

BVZ 7.62HP/09/180 SN BK BX
Weidmüller Interfaces GmbH & Co. KG

Postfach 3030

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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: 9, 180°, Clamping yoke connection, Clamping range, max. : 10 mm², Box
Order No.	1930000000
Type	BVZ 7.62HP/09/180 SN BK BX
GTIN (EAN)	4032248579785
Qty.	50 pc(s).
Product data	IEC: 1000 V / 57 A / 0.2 - 10 mm² UL: 600 V / 40.5 A / AWG 24 - AWG 8
Packaging	Box

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Technical data

Dimensions and weights

Depth	41.2 mm	Depth (inches)	1.622 inch
Height	23.1 mm	Height (inches)	0.909 inch
Width	68.58 mm	Width (inches)	2.7 inch
Net weight	44.205 g		

Temperatures

Operating temperature, min.	-50 °C	Operating temperature, max.	125 °C
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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)	0.3 inch	Conductor outlet direction	180°
Number of poles	9	L1 in mm	60.96 mm
L1 in inches	2.4 inch	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, 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	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
Wire connection cross section AWG, min.	AWG 24
Wire connection cross section AWG, max.	AWG 8
Solid, min. H05(07) V-U	0.2 mm ²
Solid, max. H05(07) V-U	6 mm ²
Flexible, min. H05(07) V-K	0.2 mm ²
Flexible, max. H05(07) V-K	10 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, 0.2 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.	

Creation date May 2, 2023 11:45:53 AM CEST

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Technical data

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	H1.5/18D SW
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
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	4 mm ²
wire end ferrule	Stripping length	nominal 12 mm
	Recommended wire-end ferrule	H4.0/12
Cross-section for conductor connection	Type	fine-wired
	nominal	6 mm ²
wire end ferrule	Stripping length	nominal 14 mm
	Recommended wire-end ferrule	H6.0/20 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
Cross-section for conductor connection	Type	fine-wired
	nominal	4 mm ²
wire end ferrule	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
	Recommended wire-end ferrule	H6.0/20 SW
Cross-section for conductor connection	Type	fine-wired
	nominal	6 mm ²
wire end ferrule	Stripping length	nominal 14 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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Technical data

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	1,000 V
Rated voltage for surge voltage class / pollution degree III/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 II/2	6,000 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
Clearance, min.	10.2 mm	Creepage distance, min.	13.8 mm

Rated data acc. to CSA

Institute (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)		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)	40.5 A
Rated current (Use group C / UL 1059)	40.5 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	335 mm
VPE width	147 mm	VPE height	88 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

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Catalogue status 28.04.2023 / We reserve the right to make technical changes.

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DIN EN 61984 section 6.3 and 6.9.1 / 09.02,
DIN IEC 61213 part 7 section 5 / 05.94

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Test: Misengagement (Non-interchangeability)

Standard	DIN EN 61984 section 6.3 and 6.9.1 / 09.02, DIN IEC 61213 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 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 10/1
	Type of conductor and conductor cross-section	AWG 10/19
Evaluation	passed	

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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 and conductor cross-section	AWG 24/1 and conductor cross-section	
		Type of conductor and conductor cross-section	AWG 24/19	
	Evaluation	passed		
	Requirement	0.3 kg		
	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	
	Evaluation	passed		
	Requirement	1.4 kg		
	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	AWG 10/19	
	Evaluation	passed		
Pull-out test	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	AWG 24/19	
	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	stranded 0.5 mm ²	
	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	AWG 10/19	
Evaluation	passed			

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Classifications

ETIM 6.0	EC002638	ETIM 7.0	EC002638
ETIM 8.0	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

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
- 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.
 - Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months

Approvals

Approvals



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

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Technical data**Downloads**

Approval/Certificate/Document of Conformity	Declaration of the Manufacturer	www.weidmueller.com
Engineering Data	CAD data – STEP	
Product Change Notification	PCN_2016_138_PL33_Redesign_BVZ_762HP_Abstandshalter_DE PCN_2016_138_PL33_Redesign_BVZ_762HP_outside_pole_spacer_EN PCN_2016_275_PL33_plugable_SIBL_EN PCN_2016_275_PL33_Steckbare_SIBL_DE 20220201 Visual change OMNIMATE® Power PCB terminal blocks and connectors 20220201 Visuelle Änderung OMNIMATE® Power Leiterplattenklemmen und -steckverbinder	
User Documentation	QR-Code product handling video	
Catalogues	Catalogues in PDF-format	
Brochures	FL DRIVES EN MB DEVICE MANUF. EN FL DRIVES DE FL HEATING ELECTR EN FL APPL INVERTER EN FL_BASE_STATION_EN FL ELEVATOR EN FL POWER SUPPLY EN FL 72H SAMPLE SER EN PO OMNIMATE EN	

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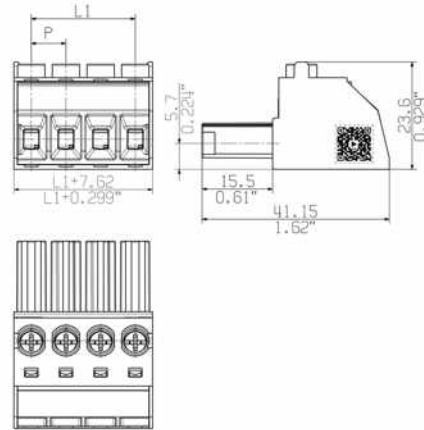
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Drawings

Product image

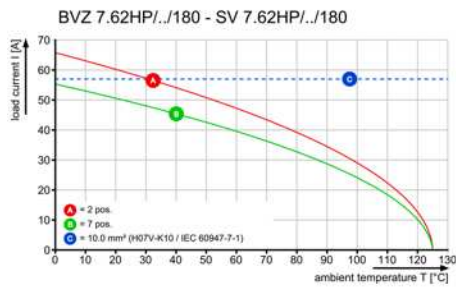


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