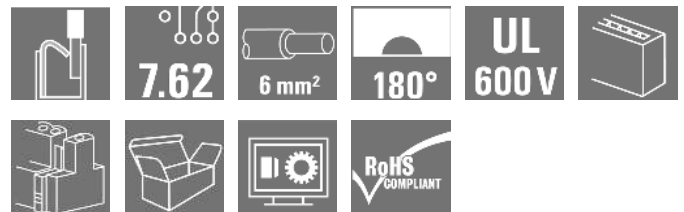


## OMNIMATE Power - series BV/SV 7.62HP BVF 7.62HP/04/180MF2 SN BK BX

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

### Product image



180° female header with PUSH IN connection technology for field wiring in 6 mm<sup>2</sup> 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.	<a href="#">1430120000</a>
Version	PCB plug-in connector, female plug, 7.62 mm, No. of poles: 4, 180°, PUSH IN, Clamping range, max.: 10 mm <sup>2</sup> , Box
GTIN (EAN)	4050118235043
Qty.	40 pc(s).
Product data	IEC: 1000 V / 57 A / 0.5 - 10 mm <sup>2</sup> 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 <sup>2</sup>	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 <sup>8</sup> 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 <sup>2</sup>
Clamping range, max.	10 mm <sup>2</sup>
Solid, min. H05(07) V-U	0.5 mm <sup>2</sup>
Solid, max. H05(07) V-U	10 mm <sup>2</sup>
Stranded, max. H07V-R	10 mm <sup>2</sup>
Flexible, min. H05(07) V-K	0.5 mm <sup>2</sup>
Flexible, max. H05(07) V-K	10 mm <sup>2</sup>
w. plastic collar ferrule, DIN 46228 pt 4, 1.5 mm <sup>2</sup> min.	
w. plastic collar ferrule, DIN 46228 pt 4, 6 mm <sup>2</sup> max.	
w. wire end ferrule, DIN 46228 pt 1, min 1.5 mm <sup>2</sup>	
w. wire end ferrule, DIN 46228 pt 1, 10 mm <sup>2</sup> max.	

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**Technical data**

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

**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 BVF 7.62HP/04/180MF2 SN BK BX

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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

## Data sheet

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

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## Technical data

### Downloads

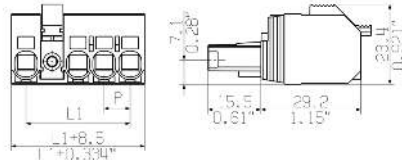
Approval/Certificate/Document of Conformity	<a href="#">Declaration of the Manufacturer</a>
Brochure/Catalogue	<a href="#">FL DRIVES EN</a> <a href="#">MB DEVICE MANUF. EN</a> <a href="#">FL DRIVES DE</a> <a href="#">CAT 2 PORTFOLIOGUIDE EN</a> <a href="#">FL HEATING ELECTR EN</a> <a href="#">FL APPL. 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="#">STEP</a>
Motion controllers white paper	<a href="#">Download Whitepaper</a>
User Documentation	<a href="#">Operating Instruction BVF</a> <a href="#">QR-Code product handling video</a>
White Paper UL 600 V	<a href="#">Download Whitepaper</a>
White Paper wire connection	<a href="#">Download Whitepaper</a>

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Drawings


Dimensional drawing



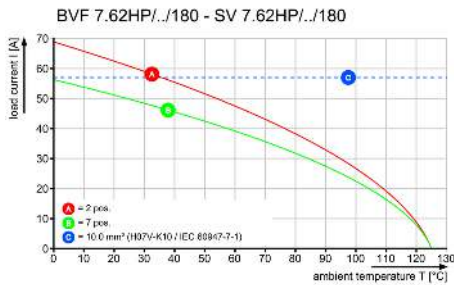
Similar to illustration

Connection diagram

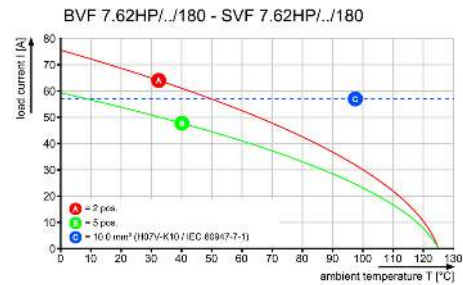
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6	M(S)F5	o	o	o	o	X	o	o
6	M(S)F4	o	o	o	X	o	o	o
6	M(S)F3	o	o	X	o	o	o	o
6	M(S)F2	o	X	o	o	o	o	o
5	M(S)F5	o	o	o	o	X	o	o
5	M(S)F4	o	o	o	X	o	o	o
5	M(S)F3	o	o	X	o	o	o	o
5	M(S)F2	o	X	o	o	o	o	o
4	M(S)F4	o	o	o	X	o	o	o
4	M(S)F3	o	o	X	o	o	o	o
4	M(S)F2	o	X	o	o	o	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	1	2	3	4	5	6	7



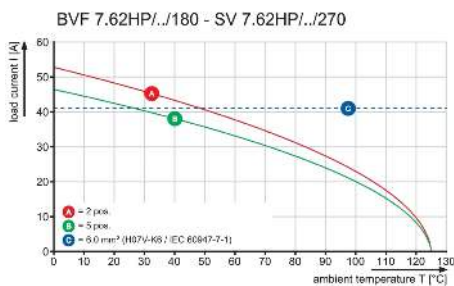
Graph



Graph



Graph

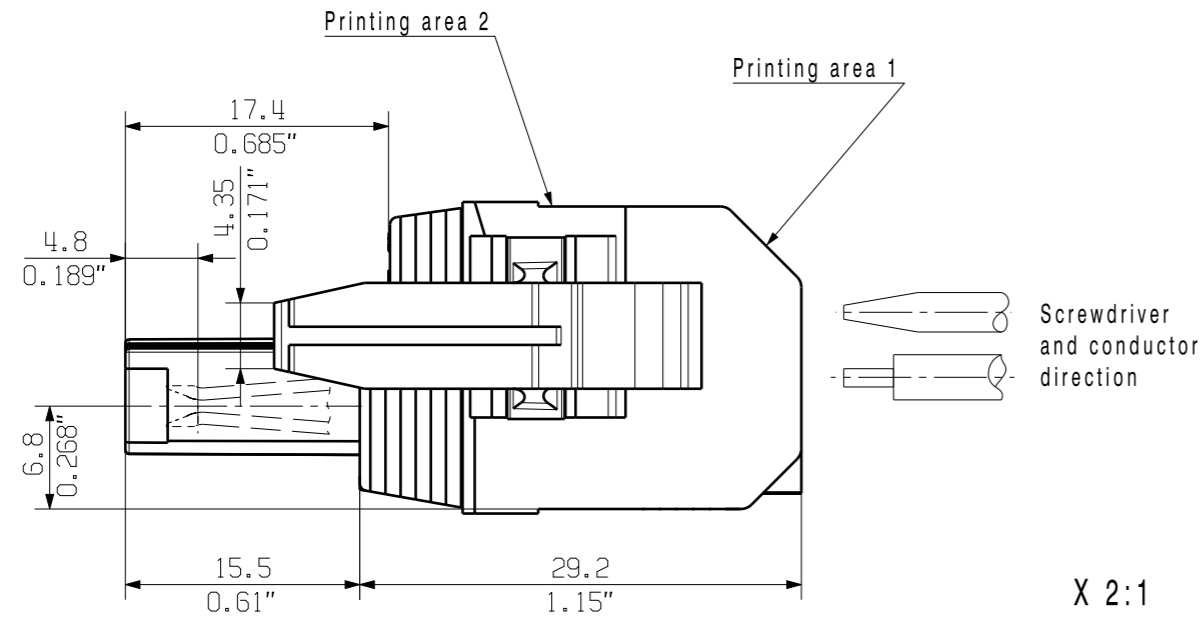


Product benefits

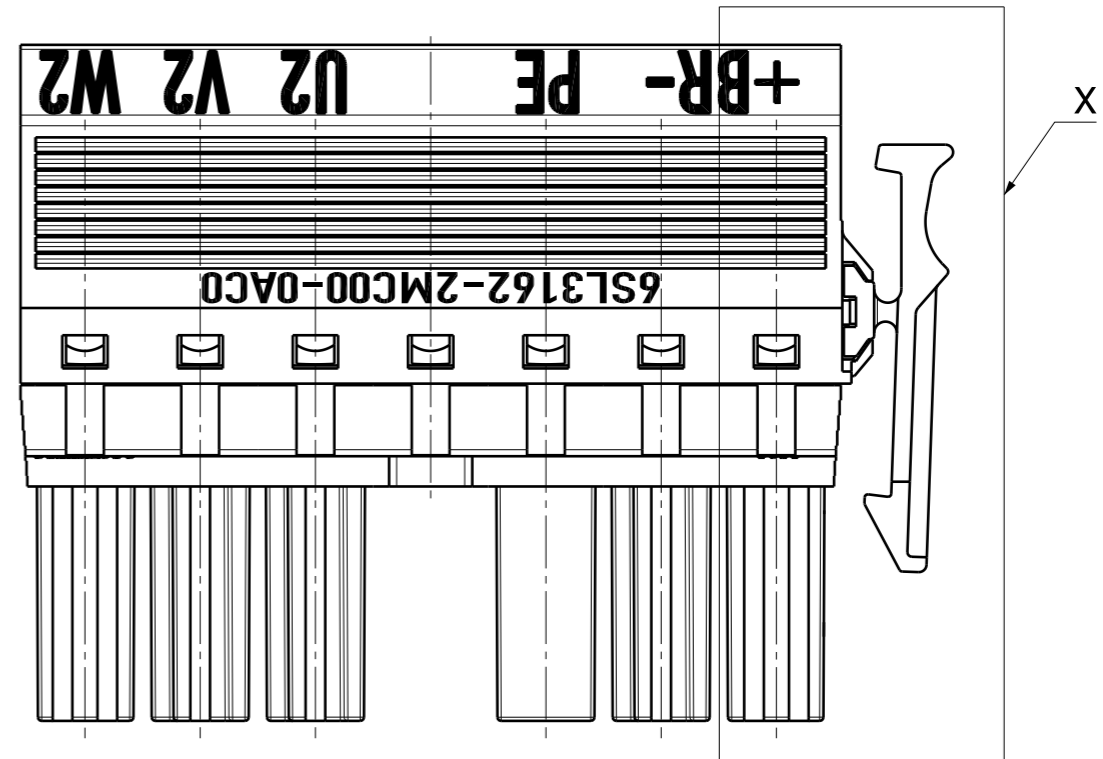
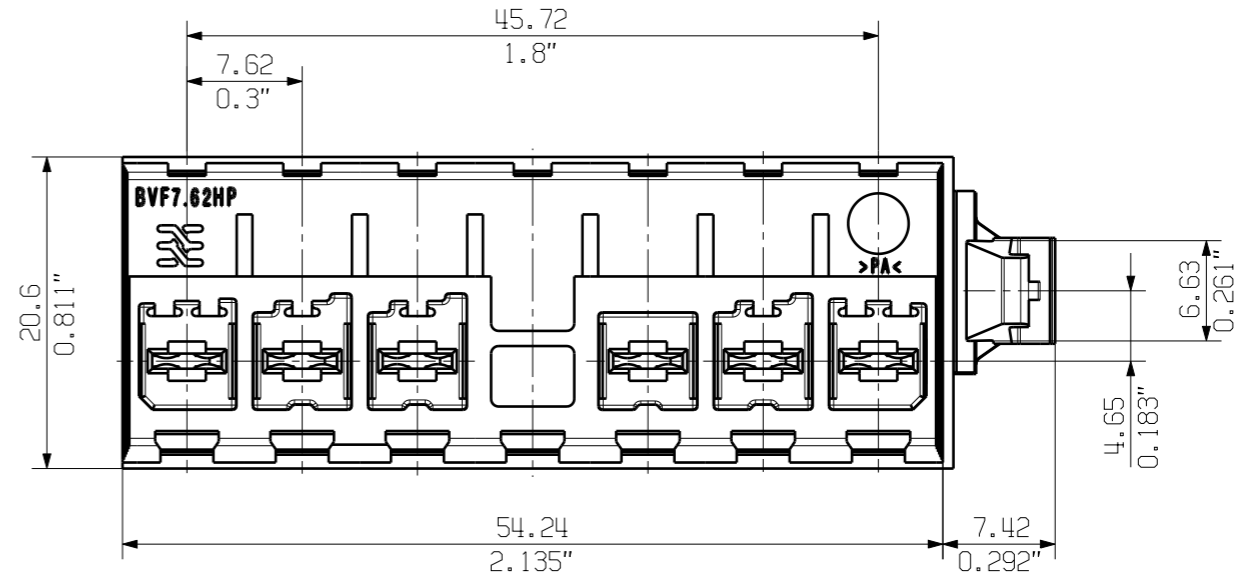
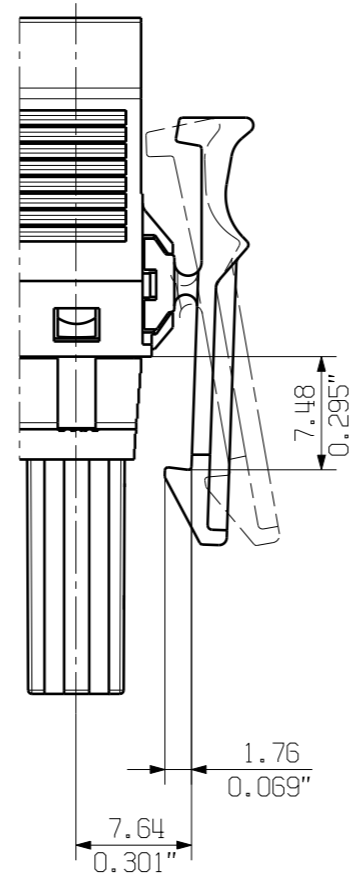


Installation without tools  
Outlet direction: 90° und 180°

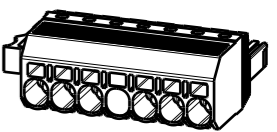
General customer drawing, topical version only if required



X 2:1  
Representation of the actuated retaining hook



M 1:1



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						

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

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

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