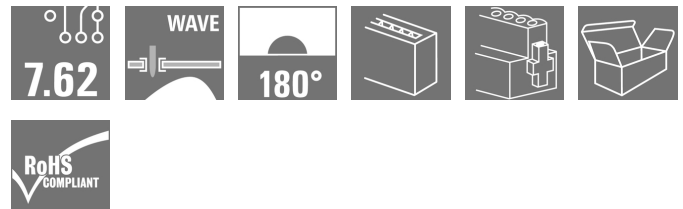


**OMNIMATE Power - series BV/SV 7.62HP
BVL 7.62HP/10/180SFI 3.5SN BK BX**

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Product image

Similar to illustration

High-performance female header with solder connection. Side-by-side mounting without sacrificing any poles or with patented multifunction flange for secure, fast fixing without tools. Maximum connection and operating reliability thanks to a mating profile that prevents incorrect connection, with unique coding diversity, protection against faulty wiring and 4-point contact.

General ordering data

Delivery status	Discontinued
Available until	2011-01-17
Type	BVL 7.62HP/10/180SFI 3.5SN BK BX
Order No.	1928940000
Version	PCB plug-in connector, female header, Screw/clip-on flange, reversed, THT solder connection, 7.62 mm, Number of poles: 10, 180°, Solder pin length (l): 3.5 mm, tinned, black, Box
GTIN (EAN)	4032248578283
Qty.	50 pc(s).
Product data	IEC: 1000 V / 56.8 A
Creation date	July 24, 2020 2:26:00 PM CEST
Packaging	Box

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Technical data

Dimensions and weights

Net weight	15.13 g
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System Parameters

Product family	OMNIMATE Power - series BV/SV 7.62HP	Type of connection	Board 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	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	IP 20	Volume resistance	2.00 mΩ
Can be coded	Yes	Tightening torque for screw flange, min.	0.2 Nm
Tightening torque for screw flange, max.	0.3 Nm	Plugging cycles	25
Plugging force/pole, max.	7 N	Pulling force/pole, max.	4 N

Material data

Insulating material	PA GF	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	II
Comparative Tracking Index (CTI)	≥ 500	Insulation strength	≥ 10 ⁸ Ω
UL 94 flammability rating	V-0	GWFI	960 °C
Contact material	Copper alloy	Contact surface	tinned
Layer structure of solder connection	4...6 μm Sn matt	Layer structure of plug contact	4...6 μm Sn matt
Storage temperature, min.	-25 °C	Storage temperature, max.	50 °C
Max. relative humidity during storage	70 %	Operating temperature, min.	-50 °C
Operating temperature, max.	130 °C	Temperature range, installation, min.	-25 °C
Temperature range, installation, max.	130 °C		

Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	56.8 A
Rated current, max. number of poles (Tu=20°C)	41 A	Rated current, min. number of poles (Tu=40°C)	41 A
Rated current, max. number of poles (Tu=40°C)	41 A	Rated voltage for surge voltage class / pollution degree II/2	1,000 V
Rated voltage for surge voltage class / pollution degree III/2	630 V	Rated voltage for surge voltage class / pollution degree III/3	630 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 420 A
Clearance, min.	6.9 mm	Creepage distance, min.	9.66 mm

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Technical data
Rated data acc. to CSA

Institute (CSA)



Certificate No. (CSA)

200039-1534443

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) 35 A

Rated current (Use group C / CSA) 35 A

Rated current (Use group D / CSA) 5 A

Reference to approval values

Specifications are
maximum values, details -
see approval certificate.

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) 35 A

Rated current (Use group C / UL 1059) 42 A

Rated current (Use group D / UL 1059) 5 A

Clearance distance, min. 6.9 mm

Creepage distance, min. 9.66 mm

Reference to approval values

Specifications are
maximum values, details -
see approval certificate.

Packing

Packaging Box

VPE length 0

VPE width 0

VPE height 0

Classifications

UNSPSC 30-21-18-10

Notes

Notes

- Additional colours on request
- Rated current related to rated cross-section & min. No. of poles.
- The data given under CSA relates to a cUL approval - E60693
- 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.

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.

OMNIMATE Power - series BV/SV 7.62HP BVL 7.62HP/10/180SFI 3.5SN BK BX

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Technical data

Approvals

Approvals



ROHS

Conform

Downloads

Approval/Certificate/Document of
Conformity

[Declaration of the Manufacturer](#)

White paper power electronics
connected correctly

[Download Whitepaper](#)

White paper UL 600 V

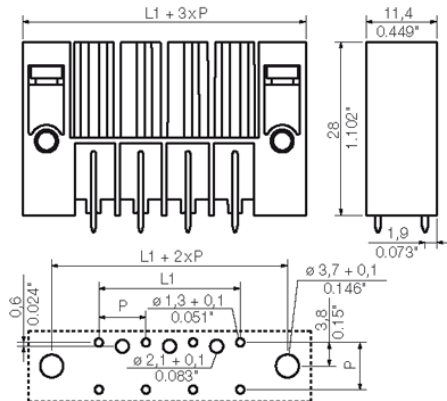
[Download Whitepaper](#)

OMNIMATE Power - series BV/SV 7.62HP BVL 7.62HP/10/180SFI 3.5SN BK BX

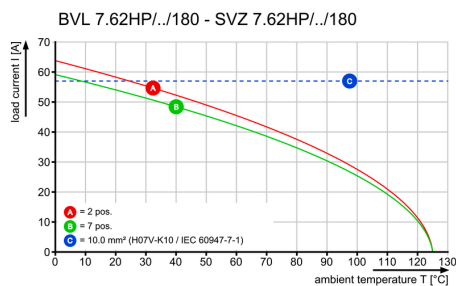
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Drawings

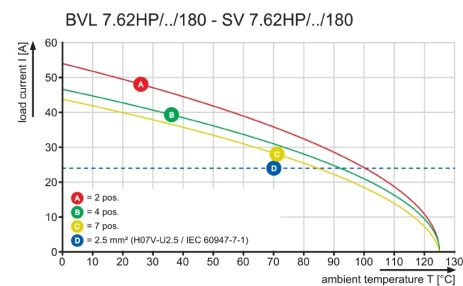
Dimensional drawing



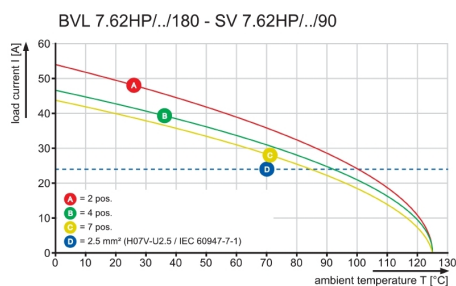
Graph



Graph



Graph

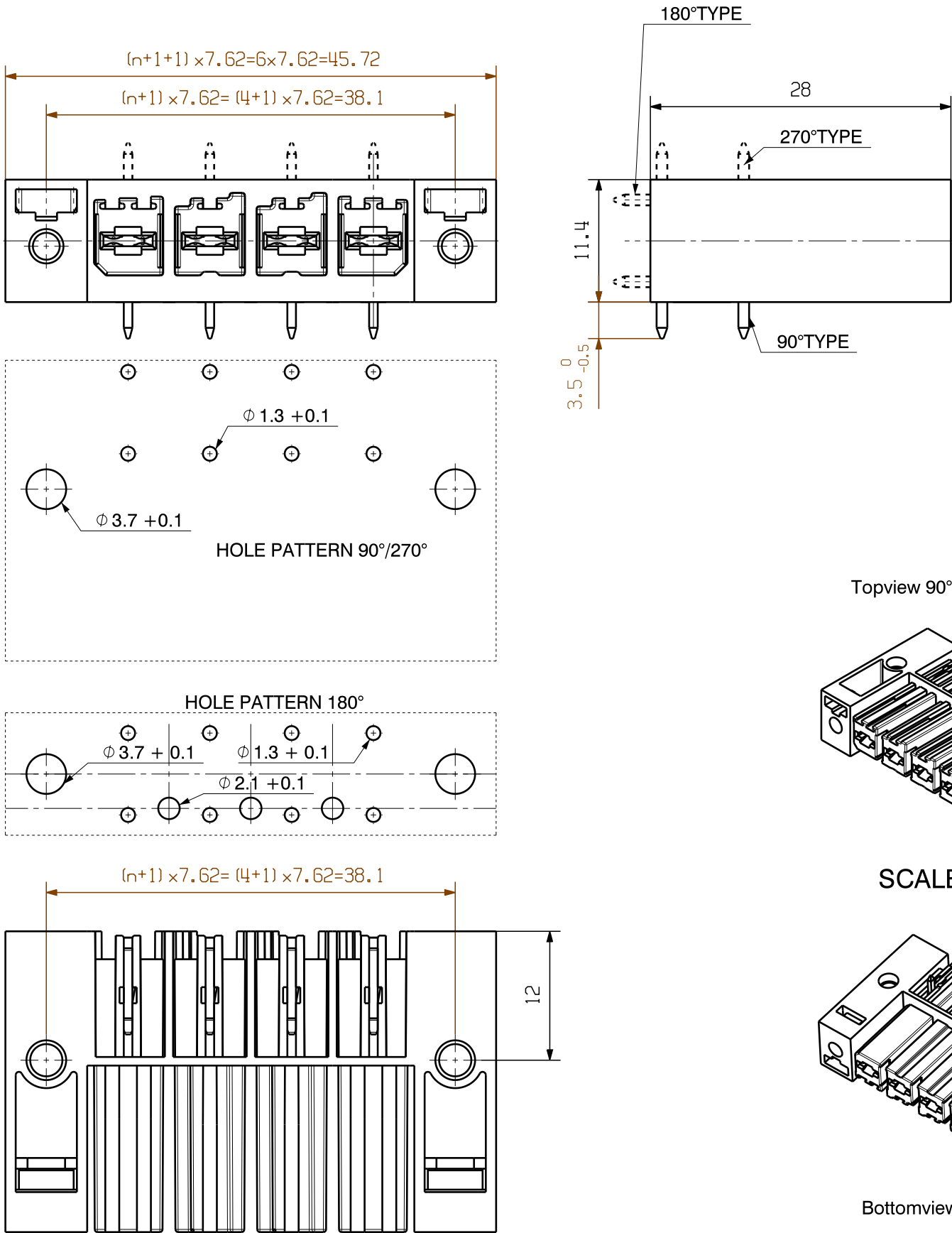


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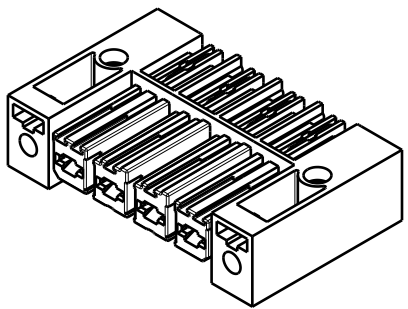
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Dimensions without tolerances are no check dimensions

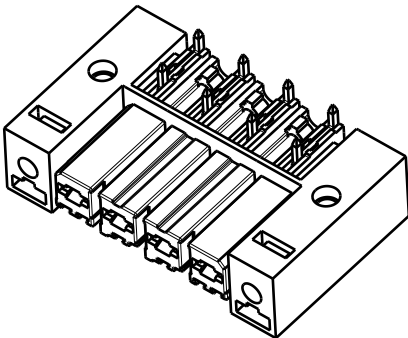
The English version is binding



Topview 90° type



SCALE: 1:1



Bottomview 90° type

P = 7.62 Raster Pitch
D = Ø1.3+0.01
0.051+0.004
d = 1.28
0.05"

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 IEC 60326 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		103219/5 29.03.18 HELIS_MA		01	Cat.no.: .	
		Modification				
 		Weidmüller 			4 39739 	
					Drawing no. Issue no.	
					Sheet 01 of 02 sheets	
Scale: 2:1		Drawn	08.12.2006	HECKERT_M	BVL7.62HP/02..07/...FI BUCHSENLEISTE-LOETANSCHLUSS SOCKET CONNECTOR WITH SOLDER CONNECTION	
Supersedes: .		Responsible		KRUG_M		
		Checked	23.04.2018	HELIS_MA		
		Approved		LANG_T		
		Product file: BVL 7.62			7167	

Recommended wave soldering profiles

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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.

We reserve the right to make technical changes.