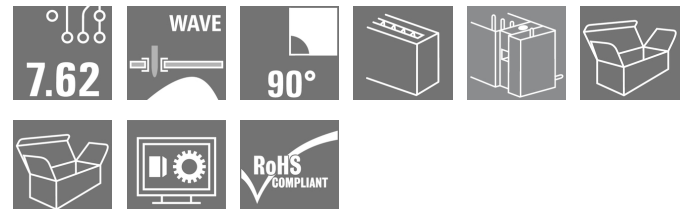


**OMNIMATE Power - series BV/SV 7.62IT
SV 7.62IT/03/90MF3 3.5SN BK BX**

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

Product image


90° male header with soldered flange fastening with 7.62 pitch for 400 V IT power networks according to IEC 61800-5-1.

UL approval as per UL840 600 V.

Meets the extended requirements on 5.5 mm touch safety for IT power networks as per IEC 61800-5-1 for 400 V to earth when combined with female header BVZ 7.62 IT...

Without a female header, the mating profile guarantees minimum touch safety of >3 mm with 20 N pressure on the test finger.

The automatically locking middle flange which can optionally also be screwed, reduces space requirements by one pitch width in comparison with conventional solutions.

On request: available with screw flange or without flange.

General ordering data

Type	SV 7.62IT/03/90MF3 3.5SN BK BX
Order No.	1156570000
Version	PCB plug-in connector, male header, closed side, Middle flange, THT solder connection, 7.62 mm, No. of poles: 3, 90°, Solder pin length (l): 3.5 mm, tinned, Black, Box
GTIN (EAN)	4032248943296
Qty.	60 pc(s).
Product data	IEC: 1000 V / 41 A UL: 300 V / 40.5 A
Packaging	Box

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Technical data

Dimensions and weights

Net weight	6.672 g
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System specifications

Product family	OMNIMATE Power - series BV/SV 7.62IT	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°
No. of poles	3	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
CTI	≥ 500	Insulation resistance	≥ 10 ⁸ 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)	41 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 / 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)	40.5 A
Rated current (Use group C / UL 1059)	40.5 A	Rated current (Use group D / UL 1059)	5 A
Clearance distance, min.	6.9 mm	Creepage distance, min.	9.6 mm
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Packaging

Packaging	Box	VPE length	30 mm
VPE width	135 mm	VPE height	350 mm

Classifications

ETIM 4.0	EC002637	ETIM 5.0	EC002637
ETIM 6.0	EC002637	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. • MFX and MSFX: X= Position of the middle flange e.g. MF2, MSF3
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](#)
[FL DRIVES DE](#)
[CAT 2 PORTFOLIOGUIDE EN](#)
[FL HEATING ELECTR EN](#)
[FL APPL INVERTER EN](#)
[FL_BASE_STATION_EN](#)
[FL ELEVATOR EN](#)
[FL POWER SUPPLY EN](#)
[FL 72H SAMPLE SER EN](#)
[PO OMNIMATE EN](#)

Engineering Data

[EPLAN, WSCAD](#)

Engineering Data

[STEP](#)

Motion controllers white paper

[Download Whitepaper](#)

White Paper UL 600 V

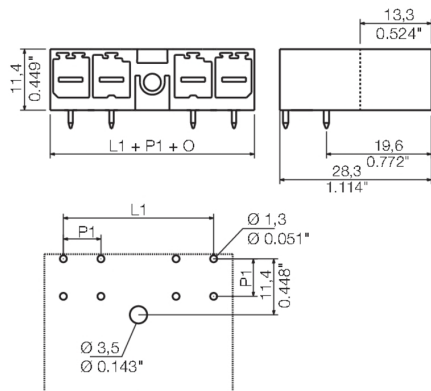
[Download Whitepaper](#)

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Drawings

Dimensional drawing



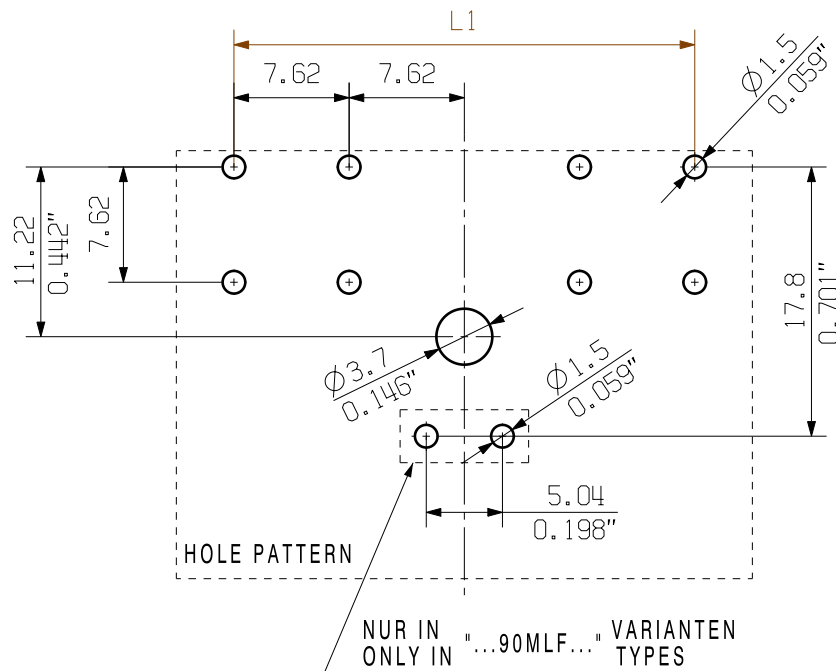
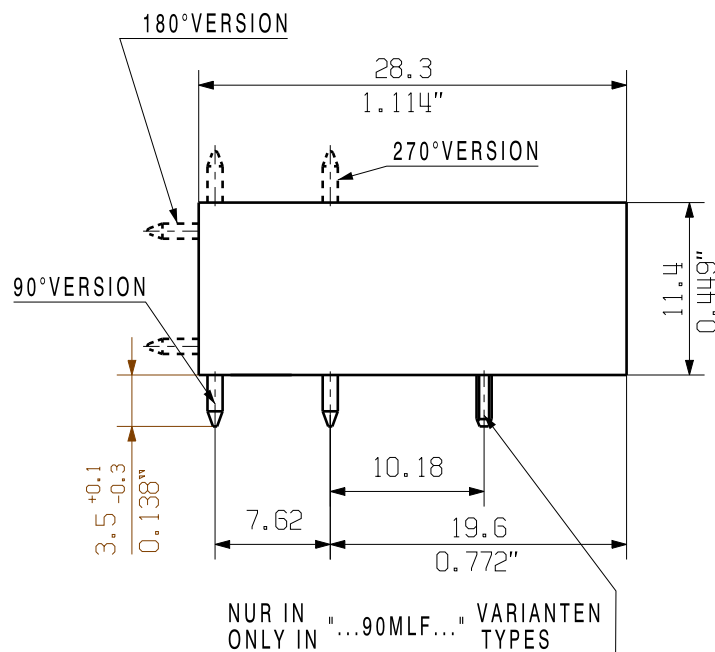
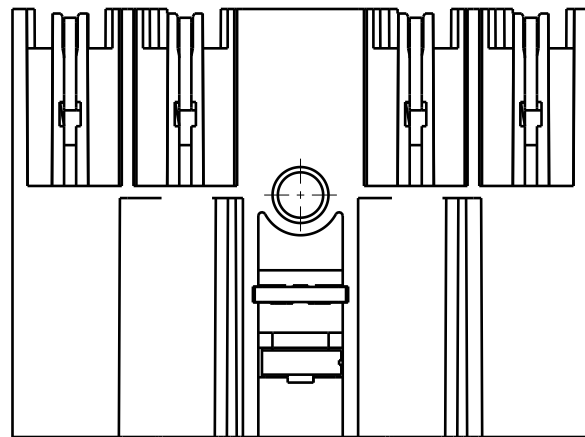
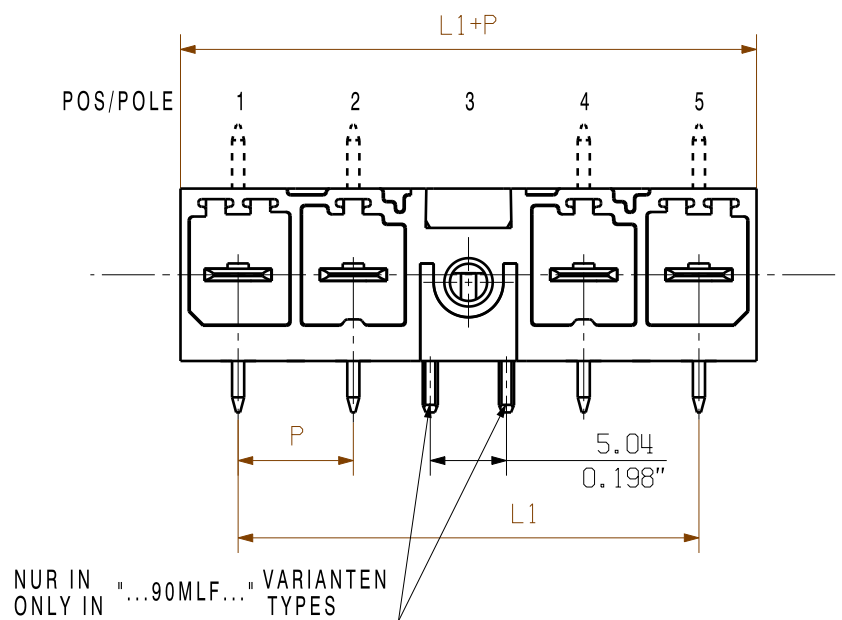
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Dimensions without tolerances are no check dimensions

The English version is binding

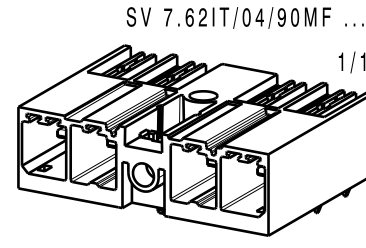
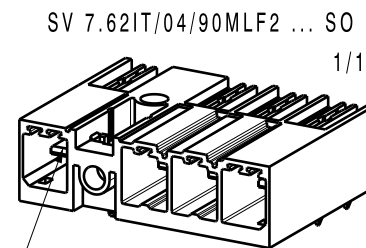
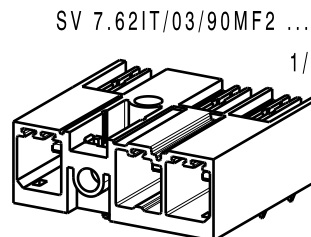
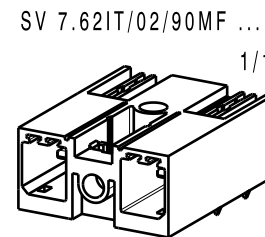
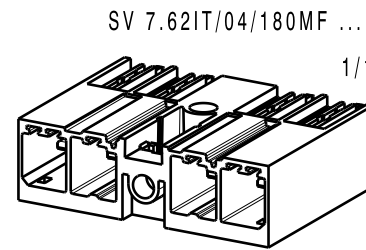
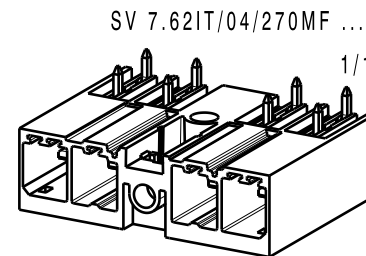
SV 7.62IT/04/...MF ...
SHOWN: SV 7.62IT/04/90MSF



For the mounting of PCBs, it should be noted that the rated data relates only to the PCB components alone.
The necessary creepage and clearance paths must be observed in connection with the respective applicant in accordance to IEC 664 / VDE 0110.
The current-carrying capacity and pitch tolerance is to be determined according to DIN IEC 326 part 3 very fine.

Weidmüller PCB components are tested to the DIN EN 61984 standard, and are valid for its field of application. Provided that the components are used to the intended purpose, all requirements with respect to the occurring of electrical, mechanical, thermic and corrosive stress will be satisfied.

ALLGEMEINGÜELTIGE KUNDENZEICHNUNG, AKTUELLER STAND NUR AUF ANFRAGE
GENERAL CUSTOMER DRAWING, TOPICAL VERSION ONLY IF REQUIRED



5 LEADING PIN 2mm
ONLY 4POL MLF SEE TABLE (PE)

6 MF 4	45,72	1,8	P	P	P	MF	P	P	P
5 MF 4	38,1	1,5	P	P	P	MF	P	P	
5 MF 3	38,1	1,5	P	P	MF	P	P	P	
4 MLF 4	30,48	1,2	P	P	P	MF	PE		
4 MF 3	30,48	1,2	P	P	MF	P	P		
4 MLF 2	30,48	1,2	PE	MF	P	P	P		
3 MF 3	22,86	0,9	P	P	MF	PE			
3 MLF 2 SO	22,86	0,9	P	MF	P	P			
3 MLF 2	22,86	0,9	PE	MF	P	P			
3 MF 2	22,86	0,9	PE	MF	P	P			
2 MLF 2 SO	15,24	0,6	P	MF	P				
2 MF 2 SO	15,24	0,6	P	MF	P				
	mm	inch	1	2	3	4	5	6	7
NO OF MF POLES	L1		POS / POLE						

P= POL/POLES
MF= MITTELFLANSCH/MIDDLE FLANGE
PE= VOREILENDER KONTAKT/LEADING PIN

DIN ISO 2768-m		99860/5 22.11.17 HELIS_MA		00	Weidmüller		3 54268 06		Cat.no.: . Drawing no. Issue no. Sheet 01 of 03 sheets							
Modification		Date	Name													
Drawn		31.05.2011	KRUG_M		SV 7.62IT/.. /90/270M(L)F STIFTELEISTE MALE HEADER											
Responsible			KRUG_M													
Checked		24.11.2017	HELIS_MA													
Supersedes: .		Approved	LANG_T		Product file: SV/BVZ 7.62HP											

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.