

BVF 7.62HP/03/180 BCF/04R SN BK BX
Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image


180° female plug with energy and signal contacts in PUSH IN wire connection in 7.62 pitch.
Fulfils the IEC 61800-5-1 requirement and for the energy contact UL 1059 ClassC 600 V.

General ordering data

Version	PCB plug-in connector, female plug, 7.62 mm, Number of poles: 3, 180°, PUSH IN with actuator, PUSH IN without actuator, Clamping range, max. : 10 mm ² , Box
Order No.	1080490000
Type	BVF 7.62HP/03/180 BCF/04R SN BK BX
GTIN (EAN)	4032248843213
Qty.	50 pc(s).
Product data	IEC: 1000 V / 38 A / 0.5 - 10 mm ² UL: 600 V / 35 A / AWG 24 - AWG 8
Packaging	Box

Creation date May 2, 2023 9:08:15 AM CEST

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Technical data
Dimensions and weights

Net weight	19.98 g
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Temperatures

Operating temperature, min.	-50 °C	Operating temperature, max.	125 °C
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System Parameters

Product family		Type of connection	
OMNIMATE Power - series BV/SV 7.62HP		Field connection	
Wire connection method	PUSH IN with actuator, PUSH IN without actuator	Pitch in mm (P)	7.62 mm
Pitch in inches (P)	0.3 inch	Conductor outlet direction	180°
Number of poles	3	L1 in mm	15.24 mm
L1 in inches	0.6 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	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
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.	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, 1.5 mm ² min.	
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	0.5 mm ²
wire end ferrule		Stripping length	nominal 14 mm
		Recommended wire-end ferrule	H0.5/18 OR
Clampable conductor	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
Clampable conductor	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
Clampable conductor	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
Clampable conductor	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
Clampable conductor	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
Clampable conductor	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
Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	10 mm ²
wire end ferrule		Stripping length	nominal 12 mm
		Recommended wire-end ferrule	H10.0/12
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)	38 A
Rated current, max. number of poles (Tu=20°C)	38 A	Rated current, min. number of poles (Tu=40°C)	34 A
Rated current, max. number of poles (Tu=40°C)	34 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.		

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)	35 A
Rated current (Use group C / UL 1059)	35 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	61 mm

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Technical data
Technical data - hybrid

Pitch in mm (Signal)	3.81 mm	Pitch in inches (Signal)	0.15 inch
Number of poles (Signal)	4	L2 in mm	3.81 mm
L2 in inch	0.15 inch	Number of rows (Signal)	2
Contact material (Signal)	CuMg	Contact surface (Signal)	tinned
Layer structure of the plug contact (Signal)	1-3 μ Ni / 4-8 μ Sn	Rated voltage for overvoltage class/pollution severity level II/2 (Signal)	400 V
Rated voltage for overvoltage class/pollution severity level III/2 (Signal)	320 V	Rated voltage for overvoltage class/pollution severity level III/3 (Signal)	200 V
Rated impulse voltage for overvoltage class/pollution severity level II/2 (Signal)	4 kV	Rated impulse voltage for overvoltage class/pollution severity level III/2 (Signal)	4 kV
Rated impulse voltage for overvoltage class/pollution severity level III/3 (Signal)	4 kV	Short-time withstand current resistance (Signal)	3 x 1s with 80 A
Rated voltage (Use group B / CSA) (Signal)	300 V	Rated voltage (Use group C / CSA) (Signal)	50 V
Rated voltage (Use group D / CSA) (Signal)	300 V	Rated current (Use group B / CSA) (Signal)	9 A
Rated current (Use group C / CSA) (Signal)	9 A	Rated current (Use group D / CSA) (Signal)	9 A
Wire connection cross-section AWG (Signal)	AWG 24...AWG 16	Rated voltage (Use group B / UL 1059) (Signal)	300 V
Rated voltage (Use group C / UL 1059) (Signal)	50 V	Rated voltage (Use group D / UL 1059) (Signal)	300 V
Rated current (Use group B / UL 1059) (Signal)	5 A	Rated current (Use group C / UL 1059) (Signal)	5 A
Rated current (Use group D / UL 1059) (Signal)	5 A	Connector cross-section (Signal)	AWG 26...AWG 16

Conductors that can be connected - Hybrid

Clamping range, rated connection (Power)	0.5...10 mm ²	Clamping range, rated connection (Signal)	0.2...1.5 mm ²
Connector cross-section (Power)	AWG 24...AWG 8	Connector cross-section AWG (Signal)	AWG 26...AWG 16
solid, H05(07) V-U (Power)	0.5...10 mm ²	solid, H05(07) V-U (Signal)	0.14...1.5 mm ²
flexible, H05(07) V-K (Power)	0.5...6 mm ²	flexible, H05(07) V-K (Signal)	0.14...1.5 mm ²
with wire-end ferrule with collar (Power)	0.5...6 mm ²	with wire-end ferrule with collar, DIN 46 228/4 (Signal)	0.25...1.5 mm ²
with wire-end ferrule according to DIN 46 228/1 (Power)	0.5...6 mm ²	with wire-end ferrule according to DIN 46 228/1 (Signal)	0.25...1.5 mm ²

Classifications

ETIM 6.0	EC002638	ETIM 7.0	EC002638
ETIM 8.0	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	27-46-03-02

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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	<ul style="list-style-type: none"> • Technical specifications refer to the power contacts • Technical data of signal contacts: 50V / 5A, stripping length 8mm • 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 • 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. • 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	UL Website
Certificate No. (cURus)	E60693

Downloads

Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Engineering Data	CAD data – STEP
Engineering Data	WSCAD
Product Change Notification	20220201 Visual change OMNIMATE® Power PCB terminal blocks and connectors 20220201 Visuelle Änderung OMNIMATE® Power Leiterplattenklemmen und -steckverbinder
User Documentation	Operating Instruction BVF Operating Instruction BVF hybrid 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

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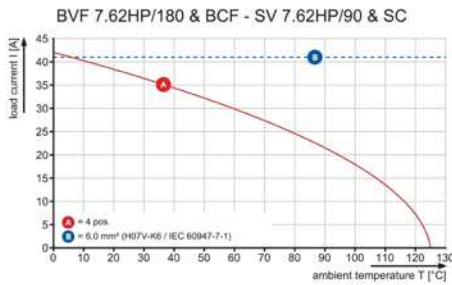
Drawings

Product image

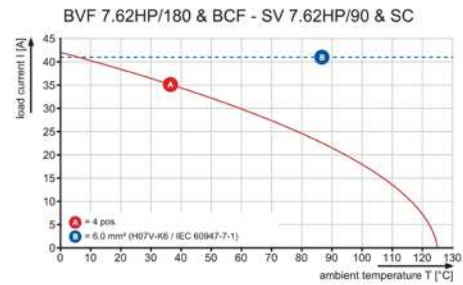


Dimensional drawing

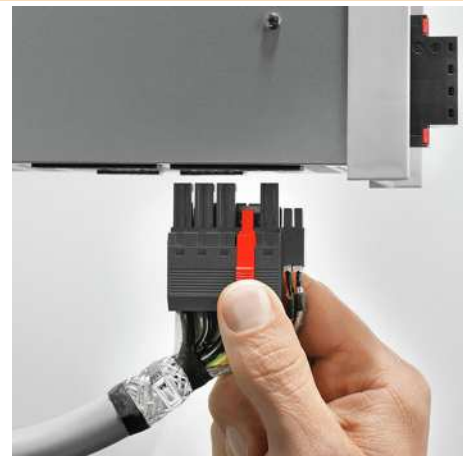
Graph



Graph

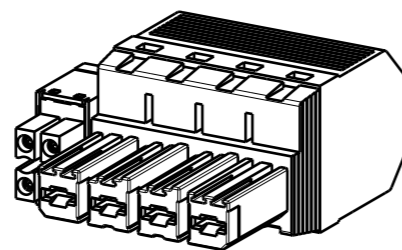
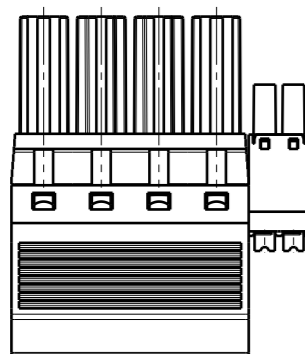
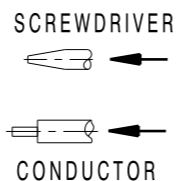
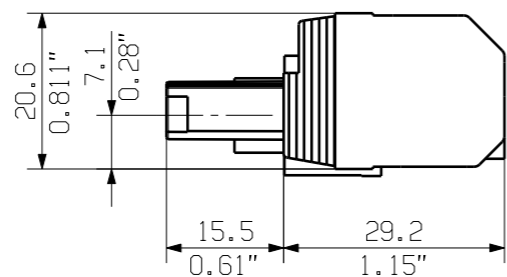
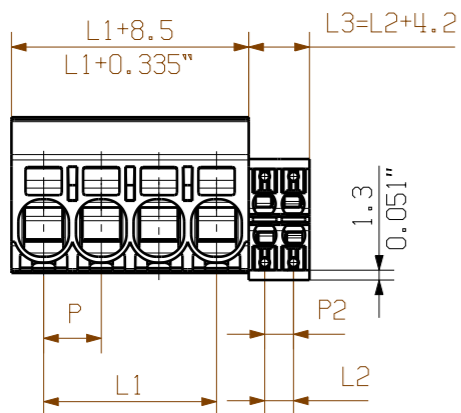


Product benefits

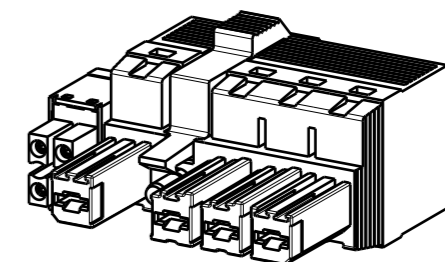
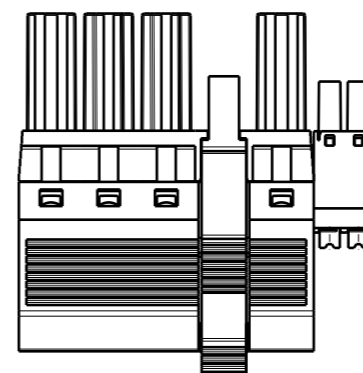
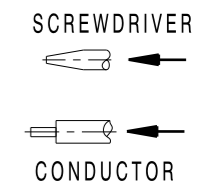
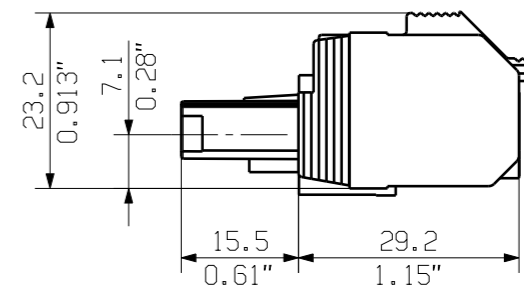
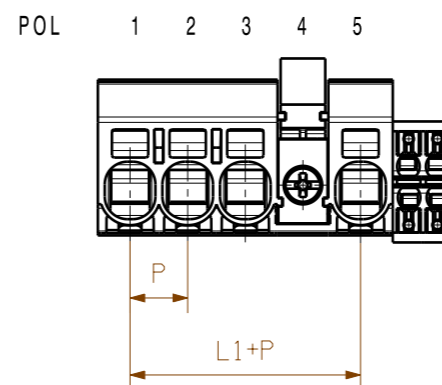


Single-handed operation
 Automatic latching

BVF7.62HP/.../180BCF/...R
 SHOWN: BVF7.62HP/04/180BCF/04R



BVF7.62HP/.../180MF...BCF/...R
 SHOWN: BVF7.62HP/04/180MF4BCF/04R



P = Raster/pitch = 7.62
 P2 = Raster/pitch = 3.81

5	30,48	7.62	HYBRID 4POL L3=8.03mm L2=3.81	HYBRID 6POL L3=11.84mm L2=7.62	HYBRID 8POL L3=15.65mm L2=11.43
4	22,86				
3	15,24				
2	7,62				
POLZAHL/ NO OF POLES	L1 mm	P mm			

P=POL/POLES
 MF= MITTELFANSCH/MIDDLE FLANGE

5 MF 4	P	P	P	MF	P	P
5 MF 3	P	P	MF	P	P	P
4 MF 4	P	P	P	MF	P	
4 MF 3	P	P	MF	P	P	
3 MF 3	P	P	MF	P		
3 MF 2	P	MF	P	P		
2 MF 2	P	MF	P			
POLE	1	2	3	4	5	6
NO OF POLES	POS					

GENERAL TOLERANCE:
 DIN ISO 2768-m

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 connectors are tested to the DIN VDE 0627 standard, and are valid for its field of application. Provided that the connectors are used to the intended purpose, all requirements with respect to the occurring of electrical, mechanical, thermic and corrosive stress will be satisfied.

RoHS COMPLIANT	Max. nos.	Prim PLM Part No.:005815		Prim ERP Part No.:1080320000		
	First Issue Date 29.08.2018	00				
Modification						
Scale: 2/11		Date	Name	Sheet 01 of 01 sheets		
Size: A3		Drawn	24.10.2018	Administrator		
Drawings Assembly		Responsible	Krug, Matthias			
		Approved				
		BVF 7.62HP/04/180 BCF BUCHSENLEISTE SOCKET BLOCK				not released
		Product file: 7390 BVF/SVF 7.62HP				