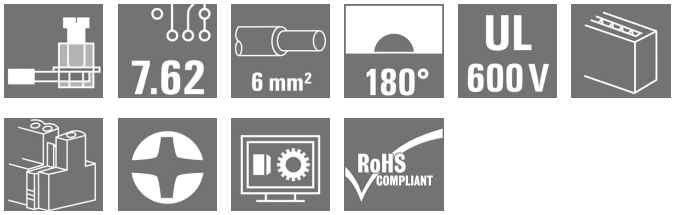
OMNIMATE Power - series BV/SV 7.62IT
BVZ 7.62IT/04/180MF3 SN BK BX

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 plug with a 7.62 pitch for IT power networks. Meets the requirements of UL1059 600 V class C. In combination with male header SV 7.62 IT.. with leading contact.
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.
The self-locking (optionally also screwable) middle flange reduces the space requirements by one pitch width in comparison with conventional solutions.
On request also available without middle flange interlock.

General ordering data

Type	BVZ 7.62IT/04/180MF3 SN BK BX
Order No.	1312730000
Version	PCB plug-in connector, female plug, 7.62 mm, No. of poles: 4, 180°, Clamping yoke connection, Clamping range, max. : 10 mm², Box
GTIN (EAN)	4050118115635
Qty.	32 pc(s).
Product data	IEC: 1000 V / 41 A / 0.2 - 6 mm² UL: 600 V / 40.5 A / AWG 24 - AWG 8
Packaging	Box

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Technical data

Dimensions and weights

Net weight	23.06 g

system parameters

Product family	OMNIMATE Power - series BV/SV 7.62IT	Type of connection	Field connection
Wire connection method	Clamping yoke connection	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	Number of rows	1
Pin series quantity	1	Rated cross-section	6 mm²
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	Tightening torque, min.	0.5 Nm
Tightening torque, max.	0.6 Nm	Clamping screw	M 3
Screwdriver blade	0.6 x 3.5	Plugging cycles	25
Plugging force/pole, max.	14 N	Pulling force/pole, max.	14 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.	0.2 mm²
Clamping range, max.	10 mm²
Solid, min. H05(07) V-U	0.2 mm²
Solid, max. H05(07) V-U	6 mm²
Flexible, min. H05(07) V-K	0.5 mm²
Flexible, max. H05(07) V-K	6 mm²
w. plastic collar ferrule, DIN 46228 pt 4, min.	0.25 mm²
w. plastic collar ferrule, DIN 46228 pt 4, max.	6 mm²
w. wire end ferrule, DIN 46228 pt 1, min	0.25 mm²
w. wire end ferrule, DIN 46228 pt 1, max.	6 mm²
Plug gauge in accordance with EN 60999 a x b; ø	2.8 mm x 2.0 mm; 2.4 mm

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Technical data

Clampable conductor	Cross-section for conductor connection	Type	fine-wired	
		nominal	0.5 mm²	
	AEH	Stripping length	nominal	14 mm
	Cross-section for conductor connection	Type	fine-wired	
		nominal	1 mm²	
	AEH	Stripping length	nominal	15 mm
	Cross-section for conductor connection	Type	fine-wired	
		nominal	1.5 mm²	
	AEH	Stripping length	nominal	15 mm
		Stripping length	nominal	12 mm
	Cross-section for conductor connection	Type	fine-wired	
		nominal	0.75 mm²	
	AEH	Stripping length	nominal	14 mm
	Cross-section for conductor connection	Type	fine-wired	
		nominal	2.5 mm²	
	AEH	Stripping length	nominal	14 mm
		Stripping length	nominal	12 mm
	Cross-section for conductor connection	Type	fine-wired	
		nominal	4 mm²	
	AEH	Stripping length	nominal	12 mm
		Stripping length	nominal	14 mm
	Cross-section for conductor connection	Type	fine-wired	
		nominal	6 mm²	
	AEH	Stripping length	nominal	14 mm
		Stripping length	nominal	12 mm
Max. clamping range	10 mm²			

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, min. 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	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.	10.2 mm	Creepage distance, min.	13.8 mm

Rated data acc. to CSA

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)	40.5 A
Rated current (Use group C / CSA)	40.5 A	Rated current (Use group D / CSA)	5 A
Wire cross-section, AWG, min.	AWG 24	Wire cross-section, AWG, max.	AWG 8

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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)	40.5 A
Rated current (Use group C / UL 1059)	40.5 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	45 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 • Rated current related to rated cross-section & min. No. of poles. • 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
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

Creation date May 27, 2019 7:09:35 PM CEST

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Technical data

Downloads

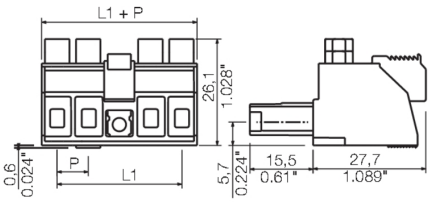
Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Brochure/Catalogue	FL DRIVES EN MB DEVICE MANUF. EN FL DRIVES DE FL HEATING ELECTR EN FL APPL_INVERTER EN FL_BASE_STATION_EN FL ELEVATOR EN FL POWER SUPPLY EN FL 72H SAMPLE SER EN PO OMNIMATE EN
Engineering Data	EPLAN, WSCAD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

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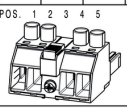
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Drawings

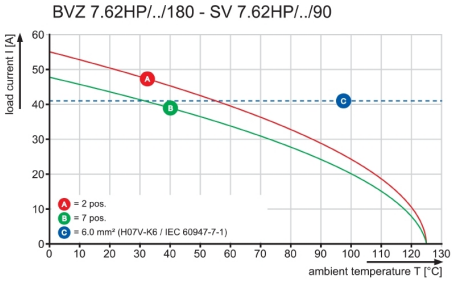
Dimensional drawing



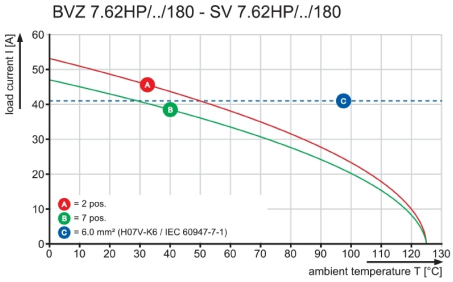
Connection diagram

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

Graph



Graph

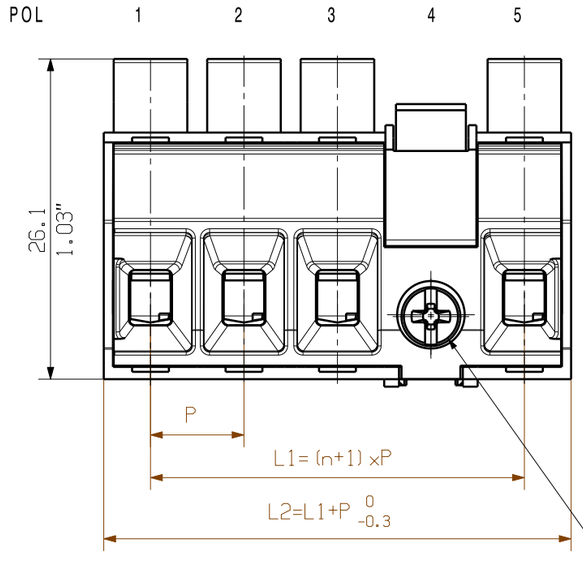


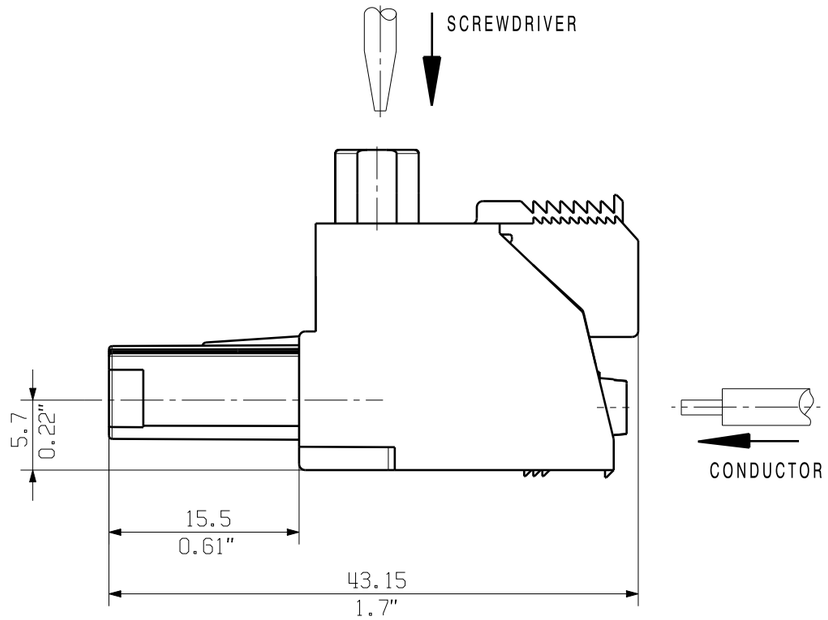
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Dimensions without tolerances are no check dimensions

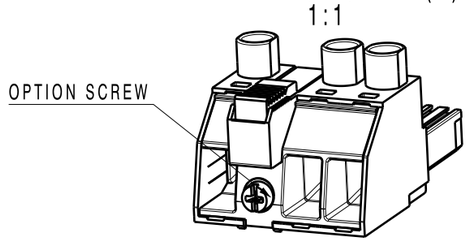
The English version is binding

BVZ 7.62IT/04/180M(S)F4

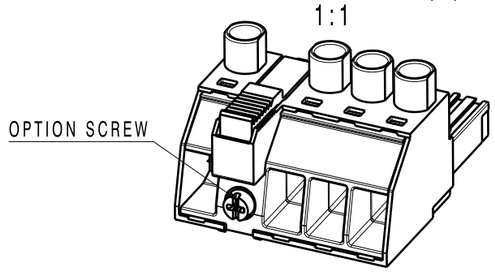




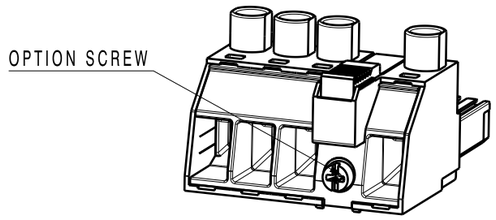
BVZ 7.62IT/03/180M(S)F2
1:1



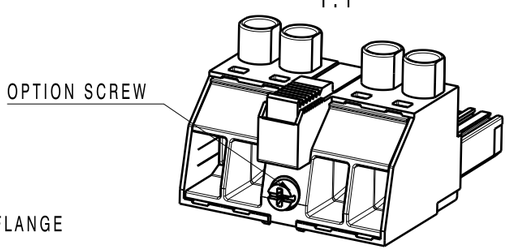
BVZ 7.62IT/04/180M(S)F2
1:1



BVZ 7.62IT/04/180M(S)F4
1:1



BVZ 7.62IT/04/180M(S)F3
1:1



P=RASTER/PITCH
MF =MITTELFLANSCH/MIDDLE FLANGE
PE= POTENTIAL ERDE/GROUND
n=POLZAHL/NO. OF POLES
POL= POL/POLES

BVZ7.62IT/03/180 MF 2	POL	MF	POL	POL	
BVZ7.62IT/04/180 MF 3	POL	POL	MF	POL	POL
BVZ7.62IT/04/180 MF 4	POL	POL	POL	MF	POL
BVZ7.62IT/04/180 MF 2	POL	MF	POL	POL	POL
BEZEICHNUNG/ PART NAME	1	2	3	4	5
	POSITION				

n	L1	
	MM	INCH
2	15,24	0,60
3	22,86	0,90
4	30,48	1,20
5	38,10	1,50
6	45,72	1,80
7	53,34	2,10

For the mounting of PCBs, it should be noted that the rated data given in the catalogue relates only to the connection elements. The neccessary creepage and clearance paths must be observed in connection with the respective applicant in accordance to 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 VDE 0627 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 occuring of electrical, mechanical, thermic and corrosive stress will be satisfied.

RoHS COMPLIANT

DIN ISO 2768-m

99788/5 29.11.17 HELIS_MA 00

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Modification

. .

Cat.no.: .

Weidmüller

3 50052 14

Drawing no. Issue no.

Sheet 01 of 04 sheets

	Date	Name
Drawn	24.06.2011	KRUG_M
Responsible		KRUG_M
Checked	05.12.2017	HELIS_MA
Approved		LANG_T

Scale: 2:1

Supersedes: .

BVZ 7.62IT/../180MF...

BUCHSENLEISTE
SOCKET BLOCK

Product file: BVZ7.62HP MF 7391