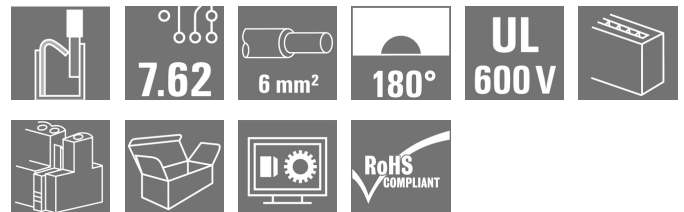


OMNIMATE Power - series BV/SV 7.62HP BVF 7.62HP/04/180MF2 SN BK BX

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

Product image



180° female header with PUSH IN connection technology for field wiring in 6 mm² with 7.62 pitch.

Meets the requirements as per UL1059 600 V class C and IEC 61800-5-1. Ideal touch-safe solution for the power output.

The self-locking (optionally also screwable) middle flange reduces the space requirements by one pitch width in comparison with conventional solutions.

Variants: without flange, external flange, middle flange with detent fastening and optionally additional screw mount.

General ordering data

Type	BVF 7.62HP/04/180MF2 SN BK BX
Order No.	1430120000
Version	PCB plug-in connector, female plug, 7.62 mm, No. of poles: 4, 180°, PUSH IN, Clamping range, max.: 10 mm ² , Box
GTIN (EAN)	4050118235043
Qty.	40 pc(s).
Product data	IEC: 1000 V / 57 A / 0.5 - 10 mm ² UL: 600 V / 39 A / AWG 24 - AWG 8
Packaging	Box

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Technical data**Dimensions and weights**

Height	22.9 mm	Height (inches)	0.902 inch
Depth	47.7 mm	Depth (inches)	1.878 inch
Net weight	22.578 g		

system parameters

Product family	OMNIMATE Power - series BV/SV 7.62HP	Type of connection	Field connection
Wire connection method	PUSH IN	Pitch in mm (P)	7.62 mm
Pitch in inches (P)	0.3 inch	Conductor outlet direction	180°
No. of poles	4	L1 in mm	30.48 mm
L1 in inches	1.2 inch	Pin series quantity	1
Rated cross-section	6 mm ²	Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch
Touch-safe protection acc. to DIN VDE 0470	IP 20	Volume resistance	4.50 mΩ
Can be coded	Yes	Stripping length	12 mm
Screwdriver blade	0.6 x 3.5	Plugging cycles	25
Plugging force/pole, max.	17 N	Pulling force/pole, max.	15 N

Material data

Insulating material	PA GF	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	II
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 plug contact	6-8 μm Sn glossy	Storage temperature, min.	-25 °C
Storage temperature, max.	55 °C	Max. relative humidity during storage	80 %
Operating temperature, min.	-50 °C	Operating temperature, max.	125 °C
Temperature range, installation, min.	-25 °C	Temperature range, installation, max.	125 °C

Conductors suitable for connection

Clamping range, min.	0.5 mm ²
Clamping range, max.	10 mm ²
Solid, min. H05(07) V-U	0.5 mm ²
Solid, max. H05(07) V-U	10 mm ²
Stranded, max. H07V-R	10 mm ²
Flexible, min. H05(07) V-K	0.5 mm ²
Flexible, max. H05(07) V-K	10 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, 1.5 mm ² min.	
w. plastic collar ferrule, DIN 46228 pt 4, 6 mm ² max.	
w. wire end ferrule, DIN 46228 pt 1, min 1.5 mm ²	
w. wire end ferrule, DIN 46228 pt 1, 10 mm ² max.	

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Technical data

Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	2.5 mm ²
AEH	Cross-section for conductor connection	Stripping length	nominal 12 mm
		Stripping length	nominal 14 mm
Cross-section for conductor connection	Cross-section for conductor connection	Type	fine-wired
		nominal	4 mm ²
AEH	Cross-section for conductor connection	Stripping length	nominal 12 mm
		Stripping length	nominal 14 mm
Cross-section for conductor connection	Cross-section for conductor connection	Type	fine-wired
		nominal	6 mm ²
AEH	Cross-section for conductor connection	Stripping length	nominal 12 mm
		Stripping length	nominal 14 mm
Cross-section for conductor connection	Cross-section for conductor connection	Type	fine-wired
		nominal	1.5 mm ²
AEH	Cross-section for conductor connection	Stripping length	nominal 15 mm
		Stripping length	nominal 12 mm
Cross-section for conductor connection	Cross-section for conductor connection	Type	fine-wired
		nominal	10 mm ²
AEH	Stripping length	nominal 12 mm	
Max. clamping range	10 mm ²		

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)	51 A	Rated current, min. no. of poles (Tu=40°C)	57 A
Rated current, max. no. of poles (Tu=40°C)	45 A	Rated voltage for surge voltage class / pollution degree II/2	1,000 V
Rated voltage for surge voltage class / pollution degree III/2	1,000 V	Rated voltage for surge voltage class / pollution degree III/3	800 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	8 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	8 kV	Short-time withstand current resistance	3 x 1s with 420 A
Clearance, min.	10.4 mm	Creepage distance, min.	12.7 mm

Rated data acc. to CSA

Institute (CSA)		Certificate No. (CSA)	200039-1121690
Rated voltage (Use group B / CSA)	600 V	Rated voltage (Use group C / CSA)	600 V
Rated voltage (Use group D / CSA)	600 V	Rated current (Use group B / CSA)	33 A
Rated current (Use group C / CSA)	33 A	Rated current (Use group D / CSA)	5 A
Wire cross-section, AWG, min.	AWG 24	Wire cross-section, AWG, max.	AWG 8
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Data sheet

**OMNIMATE Power - series BV/SV 7.62HP
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Technical data

Rated data acc. to UL 1059

Institute (cURus)



Certificate No. (cURus)

E60693

Rated voltage (Use group B / UL 1059)	600 V	Rated voltage (Use group C / UL 1059)	600 V
Rated voltage (Use group D / UL 1059)	600 V	Rated current (Use group B / UL 1059)	39 A
Rated current (Use group C / UL 1059)	39 A	Rated current (Use group D / UL 1059)	5 A
Wire cross-section, AWG, min.	AWG 24	Wire cross-section, AWG, max.	AWG 8
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Packing

Packaging	Box	VPE length	55 mm
VPE width	135 mm	VPE height	350 mm

Classifications

ETIM 4.0	EC002637	ETIM 5.0	EC002637
ETIM 6.0	EC002638	eClass 6.2	27-26-07-04
eClass 7.1	27-44-04-02	eClass 8.1	27-44-04-02
eClass 9.0	27-44-03-09	eClass 9.1	27-44-03-09

Notes

- Notes
- Additional colours on request
 - Wire end ferrule with plastic collar to DIN 46228/4
 - Wire end ferrule without plastic collar to DIN 46228/1
 - 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
 - Versions with pusher, see BVFL

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.

Approvals

Approvals



ROHS Conform

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Technical data

Downloads

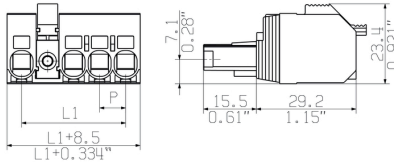
Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Brochure/Catalogue	FL DRIVES EN MB DEVICE MANUF. EN FL DRIVES DE CAT 2 PORTFOLIOGUIDE EN FL HEATING ELECTR EN FL APPL. INVERTER EN FL_BASE_STATION_EN FL ELEVATOR EN FL POWER SUPPLY EN FL 72H SAMPLE SER EN PO OMNIMATE EN
Engineering Data	EPLAN, WSCAD
Engineering Data	STEP
Motion controllers white paper	Download Whitepaper
User Documentation	Operating Instruction BVF QR-Code product handling video
White Paper UL 600 V	Download Whitepaper
White Paper wire connection	Download Whitepaper

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Drawings

Dimensional drawing




Similar to illustration

Connection diagram

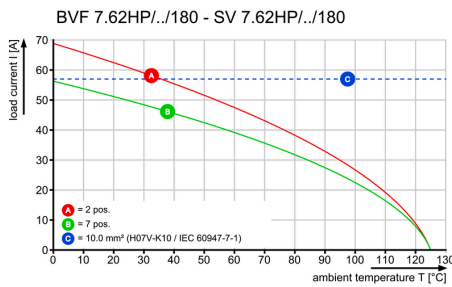
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6	M(S)F5	o	o	o	o	X	o	o
6	M(S)F4	o	o	o	X	o	o	o
6	M(S)F3	o	o	X	o	o	o	o
6	M(S)F2	o	X	o	o	o	o	o
5	M(S)F5	o	o	o	o	X	o	o
5	M(S)F4	o	o	o	X	o	o	o
5	M(S)F3	o	o	X	o	o	o	o
5	M(S)F2	o	X	o	o	o	o	o
4	M(S)F4	o	o	o	X	o	o	o
4	M(S)F3	o	o	X	o	o	o	o
4	M(S)F2	o	X	o	o	o	o	o
3	M(S)F3	o	o	X	o	o	o	o
3	M(S)F2	o	X	o	o	o	o	o
2	M(S)F2	o	X	o	o	o	o	o

NO OF POLES: X = MIDDLE FLANGE POSITION

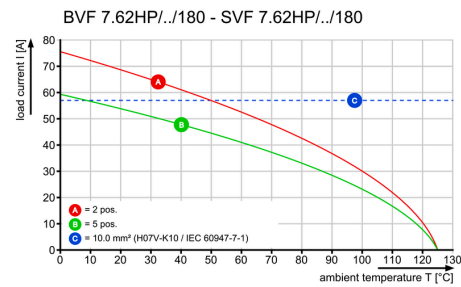
POS: 1 2 3 4 5



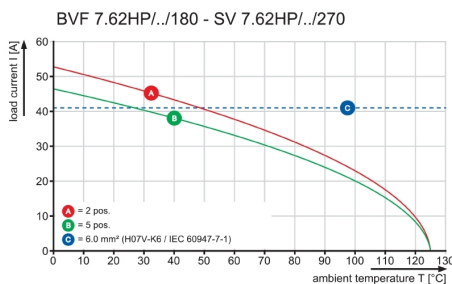
Graph



Graph



Graph

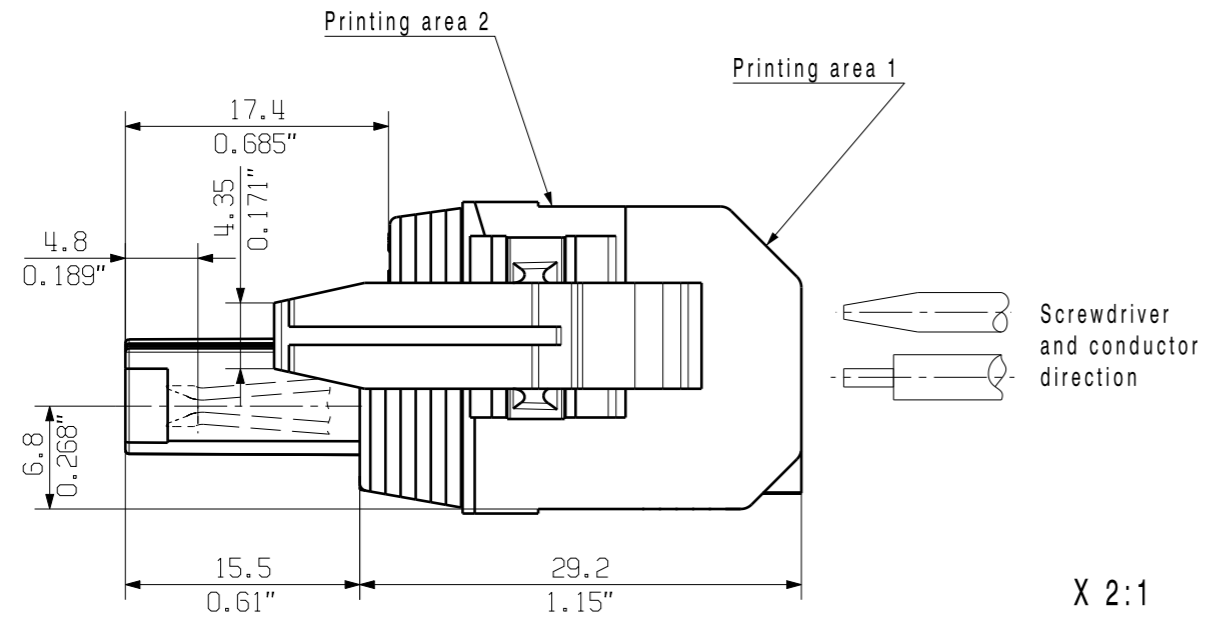


Product benefits

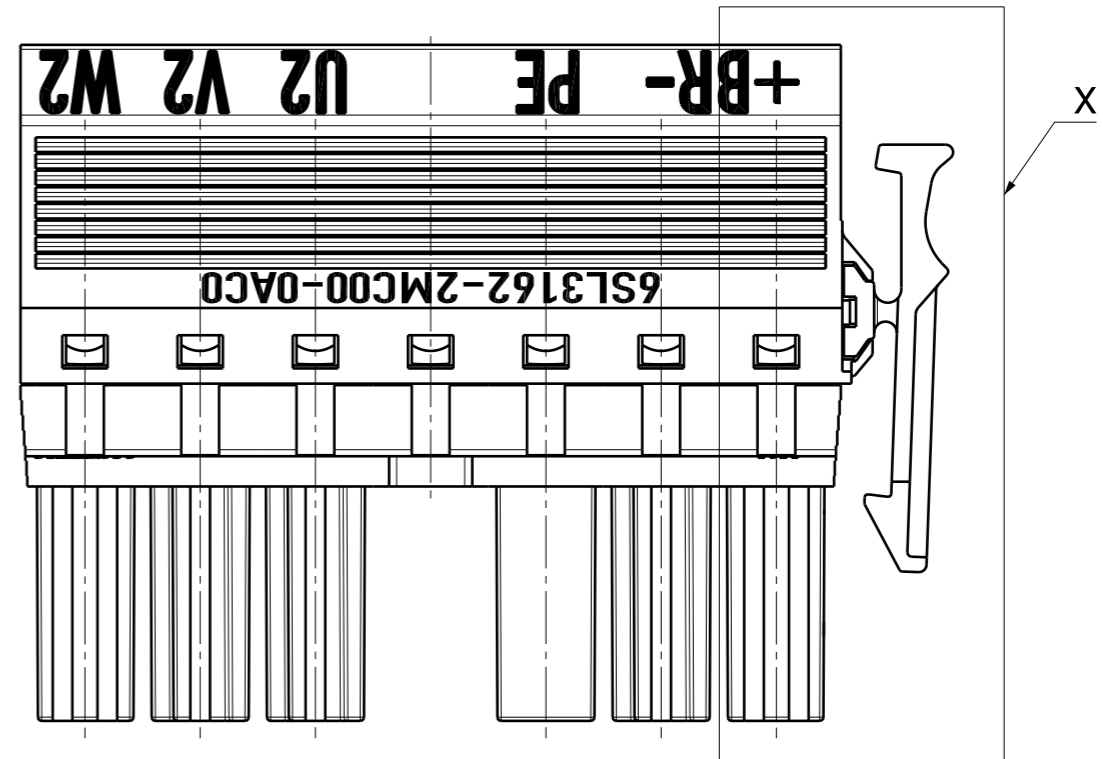
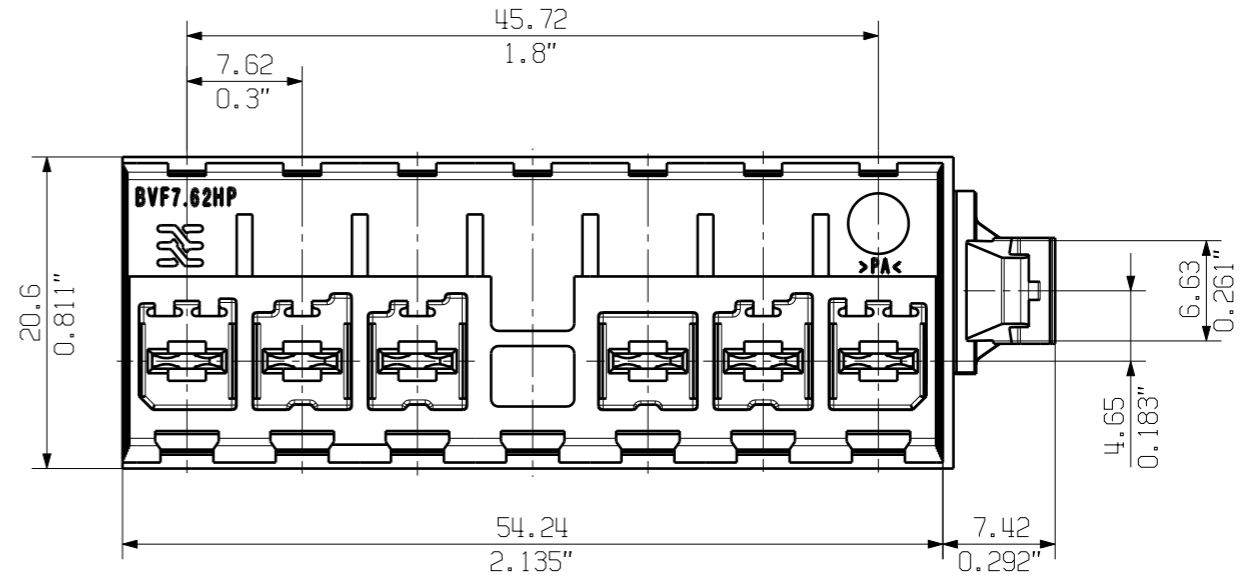
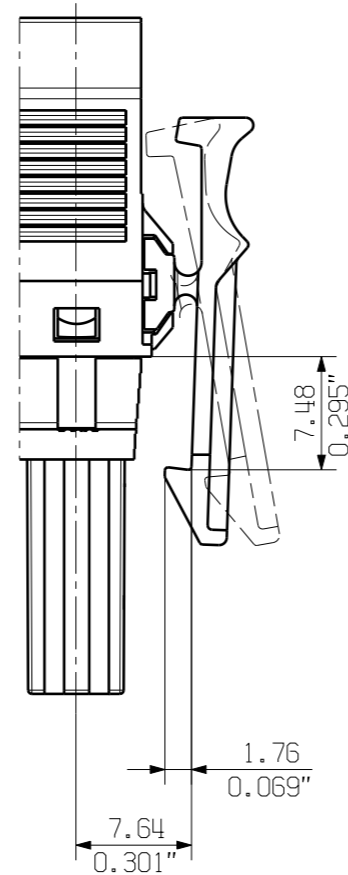


Installation without tools
Outlet direction: 90° und 180°

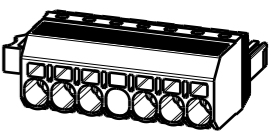
General customer drawing, topical version only if required



X 2:1
Representation of the actuated retaining hook



M 1:1



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.

Plastic PA GF
Retaining hook PA red
Contact base material Cu-Leg
Coating thickness - plug contact 6-8µm Sn
material tension spring Steel Alloyed
Crimp dimensions 5.0X4.0mm

2503040000	2	BVF 7.62HP/06/180 SN BK BX SO	6SL3162-2MC00-0AC0						
1987300000	1	BVF 7.62HP/06/180 SN BK BX SO	W2	V2	U2	PE	-BR+		
ERP Nummer/ number	Bedr. Fläche/ printing area	Bezeichnung/ description	1	2	3	4	5	6	7
			Bedruckung/printing						

General DIN ISO	tolerance: 2768-mK	EC00000467	Prim PLM Part No.: 029478	Prim ERP Part No.: 1987300000
RoHS COMPLIANT	First Issue Date: 03.01.2017	Modification	Weidmüller	
Scale: 2:1		Size: A3	60834	
Drawings Assembly		Drawn: 29.10.2018 Administrator	Drawing no. 60834 Issue no. 9	
		Responsible: Krug, Matthias	Sheet 01 of 01 sheets	
		Approved: 01.11.2018 Lang, Thomas	BVF 7.62HP/06/180 SO BUCHSENSTECKER FEMALE PLUG	
			Product file: 7168 SV/BVZ 7.62	

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