

**OMNIMATE Power - series BV/SV 7.62HP
SV 7.62HP/04/90F 3.5SN BK BX****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

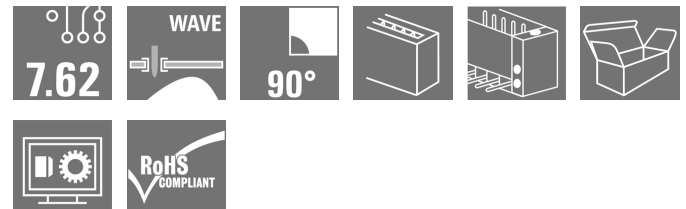
D-32758 Detmold

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Single-row, high-current and high-performance male headers for side-by-side mounting without sacrificing any poles or with flange for fast fixing without tools. Maximum connection and operating reliability thanks to a mating profile that prevents incorrect connection, unique coding diversity and additional fastening in the flange.

General ordering data

Type	SV 7.62HP/04/90F 3.5SN BK BX
Order No.	1930400000
Version	PCB plug-in connector, male header, Clip-on flange, THT solder connection, 7.62 mm, Number of poles: 4, 90°, Solder pin length (l): 3.5 mm, tinned, black, Box
GTIN (EAN)	4032248580279
Qty.	36 pc(s).
Product data	IEC: 1000 V / 57 A UL: 300 V / 40.5 A
Packaging	Box

Creation date August 8, 2020 2:16:20 AM CEST

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Technical data

Dimensions and weights

Height	14.9 mm	Height (inches)	0.587 inch
Height of lowest version	11.4 mm	Depth	28.3 mm
Depth (inches)	1.114 inch	Net weight	12.194 g

System specifications

Product family	OMNIMATE Power - series BV/SV 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 inch	Outgoing elbow	90°
Number of poles	4	Number of solder pins per pole	2
Solder pin length (l)	3.5 mm	Solder pin length tolerance	+0.1 / -0.3 mm
Tolerance of solder pin position	± 0.1 mm	Solder pin dimensions	0.8 x 1.0 mm
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 57 106	Touch-safe above the printed circuit board	Touch-safe protection acc. to DIN VDE 0470	IP 20
Volume resistance	2.00 mΩ	Can be coded	Yes
Plugging cycles	25		

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	1...3 µm Ni / 4...6 µm Sn matt	Storage temperature, min.	-40 °C
Storage temperature, max.	70 °C	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)	57 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.	9.6 mm

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Technical data
Rated data acc. to CSA

Institute (CSA)



Certificate No. (CSA)

200039-1121690

Rated voltage (Use group B / CSA)	300 V
Rated voltage (Use group D / CSA)	600 V
Rated current (Use group C / CSA)	35 A
Reference to approval values	Specifications are maximum values, details - see approval certificate.

Rated voltage (Use group C / CSA)	300 V
Rated current (Use group B / CSA)	35 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 D / UL 1059)	600 V
Rated current (Use group C / UL 1059)	40.5 A
Clearance distance, min.	6.9 mm
Reference to approval values	Specifications are maximum values, details - see approval certificate.

Rated voltage (Use group C / UL 1059)	300 V
Rated current (Use group B / UL 1059)	40.5 A
Rated current (Use group D / UL 1059)	5 A
Creepage distance, min.	9.6 mm

Packing

Packaging	Box	VPE length	35 mm
VPE width	125 mm	VPE height	350 mm

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	UNSPSC	30-21-18-10

Notes

Notes

- Additional colours 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.
- Diameter of solder eyelet D = 1.4+0.1 mm starting with 8-pole
- Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months

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.

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Technical data**Approvals**

Approvals



ROHS

Conform

DownloadsApproval/Certificate/Document of
Conformity[Declaration of the Manufacturer](#)

Brochure/Catalogue

[FL DRIVES EN](#)
[MB DEVICE MANUF. EN](#)
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[FL_BASE_STATION_EN](#)
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[FL POWER SUPPLY EN](#)
[FL 72H SAMPLE SER EN](#)
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Engineering Data

[EPLAN, WSCAD, Zuken E3.S](#)

Engineering Data

[SV.zip](#)
[STEP](#)

White paper power electronics
connected correctly[Download Whitepaper](#)

White paper UL 600 V

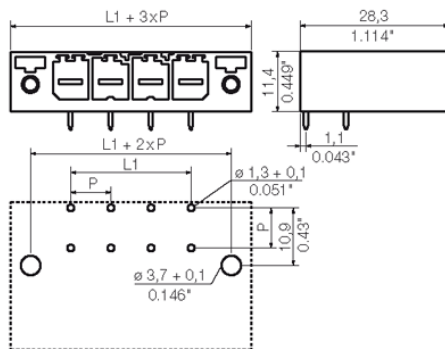
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Drawings

Dimensional drawing



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.