

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

Product image

























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

Version	PCB plug-in connector, female plug, 7.62 mm,		
	Number of poles: 8, Clamping yoke connection,		
	Clamping range, max.: 4 mm², Box		
Order No.	<u>1980540000</u>		
Туре	BLZ 7.62HP/08/180 SN OR BX		
GTIN (EAN)	4032248675593		
Qty.	25 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	23.3 mm	Depth (inches)	0.917 inch
Height	18.3 mm	Height (inches)	0.72 inch
Net weight	16.048 g		

System Parameters

Product family	OMNIMATE Power - series	Type of connection	
,	BL/SL 7.62HP		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	8
L1 in mm	53.34 mm	L1 in inches	2.1 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		Volume resistance	
0470	IP 20		$5.00~\text{m}\Omega$
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	orange
Colour chart (similar)	RAL 2000	Insulating material group	IIIa
Comparative Tracking Index (CTI)	≥ 200	UL 94 flammability rating	V-0
Contact material	Copper alloy	Contact surface	tinned
Layer structure of plug contact	48 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 min.	4, 0.2 mm ²
w. plastic collar ferrule, DIN 46228 pt max.	4, 2.5 mm ²
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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Clampable conductor	Cross-section for conductor connection	Туре	fine-wired
		nominal	0.25 mm ²
	wire end ferrule	Stripping length	nominal 10 mm
		Recommended wire- H0,25/12 HBL end ferrule	
	Cross-section for conductor connection	Type	fine-wired
		nominal	0.34 mm ²
	wire end ferrule	Stripping length	nominal 10 mm
		Recommended wire- H0,34/12 TK end ferrule	
	Cross-section for conductor connection	Туре	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	Туре	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	Туре	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	Туре	fine-wired
		nominal	2.5 mm ²
	wire end ferrule	Stripping length	nominal 7 mm
		Recommended wire-	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		Rated current, min. number of poles	
	IEC 60664-1, IEC 61984	(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



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E60693

600 V

20 A

5 A AWG 12

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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 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.		

Rated data acc. to UL 1059

Institute (cURus)	c SL "us	Certificate No. (cURus)
Rated voltage (Use group B / UL 1059)	600 V	Rated voltage (Use group C / UL 1059)

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

see approval certificate.

Packaging	Box	VPE length	350 mm
VPE width	135 mm	VPE height	27 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				
	Evaluation	passed				
Test: Misengagement (Non- interchangeability)	Standard	DIN EN 61984 section 6.3 and 6.9.1 / 09.02				
	Test	180° turned with coding elements				
	Evaluation	passed				
	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, DI EN 60947-1 section 8.2.4.5.1 / 12.02
	Conductor type	Type of conductor solid 0.5 mm ² and conductor cross-section
		Type of conductor stranded 0.5 mm ² and conductor cross-section
		Type of conductor solid 2.5 mm ² and conductor cross-section
		Type of conductor stranded 2.5 mm ² and conductor cross-section
		Type of conductor AWG 20/1 and conductor cross-section
		Type of conductor AWG 20/19 and conductor cross-section
		Type of conductor AWG 12/1 and conductor cross-section
		Type of conductor AWG 12/19 and conductor cross-section
	Evaluation	passed
est for damage to and accidental	Standard	DIN EN 60999-1 section 9.4 / 12.00
osening of conductors	Requirement	0.2 kg
	Conductor type	Type of conductor AWG 28/1 and conductor cross-section
		Type of conductor AWG 28/19 and conductor cross-section
	Evaluation	passed
	Requirement	0.3 kg
	Conductor type	Type of conductor H05V-U0.5 and conductor cross-section
		Type of conductor H05V-K0.5 and conductor cross-section
	Evaluation	passed
	Requirement	0.7 kg
	Conductor type	Type of conductor AWG 14/1 and conductor cross-section
		Type of conductor AWG 14/19 and conductor cross-section
	Evaluation	passed
	Requirement	0.9 kg
	Conductor type	Type of conductor H07V-U4.0 and conductor cross-section
		Type of conductor H07V-K4.0 and conductor cross-section
	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 AWG 28/1 and conductor cross-section
		Type of conductor AWG 28/19 and conductor cross-section
	Evaluation	passed
	Requirement	≥20 N
	Conductor type	Type of conductor H05V-U0.5 and conductor cross- section
		Type of conductor H05V-K0.5 and conductor cross-section
	Evaluation	passed
	Requirement	≥50 N
	Conductor type	Type of conductor AWG 14/1 and conductor cross-section
		Type of conductor AWG 14/19 and conductor cross-section
		Type of conductor H07V-K4.0 and conductor cross-section
	Evaluation	passed
	Requirement	≥60 N
	Conductor type	Type of conductor H07V-U4.0 and conductor cross-section
	Evaluation	passed

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	ECLASS 11.0	27-46-02-02



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Important note

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. • 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.
- Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months

Approvals

Approvals	® c S LL us Ⅲ
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ROHS	Conform
UL File Number Search	E60693

Downloads

Approval/Certificate/Document of	
Conformity	Declaration of the Manufacturer
Engineering Data	STEP
Engineering Data	EPLAN, WSCAD
User Documentation	QR-Code product handling video



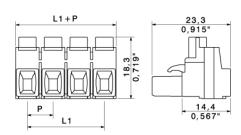
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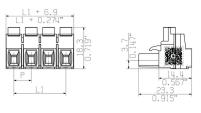
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Drawings

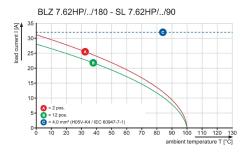
Dimensional drawing



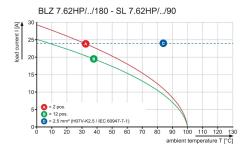
Dimensional drawing

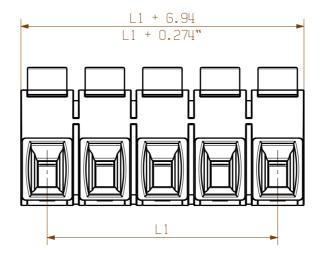


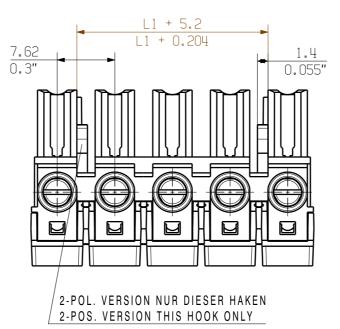
Graph

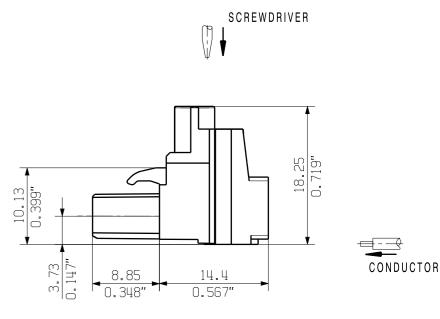


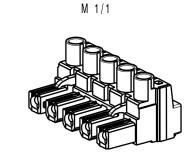
Graph





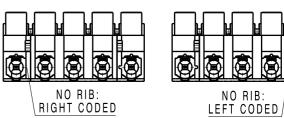






SOCKET BLOCK

Product file: BLZ/SL 7.62 HP



BEDRUCKUNGSVORLAGE SIEHE ZNG: 43764 PRINT DRAWING NO.:43764

ORDER NUMBERS SEE SHEET: S 43761 CODING SCHEME SEE SHEET: K 43761

Checked

Approved

11.05.2017 | HELIS_MA

LANG T

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

7375

For the mounting of PCBs, it should be noted that the rated data given in the catalogue relates only to the connection elements. The neccessary 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	. G
Weidmueller connectors are tested to the DIN VDE 0627 standard, and are valid for its field of application	

Scale: 2:1

Supersedes:

the respective applicant in accordance to The current-carrying capacity and pitch to be determined according to DIN IEC 326 p Weidmueller connectors are tested to the 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 occuring of electrical, mechanical, thermic and corrosive stress will be satisfied.

REPRESENTED: BLZ7.62HP/5/1	80							n L1	[mm]	L1 [Inch]
General tolerance:					С	Cat.no.:.				
DIN ISO 2768-mK	94081/5 02.05.17 HE	-	We	eidmül	ler		3 Drawing n	. •	761	06 Issue no.
V	Modifi	cation					Sheet	01	of 02	sheets
		Date	N a m e							
	Drawn	24.04.2017	HELIS_MA	BLZ 7.62HP//18			/18	n		
	Responsible		KRUG_M		,	BUCHSEN	•	, 10	J	

