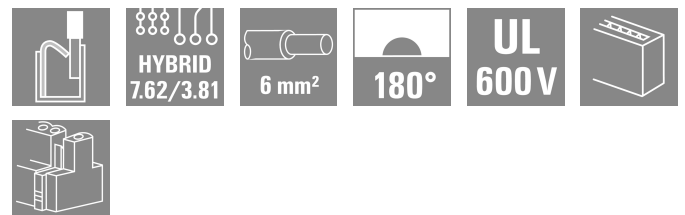
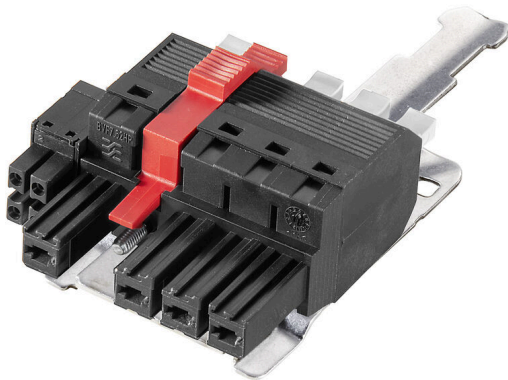


BVFL 7.62HP/4/180MSF4 BCF/4 SNBKBX SH180

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com



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. Including pre-assembled pluggable shield connection for large area shielding in your application.

Directly during the plug-in process itself, the shield connection is attached vibration-proof to the contact area of the metal housing.

General ordering data

Version	PCB plug-in connector, female plug, 7.62 mm, Number of poles: 4, 180°, PUSH IN with actuator, Clamping range, max. : 6 mm ² , Box
Order No.	2681770000
Type	BVFL 7.62HP/4/180MSF4 BCF/4 SNBKBX SH180
GTIN (EAN)	4050118691429
Qty.	20 items
Product data	IEC: 800 V / 38 A / 0.5 - 6 mm ² UL: / AWG 24 - AWG 8
Packaging	Box

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Technical data
Approvals

ROHS	Conform
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Dimensions and weights

Net weight	48.38 g
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Environmental Product Compliance

RoHS Compliance Status	Compliant without exemption
REACH SVHC	No SVHC above 0.1 wt%

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)	0.300 "	Conductor outlet direction	180°
Number of poles	4	L1 in mm	30.48 mm
L1 in inches	1.200 "	L2 in mm	3.81 mm
L2 in inch	0.150 "	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	Tightening torque for screw flange, min.	0.2 Nm
Tightening torque for screw flange, max.	0.3 Nm	Screwdriver blade	0.6 x 3.5
Plugging cycles	25		

Material data

Insulating material	PA GF	Colour	black
Colour of operational elements	white	Colour chart (similar)	RAL 9011
Insulating material group	II	Comparative Tracking Index (CTI)	≥ 500
Moisture Level (MSL)		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 mm ²
Clamping range, max.	6 mm ²
Solid, min. H05(07) V-U	0.5 mm ²
Solid, max. H05(07) V-U	6 mm ²
Flexible, min. H05(07) V-K	0.5 mm ²
Flexible, max. H05(07) V-K	6 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, 0.5 mm ² min.	
w. plastic collar ferrule, DIN 46228 pt 4, 6 mm ² max.	
w. wire end ferrule, DIN 46228 pt 1, 0.5 mm ² min.	
w. wire end ferrule, DIN 46228 pt 1, 6 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
		Recommended wire-end ferrule	H1,0/18 GE
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
		Recommended wire-end ferrule	H1,5/18D SW
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	H1,5/12
	Stripping length	nominal	12 mm
		Recommended wire-end ferrule	H1,5/12
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
		Recommended wire-end ferrule	H2,5/19D BL
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	H2,5/12
	Stripping length	nominal	12 mm
		Recommended wire-end ferrule	H4,0/12
Cross-section for conductor connection	Type	fine-wired	
	nominal	4 mm ²	
wire end ferrule	Stripping length	nominal	12 mm
		Recommended wire-end ferrule	H4,0/20D GR
	Stripping length	nominal	14 mm
		Recommended wire-end ferrule	H6,0/20 SW
Cross-section for conductor connection	Type	fine-wired	
	nominal	6 mm ²	
wire end ferrule	Stripping length	nominal	14 mm
		Recommended wire-end ferrule	H6,0/12
	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.

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	800 V
Rated voltage for surge voltage class / pollution degree III/2	630 V	Rated voltage for surge voltage class / pollution degree III/3	630 V

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Technical data

Rated impulse voltage for surge voltage class/ pollution degree II/2	6 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	6 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	6 kV	Short-time withstand current resistance	3 x 1s with 420 A
Creepage distance, min.	12.7 mm	Clearance, min.	10.4 mm

Rated data acc. to UL 1059

Rated voltage (Use group F / UL 1059)	600 V	Rated current (Use group F / UL 1059)	33 A
Wire cross-section, AWG, min.	AWG 24	Wire cross-section, AWG, max.	AWG 8

Packing

Packaging	Box	VPE length	338.00 mm
VPE width	130.00 mm	VPE height	33.00 mm

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	0.150 "	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)	250 V
Rated voltage for overvoltage class/ pollution severity level III/2 (Signal)	150 V	Rated voltage for overvoltage class/ pollution severity level III/3 (Signal)	63 V
Rated impulse voltage for overvoltage class/pollution severity level II/2 (Signal)	2.5 kV	Rated impulse voltage for overvoltage class/pollution severity level III/2 (Signal)	2.5 kV
Rated impulse voltage for overvoltage class/pollution severity level III/3 (Signal)	2.5 kV	Short-time withstand current resistance (Signal)	3 x 1s with 80 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

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. • Additional pole combinations on request

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Technical data

- 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

Classifications

ETIM 8.0	EC002638	ETIM 9.0	EC002638
ETIM 10.0	EC002638	ECLASS 14.0	27-46-03-02
ECLASS 15.0	27-46-03-02		

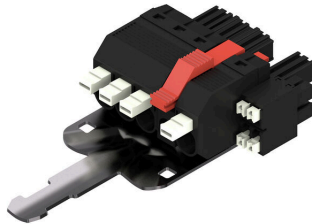
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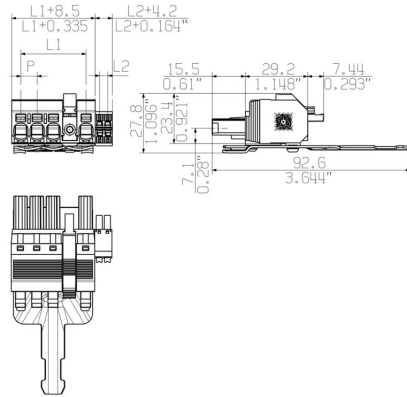
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Drawings

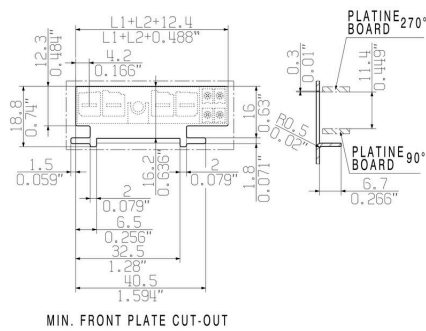
Product image



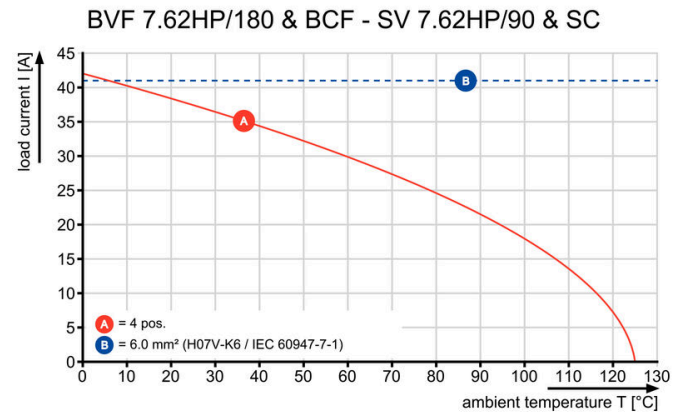
Dimensional drawing



Graph



Graph



Product benefits



one connector for: Power, Signal (data) and Shielding

Product benefits



Single-handed operation Automatic latching