

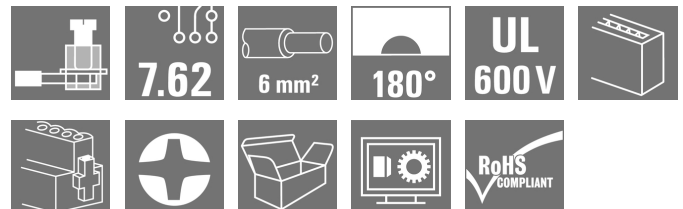
BVZ 7.62IT/04/180MF2 SN BK BX PRT SO**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

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

Version	PCB plug-in connector, female plug, 7.62 mm, Number of poles: 4, 180°, Clamping yoke connection, Clamping range, max.: 10 mm², Box
Order No.	1081890000
Type	BVZ 7.62IT/04/180MF2 SN BK BX PRT SO
GTIN (EAN)	4032248844913
Qty.	32 pc(s).
Product data	IEC: 1000 V / 57 A / 0.2 - 10 mm² UL: 600 V / 40.5 A / AWG 24 - AWG 8
Packaging	Box

Creation date April 15, 2021 11:48:22 AM CEST

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Technical data**Dimensions and weights**

Depth	43.1 mm	Depth (inches)	1.697 inch
Height	26.1 mm	Height (inches)	1.028 inch
Net weight	25.97 g	Width	38.1 mm
Width (inches)	1.5 inch		

System Parameters

Product family	OMNIMATE Power - series BV/SV 7.62HP	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°
Number 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 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	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.	16.5 N	Pulling force/pole, max.	11 N

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 plug contact	6...8 µm Sn glossy	Storage temperature, min.	-40 °C
Storage temperature, max.	70 °C	Operating temperature, min.	-50 °C
Operating temperature, max.	125 °C	Temperature range, installation, min.	-25 °C
Temperature range, installation, max.	100 °C		

Conductors suitable for connection

Clamping range, min.	0.2 mm ²
Clamping range, max.	10 mm ²
Wire connection cross section AWG, min.	AWG 24
Wire connection cross section AWG, max.	AWG 8
Solid, min. H05(07) V-U	0.2 mm ²
Solid, max. H05(07) V-U	6 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, 0.2 mm ² min.	
w. plastic collar ferrule, DIN 46228 pt 4, 6 mm ² max.	
w. wire end ferrule, DIN 46228 pt 1, min.	0.25 mm ²
w. wire end ferrule, DIN 46228 pt 1, max.	6 mm ²
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 mm ²	
	wire end ferrule	Stripping length	nominal	14 mm
		Recommended wire-end ferrule	H0.5/18 OR	
	Cross-section for conductor connection	Type	fine-wired	
		nominal	1 mm ²	
	wire end ferrule	Stripping length	nominal	15 mm
		Recommended wire-end ferrule	H1.0/18 GE	
	Cross-section for conductor connection	Type	fine-wired	
		nominal	1.5 mm ²	
	wire end ferrule	Stripping length	nominal	15 mm
		Recommended wire-end ferrule	H1.5/18D SW	
		Stripping length	nominal	12 mm
		Recommended wire-end ferrule	H1.5/12	
	Cross-section for conductor connection	Type	fine-wired	
		nominal	0.75 mm ²	
	wire end ferrule	Stripping length	nominal	14 mm
		Recommended wire-end ferrule	H0.75/18 W	
	Cross-section for conductor connection	Type	fine-wired	
		nominal	2.5 mm ²	
	wire end ferrule	Stripping length	nominal	14 mm
		Recommended wire-end ferrule	H2.5/19D BL	
		Stripping length	nominal	12 mm
		Recommended wire-end ferrule	H2.5/12	
	Cross-section for conductor connection	Type	fine-wired	
		nominal	4 mm ²	
	wire end ferrule	Stripping length	nominal	12 mm
		Recommended wire-end ferrule	H4.0/12	
		Stripping length	nominal	14 mm
		Recommended wire-end ferrule	H4.0/20D GR	
	Cross-section for conductor connection	Type	fine-wired	
		nominal	6 mm ²	
	wire end ferrule	Stripping length	nominal	14 mm
		Recommended wire-end ferrule	H6.0/20 SW	
		Stripping length	nominal	12 mm
		Recommended wire-end ferrule	H6.0/12	
Reference text	The outside diameter of the plastic collar should not be larger than the pitch (P), Length of ferrules is to be chosen depending on the product and the rated voltage.			

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Technical data

Rated data acc. to IEC

tested acc. to standard

IEC 60664-1, IEC 61984

Rated current, min. number of poles
($T_u=40^{\circ}\text{C}$)

41 A

Rated voltage for surge voltage class /
pollution degree III/2

1,000 V

Rated impulse voltage for surge voltage
class/ pollution degree II/2

6 kV

Rated impulse voltage for surge voltage
class/ contamination degree III/3

8 kV

Rated current, min. number of poles
($T_u=20^{\circ}\text{C}$)

57 A

Rated voltage for surge voltage class /
pollution degree II/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 III/2

8 kV

Short-time withstand current resistance

3 x 1s with 420 A

Rated data acc. to CSA

Rated voltage (Use group B / CSA)

600 V

Rated voltage (Use group D / CSA)

600 V

Rated current (Use group C / CSA)

40.5 A

Wire cross-section, AWG, min.

AWG 24

Rated voltage (Use group C / CSA)

600 V

Rated current (Use group B / CSA)

40.5 A

Rated current (Use group D / CSA)

5 A

Wire cross-section, AWG, max.

AWG 8

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 D / UL 1059)

600 V

Rated current (Use group C / UL 1059)

40.5 A

Wire cross-section, AWG, min.

AWG 24

Reference to approval values

Specifications are
maximum values, details -
see approval certificate.

Rated voltage (Use group C / UL 1059)

600 V

Rated current (Use group B / UL 1059)

40.5 A

Rated current (Use group D / UL 1059)

5 A

Wire cross-section, AWG, max.

AWG 8

Packing

Packaging

Box

VPE length

351 mm

VPE width

136 mm

VPE height

50 mm

Classifications

ETIM 6.0

EC002638

ETIM 7.0

EC002638

ECLASS 9.0

27-44-03-09

ECLASS 9.1

27-44-03-09

ECLASS 10.0

27-44-03-09

ECLASS 11.0

27-46-02-02

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Technical data
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. • 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 • Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months

Approvals

Approvals



ROHS	Conform
UL File Number Search	E60693

Downloads

Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Engineering Data	WSCAD
User Documentation	QR-Code product handling video
Brochure/Catalogue	Catalogues in PDF-format

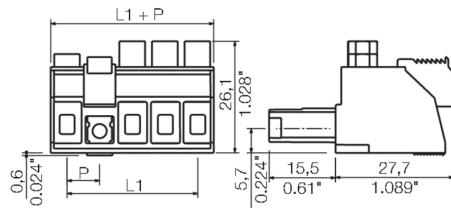
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Drawings

Dimensional drawing



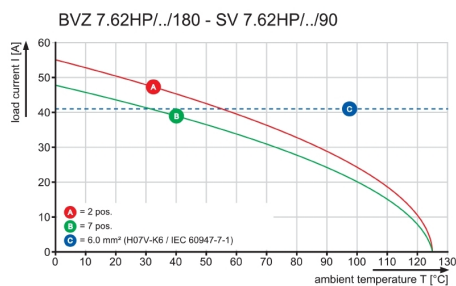
Connection diagram

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	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

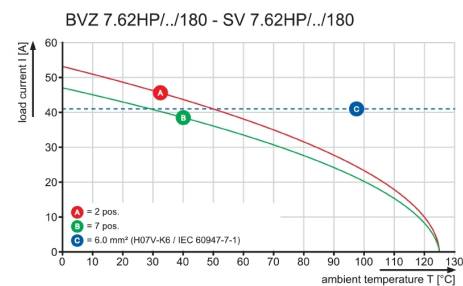
NO OF POLES	X = MIDDLE FLANGE POSITION	1	2	3	4	5	6	7
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Graph



Graph



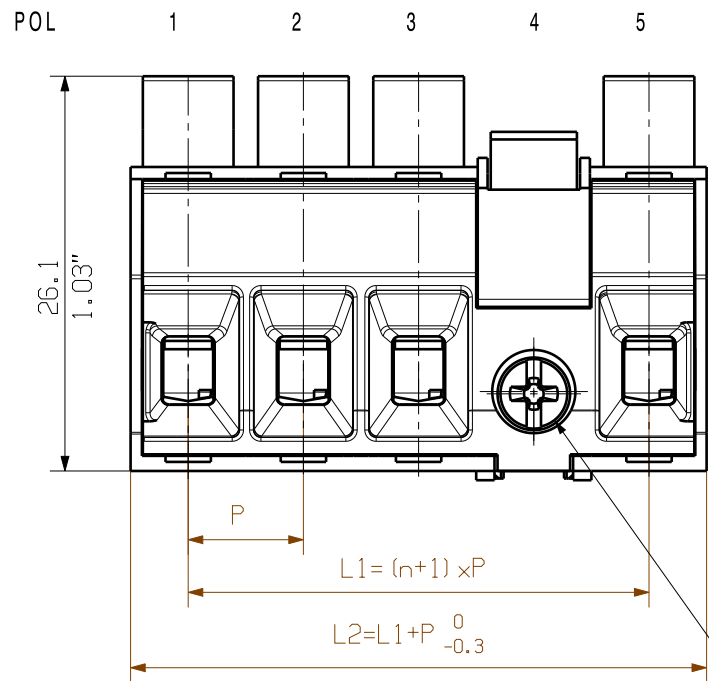
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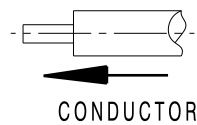
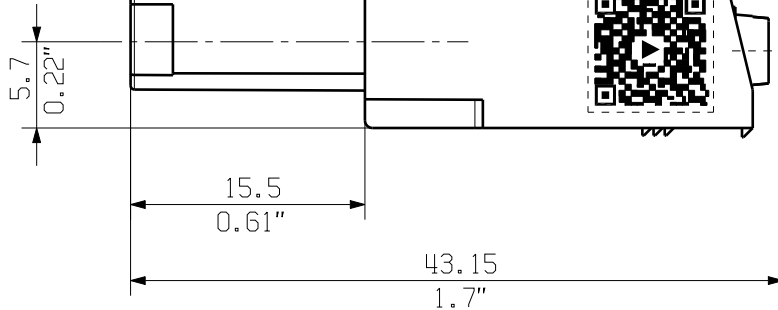
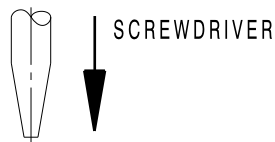
Dimensions without tolerances are no check dimensions

The English version is binding

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



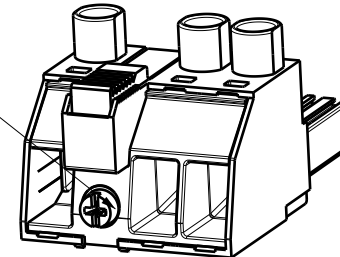
OPTION SCREW



CONDUCTOR

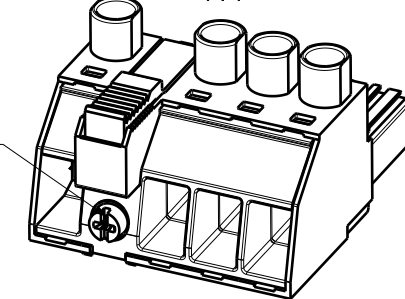
BVZ 7.62IT/03/180M(S)F2
1:1

OPTION SCREW



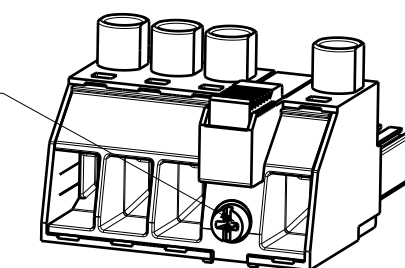
BVZ 7.62IT/04/180M(S)F2
1:1

OPTION SCREW



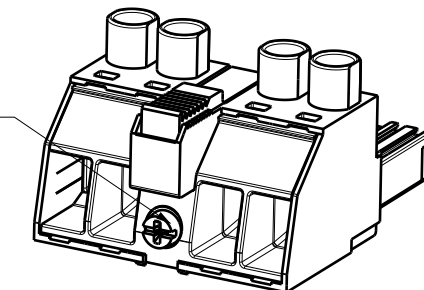
BVZ 7.62IT/04/180M(S)F4
1:1

OPTION SCREW



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

OPTION SCREW



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

BVZ7.62IT/03/180 MF 2	POL	MF	POL	POL		7	53.34	2.10
BVZ7.62IT/04/180 MF 3	POL	POL	MF	POL	POL	6	45.72	1.80
BVZ7.62IT/04/180 MF 4	POL	POL	POL	MF	POL	5	38.10	1.50
BVZ7.62IT/04/180 MF 2	POL	MF	POL	POL	POL	4	30.48	1.20
						3	22.86	0.90
						2	15.24	0.60
BEZEICHNUNG/ PART NAME	1	2	3	4	5	n	MM	INCH
	POSITION					L1		

For the mounting of PCBs, it should be noted that the rated data given in the catalogue relates only to the connection elements. The necessary 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 occurring of electrical, mechanical, thermic and corrosive stress will be satisfied.

HINWEIS: QR Code bitte noch nicht berücksichtigen!
INFORMATION: Please do not consider the QR code yet

GENERAL TOLERANCE:
DIN ISO 2768-mK

EC00001333	Prim PLM Part No.: 011202	Prim ERP Part No.: 1312730000
RoHS COMPLIANT	Max. nos.	Weidmüller
First Issue Date 24.06.2011	Modification	
Scale: 2:1	Size: A3	Drawn 29.04.2019 Helis, Maria
Drawings Assembly	Approved 14.05.2019 Lang, Thomas	Responsible Döhrer, Karl
Product file: 7391 BVZ7.62HP_MF		

BVZ 7.62IT/./180MF...
BUCHSENLEISTE
SOCKET BLOCK

50052
Drawing no. Issue no.
Sheet 02 of 05 sheets

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