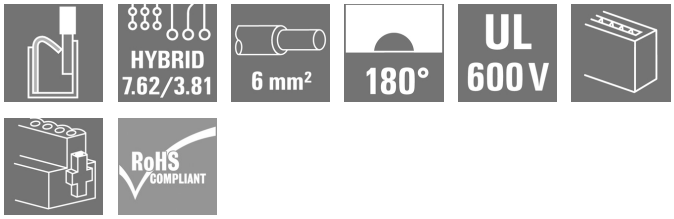
BVFL 7.62HP/05/180MF3 BCF/08R SN BK BX

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. With adjustable, self-locking pusher for opening the contact point.

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

Version	PCB plug-in connector, female plug, 7.62 mm, Number of poles: 5, 180°, PUSH IN with actuator, Clamping range, max. : 6 mm², Box
Order No.	2628980000
Type	BVFL 7.62HP/05/180MF3 BCF/08R SN BK BX
GTIN (EAN)	4050118632996
Qty.	30 pc(s).
Product data	IEC: 1000 V / 38 A / 0.5 - 6 mm² UL: 600 V / 35 A / AWG 24 - AWG 8
Packaging	Box

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Technical data

Dimensions and weights

Net weight	37.257 g

System Parameters

Product family	OMNIMATE Power - series BV/SV 7.62HP	Type of connection	Field connection
Wire connection method	PUSH IN with actuator	Pitch in mm (P)	7.62 mm
Pitch in inches (P)	0.3 "	Conductor outlet direction	180°
Number of poles	5	L1 in mm	38.1 mm
L1 in inches	1.5 "	L2 in mm	11.43 mm
L2 in inch	0.45 "	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		

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.	0.5 mm²
Clamping range, max.	6 mm²
Solid, min. H05(07) V-U	0.5 mm²
Solid, max. H05(07) V-U	6 mm²
Flexible, min. H05(07) V-K	0.5 mm²
Flexible, max. H05(07) V-K	6 mm²
w. plastic collar ferrule, DIN 46228 pt 4, min.	0.5 mm²
w. plastic collar ferrule, DIN 46228 pt 4, max.	6 mm²
w. wire end ferrule, DIN 46228 pt 1, min.	0.5 mm²
w. wire end ferrule, DIN 46228 pt 1, max.	6 mm²

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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)	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 UL 1059

Institute (cURus)	c UL us	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	338 mm
VPE width	130 mm	VPE height	54 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)	8	L2 in mm	11.43 mm
L2 in inch	0.45 "	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 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 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	27-46-03-02	ECLASS 13.0	27-46-03-02
ECLASS 14.0	27-46-03-02		

Environmental Product Compliance

REACH SVHC	/
RoHS Compliance Status	Compliant without exemption

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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	• 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. • Additional pole combinations on request • 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	c UL us
ROHS	Conform
UL File Number Search	UL Website
Certificate No. (cURus)	E60693

Downloads

Engineering Data	CAD data – STEP
Product Change Notification	EN - Change of isolation material DE - Werkstoffänderung Pusher 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	Operating Instruction BVFL hybrid QR-Code product handling video
Catalogues	Catalogues in PDF-format

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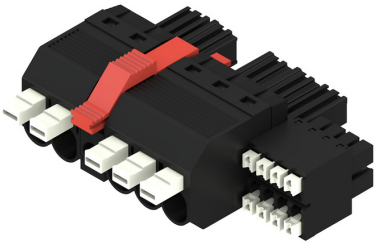
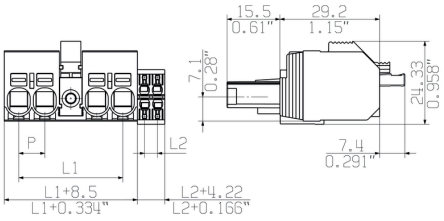
Drawings

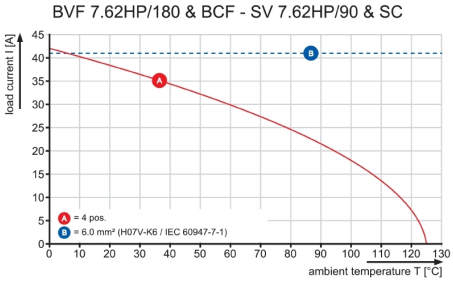
Product image



Dimensional drawing



Graph



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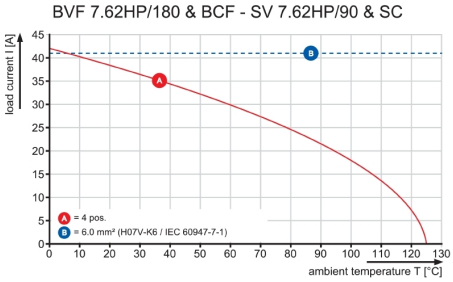
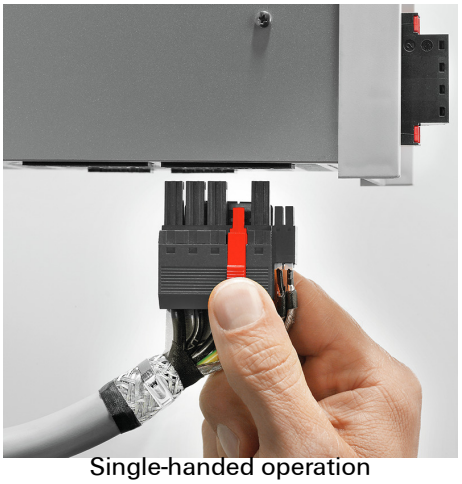


Product benefits



Single-handed operation
Automatic latching