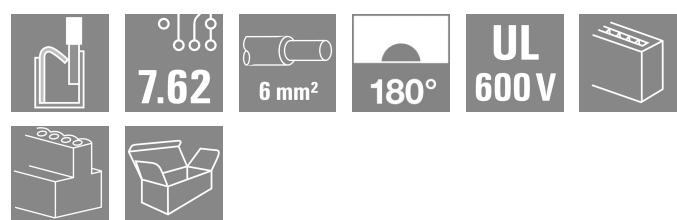


**BVDF 7.62HP/07/180 SN BK BX**

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

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

**Product image**

Bus connector with two connections per pole with the time-saving 6mm<sup>2</sup> PUSH IN connection system.

- The extremely short cross-connection allows you to safely loop through bus currents.
- PUSH IN connection: Solid wires and stranded wires with ferrules need only to be inserted and they are ready.
- The self-locking middle flange reduces the space requirements by one pitch width in comparison with conventional solutions.

**General ordering data**

Version	PCB plug-in connector, female plug, 7.62 mm, Number of poles: 7, 180°, PUSH IN with actuator, Tension-clamp connection, Clamping range, max. : 10 mm <sup>2</sup> , Box
Order No.	<a href="#">2720470000</a>
Type	BVDF 7.62HP/07/180 SN BK BX
GTIN (EAN)	4050118780987
Qty.	15 items
Product data	IEC: 600 V / 46 A / 0.5 - 10 mm <sup>2</sup> UL: 600 V / 35 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	42.55 mm	Depth (inches)	1.6752 inch
Height	35.05 mm	Height (inches)	1.3799 inch
Width	69.58 mm	Width (inches)	2.7394 inch
Net weight	73.17 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 with actuator, Tension-clamp connection				
Pitch in mm (P)	7.62 mm				
Pitch in inches (P)	0.300 "				
Conductor outlet direction	180°				
Number of poles	7				
L1 in mm	45.62 mm				
L1 in inches	1.800 "				
Number of rows	2				
Pin series quantity	1				
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				
Stripping length tolerance	min.	-1 mm			
	max.	1 mm			
Screwdriver blade	0.6 x 3.5				
Plugging cycles	25				
Plugging force/pole, max.	12 N				
Pulling force/pole, max.	12 N				

## Material data

Insulating material	PA GF	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	I
Comparative Tracking Index (CTI)	≥ 600	Moisture Level (MSL)	
UL 94 flammability rating	V-0	Contact material	Cu-alloy
Contact surface	tinned	Layer structure of solder connection	1...3 µm Ni / 4...10 µm Sn
Storage temperature, min.	-40 °C	Storage temperature, max.	70 °C

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## Technical data

Operating temperature, min.	-50 °C	Operating temperature, max.	120 °C
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## Conductors suitable for connection

Clamping range, min.	0.5 mm <sup>2</sup>
Clamping range, max.	10 mm <sup>2</sup>
Wire connection cross section AWG, min.	AWG 24
Wire connection cross section AWG, max.	AWG 8
Solid, min. H05(07) V-U	0.5 mm <sup>2</sup>
Solid, max. H05(07) V-U	10 mm <sup>2</sup>
Stranded, min. H07V-R	1.5 mm <sup>2</sup>
Stranded, max. H07V-R	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, 0.5 mm <sup>2</sup> min.	
w. wire end ferrule, DIN 46228 pt 1, min.	0.5 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	nominal	0.5 mm <sup>2</sup>
	wire end ferrule	Stripping length	nominal 14 mm
		Recommended wire-end ferrule	<a href="#">H0.5/12 OR</a>
	Cross-section for conductor connection	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	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	nominal	1.5 mm <sup>2</sup>
	wire end ferrule	Stripping length	nominal 12 mm
		Recommended wire-end ferrule	<a href="#">H1.5/12</a>
		Stripping length	nominal 15 mm
		Recommended wire-end ferrule	<a href="#">H1.5/18D SW</a>
	Cross-section for conductor connection	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	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	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

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## Technical data

		Recommended wire-end ferrule <a href="#">H6,0/20 SW</a>
	Cross-section for conductor connection	nominal 10 mm <sup>2</sup>

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)	46 A
Rated current, max. number of poles (Tu=20°C)	41 A	Rated current, min. number of poles (Tu=40°C)	38 A
Rated current, max. number of poles (Tu=40°C)	37.5 A	Rated voltage for surge voltage class / pollution degree II/2	600 V
Rated voltage for surge voltage class / pollution degree III/2	600 V	Rated voltage for surge voltage class / pollution degree III/3	600 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	4 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	6 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	6 kV	Short-time withstand current resistance	3 x 1s with 400 A
Creepage distance, min.	11.03 mm	Clearance, min.	10.36 mm

## 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)	35 A
Rated current (Use group C / UL 1059)	35 A	Rated current (Use group D / UL 1059)	35 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	338.00 mm
VPE width	130.00 mm	VPE height	54.00 mm

## Type tests

Test: Durability of markings	Standard	IEC 61984 section 7.3.2 / 10.08 Taking pattern from IEC 60068-2-70 / 12.95
	Test	mark of origin, type identification, pitch, durability
	Evaluation	available
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 H05V-U0.5
		Type of conductor and conductor cross-section H05V-K0.5
		Type of conductor and conductor cross-section H07V-K6
		Type of conductor and conductor cross-section H07V-K10

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## Technical data

Test for damage to and accidental loosening of conductors	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 8/19
	Evaluation	passed
	Standard	IEC 60999-1 section 9.4 / 11.99
	Requirement	0.2 kg
	Conductor type	Type of conductor and conductor cross-section
		AWG 24/1
		Type of conductor and conductor cross-section
	Evaluation	passed
Pull-out test	Requirement	0.3 kg
	Conductor type	Type of conductor and conductor cross-section
		H05V-U0.5
		Type of conductor and conductor cross-section
	Evaluation	passed
	Requirement	1.4 kg
	Conductor type	Type of conductor and conductor cross-section
		H07V-K6
	Evaluation	passed
	Requirement	2.0 kg
	Conductor type	Type of conductor and conductor cross-section
		H07V-U10
		Type of conductor and conductor cross-section
	Evaluation	passed
	Standard	IEC 60999-1 section 9.5 / 11.99
	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
		H05V-U0.5
		Type of conductor and conductor cross-section
	Evaluation	passed
	Requirement	≥80 N
	Conductor type	Type of conductor and conductor cross-section
		H07V-K6
	Evaluation	passed
	Requirement	≥ 90N

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## Technical data

Conductor type	Type of conductor and conductor cross-section	H07V-K10
	Type of conductor and conductor cross-section	AWG 8/19
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

- Additional variants on request
- 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

## 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		

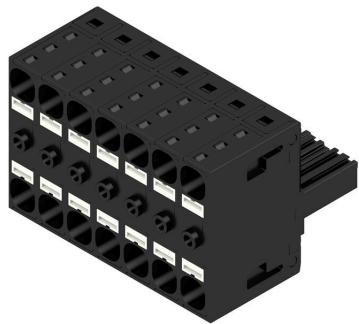
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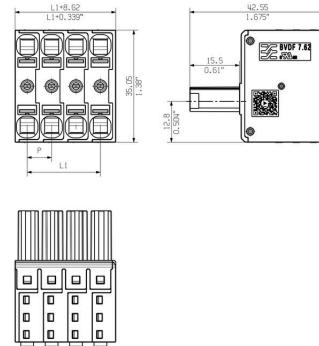
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## Drawings

### Product image

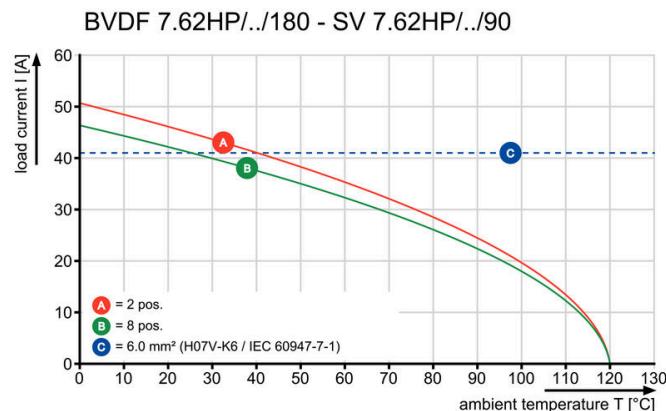


### Dimensional drawing

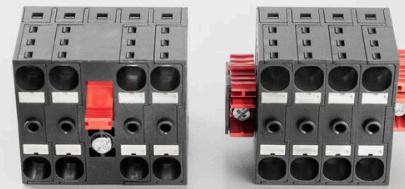


Similar to illustration

### Derating curve



### Product benefits



### Product benefits



### Product benefits



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## Counterpart

## SV 7.62HP 180G SN

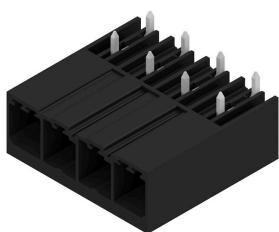


Single-row, high-performance male header for side-by-side mounting without sacrificing any poles or with patented flange for fast fixing without tools. Maximum connection and operating reliability thanks to a mating profile that prevents incorrect connection, with unique coding diversity and additional fastening in the flange. 3.5 mm pin length is optimised for lead-free wave soldering.

## General ordering data

Type	SV 7.62HP/07/180G 3.5SN...	Version
Order No.	<a href="#">1930650000</a>	PCB plug-in connector, male header, closed side, THT solder
GTIN (EAN)	4032248580620	connection, 7.62 mm, Number of poles: 7, 180°, Solder pin length (l):
Qty.	30 ST	3.5 mm, tinned, black, Box

## SV 7.62HP 270G SN



Single-row, high-current and high-performance male headers for side-by-side mounting without sacrificing any poles or with flange for fast fixing without tools. Maximum connection and operating reliability thanks to a mating profile that prevents incorrect connection, unique coding diversity and additional fastening in the flange.

## General ordering data

Type	SV 7.62HP/07/270G 3.5SN...	Version
Order No.	<a href="#">1931310000</a>	PCB plug-in connector, male header, closed side, THT solder
GTIN (EAN)	4032248580347	connection, 7.62 mm, Number of poles: 7, 270°, Solder pin length (l):
Qty.	30 ST	3.5 mm, tinned, black, Box

## SV 7.62HP 90G SN



Single-row, high-current and high-performance male headers for side-by-side mounting without sacrificing any poles or with flange for fast fixing without tools. Maximum connection and operating reliability thanks to a mating profile that prevents incorrect connection, unique coding diversity and additional fastening in the flange.

## General ordering data

Type	SV 7.62HP/07/90G 3.5SN ...	Version
Order No.	<a href="#">1930320000</a>	PCB plug-in connector, male header, closed side, THT solder
GTIN (EAN)	4032248580194	connection, 7.62 mm, Number of poles: 7, 90°, Solder pin length (l):
Qty.	30 ST	3.5 mm, tinned, black, Box

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**Counterpart****SVZ 7.62HP 180 SN**

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**

Type	SVZ 7.62HP/07/180G SN B...	Version
Order No.	<a href="#">1931680000</a>	PCB plug-in connector, male plug, 7.62 mm, Number of poles: 7,
GTIN (EAN)	4032248581672	180°, Clamping yoke connection, Clamping range, max. : 6 mm <sup>2</sup> , Box
Qty.	25 ST	