

SL 7.62HP/02/180F 3.2 SN BK BX**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, with screw flanges

General ordering data

Version	PCB plug-in connector, male header, Flange, THT solder connection, 7.62 mm, Number of poles: 2, 180°, Solder pin length (l): 3.2 mm, tinned, black, Box
Order No.	1140870000
Type	SL 7.62HP/02/180F 3.2 SN BK BX
GTIN (EAN)	4032248923342
Qty.	72 pc(s).
Product data	IEC: 630 V / 29 A UL: 300 V / 20 A
Packaging	Box

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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	24.1 mm
Width (inches)	0.949 inch	Net weight	2.12 g

Temperatures

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

Product family	OMNIMATE Power - series BL/SL 7.62HP	Type of connection	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	2	Number of solder pins per pole	1
Solder pin length (l)	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	7.62 mm
L1 in inches	0.3 "	Number of rows	1
Pin series quantity	1	Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch, plugged
Touch-safe protection acc. to DIN VDE 0470	IP20 plugged	Protection degree	IP10
Can be coded	Yes	Tightening torque for screw flange, min.	0.15 Nm
Tightening torque for screw flange, max.	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	1...3 µm Ni / 2...4 µm Sn matt	Layer structure of plug contact	1...3 µm Ni / 2...4 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	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 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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Technical data

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)



Certificate No. (cURus)

E60693

Rated voltage (Use group B / UL 1059)	300 V	Rated voltage (Use group C / UL 1059)	300 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
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	341 mm
VPE width	134 mm	VPE height	21 mm

Classifications

ETIM 6.0	EC002637	ETIM 7.0	EC002637
ETIM 8.0	EC002637	ETIM 9.0	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

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	<ul style="list-style-type: none"> • 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 months

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www.weidmueller.com**Technical data****Approvals**

Approvals



ROHS Conform

UL File Number Search UL Website

Certificate No. (cURus) E60693

Downloads

Approval/Certificate/Document of Conformity

[Declaration of the Manufacturer](#)

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

[Catalogues in PDF-format](#)

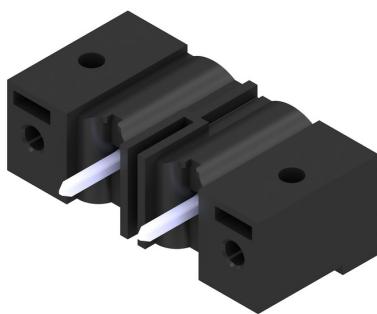
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Drawings**Product image****Dimensional drawing**

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www.weidmueller.com**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 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).			
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).			

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Dimensions without tolerances are no check dimensions

The English version is binding



P = 7.62 Raster Pitch
D = 0.51"
d = 1.2
0.047"
n = Polzahl/ number of poles

shown: SL 7.62HP/05/180F



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

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]

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.

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

General tolerance:
DIN ISO 2768-mK

103327/5
03.04.18 HELIS_MA

00

Modification

Date

Name

Drawn

28.06.2017

HELIS_MA

Responsible

KRUG_M

Checked

23.04.2018

HELIS_MA

Approved

LANG_T

Scale: 2:1

Supersedes: .

SL 7.62HP/.. /180...

STIFTLISTE

MALE HEADER

Product file: SL 7.62HP

7375

Cat.no.: .

3 47881 06

Drawing no.

Sheet 02 of 03 sheets

Issue no.

Recommended wave soldering profiles

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

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.

We reserve the right to make technical changes.