OMNIMATE Power - series BV/SV 7.62HP
BVF 7.62HP/02/180MF2 BCF/06R SN BK BX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
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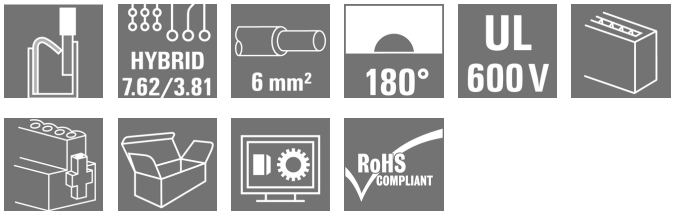
www.weidmueller.com

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.

The self-locking middle flange with automatic interlock reduces the space requirements by one pitch width in comparison with conventional solutions. Optionally also available with additional mounting screw.

General ordering data

Type	BVF 7.62HP/02/180MF2 BCF/06R SN BK BX
Order No.	1081030000
Version	PCB plug-in connector, female plug, 7.62 mm, No. of poles: 2, 180°, PUSH IN, Clamping range, max. : 10 mm², Box
GTIN (EAN)	4032248843800
Qty.	45 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	18 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	2	L1 in mm	15.24 mm
L1 in inches	0.6 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	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 mm²
Clamping range, max.	10 mm²
Solid, min. H05(07) V-U	0.5 mm²
Solid, max. H05(07) V-U	10 mm²
Stranded, max. H07V-R	10 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.	1.5 mm²
w. plastic collar ferrule, DIN 46228 pt 4, max.	6 mm²
w. wire end ferrule, DIN 46228 pt 1, min	1.5 mm²
w. wire end ferrule, DIN 46228 pt 1, max.	10 mm²

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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
	Cross-section for conductor connection	Type	fine-wired	
		nominal	10 mm²	
	AEH	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)	38 A
Rated current, max. no. of poles (Tu=20°C)	38 A	Rated current, min. no. of poles (Tu=40°C)	34 A
Rated current, max. no. 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

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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 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	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)	6
L2 in mm	7.62 mm	L2 in inch	0.3 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 mm²	Clamping range, rated connection (Signal)	0.2...1.5 mm²
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 mm²	solid, H05(07) V-U (Signal)	0.14...1.5 mm²
flexible, H05(07) V-K (Power)	0.5...6 mm²	flexible, H05(07) V-K (Signal)	0.14...1.5 mm²
with wire-end ferrule with collar (Power)	0.5...6 mm²	with wire-end ferrule with collar, DIN 46 228/4 (Signal)	0.25...1.5 mm²
with wire-end ferrule according to DIN 46 228/1 (Power)	0.5...6 mm²	with wire-end ferrule according to DIN 46 228/1 (Signal)	0.25...1.5 mm²

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. • 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

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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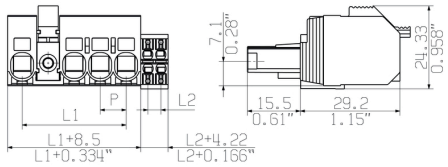
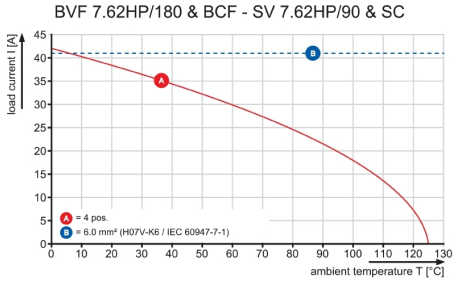
Drawings

Dimensional drawing



Connection diagram

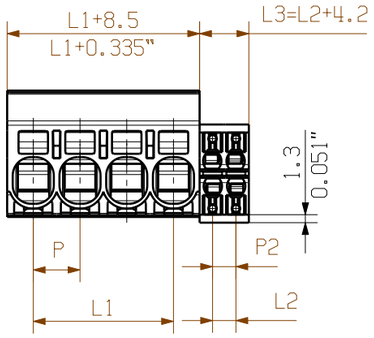
Graph

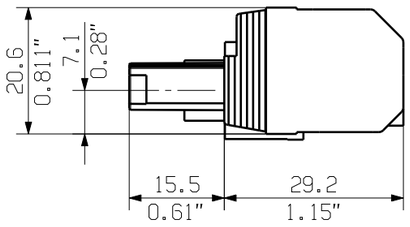


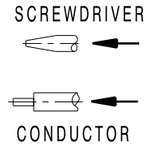
Dimensions without tolerances are no check dimensions

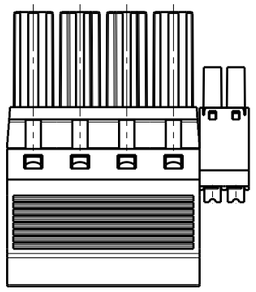
The English version is binding

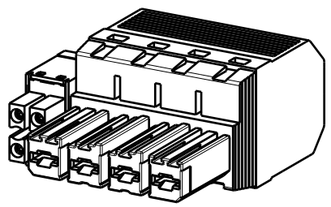
BVF7.62HP/.../180BCF/...R
SHOWN: BVF7.62HP/04/180BCF/04R



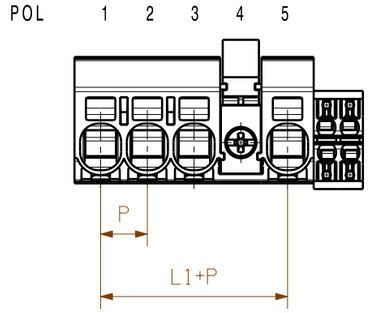


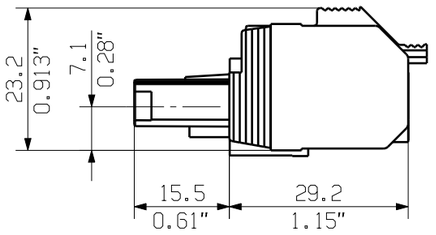


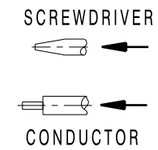


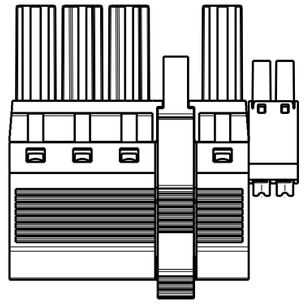


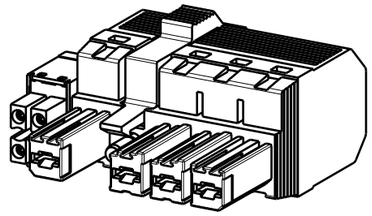
BVF7.62HP/.../180MF...BCF/...R
SHOWN: BVF7.62HP/04/180MF4BCF/04R











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

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
5	30,48	7.62			
4	22,86				
3	15,24				
2	7,62				

P=POL/POLES
MF= MITTELFLANSCH/MIDDLE FLANGE

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

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 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 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 occuring of electrical, mechanical, thermic and corrosive stress will be satisfied.

RoHS COMPLIANT

Max. nos.

First Issue Date 29.08.2018

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Modification

Prim PLM Part No.:005815

Prim ERP Part No.:1080320000

Weidmüller

49284 Drawing no.

10 Issue no.

Sheet 01 of 01 sheets

		Date	Name
Drawn		24.10.2018	Administrator
Responsible			Krug, Matthias
Approved			

Scale: 2/11 Size: A3

Drawings Assembly

BVF 7.62HP/04/180 BCF
BUCHSENLEISTE
SOCKET BLOCK
not released

Product file: 7390 BVF/SVF 7.62HP .