

## SVF 7.62HP/06/180MSF4 SN BK BX

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

www.weidmueller.com

### Product image



180° inverted inverse voltage-safe male header with PUSH IN connection technology for field wiring. With automatically locking middle flange for field wiring in 6 mm<sup>2</sup> with 7.62 pitch.

Also ideal as a touch-safe solution for inverse voltages. Meets the requirements of UL1059 600 V class C and IEC 61800-5-1.

On request, also available without middle flange.

### General ordering data

Version	PCB plug-in connector, male plug, 7.62 mm, Number of poles: 6, 180°, PUSH IN without actuator, Tension-clamp connection, Clamping range, max. : 10 mm <sup>2</sup> , Box
Order No.	<a href="#">1061180000</a>
Type	SVF 7.62HP/06/180MSF4 SN BK BX
GTIN (EAN)	4032248810598
Qty.	25 items
Product data	IEC: 1000 V / 57 A / 0.5 - 10 mm <sup>2</sup> UL: 600 V / 39 A / AWG 24 - AWG 10
Packaging	Box

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## Technical data

## Approvals

Approvals



ROHS	Conform
UL File Number Search	<a href="#">UL Website</a>
Certificate No. (cURus)	E60693

## Dimensions and weights

Depth	47.7 mm	Depth (inches)	1.8779 inch
Height	23.4 mm	Height (inches)	0.9213 inch
Width	54.22 mm	Width (inches)	2.1346 inch
Net weight	28.83 g		

## 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 without actuator, Tension-clamp connection	Pitch in mm (P)	7.62 mm
Pitch in inches (P)	0.300 "	Conductor outlet direction	180°
Number of poles	6	L1 in mm	45.72 mm
L1 in inches	1.800 "	Number of rows	1
Pin series quantity	1	Rated cross-section	6 mm <sup>2</sup>
Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch	Touch-safe protection acc. to DIN VDE 0470	IP20 plugged
Protection degree	IP20	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 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	4...6 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 <sup>2</sup>
Clamping range, max.	10 mm <sup>2</sup>
Solid, min. H05(07) V-U	0.5 mm <sup>2</sup>
Solid, max. H05(07) V-U	6 mm <sup>2</sup>
Stranded, min. H07V-R	10 mm <sup>2</sup>
Stranded, max. H07V-R	10 mm <sup>2</sup>

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Flexible, min. H05(07) V-K	0.5 mm <sup>2</sup>
Flexible, max. H05(07) V-K	10 mm <sup>2</sup>
w. plastic collar ferrule, DIN 46228 pt 4, min.	1.5 mm <sup>2</sup>
w. plastic collar ferrule, DIN 46228 pt 4, max.	6 mm <sup>2</sup>
w. wire end ferrule, DIN 46228 pt 1, min.	1.5 mm <sup>2</sup>
w. wire end ferrule, DIN 46228 pt 1, max.	6 mm <sup>2</sup>

Clampable conductor	Cross-section for conductor connection	Type	fine-wired	
		nominal	2.5 mm <sup>2</sup>	
wire end ferrule		Stripping length	nominal	12 mm
		Recommended wire-end ferrule	<a href="#">H2.5/12</a>	
		Stripping length	nominal	14 mm
		Recommended wire-end ferrule	<a href="#">H2.5/19D BL</a>	
Cross-section for conductor connection		Type	fine-wired	
		nominal	4 mm <sup>2</sup>	
wire end ferrule		Stripping length	nominal	12 mm
		Recommended wire-end ferrule	<a href="#">H4.0/12</a>	
		Stripping length	nominal	14 mm
		Recommended wire-end ferrule	<a href="#">H4.0/20D GR</a>	
Cross-section for conductor connection		Type	fine-wired	
		nominal	6 mm <sup>2</sup>	
wire end ferrule		Stripping length	nominal	12 mm
		Recommended wire-end ferrule	<a href="#">H6.0/12</a>	
		Stripping length	nominal	14 mm
		Recommended wire-end ferrule	<a href="#">H6.0/20 SW</a>	
Cross-section for conductor connection		Type	fine-wired	
		nominal	1.5 mm <sup>2</sup>	
wire end ferrule		Stripping length	nominal	15 mm
		Recommended wire-end ferrule	<a href="#">H1.5/18D SW</a>	
		Stripping length	nominal	12 mm
		Recommended wire-end ferrule	<a href="#">H1.5/12</a>	

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)	50 A	Rated current, min. number of poles (Tu=40°C)	57 A
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	800 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
Creepage distance, min.	12.7 mm	Clearance, min.	12.7 mm

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**Technical data**

**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)	36 A
Rated current (Use group C / CSA)	36 A	Rated current (Use group D / CSA)	5 A
Wire cross-section, AWG, min.	AWG 24	Wire cross-section, AWG, max.	AWG 10

**Rated data acc. to UL 1059**

Institute (cURus)	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)	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 10
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

**Packing**

Packaging	Box	VPE length	352.00 mm
VPE width	135.00 mm	VPE height	60.00 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		
Test: Misengagement (Non-interchangeability)	Evaluation	passed		
	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: 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 <sup>2</sup>	
		Type of conductor and conductor cross-section	stranded 0.5 mm <sup>2</sup>	
		Type of conductor and conductor cross-section	solid 6 mm <sup>2</sup>	
		Type of conductor and conductor cross-section	stranded 6 mm <sup>2</sup>	
		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	

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		Type of conductor and conductor cross-section	AWG 14/19
Test for damage to and accidental loosening of conductors	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		
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		

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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	<ul style="list-style-type: none"> <li>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</li> <li>Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months</li> </ul>

### 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		

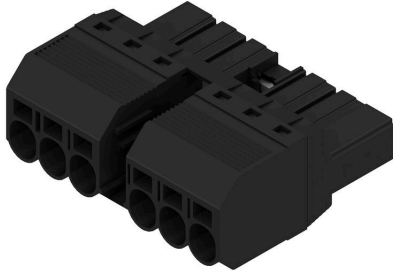
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Drawings

Product image



Dimensional drawing



Graph

BVF 7.62HP/./180 - SVF 7.62HP/./180



Graph

BVZ 7.62HP/./180 - SVZ 7.62HP/./180

