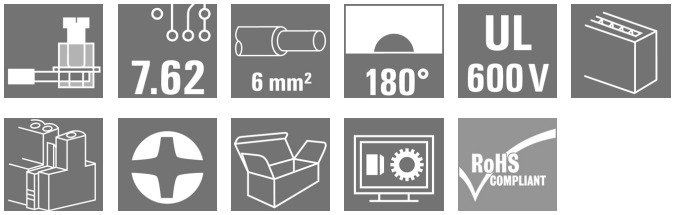
BVZ 7.62IT/03/180MF3 SN BK BX

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: 3, 180°, Clamping yoke connection, Clamping range, max. : 10 mm², Box
Order No.	1156730000
Type	BVZ 7.62IT/03/180MF3 SN BK BX
GTIN (EAN)	4032248943937
Qty.	40 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 March 12, 2024 4:11:15 PM CET

BVZ 7.62IT/03/180MF3 SN BK BX

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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
Width	30.48 mm	Width (inches)	1.2 inch
Net weight	17.897 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 "	Conductor outlet direction	180°
Number of poles	3	L1 in mm	22.86 mm
L1 in inches	0.9 "	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
Comparative Tracking Index (CTI)	≥ 500	UL 94 flammability rating	V-0
Contact material	Cu-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.	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	10 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
	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 mm²
	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 mm²
	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 mm²
	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 mm²
	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 mm²
	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 mm²
	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 (Tu=20°C)	57 A
Rated current, min. 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	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

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)	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
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

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	353 mm
VPE width	135 mm	VPE height	49 mm

Classifications

ETIM 6.0	EC002638	ETIM 7.0	EC002638
ETIM 8.0	EC002638	ETIM 9.0	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
ECLASS 12.0	27-46-02-02	ECLASS 13.0	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 variants 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. • In accordance with IEC 61984, OMNIMATE-connectors are connectors without breaking capacity (COC). During designated use, connectors are not allowed to be engaged or disengaged when live or under load • Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months

Approvals

Approvals	
ROHS	Conform
UL File Number Search	UL Website
Certificate No. (cURus)	E60693

Downloads

Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Engineering Data	CAD data – STEP
Product Change Notification	20220201 Visual change OMNIMATE® Power PCB terminal blocks and connectors 20220201 Visuelle Änderung OMNIMATE® Power Leiterplattenklemmen und -steckverbinder 20220208 Visual change Temporarily different color for connectors and accessories 20220208 Visuelle Änderung Vorübergehend anderer Farbton für Steckverbinder und Zubehör
User Documentation	QR-Code product handling video
Catalogues	Catalogues in PDF-format
Brochures	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 PO OMNIMATE EN

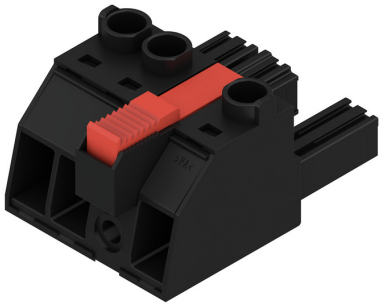
BVZ 7.62IT/03/180MF3 SN BK BX

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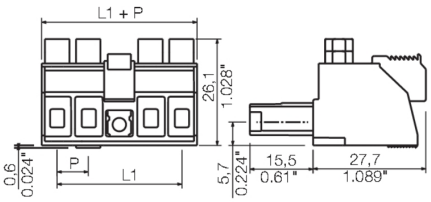
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Drawings

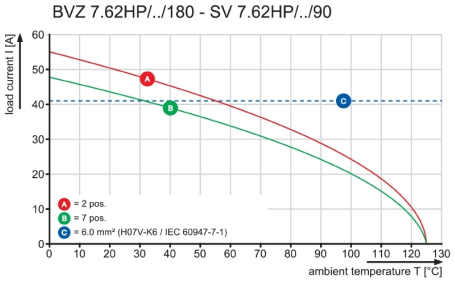
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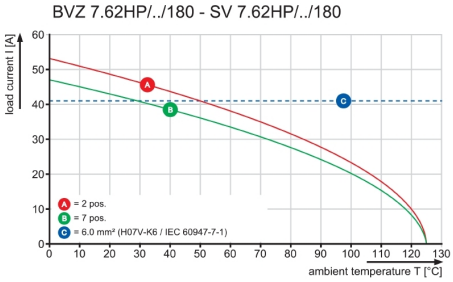
Dimensional drawing



Graph



Graph



BVZ 7.62IT/03/180MF3 SN BK BX

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Accessories

Crosshead screwdriver Phillips

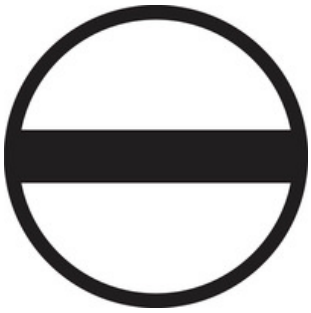


VDE insulated crosshead screwdriver, for Phillips screws, SDIK PH DIN 7438, ISO 8764/2-PH, output to ISO 8764-PH, SoftFinish grip

General ordering data

Type	SDIK PH1	Version
Order No.	9008570000	Screwdriver, Screwdriver
GTIN (EAN)	4032248056569	
Qty.	1 pc(s).	

Slotted screwdriver



VDE insulated slot-head screwdriver, SDI DIN 7437, ISO 2380/2, drive output acc. to DIN 5264, ISO 2380/1. SoftFinish grip

General ordering data

Type	SDIS 0.8X4.0X100	Version
Order No.	9008400000	Screwdriver, Screwdriver
GTIN (EAN)	4032248056361	
Qty.	1 pc(s).	

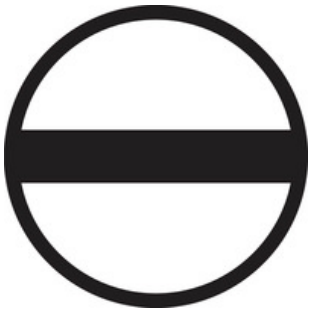
BVZ 7.62IT/03/180MF3 SN BK BX

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Germany

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Accessories

Slotted screwdriver



Slotted screwdriver with rounded blade SD DIN 5265, ISO 2380/2, output to DIN 5264, ISO 2380/1. ChromTop tip, SoftFinish grip

General ordering data

Type	SDS 0.8X4.5X125	Version
Order No.	9009020000	Screwdriver, Screwdriver
GTIN (EAN)	4032248266883	
Qty.	1 pc(s).	

Crosshead screwdriver Phillips



Crosshead screwdriver, Phillips, SDK PH DIN 5262, ISO 8764/2-PH, output to ISO 8764-PH, ChromTop tip, SoftFinish grip

General ordering data

Type	SDK PH1	Version
Order No.	9008480000	Screwdriver, Screwdriver
GTIN (EAN)	4032248056477	
Qty.	1 pc(s).	

BVZ 7.62IT/03/180MF3 SN BK BX

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Accessories

Coding elements



The pluggable connections for power electronics - optimised for modern drive technologies, e.g. motor starters, frequency converters and servo-controllers.
OMNIMATE Power sets the new standard – with increased safety and innovative solutions such as the pluggable shield, integrated signal contacts and one-handed operation.
The three product lines offer you further advantages:
- Application-oriented scalability: from the compact 4 mm² connector for 29 A (IEC) or 20 A (UL) up to the sturdy 16 mm² connector for 76 A (IEC) or 54 A (UL)
- Unlimited usage up to 1,000 V (IEC) or 600 V (UL)
- A variety of application optimised mounting options

Our Service:
Design your individual connectors simply by using the

General ordering data

Type	BV/SV 7.62HP KO RD 2022	Version	Product data	Packaging
Order No.	2007300000	PCB plug-in connector, Accessories, Coding element, red, Number of		Box
GTIN (EAN)	4050118392715	poles: 1		
Qty.	20 pc(s).			

Crimping tools



Crimping tools for wire end ferrules, with and without plastic collars
- Ratchet guarantees precise crimping
- Release option in the event of incorrect operation

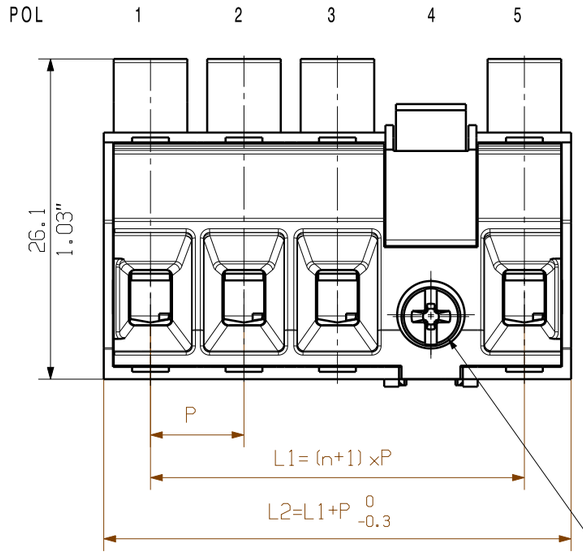
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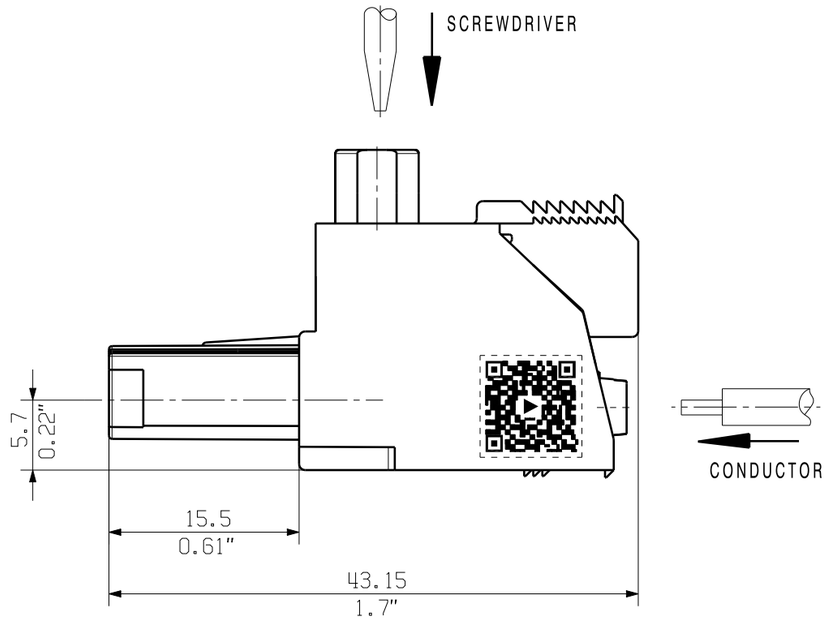
Type	PZ 6/5	Version
Order No.	9011460000	Pressing tool, Crimping tool for wire-end ferrules, 0.25mm², 6mm²,
GTIN (EAN)	4008190165352	Trapezoidal indentation crimp
Qty.	1 pc(s).	

Dimensions without tolerances are no check dimensions

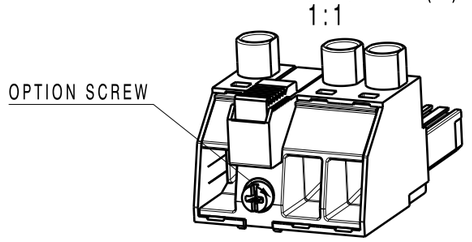
The English version is binding

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

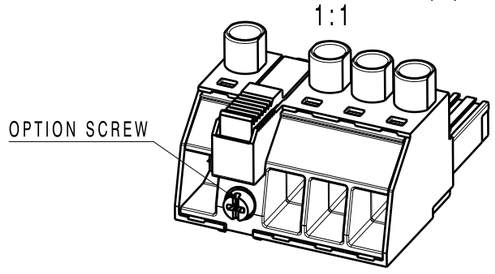




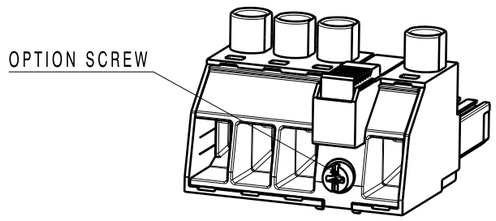
BVZ 7.62IT/03/180M(S)F2
1:1



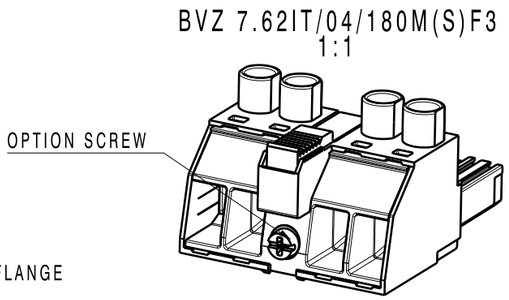
BVZ 7.62IT/04/180M(S)F2
1:1



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				

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

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

GENERAL TOLERANCE:
DIN ISO 2768-mK

RoHS COMPLIANT

EC00001333

First Issue Date 24.06.2011

Max. nos.

Modification

Prim PLM Part No.: 011202

Prim ERP Part No.: 1312730000

Weidmüller

50052 Drawing no. 16 Issue no.

Sheet 02 of 05 sheets

	Date	Name
Drawn	29.04.2019	Helis, Maria
Responsible		Döhrer, Karl
Approved	14.05.2019	Lang, Thomas

Scale: 2:1 Size: A3

Drawings Assembly

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

Product file: 7391 BVZ7.62HP_MF

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