

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

Product image





















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

Version	PCB plug-in connector, male header, closed side, Middle solder flange, THT solder connection, 7.62 mm, Number of poles: 4, 90°, Solder pin length (I): 3.5 mm, tinned, black, Box
Order No.	<u>1081790000</u>
Туре	SV 7.62IT/04/90MLF4 3.5SN BK BX
GTIN (EAN)	4032248844920
Qty.	48 pc(s).
Product data	IEC: 1000 V / 57 A UL: 300 V / 35 A
Packaging	Box

Creation date March 22, 2021 11:18:51 PM CET



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Technical data

Dimensions and weights

Net weight 10.396 g

System specifications

Product family	OMNIMATE Power - series	Type of connection		
	BV/SV 7.62HP		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 (I)	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 tolera	nce (D)+ 0,1 mm	L1 in mm	22.86 mm	
L1 in inches	0.9 inch	Number of rows	1	
Pin series quantity		Touch-safe protection acc. to DIN VDE	Touch-safe above the	
	1	57 106	printed circuit board	
Touch-safe protection acc. to DIN	VDE	Volume resistance		
0470	470 IP 20		$2.00~\text{m}\Omega$	
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	13 μm Ni / 46 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 ℃
Temperature range, installation, max.	130 °C		

Rated data acc. to IEC

tested acc. to standard		Rated current, min. number of poles	
	IEC 60664-1, IEC 61984	(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



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Technical data

Rated data acc. to CSA

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 data acc. to UL 1059 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) 35 A Clearance distance, min. 6.9 mm Packing Packaging Box VPE width 133 mm Classifications	Rated voltage (Use group C / CSA) Rated current (Use group B / CSA) Rated current (Use group D / CSA) Rated voltage (Use group C / UL 1059) Rated current (Use group B / UL 1059) Rated current (Use group D / UL 1059) Creepage distance, min. VPE length VPE height	200039-1534443 300 V 35 A 5 A 5 A 300 V 35 A 5 A 9.6 mm			
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Rated voltage (Use group D / UL 1059) 600 V Rated current (Use group C / UL 1059) 35 A Clearance distance, min. 6.9 mm Packing Packaging Box Pre width 133 mm Classifications	Rated current (Use group B / UL 1059) Rated current (Use group D / UL 1059) Creepage distance, min. VPE length	35 A 5 A 9.6 mm			
Rated voltage (Use group D / UL 1059) 600 V Rated current (Use group C / UL 1059) 35 A Clearance distance, min. 6.9 mm Packing Packaging Box PE width 133 mm Classifications	Rated current (Use group B / UL 1059) Rated current (Use group D / UL 1059) Creepage distance, min. VPE length	35 A 5 A 9.6 mm			
Clearance distance, min. 6.9 mm Packing Packaging Box PPE width 133 mm Classifications	Creepage distance, min. VPE length	9.6 mm 35 mm			
Packing Packaging Box PE width 133 mm Classifications	VPE length	35 mm			
Packaging Box VPE width 133 mm Classifications					
/PE width 133 mm Classifications					
/PE width 133 mm Classifications					
TIM 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					
PC conformity Conformity: The products are devel	loped, manufactured and delivered according	international recognized			
standards and norms and comply v	with the assured properties in the data sheet $_{ m ss}$ 2". Further claims on the products can be $_{ m c}$	resp. fulfill decorative properti			
Notes • Additional colours on request		·			
Rated current related to rated cro	Rated current related to rated cross-section & min. No. of poles.				
• P on drawing = pitch	• P on drawing = pitch				
· · · · · · · · · · · · · · · · · · ·	ponent itself. Clearance and creepage distand the relevant application standards.	ces to other components are			
 MFX and MSFX: X= Position of t 	the middle flange e.g. MF2, MSF3				
Long term storage of the produce	ct with average temperature of 50 °C and aver	rage humidity 70%, 36 mont			

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Approvals

ROHS



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Downloads

Approval/Certificate/Document of	
Conformity	Declaration of the Manufacturer
Engineering Data	STEP
Engineering Data	EPLAN, WSCAD



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Drawings

NO OF POLES	X = MIDDLE FLANGE POSITION	POS. 1 2 3 4 5						
		1	2	3	4	5	6	7
2	M(S)F2	0	X	0				
3	M(S)F2	0	X	0	0			
3	M(S)F3	0	0	Х	0			
4	M(S)F2	0	Х	0	0	0		
4	M(S)F3	0	0	х	0	0		
4	M(S)F4	0	0	0	х	0		
5	M(S)F2	0	Х	0	0	0	0	
5	M(S)F3	0	0	х	0	0	0	
5	M(S)F4	0	0	0	х	0	0	
5	M(S)F5	0	0	0	0	х	0	
6	M(S)F2	0	Х	0	0	0	0	0
6	M(S)F3	0	0	Х	0	0	0	0
6	M(S)F4	0	0	0	Х	0	0	0
6	M(S)F5	0	0	0	0	Х	0	0
6	M(S)F6	0	0	0	0	0	X	0



Recommended wave solderding profiles

Weidmüller Interface GmbH & Co. KG

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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.