

BLZ 7.62HP/10/180LR SN BK BX

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image



Similar to illustration

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

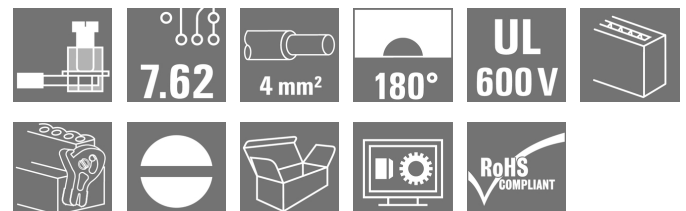
The compact, efficient solution for UL-600V applications in the lower performance range up to 12kVA.

- 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

Version	PCB plug-in connector, female plug, 7.62 mm, Number of poles: 10, Clamping yoke connection, Clamping range, max.: 4 mm ² , Box
Order No.	116500000
Type	BLZ 7.62HP/10/180LR SN BK BX
GTIN (EAN)	4032248954759
Qty.	15 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

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Technical data**Dimensions and weights**

Depth	23.4 mm	Depth (inches)	0.921 inch
Height	18.3 mm	Height (inches)	0.72 inch
Net weight	26.267 g		

System Parameters

Product family	OMNIMATE Power - series BL/SL 7.62HP	Type of connection	Field connection
Wire connection method	Clamping yoke connection	Pitch in mm (P)	7.62 mm
Pitch in inches (P)	0.3 inch	Number of poles	10
L1 in mm	68.58 mm	L1 in inches	2.7 inch
Pin series quantity	1	Rated cross-section	2.5 mm ²
Plugging cycles	25	Plugging force/pole, max.	9.5 N
Pulling force/pole, max.	8.5 N		

Material data

Colour	black	Colour chart (similar)	RAL 9011
Insulating material group	IIIa	Comparative Tracking Index (CTI)	≥ 200
UL 94 flammability rating	V-0	Layer structure of plug contact	4...8 µm Sn hot-dip tinned
Storage temperature, min.	-40 °C	Storage temperature, max.	70 °C
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, max.	2.5 mm ²
Plug gauge in accordance with EN 60999 a x b; ø	2.8 mm x 2.4 mm

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Technical data

Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	0.25 mm ²
wire end ferrule	Stripping length	nominal	10 mm
		Recommended wire-end ferrule	H0.25/12 HBL
Cross-section for conductor connection	Type	fine-wired	
		nominal	0.34 mm ²
wire end ferrule	Stripping length	nominal	10 mm
		Recommended wire-end ferrule	H0.34/12 TK
Cross-section for conductor connection	Type	fine-wired	
		nominal	0.5 mm ²
wire end ferrule	Stripping length	nominal	6 mm
		Recommended wire-end ferrule	H0.5/6
Cross-section for conductor connection	Type	fine-wired	
		nominal	0.75 mm ²
wire end ferrule	Stripping length	nominal	6 mm
		Recommended wire-end ferrule	H0.75/6
Cross-section for conductor connection	Type	fine-wired	
		nominal	1 mm ²
wire end ferrule	Stripping length	nominal	6 mm
		Recommended wire-end ferrule	H1.0/6
Cross-section for conductor connection	Type	fine-wired	
		nominal	1.5 mm ²
wire end ferrule	Stripping length	nominal	7 mm
		Recommended wire-end ferrule	H1.5/7
Cross-section for conductor connection	Type	fine-wired	
		nominal	2.5 mm ²
wire end ferrule	Stripping length	nominal	7 mm
		Recommended wire-end ferrule	H2.5/7

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.

Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	29 A
Rated current, max. number of poles (Tu=20°C)	26.5 A	Rated current, min. number of poles (Tu=40°C)	25 A
Rated current, max. number 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

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Technical data

Rated data acc. to CSA

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

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	348 mm
VPE width	137 mm	VPE height	31 mm

Type tests

Test: Durability of markings	Standard	DIN EN 61984 section 7.3.2 / 09.02 taking pattern from DIN EN 60068-2-70 / 07.96
	Test	mark of origin, type identification, pitch, type of material, date clock
	Evaluation	available
	Test	durability
Test: Misengagement (Non-interchangeability)	Evaluation	passed
	Standard	DIN EN 61984 section 6.3 and 6.9.1 / 09.02
	Test	180° turned with coding elements
	Evaluation	passed
Test: Misengagement (Non-interchangeability)	Test	180° turned without coding elements
	Evaluation	passed

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Test: Clampable cross section	Standard	DIN EN 60999-1 section 7 and 9.1 / 12.00, DIN EN 60947-1 section 8.2.4.5.1 / 12.02	
	Conductor type	Type of conductor and conductor cross-section	solid 0.5 mm ²
		Type of conductor and conductor cross-section	stranded 0.5 mm ²
		Type of conductor and conductor cross-section	solid 2.5 mm ²
		Type of conductor and conductor cross-section	stranded 2.5 mm ²
		Type of conductor and conductor cross-section	AWG 20/1
		Type of conductor and conductor cross-section	AWG 20/19
		Type of conductor and conductor cross-section	AWG 12/1
		Type of conductor and conductor cross-section	AWG 12/19
Evaluation	passed		
Test for damage to and accidental loosening of conductors	Standard	DIN EN 60999-1 section 9.4 / 12.00	
	Requirement	0.2 kg	
	Conductor type	Type of conductor and conductor cross-section	AWG 28/1
		Type of conductor and conductor cross-section	AWG 28/19
	Evaluation	passed	
	Requirement	0.3 kg	
	Conductor type	Type of conductor and conductor cross-section	H05V-U0.5
		Type of conductor and conductor cross-section	H05V-K0.5
	Evaluation	passed	
	Requirement	0.7 kg	
	Conductor type	Type of conductor and conductor cross-section	AWG 14/1
		Type of conductor and conductor cross-section	AWG 14/19
	Evaluation	passed	
	Requirement	0.9 kg	
	Conductor type	Type of conductor and conductor cross-section	H07V-U4.0
Type of conductor and conductor cross-section		H07V-K4.0	
Evaluation	passed		

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Technical data

Pull-out test	Standard	DIN EN 60999-1 section 9.5 / 12.00		
	Requirement	≥5 N		
	Conductor type	Type of conductor and conductor cross-section	AWG 28/1	
		Type of conductor and conductor cross-section	AWG 28/19	
	Evaluation	passed		
	Requirement	≥20 N		
	Conductor type	Type of conductor and conductor cross-section	H05V-U0.5	
		Type of conductor and conductor cross-section	H05V-K0.5	
	Evaluation	passed		
	Requirement	≥50 N		
	Conductor type	Type of conductor and conductor cross-section	AWG 14/1	
		Type of conductor and conductor cross-section	AWG 14/19	
		Type of conductor and conductor cross-section	H07V-K4.0	
	Evaluation	passed		
	Requirement	≥60 N		
	Conductor type	Type of conductor and conductor cross-section	H07V-U4.0	
Evaluation	passed			

Classifications

ETIM 6.0	EC002638	ETIM 7.0	EC002638
ETIM 8.0	EC002638	ECLASS 9.0	27-44-03-09
ECLASS 9.1	27-44-03-09	ECLASS 10.0	27-44-03-09
ECLASS 11.0	27-46-02-02		

Important note

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.

Notes

- 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.

Creation date January 21, 2022 12:15:56 PM CET

Catalogue status 14.01.2022 / We reserve the right to make technical changes.

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Data sheet

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Technical data

Approvals

Approvals



ROHS	Conform
UL File Number Search	E60693

Downloads

Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Engineering Data	CAD data – STEP
Engineering Data	EPLAN, WSCAD
User Documentation	QR-Code product handling video
Catalogues	Catalogues in PDF-format
Brochures	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 PO OMNIMATE EN

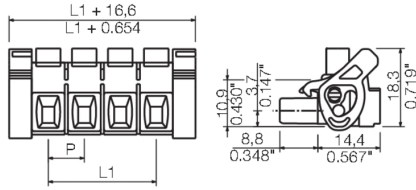
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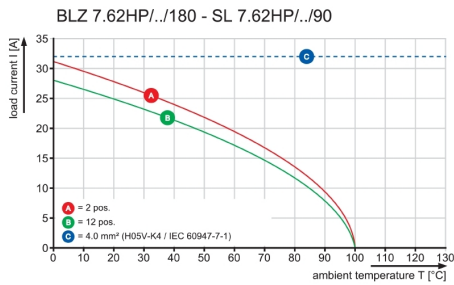
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Drawings

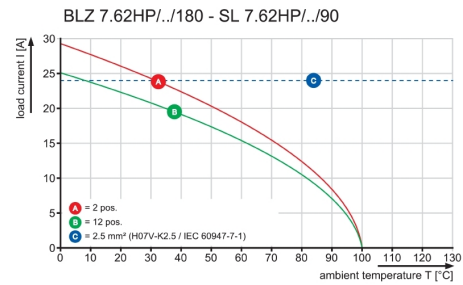
Dimensional drawing



Graph



Graph



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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 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).			

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).			

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	Product data	Packaging
Order No.	9008330000	Screwdriver, Screwdriver		
GTIN (EAN)	4032248056286			
Qty.	1 pc(s).			

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Accessories

Crimping tools



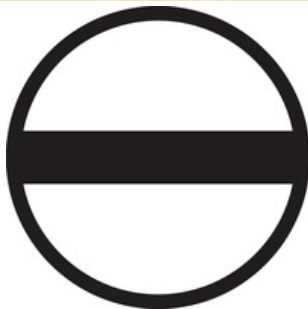
Crimping tools for wire end ferrules, with and without plastic collars

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

General ordering data

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

Slotted screwdriver



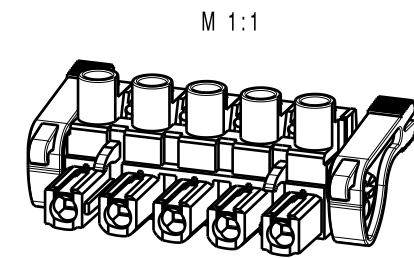
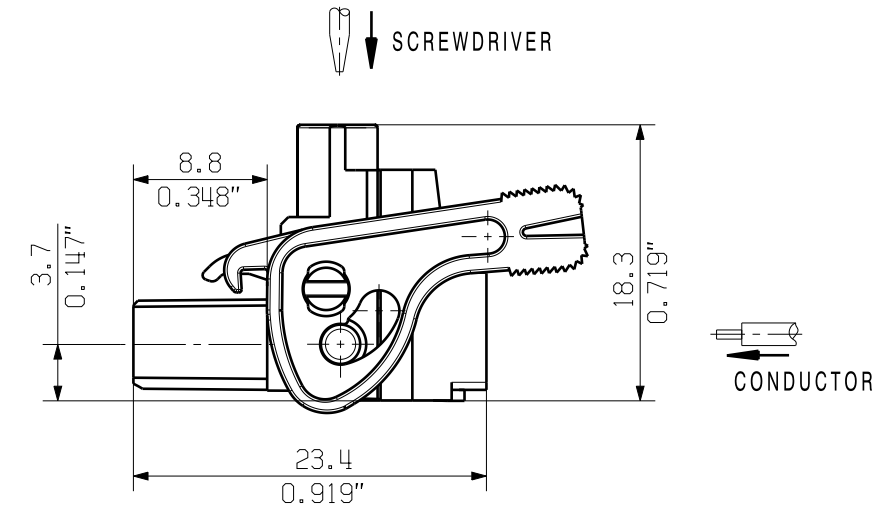
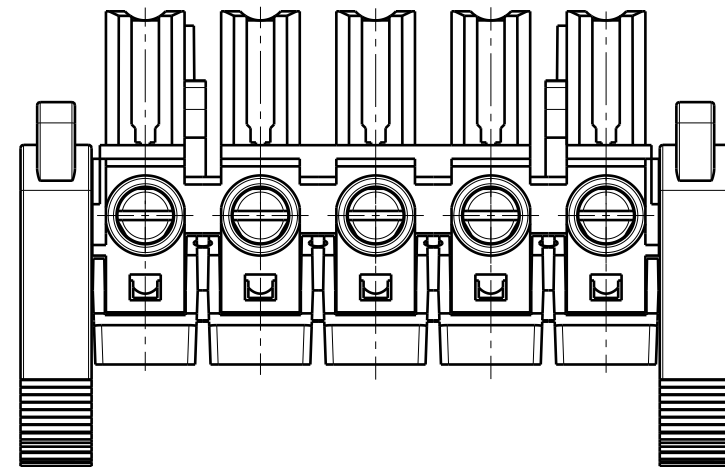
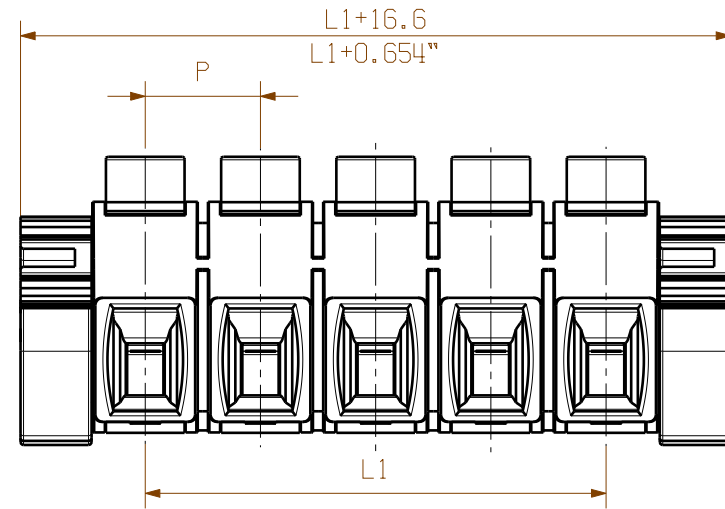
VDE insulated slot-head screwdriver, SDI DIN 7437, ISO 2380/2, drive output acc. to DIN 5264, ISO 2380/1. SoftFinish grip

General ordering data

Type	SDIS 0.6X3.5X100	Version
Order No.	9008390000	Screwdriver, Screwdriver
GTIN (EAN)	4032248056354	
Qty.	1 pc(s).	

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12	83,82	3,300
11	76,20	3,000
10	68,58	2,700
9	60,96	2,400
8	53,34	2,100
7	45,72	1,800
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]

P=Raster/pitch
shown: BLZ 7.62HP/05/180LR

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.

Weidmueller 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		93941/5 24.04.17 HELIS_MA 01		Cat.no.: .	
		Modification			
		Drawn	Date	Name	3 49781 09 Drawing no. Issue no. Sheet 01 of 02 sheets
Responsible	24.04.2017	HELIS_MA	BLZ 7.62HP/./180LH/LR BUCHSENLEISTE SOCKET BLOCK		
Checked	11.05.2017	HELIS_MA			
Supersedes: .	Approved	LANG_T	7375		

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