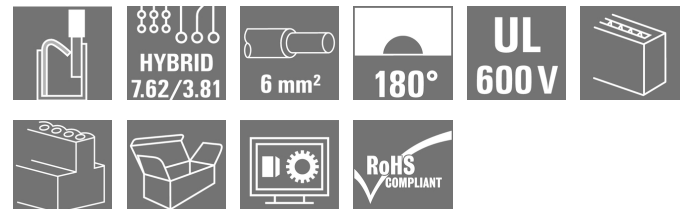


OMNIMATE Power - series BV/SV 7.62HP BVF 7.62HP/03/180 BCF/08R SN BK BX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
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Germany
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Product image



Similar to illustration

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

Type	BVF 7.62HP/03/180 BCF/08R SN BK BX
Order No.	1156450000
Version	PCB plug-in connector, female plug, 7.62 mm, No. of poles: 3, 180°, PUSH IN, Clamping range, max.: 10 mm², Box
GTIN (EAN)	4032248943258
Qty.	40 pc(s).
Product data	IEC: 1000 V / 38 A / 0.5 - 10 mm² UL: 600 V / 35 A / AWG 24 - AWG 8
Packaging	Box

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Technical data
Dimensions and weights

Net weight 22 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	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
Material of operational elements	PPA GF	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.	0.5 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, min 1.5 mm ²	
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	
AEH		Stripping length	nominal	14 mm
Cross-section for conductor connection	AEH	Type	fine-wired	
		nominal	1 mm ²	
AEH		Stripping length	nominal	15 mm
Cross-section for conductor connection	AEH	Type	fine-wired	
		nominal	1.5 mm ²	
AEH		Stripping length	nominal	15 mm
Cross-section for conductor connection	AEH	Stripping length	nominal	12 mm
		Stripping length	nominal	12 mm
Cross-section for conductor connection	AEH	Type	fine-wired	
		nominal	0.75 mm ²	
AEH		Stripping length	nominal	14 mm
Cross-section for conductor connection	AEH	Type	fine-wired	
		nominal	2.5 mm ²	
AEH		Stripping length	nominal	14 mm
Cross-section for conductor connection	AEH	Stripping length	nominal	12 mm
		Stripping length	nominal	12 mm
Cross-section for conductor connection	AEH	Type	fine-wired	
		nominal	4 mm ²	
AEH		Stripping length	nominal	12 mm
Cross-section for conductor connection	AEH	Stripping length	nominal	14 mm
		Stripping length	nominal	14 mm
Cross-section for conductor connection	AEH	Type	fine-wired	
		nominal	6 mm ²	
AEH		Stripping length	nominal	14 mm
Cross-section for conductor connection	AEH	Stripping length	nominal	12 mm
		Stripping length	nominal	12 mm
Cross-section for conductor connection	AEH	Type	fine-wired	
		nominal	10 mm ²	
AEH		Stripping length	nominal	12 mm
Max. clamping range	10 mm ²			

Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984			
Rated current, max. no. of poles (Tu=20°C)	38 A	Rated current, min. no. of poles (Tu=20°C)	38 A	
Rated current, max. no. of poles (Tu=40°C)	34 A	Rated current, min. no. of poles (Tu=40°C)	34 A	
Rated voltage for surge voltage class / pollution degree III/2	1,000 V	Rated voltage for surge voltage class / pollution degree II/2	1,000 V	
Rated impulse voltage for surge voltage class/ pollution degree II/2	6 kV	Rated voltage for surge voltage class / pollution degree III/3	800 V	
Rated impulse voltage for surge voltage class/ contamination degree III/3	8 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	8 kV	
Clearance, min.	10.4 mm	Short-time withstand current resistance	3 x 1s with 420 A	
		Creepage distance, min.	12.7 mm	

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Technical data
Rated data acc. to CSA

Institute (CSA)



Certificate No. (CSA)

200039-1121690

Rated voltage (Use group B / CSA)	600 V
Rated voltage (Use group D / CSA)	600 V
Rated current (Use group C / CSA)	33 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 / CSA)	600 V
Rated current (Use group B / CSA)	33 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)	35 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)	35 A
Rated current (Use group D / UL 1059)	5 A
Wire cross-section, AWG, max.	AWG 8

Packing

Packaging	Box	VPE length	0
VPE width	0	VPE height	0

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Technical data
Technical data - hybrid

stripping length (Signal)	8 mm	Pitch in mm (Signal)	3.81 mm
Pitch in inches (Signal)	0.15 inch	Number of poles (Signal)	8
L2 in mm	11.43 mm	L2 in inch	0.45 inch
Number of rows (Signal)	2	Contact material (Signal)	CuMg
Contact surface (Signal)	tinned	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 26...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 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

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Technical data

Notes

Notes	• Technical specifications refer to the power contacts • Technical data of signal contacts: 50V / 5A, stripping length 8mm • 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 • 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.
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

Downloads

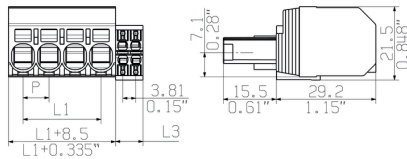
Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Brochure/Catalogue	FL DRIVES EN MB DEVICE MANUF. EN FL DRIVES DE CAT 2 PORTFOLIOGUIDE EN FL HEATING ELECTR EN FL APPL INVERTER EN FL BASE STATION EN FL ELEVATOR EN FL POWER SUPPLY EN FL 72H SAMPLE SER EN PO OMNIMATE EN
Engineering Data	EPLAN_WSCAD
Engineering Data	STEP
Motion controllers white paper	Download Whitepaper
User Documentation	Operating Instruction BVF Operating Instruction BVF hybrid QR-Code product handling video
White Paper UL 600 V	Download Whitepaper
White Paper wire connection	Download Whitepaper

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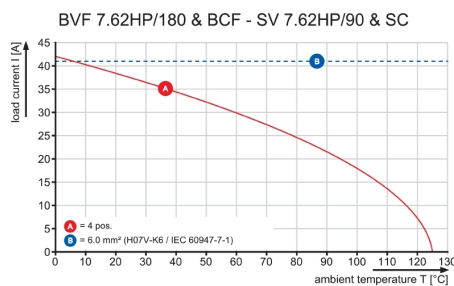
Drawings

Dimensional drawing



Graph

Graph



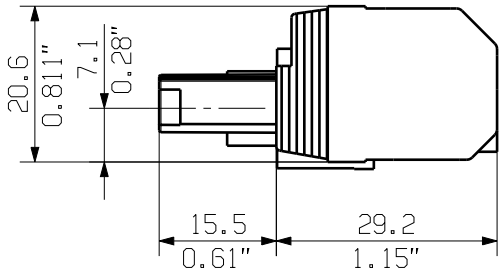
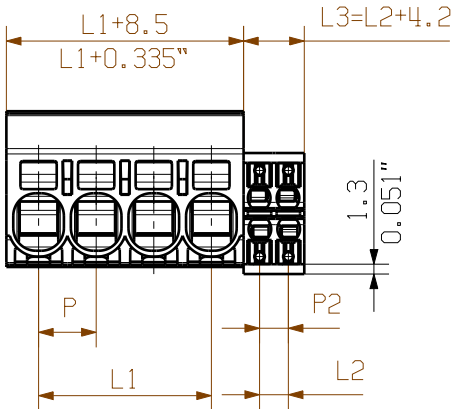
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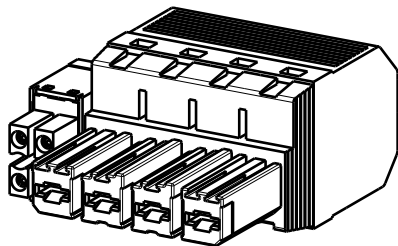
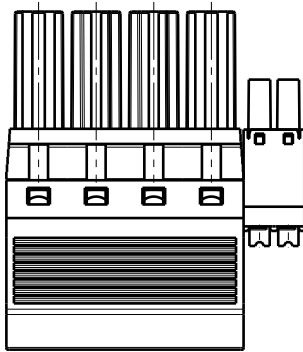
Dimensions without tolerances are no check dimensions

The English version is binding

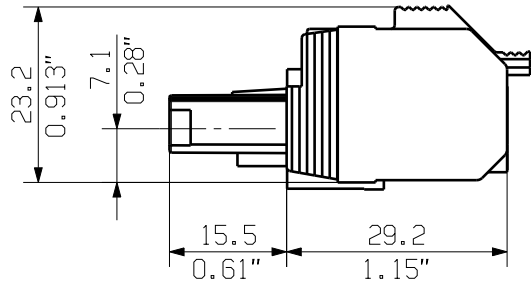
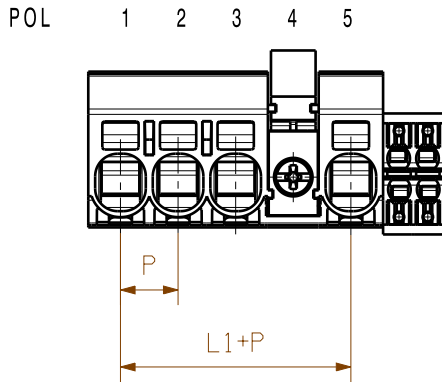
BVF7.62HP/.../180BCF/...R
SHOWN: BVF7.62HP/04/180BCF/04R



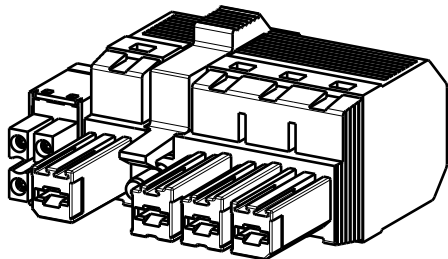
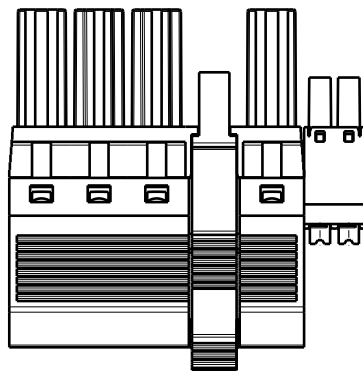
SCREWDRIVER
CONDUCTOR



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



SCREWDRIVER
CONDUCTOR



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

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

GENERAL TOLERANCE:
DIN ISO 2768-m

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					

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.

	Max. nos.		Prim PLM Part No.:005815		Prim ERP Part No.:1080320000	
	First Issue Date 29.08.2018		00			
	Modification					
	Drawn	Date 24.10.2018	Name Administrator			
	Responsible		Krug, Matthias			
Scale: 2/11	Size: A3	Approved				
Drawings Assembly			Product file: 7390 BVF/SVF 7.62HP			

BVF 7.62HP/04/180 BCF
BUCHSENLEISTE
SOCKET BLOCK

not released

49284
Drawing no. Issue no.
Sheet 01 of 01 sheets