE 0110. The current-carrying capacity and pitch tolerance is to be determined according to DIN IEC 326 part 3 very fine.

Weidmüller connectors are tested to the DIN VDE 0627 standard, and are valid for its field of application. Provided that the connectors are used to the intended purpose, all requirements with respect to the occurring of electrical, mechanical, thermic and corrosive stress will be satisfied.

<b>GENERAL TOLERANCE:</b> DIN ISO 2768-mK		94118/5 23.04.18 HELIS_MA 00	Cat.no.: .	
				<b>3 46068</b> <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">03</span>
				Drawing no. Issue no. Sheet 01 of 04 sheets
Scale: 2:1 Supersedes: .		Modification Drawn 12.04.2018 HELIS_MA Responsible DOMRATH_M Checked 24.04.2018 HELIS_MA Approved NOLTE_S	<b>SLF 7.62HP/.../180</b> STIFTLISTE PIN HEADER	
		Product file: BLF/SLF7.62HP		7381