

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 male header for applications up to 12 kVA:

- 29 A at 400 V (IEC)
- 20 A at 600 V (UL)
- Single compartment mating profile

### Assisting in device approval:

- Meets the requirements for 600 V according to UL 508 / UL840.
- Meets the increased requirements on touch safety as per IEC68100-5-1 when combined with female header BLZ 7.62 HP

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!

Male header, 180° outlet direction, without flange

### General ordering data

Version	PCB plug-in connector, male header, closed side, THT solder connection, 7.62 mm, Number of poles: 4, 180°, Solder pin length (I): 3.2 mm, tinned, black, Box
Order No.	<u>1122580000</u>
Туре	SL 7.62HP/04/180G 3.2SN BK BX
GTIN (EAN)	4032248904662
Qty.	100 pc(s).
Product data	IEC: 630 V / 29 A UL: 300 V / 20 A
Packaging	Вох



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## **Technical data**

### **Dimensions and weights**

Depth	8.4 mm	Depth (inches)	0.331 inch
Height	15 mm	Height (inches)	0.591 inch
Height of lowest version	11.8 mm	Net weight	2.11 g

### **System specifications**

Product family	OMNIMATE Power - series	Type of connection	
	BL/SL 7.62HP		Board connection
Mounting onto the PCB	THT solder connection	Pitch in mm (P)	7.62 mm
Pitch in inches (P)	0.3 inch	Outgoing elbow	180°
Number of poles	4	Number of solder pins per pole	1
Solder pin length (I)	3.2 mm	Solder pin dimensions 1.0 x 1.0 m	
Solder eyelet hole diameter (D)	1.3 mm	Solder eyelet hole diameter tolerance (	D)+ 0,1 mm
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	Safe from finger touch,	Touch-safe protection acc. to DIN VDE	
57 106	plugged	0470	IP20 plugged
Can be coded	Yes		

#### **Material data**

Insulating material	PBT	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	Illa
Comparative Tracking Index (CTI)	≥ 200	UL 94 flammability rating	V-0
Contact material	Copper alloy	Contact surface	tinned
Layer structure of solder connection	23 µm Ni / 24 µm Sn matt	Layer structure of plug contact	13 μm Ni / 24 μm Sn matt
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

### 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	00.4	Rated current, min. number of poles	05.4
(Tu=20°C)	26 A	(Tu=40°C)	25 A
Rated current, max. number of poles	21.4	Rated voltage for surge voltage class /	C20.1/
(Tu=40°C)	21 A	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	6 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	6 kV
Rated impulse voltage for surge voltage		Short-time withstand current resistance	
class/ contamination degree III/3	6 kV		3 x 1s with 180 A

### Rated data acc. to CSA

Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group C / CSA)	300 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



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## **Technical data**

### Rated data acc. to UL 1059

Kated data acc. to UL 1059							
Institute (cURus)	<b>. 511</b> " us	Certificate No. (cURus)					
	C # 100		E60693				
Rated voltage (Use group B / UL 1059)		Rated voltage (Use group C / UL 1059)	300 V				
Rated voltage (Use group D / UL 1059)		Rated current (Use group B / UL 1059)					
Rated current (Use group C / UL 1059)		Rated current (Use group D / UL 1059)					
Clearance distance, min.	6.5 mm	Creepage distance, min.	11.2 mm				
Reference to approval values	Specifications are maximum values, details - see approval certificate.						
Packing							
Packaging	Box	VPE length	42 mm				
VPE width	110 mm	VPE height	225 mm				
Classifications							
ETIM 6.0	EC002637	ETIM 7.0	EC002637				
ECLASS 9.0	27-44-04-02		27-44-04-02				
ECLASS 10.0	27-44-04-02	ECLASS 9.1 27-44-04-02 ECLASS 11.0 27-46-02-01					
Important note  IPC conformity	Conformity: The products are dev	/eloped, manufactured and delivered according	international recognized				
		y with the assured properties in the data sheet lass 2". Further claims on the products can be e					
Notes	Additional colours on request						
	Gold-plated contact surfaces or	n request					
	Rated current related to rated	cross-section & min. No. of poles.					
	• P on drawing = pitch						
		mponent itself. Clearance and creepage distance the the relevant application standards.	ces to other components are to				
	Long term storage of the prod	uct with average temperature of 50 °C and aver	rage humidity 70%, 36 months				
Approvals							
Approvals	<b>—</b> • # # # # # # # # # # # # # # # # # #						
	c <b>FL</b> us						
ROHS	Conform						
III. File Namels on Consult	FCCCCC						

UL File Number Search

E60693



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## **Technical data**

### **Downloads**

Approval/Certificate/Document of	
Conformity	Declaration of the Manufacturer
Engineering Data	<u>STEP</u>
Engineering Data	EPLAN, WSCAD
Product Change Notification	DE - Change of packaging
	EN - Change of packaging
	DE - Change of packaging Step 2
	EN - Change of packaging Step 2



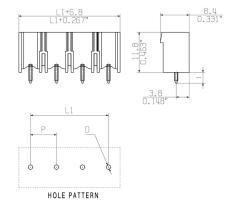
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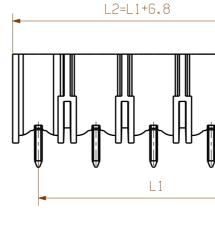
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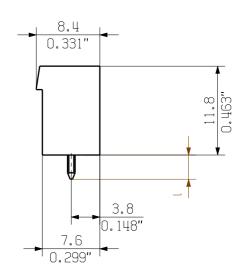
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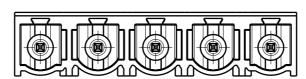
## **Drawings**

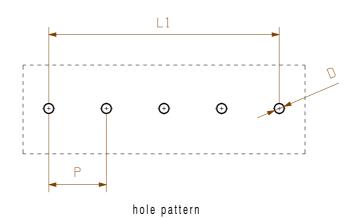
### **Dimensional drawing**

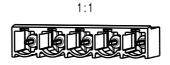












P = 7.62 Raster Pitch

 $d = \frac{1.2}{0.047}$ "

Scale: 2:1

Supersedes:

n = Polzahl/ number of poles

shown: SL 7.62HP/05/180G

Checked

Approved

23.04.2018 | HELIS\_MA

LANG\_T

A E	+0.1
4,5	-0.3
2.2	+0.1
3,2	-0.3
MASS I /	TOLERANZ/
DIM I	TOLERANCES

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
7	45,72	1,800
8	53,34	2,100
9	60,96	2,400
10	68,58	2,700
	_	

83,82

76,20

3,300

3,000

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.

standard, and are valid for its field of application. Provided that the connectors are used to the intended

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

Weidmueller connectors are tested to the DIN VDE 0627 purpose, all requirements with respect to the occuring of electrical, mechanical, thermic and corrosive stress will be satisfied.

Fehl. Masse und Angaben siehe Datenblatt Further dim. & info. see data sheet

310 WII. 3L 7.02111 /03/1000		DIM I		OLERANO	ES	n	L1 [mm]	L1 [lack]		
Canaral talaranca:							С	at.n	0.:.	
General tolerance: DIN ISO 2768-mK	103327/5 03.04.18 HEL	IS_MA 00	We	eidmülle	er	<b>%</b>	3 Drawing no		788	1 06 Issue no.
COMPLIANT	Modifi	cation					Sheet	01	of 03	sheets
		Date	Name							
	Drawn	28.06.2017	HELIS_MA	SL 7.62HP//180				1		
	Responsible		KRUG_M	"		STIFTLE		0	,	

STIFTLEISTE

MALE HEADER Product file: SL 7.62HP

7375



### Recommended wave solderding profiles

#### Weidmüller Interface GmbH & Co. KG

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### 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.