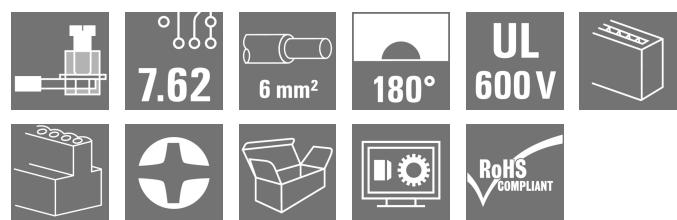


BVZ 7.62HP/05/180SH180C SN BK BX

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

www.weidmueller.com

Product image

High-performance female 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 operating reliability thanks to a mating profile that prevents incorrect connection, unique coding diversity, protection against faulty wiring, 4-point contact. Suitable for labelling.

General ordering data

Version	PCB plug-in connector, female plug, 7.62 mm, Number of poles: 5, 180°, Clamping yoke connection, Clamping range, max. : 10 mm ² , Box
Order No.	1933400000
Type	BVZ 7.62HP/05/180SH180C SN BK BX
GTIN (EAN)	4032248585731
Qty.	25 items
Product data	IEC: 1000 V / 57 A / 0.2 - 10 mm ² UL: 600 V / 40.5 A / AWG 24 - AWG 8
Packaging	Box

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Technical data

Approvals

Approvals



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

Dimensions and weights

Depth	84.6 mm	Depth (inches)	3.3307 inch
Height	25 mm	Height (inches)	0.9842 inch
Width	53.34 mm	Width (inches)	2.1 inch
Net weight	51.4 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 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
Tightening torque for screw flange, min.	0.2 Nm	Tightening torque for screw flange, max.	0.3 Nm
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	Plugging force/pole, max.	16.5 N
Pulling force/pole, max.	11 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 base material	Copper alloy
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.	100 °C		

Conductors suitable for connection

Clamping range, min.	0.2 mm ²
Clamping range, max.	10 mm ²

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Wire connection cross section AWG, min. AWG 24

Wire connection cross section AWG, max. AWG 8

Solid, min. H05(07) V-U 0.2 mm²

Solid, max. H05(07) V-U 6 mm²

Flexible, min. H05(07) V-K 0.2 mm²

Flexible, max. H05(07) V-K 10 mm²

w. plastic collar ferrule, DIN 46228 pt 4, 0.2 mm² min.

w. plastic collar ferrule, DIN 46228 pt 4, 6 mm² max.

w. wire end ferrule, DIN 46228 pt 1, min. 0.5 mm²

w. wire end ferrule, DIN 46228 pt 1, max. 6 mm²

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 ²
wire end ferrule	Stripping length	nominal 14 mm
	Recommended wire-end ferrule	H0,5/18 OR
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 15 mm
	Recommended wire-end ferrule	H1,5/18 SW
	Stripping length	nominal 12 mm
	Recommended wire-end ferrule	H1,5/12
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	2.5 mm ²
wire end ferrule	Stripping length	nominal 14 mm
	Recommended wire-end ferrule	H2,5/19D BL
	Stripping length	nominal 12 mm
	Recommended wire-end ferrule	H2,5/12
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 14 mm

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	Recommended wire-end ferrule H6,0/20 SW
	Stripping length nominal 12 mm
	Recommended wire-end ferrule H6,0/12

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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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
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	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.	13 mm	Clearance, min.	10.2 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)	40.5 A
Rated current (Use group C / CSA)	40.5 A	Rated current (Use group D / CSA)	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.		

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 voltage (Use group F / UL 1059)	1000 V
Rated current (Use group B / UL 1059)	40.5 A	Rated current (Use group C / UL 1059)	40.5 A
Rated current (Use group D / UL 1059)	5 A	Rated current (Use group F / UL 1059)	40.5 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	260.00 mm
VPE width	157.00 mm	VPE height	77.00 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

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	Evaluation	passed
Test: Misengagement (Non-interchangeability)	Standard	DIN EN 61984 section 6.3 and 6.9.1 / 09.02, DIN IEC 512 part 7 section 5 / 05.94
	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 ² and conductor cross-section
		Type of conductor stranded 0.5 mm ² and conductor cross-section
		Type of conductor solid 6 mm ² and conductor cross-section
		Type of conductor stranded 6 mm ² 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 9.4 / 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 ² and conductor cross-section
		Type of conductor stranded 0.5 mm ² and conductor cross-section
	Evaluation	passed
	Requirement	1.4 kg
	Conductor type	Type of conductor solid 6 mm ² and conductor cross-section
		Type of conductor stranded 6 mm ² and conductor cross-section
		Type of conductor AWG 10/1 and conductor cross-section

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Pull-out test	Type of conductor and conductor cross-section	AWG 10/19
	Evaluation	passed
	Standard	DIN EN 60999-1 section 9.5 / 12.00
	Requirement	≥10 N
	Conductor type	Type of conductor and conductor cross-section
		AWG 24/1
		Type of conductor and conductor cross-section
	Evaluation	passed
	Requirement	≥20 N
	Conductor type	Type of conductor and conductor cross-section
		solid 0.5 mm ²
		Type of conductor and conductor cross-section
	Evaluation	passed
	Requirement	≥80 N
	Conductor type	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 10/1
		Type of conductor 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"> Additional variants on request Rated current related to rated cross-section & min. No. of poles. 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
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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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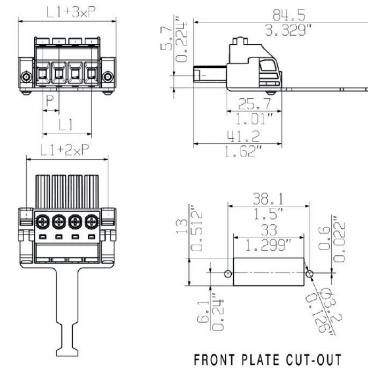
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Drawings

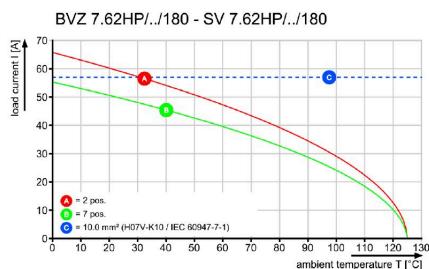
Product image



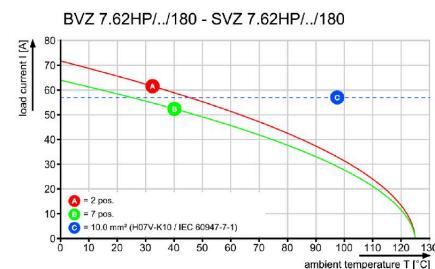
Dimensional drawing



Graph



Graph



Product benefits



Safe shielding Reliable and space-saving