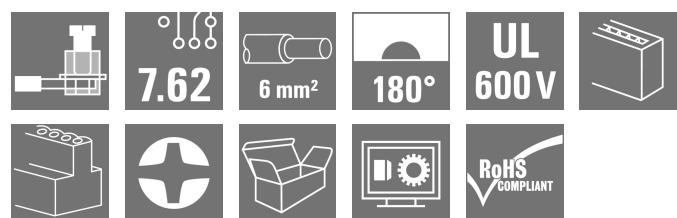


**SVZ 7.62HP/05/180G SN BK BX**

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

[www.weidmueller.com](http://www.weidmueller.com)

**Product image**

High-performance male header with the proven, 100% maintenance-free Weidmüller steel clamping yoke. Side-by-side mounting without sacrificing any poles or with patented multifunction flange for secure, fast fixing without tools. Maximum connection and operating reliability thanks to a mating profile that prevents incorrect connection, unique coding diversity, incorrect wiring protection. Suitable for labelling.

**General ordering data**

Version	PCB plug-in connector, male plug, 7.62 mm, Number of poles: 5, 180°, Clamping yoke connection, Clamping range, max. : 6 mm <sup>2</sup> , Box
Order No.	<a href="#">1931660000</a>
Type	SVZ 7.62HP/05/180G SN BK BX
GTIN (EAN)	4032248581658
Qty.	50 items
Product data	IEC: 1000 V / 57 A / 0.2 - 10 mm <sup>2</sup> UL: 600 V / 42 A / AWG 24 - AWG 8
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	41.45 mm	Depth (inches)	1.6319 inch
Height	23.1 mm	Height (inches)	0.9094 inch
Width	38.1 mm	Width (inches)	1.5 inch
Net weight	24.84 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	Clamping yoke 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	30.48 mm
L1 in inches	1.200 "	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, min.	0.5 Nm	Tightening torque, max.	0.6 Nm
Clamping screw	M 3	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 base material	Cu-alloy
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.	0.2 mm <sup>2</sup>
Clamping range, max.	6 mm <sup>2</sup>
Wire connection cross section AWG, min.	AWG 22

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Wire connection cross section AWG, max.	AWG 8
Solid, min. H05(07) V-U	0.2 mm <sup>2</sup>
Solid, max. H05(07) V-U	6 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, 0.25 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, min.	0.25 mm <sup>2</sup>
w. wire end ferrule, DIN 46228 pt 1, max.	6 mm <sup>2</sup>
Plug gauge in accordance with EN 60999 a x b; ø	2.8 mm x 2.0 mm; 2.4 mm

Clampable conductor	Cross-section for conductor connection	Type	fine-wired
	nominal	0.5 mm <sup>2</sup>	
	wire end ferrule	Stripping length	nominal 14 mm
		Recommended wire-end ferrule	<a href="#">H0,5/18 OR</a>
	Cross-section for conductor connection	Type	fine-wired
	nominal	1 mm <sup>2</sup>	
	wire end ferrule	Stripping length	nominal 15 mm
		Recommended wire-end ferrule	<a href="#">H1,0/18 GE</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>
	Cross-section for conductor connection	Type	fine-wired
	nominal	0.75 mm <sup>2</sup>	
	wire end ferrule	Stripping length	nominal 14 mm
		Recommended wire-end ferrule	<a href="#">H0,75/18 W</a>
	Cross-section for conductor connection	Type	fine-wired
	nominal	2.5 mm <sup>2</sup>	
	wire end ferrule	Stripping length	nominal 14 mm
		Recommended wire-end ferrule	<a href="#">H2,5/19D BL</a>
		Stripping length	nominal 12 mm
		Recommended wire-end ferrule	<a href="#">H2,5/12</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 14 mm
		Recommended wire-end ferrule	<a href="#">H6,0/20 SW</a>

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Stripping length	nominal	12 mm
Recommended wire-end ferrule		<a href="#">H6.0/12</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.
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## 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)	41 A	Rated current, min. number of poles (Tu=40°C)	41 A
Rated current, max. number of poles (Tu=40°C)	41 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	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.	13.8 mm	Clearance, min.	13.56 mm

## Rated data acc. to CSA

Institute (CSA)	CSA	Certificate No. (CSA)	200039-1534443
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)	35 A
Rated current (Use group C / CSA)	35 A	Rated current (Use group D / CSA)	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.		

## 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)	42 A
Rated current (Use group C / UL 1059)	42 A	Rated current (Use group D / UL 1059)	5 A
Wire cross-section, AWG, min.	AWG 24	Wire cross-section, AWG, max.	AWG 8
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

## Packing

Packaging	Box	VPE length	292.00 mm
VPE width	101.00 mm	VPE height	105.00 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, type of material
	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

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	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 / 12.02
	Conductor type	Type of conductor solid 0.5 mm <sup>2</sup> and conductor cross-section
		Type of conductor stranded 0.5 mm <sup>2</sup> and conductor cross-section
		Type of conductor solid 6 mm <sup>2</sup> and conductor cross-section
		Type of conductor stranded 6 mm <sup>2</sup> and conductor cross-section
		Type of conductor AWG 24/1 and conductor cross-section
		Type of conductor AWG 24/19 and conductor cross-section
		Type of conductor AWG 10/1 and conductor cross-section
		Type of conductor AWG 10/19 and conductor cross-section
	Evaluation	passed
Test for damage to and accidental loosening of conductors	Standard	DIN EN 60999-1 section 7 and 9.1 / 12.00
	Requirement	0.2 kg
	Conductor type	Type of conductor AWG 24/1 and conductor cross-section
		Type of conductor AWG 24/19 and conductor cross-section
	Evaluation	passed
	Requirement	0.3 kg
	Conductor type	Type of conductor solid 0.5 mm <sup>2</sup> and conductor cross-section
		Type of conductor stranded 0.5 mm <sup>2</sup> and conductor cross-section
	Evaluation	passed
	Requirement	1.4 kg
	Conductor type	Type of conductor solid 6 mm <sup>2</sup> and conductor cross-section
		Type of conductor stranded 6 mm <sup>2</sup> and conductor cross-section
		Type of conductor AWG 10/1 and conductor cross-section
		Type of conductor AWG 10/19 and conductor cross-section
	Evaluation	passed
Pull-out test	Standard	DIN EN 60999-1 section 9.5 / 12.00

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## Technical data

Requirement	$\geq 10 \text{ N}$	
Conductor type	Type of conductor	AWG 24/1
	and conductor cross-section	
	Type of conductor	AWG 24/19
	and conductor cross-section	
Evaluation	passed	
Requirement	$\geq 20 \text{ N}$	
Conductor type	Type of conductor	solid 0.5 mm <sup>2</sup>
	and conductor cross-section	
	Type of conductor	stranded 0.5 mm <sup>2</sup>
	and conductor cross-section	
Evaluation	passed	
Requirement	$\geq 80 \text{ N}$	
Conductor type	Type of conductor	solid 6 mm <sup>2</sup>
	and conductor cross-section	
	Type of conductor	stranded 6 mm <sup>2</sup>
	and conductor cross-section	
	Type of conductor	AWG 10/1
	and conductor cross-section	
	Type of conductor	AWG 10/19
	and conductor cross-section	
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	<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>

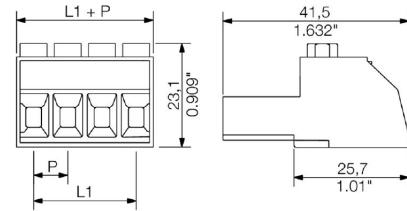
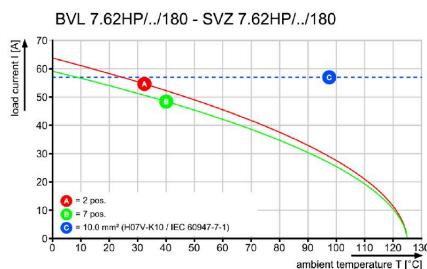
## Classifications

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****Graph**