

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.

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, with screw flanges

General ordering data

Version	PCB plug-in connector, male header, Flange, THT solder connection, 7.62 mm, Number of poles: 6, 180°, Solder pin length (I): 3.2 mm, tinned, black, Box
Order No.	<u>1140910000</u>
Туре	SL 7.62HP/06/180F 3.2 SN BK BX
GTIN (EAN)	4032248923403
Qty.	30 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	Width	54.58 mm
Width (inches)	2.149 inch	Net weight	3 g

Temperatures

Continuous operating temp., min.	-25 °C	Continuous operating temp., max.	100 °C

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 "	Outgoing elbow	180°
Number of poles	6	Number of solder pins per pole	1
Solder pin length (I)	3.2 mm	Solder pin dimensions	1.0 x 1.0 mm
Solder pin dimensions = d tolerance	+0,01 / -0,03 mm	Solder eyelet hole diameter (D)	1.4 mm
Solder eyelet hole diameter tolerance (D)+ 0,1 mm	L1 in mm	38.1 mm
L1 in inches	1.5 "	Number of rows	1
Pin series quantity		Touch-safe protection acc. to DIN VDE	Safe from finger touch,
	1	57 106	plugged
Touch-safe protection acc. to DIN VDE		Protection degree	
0470	IP20 plugged		IP10
Can be coded	Yes	Tightening torque for screw flange, min.	0.15 Nm
Tightening torque for screw flange, ma	ıx. 0.25 Nm	Plugging cycles	25

Material data

Insulating material	PBT	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	IIIa
Comparative Tracking Index (CTI)	≥ 200	UL 94 flammability rating	V-0
Contact material	Cu-alloy	Contact surface	tinned
Layer structure of solder connection	13 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 (Tu=20°C)	26 A	Rated current, min. number of poles (Tu=40°C)	25 A
Rated current, max. number of poles (Tu=40°C)	21 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	6 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.	6.5 mm	Creepage distance, min.	8.1 mm



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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

Rated data acc. to UL 1059

Institute (cURus)



approval certificate.

Certificate No. (cURus)

Rated voltage (Use group B / UL 1059)	300 V
Rated voltage (Use group D / UL 1059)	600 V
Rated current (Use group C / UL 1059)	20 A
Clearance distance, min.	6.5 mm
Reference to approval values	Specifications are maximum values, details - see

	E60693
Rated voltage (Use group C / UL 1059)	300 V
Rated current (Use group B / UL 1059)	20 A
Rated current (Use group D / UL 1059)	5 A
Creepage distance, min.	11.2 mm

Packing

Packaging	Box	VPE length	340 mm
VPE width	134 mm	VPE height	19 mm

Classifications

ETIM 6.0	EC002637	ETIM 7.0	EC002637
ETIM 8.0	EC002637	ETIM 9.0	EC002637
ETIM 10.0	EC002637	ECLASS 9.0	27-44-04-02
ECLASS 9.1	27-44-04-02	ECLASS 10.0	27-44-04-02
ECLASS 11.0	27-46-02-01	ECLASS 12.0	27-46-02-01
ECLASS 13.0	27-46-02-01	ECLASS 14.0	27-46-02-01
ECLASS 15.0	27-46-02-01		

Environmental Product Compliance

RoHS Compliance Status	Compliant without exemption
REACH SVHC	No SVHC above 0.1 wt%



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Technical data

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 variants on request
	Gold-plated contact surfaces on request
	Rated current related to rated cross-section & min. No. of poles.
	• 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.
	 In accordance with IEC 61984, OMNIMATE-connectors are connectors without breaking capacity (COC). During designated use, connectors are not allowed to be engaged or disengaged when live or under load
	 Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36

Approvals

Approvals



months

Approvals MAMID	https://mdcop.weidmueller.com/mediadelivery/rendition/900_319230/-T1z1mm-S800/
ROHS	Conform
UL File Number Search	UL Website
Certificate No. (cURus)	E60693

Downloads

Approval/Certificate/Document of Con-			
ormity <u>Declaration of the Manufacturer</u>			
Engineering Data	CAD data – STEP		
Product Change Notification	DE - Change of packaging		
	EN - Change of packaging		
	DE - Change of packaging Step 2		
	EN - Change of packaging Step 2		
Catalogues	<u>Catalogues in PDF-format</u>		
Brochures	<u>FL DRIVES EN</u>		
	MB DEVICE MANUF. EN		
	FL DRIVES DE		
	FL HEATING ELECTR EN		
	FL APPL_INVERTER EN		
	FL_BASE_STATION_EN		
	<u>FL ELEVATOR EN</u>		
	FL POWER SUPPLY EN		
	FL 72H SAMPLE SER EN		
	PO OMNIMATE EN		
	PO OMNIMATE EN		



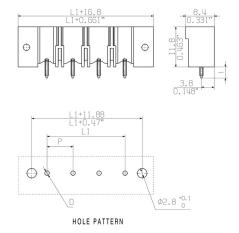
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Drawings

Dimensional drawing





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Accessories

Coding elements



Only connects what is supposed to be connected: the right connection at the right place.

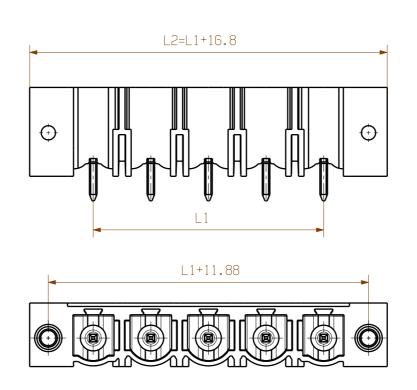
Coding elements and locking devices clearly assign connecting elements during the manufacturing process and operation

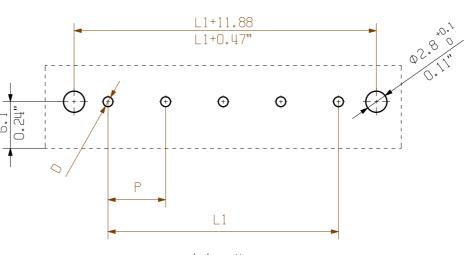
The coding elements and locking devices are inserted prior to assembly or during the cable assembly phase. The Weidmüller alternative: configure online using the variant configurator to precode prior to delivery. Incorrect assembly on the circuit board and incorrect plugging of connecting elements is no longer possible. The advantage: no troubleshooting during manufacture and no operational errors by the user.

General ordering data

Туре	BLZ/SL KO BK BX	Version	Product data	Packaging
Order No.	<u>1545710000</u>	PCB plug-in connector, Accessories, Coding element, black, Number		Box
GTIN (EAN)	4008190087142	of poles: 1		
Qty.	50 pc(s).			
Туре	BLZ/SL KO OR BX	Version	Product data	Packaging
Type Order No.	BLZ/SL KO OR BX 1573010000	Version PCB plug-in connector, Accessories, Coding element, orange, Number		Packaging Box
	· ·			0 0









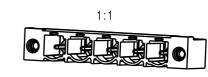
 $D = {0.51}$

d = 1.2 0.047

Scale: 2:1

Supersedes:

shown: SL 7.62HP/05/180F



Product file: SL 7.62HP

8.41 0.331"

0.299"

3.8 0.148"

	1 E	+0.1	
	4,5	-0.3	
	3,2	+0.1	
		-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
11	76,20	3,000
12	83,82	3,300

Cat.no.:

Sheet 02 of 03 sheets

Drawing no.

(06)

Issue no

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.

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 occuring of electrical, mechanical, thermic and corrosive stress will be satisfied.

General tolerance:				
DIN ISO 2768-mK	103327/5 03.04.18 HE	LIS_MA 00	We	eidmüller 🏂
COMPLIANT	Modifi	ication		
		Date	Name	
	Drawn	28.06.2017	HELIS_MA	SL 7.62HF
	Responsible		KRUG M	JE 1.02111

Checked

Approved

SL 7.62HP/../180... MALE HEADER

hole pattern

n = Polzahl/ number of poles

23.04.2018 | HELIS_MA

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



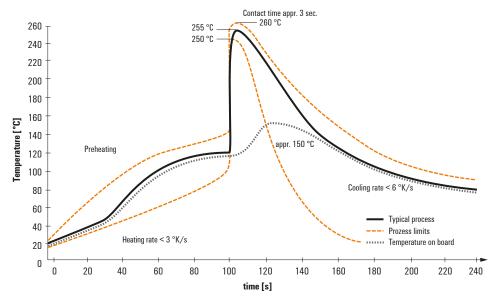
Recommended wave solderding profiles

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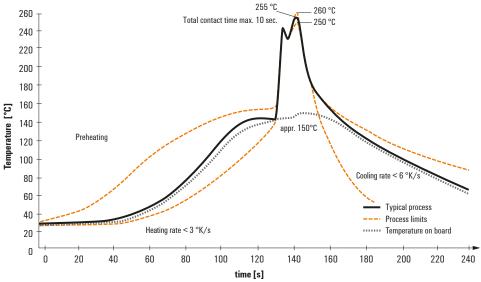
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Single Wave:



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.