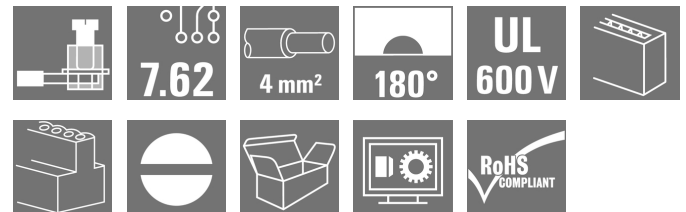


**OMNIMATE Power - series BL/SL 7.62HP
BLZ 7.62HP/06/180 SN OR BX**

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

Product image

Similar to illustration

**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	BLZ 7.62HP/06/180 SN OR BX
Order No.	1980520000
Version	PCB plug-in connector, female plug, 7.62 mm, No. of poles: 6, Screw connection, Clamping range, max.: 4 mm ² , Box
GTIN (EAN)	4032248675579
Qty.	50 pc(s).
Product data	IEC: 630 V / 29 A / 0.2 - 4 mm ² UL: 600 V / 20 A / AWG 20 - AWG 12
Packaging	Box

**OMNIMATE Power - series BL/SL 7.62HP
BLZ 7.62HP/06/180 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	18.3 mm	Height (inches)	0.72 inch
Depth	23.3 mm	Depth (inches)	0.917 inch
Net weight	12.92 g		

system parameters

Product family	OMNIMATE Power - series BL/SL 7.62HP	Type of connection	Field connection
Wire connection method	Screw connection	Pitch in mm (P)	7.62 mm
Pitch in inches (P)	0.3 inch	No. of poles	6
L1 in mm	38.1 mm	L1 in inches	1.5 inch
Number of rows	1	Pin series quantity	1
Rated cross-section	2.5 mm ²	Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch
Touch-safe protection acc. to DIN VDE 0470	IP 20	Volume resistance	5.00 mΩ
Can be coded	Yes	Stripping length	7 mm
Tightening torque, min.	0.4 Nm	Tightening torque, max.	0.5 Nm
Clamping screw	M 2.5	Screwdriver blade	0.6 x 3.5
Screwdriver blade standard	DIN 5264	Plugging force/pole, max.	9.5 N
Pulling force/pole, max.	8.5 N		

Material data

Insulating material	PBT	Colour code	orange
Colour chart (similar)	RAL 2000	Insulating material group	IIIa
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 plug contact	4-8 μm Sn hot-dip tinned	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

Conductors suitable for connection

Clamping range, min.	0.08 mm ²
Clamping range, max.	4 mm ²
Wire connection cross section AWG, min.	AWG 28
Wire connection cross section AWG, max.	AWG 12
Solid, min. H05(07) V-U	0.2 mm ²
Solid, max. H05(07) V-U	4 mm ²
Flexible, min. H05(07) V-K	0.2 mm ²
Flexible, max. H05(07) V-K	4 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, 0.2 mm ² min.	
w. plastic collar ferrule, DIN 46228 pt 4, 2.5 mm ² max.	
w. wire end ferrule, DIN 46228 pt 1, min. 0.2 mm ²	
w. wire end ferrule, DIN 46228 pt 1, 2.5 mm ² max.	
Plug gauge in accordance with EN 60999 a x b; ø	2.8 mm x 2.4 mm

Creation date April 19, 2019 10:55:40 PM CEST

Catalogue status 12.04.2019 / We reserve the right to make technical changes.

2

**OMNIMATE Power - series BL/SL 7.62HP
BLZ 7.62HP/06/180 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

Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	0.25 mm ²
	AEH	Stripping length	nominal 10 mm
	Cross-section for conductor connection	Type	fine-wired
		nominal	0.34 mm ²
	AEH	Stripping length	nominal 10 mm
	Cross-section for conductor connection	Type	fine-wired
		nominal	0.5 mm ²
	AEH	Stripping length	nominal 6 mm
	Cross-section for conductor connection	Type	fine-wired
		nominal	0.75 mm ²
	AEH	Stripping length	nominal 6 mm
	Cross-section for conductor connection	Type	fine-wired
		nominal	1 mm ²
AEH	Stripping length	nominal 6 mm	
Cross-section for conductor connection	Type	fine-wired	
	nominal	1.5 mm ²	
AEH	Stripping length	nominal 7 mm	
Cross-section for conductor connection	Type	fine-wired	
	nominal	2.5 mm ²	
AEH	Stripping length	nominal 7 mm	
Max. clamping range	4 mm ²		

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)	26.5 A	Rated current, min. no. of poles (Tu=40°C)	25 A
Rated current, max. no. of poles (Tu=40°C)	23 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	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.	9.8 mm	Creepage distance, min.	11.3 mm

Rated data acc. to CSA

Institute (CSA)		Certificate No. (CSA)	200039-1121690
Rated voltage (Use group B / CSA)	600 V	Rated voltage (Use group C / CSA)	600 V
Rated voltage (Use group D / CSA)	600 V	Rated current (Use group B / CSA)	20 A
Rated current (Use group C / CSA)	20 A	Rated current (Use group D / CSA)	5 A
Wire cross-section, AWG, min.	AWG 20	Wire cross-section, AWG, max.	AWG 12
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

OMNIMATE Power - series BL/SL 7.62HP BLZ 7.62HP/06/180 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 / UL 1059)	600 V	Rated voltage (Use group C / UL 1059)	600 V
Rated voltage (Use group D / UL 1059)	600 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)	5 A
Wire cross-section, AWG, min.	AWG 20	Wire cross-section, AWG, max.	AWG 12
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Packing

Packaging	Box	VPE length	82 mm
VPE width	115 mm	VPE height	165 mm

Classifications

ETIM 4.0	EC002637	ETIM 5.0	EC002637
ETIM 6.0	EC002637	UNSPSC	30-21-18-10
eClass 5.1	27-26-07-04	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	<ul style="list-style-type: none"> • Additional colours on request • Gold-plated contact surfaces on request • Rated current related to rated cross-section & min. No. of poles. • Wire end ferrule without plastic collar to DIN 46228/1 • Wire end ferrule with plastic collar to DIN 46228/4 • 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
BLZ 7.62HP/06/180 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
Engineering Data	STEP
Motion controllers white paper	Download Whitepaper
User Documentation	QR-Code product handling video
White Paper UL 600 V	Download Whitepaper

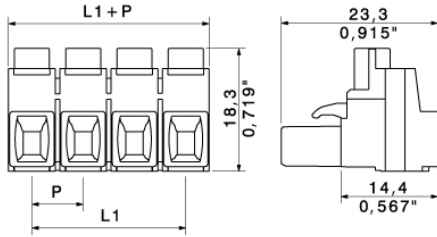
Data sheet

**OMNIMATE Power - series BL/SL 7.62HP
BLZ 7.62HP/06/180 SN OR BX**

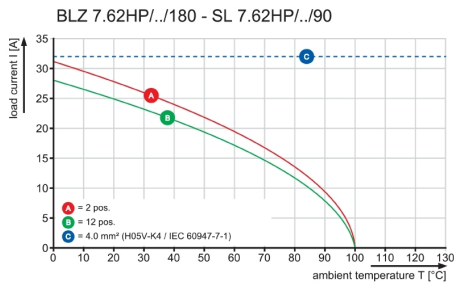
Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Drawings

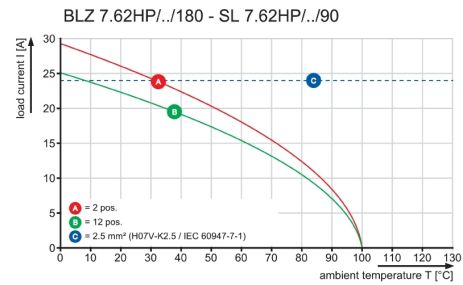
Dimensional drawing



Graph

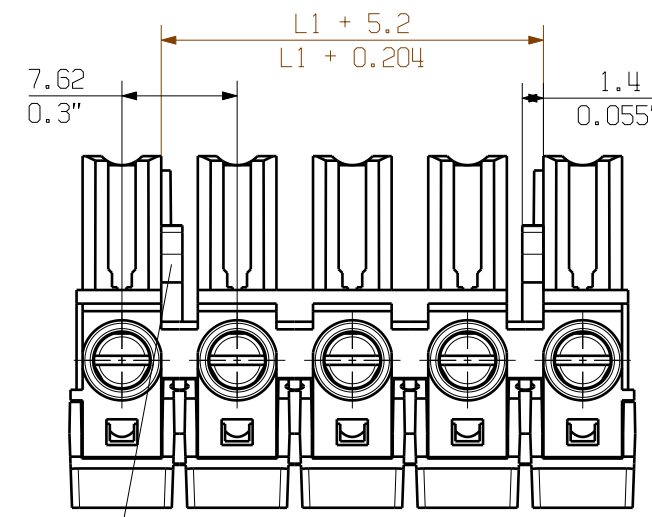
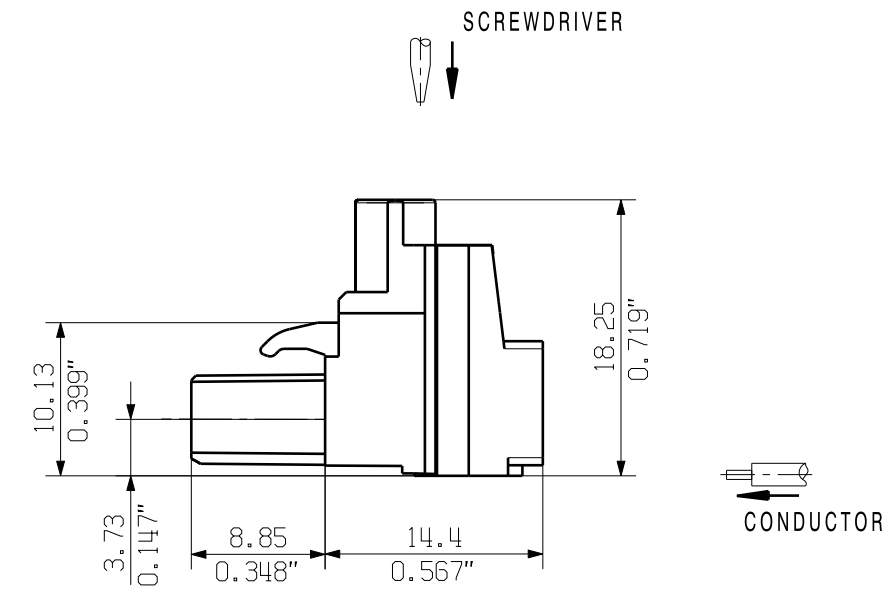
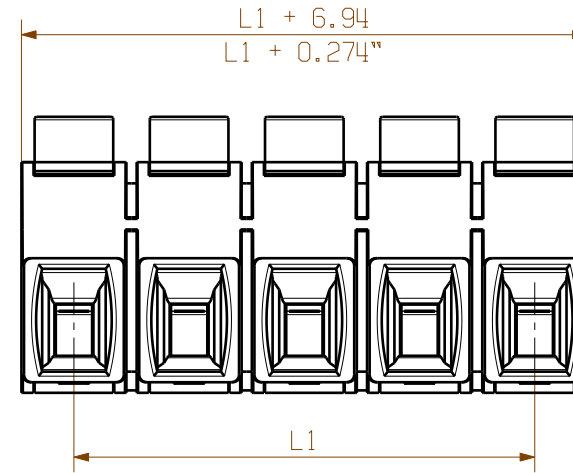


Graph

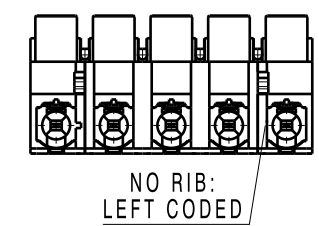
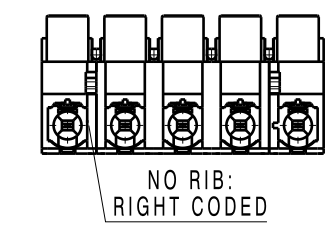
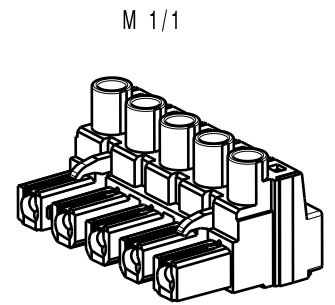


The reproduction, distribution and utilization of this document as well as the communication of its contents to others without explicit authorization is prohibited. Offenders will be held liable for the payment of damages. Weidmüller exclusively reserves the right to file for patents, utility models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

© Weidmüller Interface GmbH & Co. KG



2-POL. VERSION NUR DIESER HAKEN
2-POS. VERSION THIS HOOK ONLY



BEDRUCKUNGSVORLAGE SIEHE ZNG: 43764
PRINT DRAWING NO.:43764
ORDER NUMBERS SEE SHEET: S 43761
CODING SCHEME SEE SHEET: K 43761
REPRESENTED: BLZ7.62HP/5/180

6	38,10	1,500
5	30,48	1,200
4	22,86	0,900
3	15,24	0,600
2	7,62	0,300
n	L1 [mm]	L1 [Inch]

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.

General tolerance: DIN ISO 2768-mK		94081/5 02.05.17 HELIS_MA 00		Cat.no.: .	
		Modification			
		Drawn	Date		
		Responsible	24.04.2017	HELIS_MA	3 43761 06 Drawing no. Issue no. Sheet 01 of 02 sheets
		Checked	11.05.2017	HELIS_MA	
Scale: 2:1		Approved	LANG_T	BLZ 7.62HP/./180 BUCHSENLEISTE SOCKET BLOCK	
Supersedes: .		Product file: BLZ/SL 7.62 HP			