



**OMNIMATE Power - series BV/SV 7.62HP  
SV 7.62HP/04/180G 3.5SN BK BX**

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

**Technical data****Dimensions and weights**

Net weight 7.89 g

**System specifications**

Product family	OMNIMATE Power - series BV/SV 7.62HP	Type of connection	Solder 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°
No. 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	push-in force/pole	12 N
Withdrawal force per pole	7 N	Packaging	Box

**Material data**

Insulating material	PA GF	Colour	Black
Colour chart (similar)	RAL 9011	Insulating material group	II
CTI	≥ 500	Insulation resistance	≥ 10 <sup>8</sup> Ω
UL 94 flammability rating	V-0	Contact material	Copper alloy
Contact surface	tinned	Layer structure of solder connection	1-3 μm Ni / 4-6 μm Sn matt
Layer structure of plug contact	1-3 μm Ni / 4-6 μm Sn matt	Storage temperature, min.	-25 °C
Storage temperature, max.	55 °C	Max. relative humidity during storage	80 %
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. no. of poles (Tu=20°C)	57 A
Rated current, max. no. of poles (Tu=20°C)	41 A	Rated current, min. no. of poles (Tu=40°C)	41 A
Rated current, max. no. 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)	300 V
Rated voltage (use group D)	600 V
Rated current (use group C)	35 A

Rated voltage (Use group C)	300 V
Rated current (use group B)	35 A
Rated current (use group D)	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)	300 V
Rated voltage (use group D)	600 V
Rated current (use group C)	40.5 A
Clearance distance, min.	6.9 mm

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

Reference to approval values

Specifications are maximum values, details - see approval certificate.

**Classifications**

ETIM 4.0	EC002637	ETIM 5.0	EC002637
ETIM 6.0	EC002637	UNSPSC	30-21-18-10
eClass 5.1	27-26-07-04	eClass 6.2	27-26-07-04
eClass 7.1	27-44-04-02	eClass 8.1	27-44-04-02
eClass 9.0	27-44-04-02	eClass 9.1	27-44-04-02

**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

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.

**Data sheet**

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**Technical data**

**Approvals**

Approvals



ROHS

Conform

**Downloads**

Approval/Certificate/Document of Conformity	<a href="#">Declaration of the Manufacturer</a>
Brochure/Catalogue	<a href="#">FL DRIVES EN</a> <a href="#">MB DEVICE MANUF. EN</a> <a href="#">FL DRIVES DE</a> <a href="#">CAT 2 PORTFOLIOGUIDE EN</a> <a href="#">FL HEATING ELECTR EN</a> <a href="#">FL APPL INVERTER EN</a> <a href="#">FL_BASE_STATION_EN</a> <a href="#">FL ELEVATOR EN</a> <a href="#">FL POWER SUPPLY EN</a> <a href="#">FL 72H SAMPLE SER EN</a> <a href="#">PO OMNIMATE EN</a>
Engineering Data	<a href="#">EPLAN, WSCAD</a>
Engineering Data	<a href="#">SV.zip</a>
Motion controllers white paper	<a href="#">Download Whitepaper</a>
White Paper UL 600 V	<a href="#">Download Whitepaper</a>

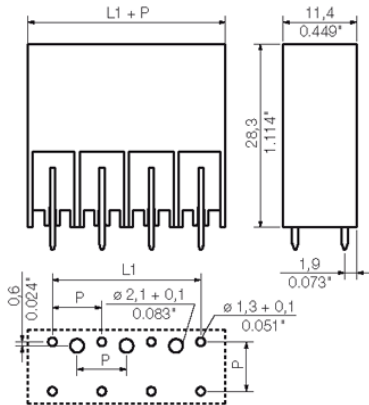
**Data sheet**

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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.