

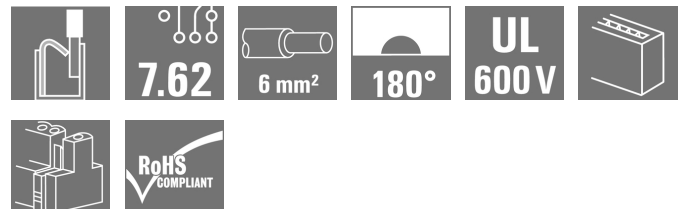
BVF 7.62HP/03/180MF3 SN BK BX PRT**Weidmüller Interface GmbH & Co. KG**

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: 3, 180°, PUSH IN, Clamping range, max. : 10 mm ² , Box
Order No.	1505030000
Type	BVF 7.62HP/03/180MF3 SN BK BX PRT
GTIN (EAN)	4050118313543
Qty.	50 pc(s).
Product data	IEC: 1000 V / 57 A / 0.5 - 10 mm ² UL: 600 V / 39 A / AWG 24 - AWG 8
Packaging	Box

Creation date April 15, 2021 3:57:06 PM CEST

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Technical data

Dimensions and weights

Depth	47.7 mm	Depth (inches)	1.878 inch
Height	22.9 mm	Height (inches)	0.902 inch
Net weight	17.614 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°
Number of poles	3	L1 in mm	22.86 mm
L1 in inches	0.9 inch	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
Colour chart (similar)	RAL 9011	Insulating material group	II
Comparative Tracking Index (CTI)	≥ 500	Insulation strength	≥ 10 ⁸ Ω
UL 94 flammability rating	V-0	Contact material	Copper 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	0.5 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, 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, 10 mm ² max.	

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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		H0.5/12 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.		

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Technical data

Rated data acc. to IEC

tested acc. to standard

IEC 60664-1, IEC 61984

Rated current, max. number of poles
(Tu=20°C)

51 A

Rated current, max. number of poles
(Tu=40°C)

45 A

Rated voltage for surge voltage class /
pollution degree III/2

1,000 V

Rated impulse voltage for surge voltage
class/ pollution degree II/2

6 kV

Rated impulse voltage for surge voltage
class/ contamination degree III/3

8 kV

Rated current, min. number of poles
(Tu=20°C)

57 A

Rated current, min. number of poles
(Tu=40°C)

57 A

Rated voltage for surge voltage class /
pollution degree II/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 III/2

8 kV

Short-time withstand current resistance

3 x 1s with 420 A

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)

39 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)

39 A

Rated current (Use group D / UL 1059)

5 A

Wire cross-section, AWG, max.

AWG 8

Packing

Packaging

Box

VPE length

338 mm

VPE width

130 mm

VPE height

54 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

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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
		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	
Test for damage to and accidental loosening of conductors	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	

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

Classifications

ETIM 6.0	EC002638	ETIM 7.0	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

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.
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Notes	• Additional colours 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. • MFX and MSFX: X= Position of the middle flange e.g. MF2, MSF3 • Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months
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Technical data

Approvals

Approvals



ROHS	Conform
UL File Number Search	E60693

Downloads

Brochure/Catalogue	Catalogues in PDF-format
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Drawings

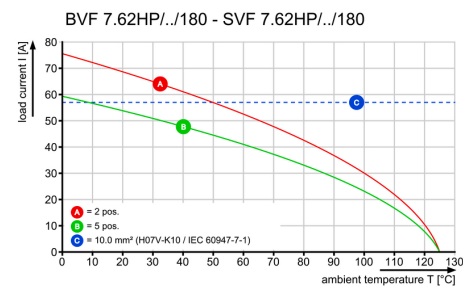
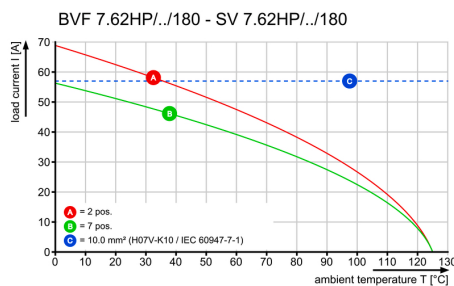
Dimensional drawing

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

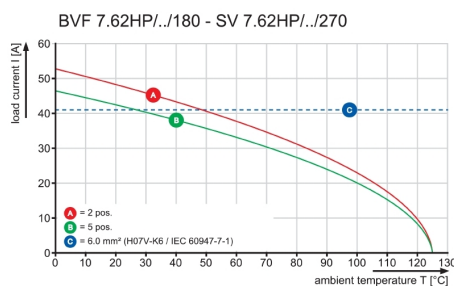
Graph

Graph



Graph

Product benefits



Installation without tools
Outlet direction: 90° und 180°