

SV 7.62IT/04/270MF2 3.5SN BK BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image

270° male header 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.

General ordering data

Version	PCB plug-in connector, male header, closed side, Middle flange, THT solder connection, 7.62 mm, Number of poles: 4, 270°, Solder pin length (l): 3.5 mm, tinned, black, Box
Order No.	1156520000
Type	SV 7.62IT/04/270MF2 3.5SN BK BX
GTIN (EAN)	4032248943388
Qty.	48 pc(s).
Product data	IEC: 1000 V / 41 A UL: 300 V / 40.5 A
Packaging	Box

Creation date March 23, 2021 6:54:15 AM CET

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Technical data

Dimensions and weights

Net weight	8.367 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	270°
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
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	30.48 mm
L1 in inches	1.2 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		

Material data

Insulating material	PA GF	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	II
Comparative Tracking Index (CTI)	≥ 500	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.	-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)	41 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

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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.

Packing

Packaging	Box	VPE length	40 mm
VPE width	135 mm	VPE height	350 mm

Classifications

ETIM 6.0	EC002637	ETIM 7.0	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

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

- 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
- Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months

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

Approvals



ROHS Conform

UL File Number Search E60693

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

Engineering Data

[STEP](#)

Engineering Data

[EPLAN, WSCAD](#)

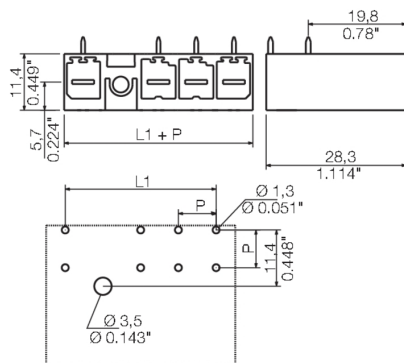
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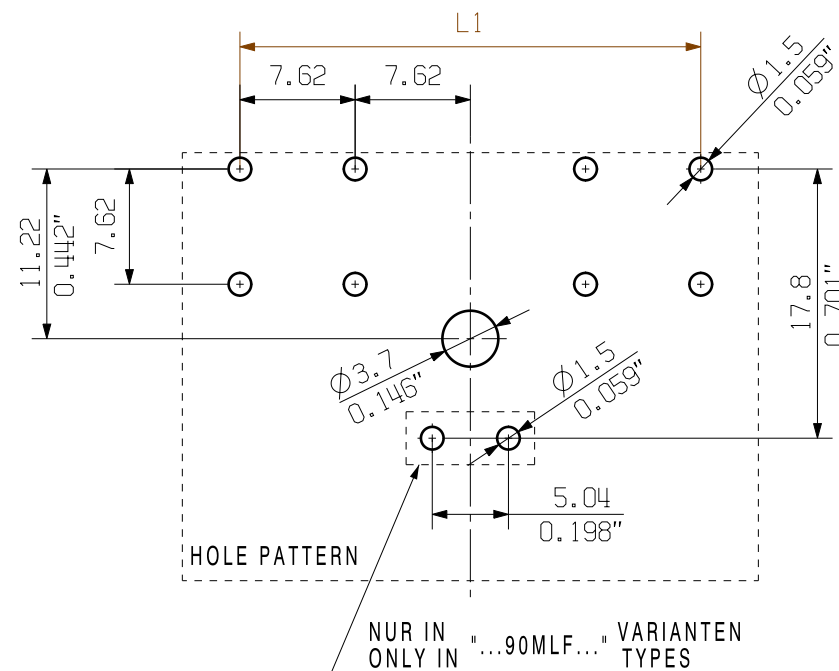
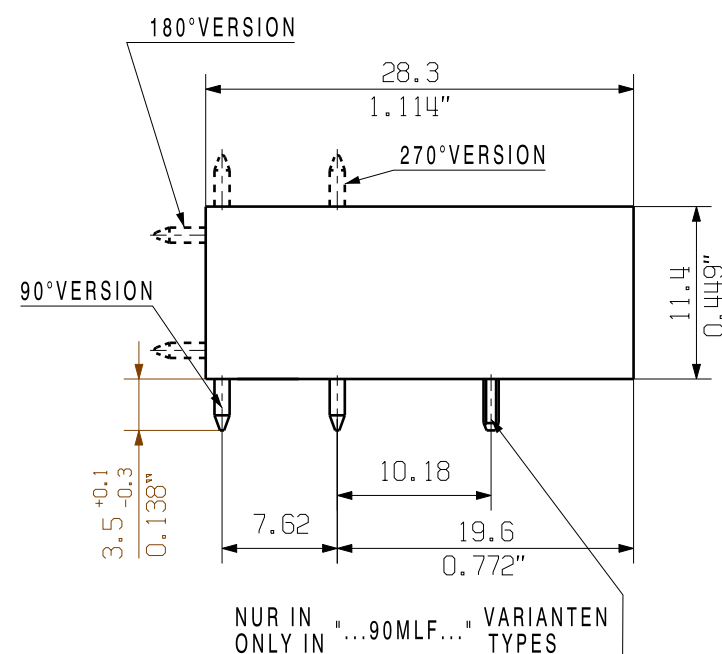
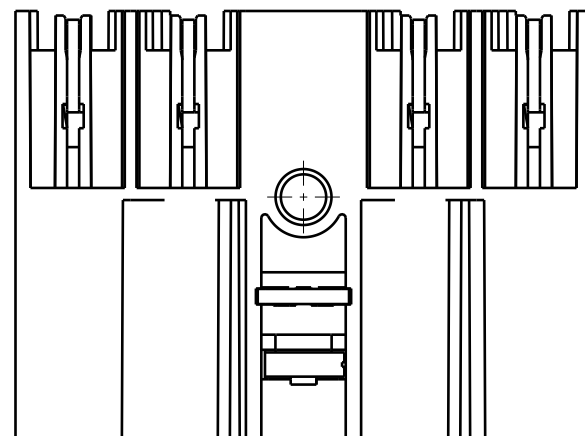
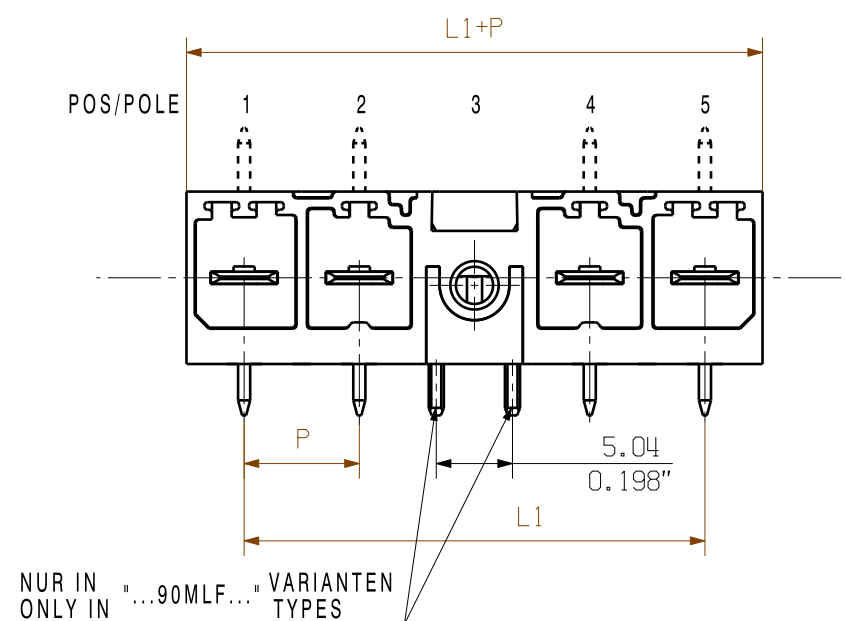
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Drawings

Dimensional drawing



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

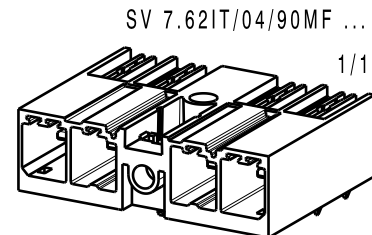
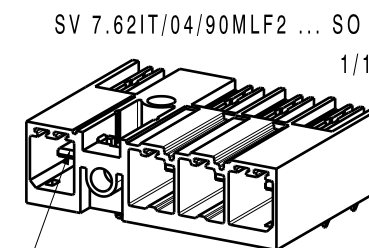
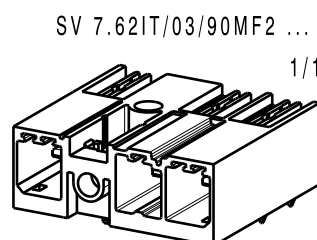
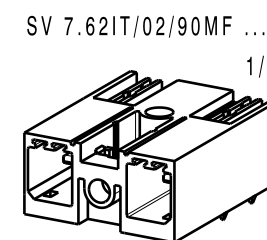
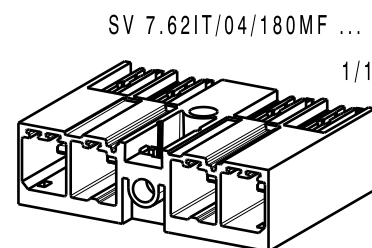
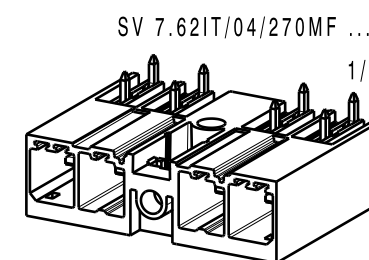


For the mounting of PCBs, it should be noted that the rated data relates only to the PCB components alone.

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.



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						Cat.no.: .	
		99860/5 22.11.17 HELIS_MA		00				3 54268 	
		Modification						Drawing no. Issue no.	
						Sheet 01		of 03 sheets	
				Date	Name	SV 7.62IT/.../90/270M(L)F STIFTELEISTE MALE HEADER			
		Drawn		31.05.2011	KRUG_M				
		Responsible			KRUG_M				
Scale: 2/1		Checked		24.11.2017	HELIS_MA				
Supersedes: .		Approved			LANG_T	Product file: SV/BVZ 7.62HP 7340			

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

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.