

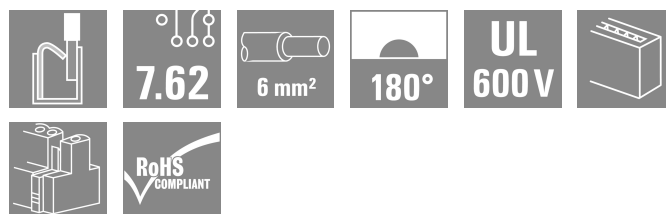
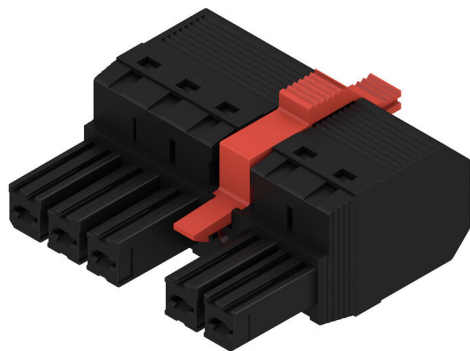
BVF 7.62HP/05/180MF3 SN BK BX SO**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image

Similar to illustration

180° female header with PUSH IN connection technology for field wiring in 6 mm² with 7.62 pitch.

Meets the requirements as per UL1059 600 V class C and IEC 61800-5-1. Ideal touch-safe solution for the power output.

The self-locking (optionally also screwable) middle flange reduces the space requirements by one pitch width in comparison with conventional solutions.

Variants: without flange, external flange, middle flange with detent fastening and optionally additional screw mount.

General ordering data

Version	PCB plug-in connector, female plug, 7.62 mm, Number of poles: 5, 180°, Clamping range, max. : 10 mm ² , Box
Order No.	2563760000
Type	BVF 7.62HP/05/180MF3 SN BK BX SO
GTIN (EAN)	4050118572834
Qty.	30 items
Product data	IEC: 1000 V / 57 A / 0.2 - 10 mm ² UL: 600 V / 39 A / AWG 24 - AWG 8
Packaging	Box

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Technical data

Approvals

ROHS	Conform
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Dimensions and weights

Net weight	28.02 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
Pitch in mm (P)	7.62 mm	Pitch in inches (P)	0.300 "
Conductor outlet direction	180°	Number of poles	5
L1 in mm	38.10 mm	L1 in inches	1.500 "
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	Protection degree	IP20
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	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.	10 mm ²		
Solid, min. H05(07) V-U	0.2 mm ²		
Solid, max. H05(07) V-U	6 mm ²		
Flexible, min. H05(07) V-K	0.2 mm ²		
Flexible, max. H05(07) V-K	10 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, min.	0.5 mm ²		
w. wire end ferrule, DIN 46228 pt 1, max.	6 mm ²		
Clampable conductor	Cross-section for conductor connection	Type	fine-wired

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	nominal	0.5 mm ²
wire end ferrule	Stripping length	nominal 14 mm
	Recommended wire-end ferrule	H0.5/12 OR
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
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
Cross-section for conductor connection	Type	fine-wired
	nominal	1.5 mm ²
wire end ferrule	Stripping length	nominal 12 mm
	Recommended wire-end ferrule	H1.5/12
	Stripping length	nominal 15 mm
	Recommended wire-end ferrule	H1.5/18D SW
Cross-section for conductor connection	Type	fine-wired
	nominal	2.5 mm ²
wire end ferrule	Stripping length	nominal 12 mm
	Recommended wire-end ferrule	H2.5/12
	Stripping length	nominal 14 mm
	Recommended wire-end ferrule	H2.5/19D BL
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
Cross-section for conductor connection	Type	fine-wired
	nominal	6 mm ²
wire end ferrule	Stripping length	nominal 12 mm
	Recommended wire-end ferrule	H6.0/12
	Stripping length	nominal 14 mm
	Recommended wire-end ferrule	H6.0/20 SW
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.

Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	57 A
Rated current, max. number of poles (Tu=20°C)	54 A	Rated current, min. number of poles (Tu=40°C)	51 A

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Rated current, max. number of poles (Tu=40°C)	45 A	Rated voltage for surge voltage class / pollution degree II/2	1000 V
Rated voltage for surge voltage class / pollution degree III/2	1000 V	Rated voltage for surge voltage class / pollution degree III/3	800 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	6000 V	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
Creepage distance, min.	12.7 mm	Clearance, min.	10.4 mm

Rated data acc. to CSA

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

Rated data acc. to UL 1059

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)	39 A
Rated current (Use group C / UL 1059)	39 A	Rated current (Use group D / UL 1059)	5 A
Wire cross-section, AWG, min.	AWG 24	Wire cross-section, AWG, max.	AWG 8

Packing

Packaging	Box	VPE length	352.00 mm
VPE width	140.00 mm	VPE height	62.00 mm

Type tests

Test: Durability of markings	Standard	DIN EN 61984 section 7.3.2 / 09.02 taking pattern from DIN EN 60068-2-70 / 07.96	
	Test	mark of origin, type identification, pitch	
	Evaluation	available	
	Test	durability	
	Evaluation	passed	
Test: Misengagement (Non-interchangeability)	Standard	DIN EN 61984 section 6.3 and 6.9.1 / 09.02, DIN EN 60512-13-5 / 11.08	
	Test	180° turned with coding elements	
	Evaluation	passed	
	Test	180° turned without coding elements	
	Evaluation	passed	
Test: Clampable cross section	Standard	DIN EN 60999-1 section 7 and 9.1 / 12.00, DIN EN 60947-1 section 8.2.4.5.1 / 04.08	
	Conductor type	Type of conductor and conductor cross-section	solid 0.5 mm ²
		Type of conductor and conductor cross-section	stranded 0.5 mm ²
		Type of conductor and conductor cross-section	solid 6 mm ²
		Type of conductor and conductor cross-section	stranded 6 mm ²
		Type of conductor and conductor cross-section	AWG 24/1

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		Type of conductor and conductor cross-section	AWG 24/19
		Type of conductor and conductor cross-section	AWG 14/1
		Type of conductor and conductor cross-section	AWG 14/19
	Evaluation	passed	
	Standard	DIN EN 60999-1 section 9.4 / 12.00	
	Requirement	0.3 kg	
	Conductor type	Type of conductor and conductor cross-section	H05V-U0.5
		Type of conductor and conductor cross-section	H05V-K0.5
		Type of conductor and conductor cross-section	AWG 20/1
		Type of conductor and conductor cross-section	AWG 20/19
Evaluation	passed		
Requirement	1.4 kg		
	Conductor type	Type of conductor and conductor cross-section	H07V-U6
		Type of conductor and conductor cross-section	H07V-K6
		Type of conductor and conductor cross-section	AWG 10/1
		Type of conductor and conductor cross-section	AWG 10/19
	Evaluation	passed	
	Standard	DIN EN 60999-1 section 9.5 / 12.00	
	Requirement	≥20 N	
	Conductor type	Type of conductor and conductor cross-section	H05V-U0.5
		Type of conductor and conductor cross-section	H05V-K0.5
		Type of conductor and conductor cross-section	AWG 20/1
Type of conductor and conductor cross-section		AWG 20/19	
Evaluation	passed		
Requirement	≥80 N		
	Conductor type	Type of conductor and conductor cross-section	H07V-U6
		Type of conductor and conductor cross-section	H07V-K6
		Type of conductor and conductor cross-section	AWG 10/1

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Technical data

	Type of conductor and conductor cross-section	AWG 10/19
Evaluation	passed	

Important note

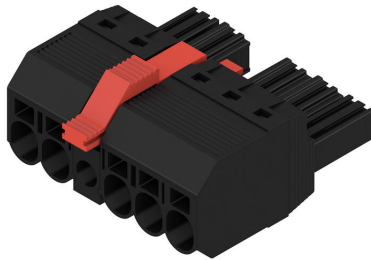
IPC conformity	Conformity: The products are developed, manufactured and delivered according international recognized standards and norms and comply with the assured properties in the data sheet resp. fulfill decorative properties in accordance with IPC-A-610 "Class 2". Further claims on the products can be evaluated on request.
Notes	• Additional variants on request • Wire end ferrule with plastic collar to DIN 46228/4 • Wire end ferrule without plastic collar to DIN 46228/1 • P on drawing = pitch • 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. • 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	27-46-02-02
ECLASS 15.0	27-46-02-02		

Drawings

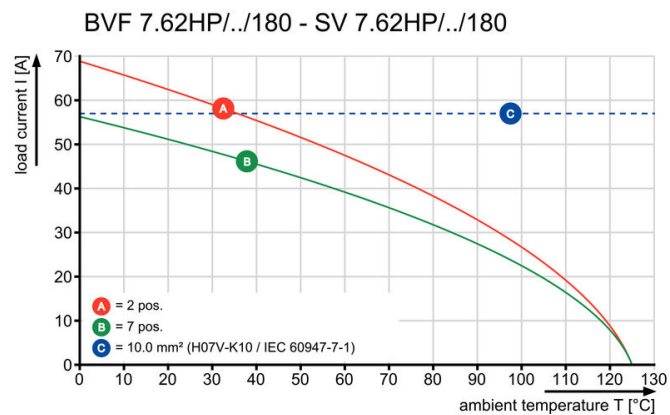
Product image



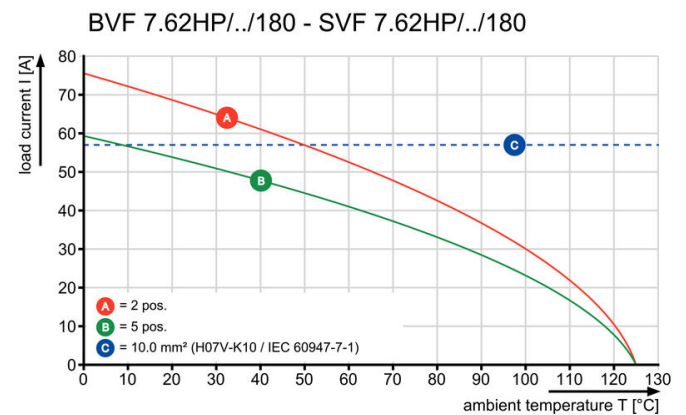
Connection diagram

6	M(S)F6	o	o	o	o	o	X	o
6	M(S)F5	o	o	o	o	X	o	o
6	M(S)F4	o	o	o	X	o	o	o
6	M(S)F3	o	o	X	o	o	o	o
6	M(S)F2	o	X	o	o	o	o	o
5	M(S)F5	o	o	o	o	X	o	o
5	M(S)F4	o	o	o	X	o	o	o
5	M(S)F3	o	o	X	o	o	o	o
5	M(S)F2	o	X	o	o	o	o	o
4	M(S)F4	o	o	o	X	o	o	o
4	M(S)F3	o	o	X	o	o	o	o
4	M(S)F2	o	X	o	o	o	o	o
3	M(S)F3	o	o	X	o	o	o	o
3	M(S)F2	o	X	o	o	o	o	o
2	M(S)F2	o	X	o	o	o	o	o
		1	2	3	4	5	6	7
NO OF POLES		POS. 1 2 3 4 5						
X = MIDDLE FLANGE POSITION								

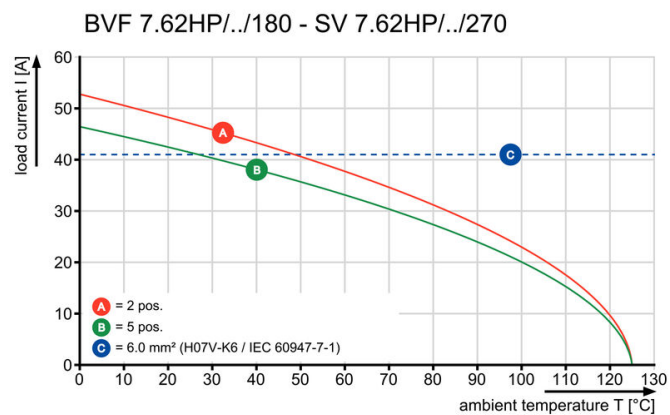
Graph



Graph



Graph



Product benefits



Installation without tools Outlet direction: 90° und 180°