

**SVF 7.62HP/03/180MF3 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: 3, 180°, PUSH IN without actuator, Tension-clamp connection, Clamping range, max. : 10 mm <sup>2</sup> , Box
Order No.	<a href="#">1061040000</a>
Type	SVF 7.62HP/03/180MF3 SN BK BX
GTIN (EAN)	4032248810703
Qty.	50 pc(s).
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

Creation date August 25, 2024 2:13:42 AM CEST

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## Technical data

## Dimensions and weights

Depth	47.7 mm	Depth (inches)	1.878 inch
Height	23.4 mm	Height (inches)	0.921 inch
Width	31.36 mm	Width (inches)	1.235 inch
Net weight	17.34 g		

## 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)	0.3 "	Conductor outlet direction	180°
Number of poles	3	L1 in mm	22.86 mm
L1 in inches	0.9 "	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	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	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>
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, 1.5 mm <sup>2</sup> min.	
w. plastic collar ferrule, DIN 46228 pt 4, 6 mm <sup>2</sup> max.	
w. wire end ferrule, DIN 46228 pt 1, 1.5 mm <sup>2</sup> min.	
w. wire end ferrule, DIN 46228 pt 1, 6 mm <sup>2</sup> max.	

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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, max. number of poles (Tu=20°C)	50 A	Rated current, min. number of poles (Tu=20°C)	57 A
Rated current, max. number of poles (Tu=40°C)	45 A	Rated current, min. number of poles (Tu=40°C)	57 A
Rated voltage for surge voltage class / pollution degree III/2	800 V	Rated voltage for surge voltage class / pollution degree II/2	1,000 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	6 kV	Rated voltage for surge voltage class / pollution degree III/3	800 V
Rated impulse voltage for surge voltage class/ contamination degree III/3	8 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	8 kV
Clearance, min.	12.7 mm	Short-time withstand current resistance	3 x 1s with 420 A
		Creepage distance, min.	12.7 mm

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## Technical data

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

## 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 10

## Packing

Packaging	Box	VPE length	352 mm
VPE width	138 mm	VPE height	61 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	180° turned without coding elements
	Evaluation	passed

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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 solid 0.5 mm <sup>2</sup> conductor cross-section
		Type of conductor and stranded 0.5 mm <sup>2</sup> conductor cross-section
		Type of conductor and solid 6 mm <sup>2</sup> conductor cross-section
		Type of conductor and stranded 6 mm <sup>2</sup> conductor cross-section
		Type of conductor and AWG 24/1 conductor cross-section
		Type of conductor and AWG 24/19 conductor cross-section
		Type of conductor and AWG 14/1 conductor cross-section
		Type of conductor and AWG 14/19 conductor cross-section
	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 H05V-U0.5 conductor cross-section
		Type of conductor and H05V-K0.5 conductor cross-section
		Type of conductor and AWG 20/1 conductor cross-section
		Type of conductor and AWG 20/19 conductor cross-section
	Evaluation	passed
	Requirement	1.4 kg
	Conductor type	Type of conductor and H07V-U6 conductor cross-section
		Type of conductor and H07V-K6 conductor cross-section
		Type of conductor and AWG 10/1 conductor cross-section
		Type of conductor and AWG 10/19 conductor cross-section
	Evaluation	passed

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## Technical data

Pull-out test	Standard	DIN EN 60999-1 section 9.5 / 12.00
	Requirement	≥20 N
	Conductor type	Type of conductor and H05V-U0.5 conductor cross-section
		Type of conductor and H05V-K0.5 conductor cross-section
		Type of conductor and AWG 20/1 conductor cross-section
		Type of conductor and AWG 20/19 conductor cross-section
	Evaluation	passed
	Requirement	≥80 N
	Conductor type	Type of conductor and H07V-U6 conductor cross-section
		Type of conductor and H07V-K6 conductor cross-section
		Type of conductor and AWG 10/1 conductor cross-section
		Type of conductor and AWG 10/19 conductor cross-section
	Evaluation	passed

## 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	27-46-02-02	ECLASS 13.0	27-46-02-02
ECLASS 14.0	27-46-02-02		

## 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	<ul style="list-style-type: none"> <li>• Additional variants on request</li> <li>• Rated current related to rated cross-section &amp; min. No. of poles.</li> <li>• Wire end ferrule without plastic collar to DIN 46228/1</li> <li>• Wire end ferrule with plastic collar to DIN 46228/4</li> <li>• P on drawing = pitch</li> <li>• 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.</li> <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>

## Approvals

Approvals



ROHS	Conform
UL File Number Search	UL Website
Certificate No. (cURus)	E60693

## Downloads

Approval/Certificate/Document of Conformity	<a href="#">Declaration of the Manufacturer</a>
Engineering Data	<a href="#">CAD data – STEP</a>
Product Change Notification	<a href="#">20220201 Visual change OMNIMATE® Power PCB terminal blocks and connectors</a> <a href="#">20220201 Visuelle Änderung OMNIMATE® Power Leiterplattenklemmen und -steckverbinder</a>
User Documentation	<a href="#">QR-Code product handling video</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>
Brochures	<a href="#">FL DRIVES EN</a> <a href="#">MB DEVICE MANUF. EN</a> <a href="#">FL DRIVES DE</a> <a href="#">FL HEATING ELECTR EN</a> <a href="#">FL APPL INVERTER EN</a> <a href="#">FL BASE STATION EN</a> <a href="#">FL ELEVATOR EN</a> <a href="#">FL POWER SUPPLY EN</a> <a href="#">FL 72H SAMPLE SER EN</a> <a href="#">PO OMNIMATE EN</a> <a href="#">PO OMNIMATE EN</a>

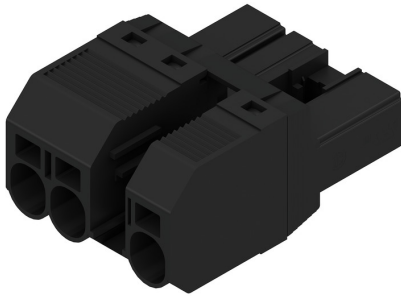
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# Drawings

## Product image



## Dimensional drawing



## Graph



## Graph





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[www.weidmueller.com](http://www.weidmueller.com)**Accessories****Slotted screwdriver**

Slotted screwdriver with rounded blade SD DIN 5265, ISO 2380/2, output to DIN 5264, ISO 2380/1. ChromTop tip, SoftFinish grip

**General ordering data**

Type	SDS 0.8X4.5X125	Version
Order No.	<a href="#">9009020000</a>	Screwdriver, Screwdriver
GTIN (EAN)	4032248266883	
Qty.	1 pc(s).	

**Crimping tools****Crimping tools for wire end ferrules, with and without plastic collars**

- Ratchet guarantees precise crimping
- Release option in the event of incorrect operation

**General ordering data**

Type	PZ 6/5	Version
Order No.	<a href="#">9011460000</a>	Pressing tool, Crimping tool for wire-end ferrules, 0.25mm², 6mm²,
GTIN (EAN)	4008190165352	Trapezoidal indentation crimp
Qty.	1 pc(s).	

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## Accessories

## Coupling set



With the aid of the SVF/BVF 7.62HP COUPLE SET the two plug-in elements can be connected back-to-back to form a 2-row connector with a maximum of 2 x 4 poles.

## General ordering data

Type	SVF/BVF 7.62HP COUPLE S ...	Version	Product data	Packaging
Order No.	<a href="#">1440850000</a>	PCB plug-in connector, Accessories, Mounting block, black		Box
GTIN (EAN)	4050118247060			
Qty.	20 pc(s).			

## Coding elements



**The pluggable connections for power electronics - optimised for modern drive technologies, e.g. motor starters, frequency converters and servo-controllers.**

OMNIMATE Power sets the new standard – with increased safety and innovative solutions such as the pluggable shield, integrated signal contacts and one-handed operation.

The three product lines offer you further advantages:

- Application-oriented scalability: from the compact 4 mm<sup>2</sup> connector for 29 A (IEC) or 20 A (UL) up to the sturdy 16 mm<sup>2</sup> connector for 76 A (IEC) or 54 A (UL)
- Unlimited usage up to 1,000 V (IEC) or 600 V (UL)
- A variety of application optimised mounting options

Our Service:

Design your individual connectors simply by using the

## General ordering data

Type	BV/SV 7.62HP KO	Version	Product data	Packaging
Order No.	<a href="#">1937590000</a>	PCB plug-in connector, Accessories, Coding element, black, Number		Box
GTIN (EAN)	4032248608881	of poles: 1		
Qty.	50 pc(s).			