

## BVL 7.62HP/02/180 3.5SN BK BX

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

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

### Product image



High-performance female header with solder connection. 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, with unique coding diversity, protection against faulty wiring and 4-point contact.

### General ordering data

Version	PCB plug-in connector, female header, closed side, THT solder connection, 7.62 mm, Number of poles: 2, 180°, Solder pin length (l): 3.5 mm, tinned, black, Box
Order No.	<a href="#">1928610000</a>
Type	BVL 7.62HP/02/180 3.5SN BK BX
GTIN (EAN)	4032248577934
Qty.	100 items
Product data	IEC: 1000 V / 56.8 A UL: 300 V / 42 A
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	11.4 mm	Depth (inches)	0.4488 inch
Height	31.4 mm	Height (inches)	1.2362 inch
Width	15.24 mm	Width (inches)	0.6 inch
Net weight	4.95 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	Board connection
Pitch in mm (P)	7.62 mm	Pitch in inches (P)	0.300 "
Number of poles	2	L1 in mm	7.62 mm
L1 in inches	0.300 "	Number of rows	1
Pin series quantity	1	Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch, plugged
Touch-safe protection acc. to DIN VDE 0470	IP 20	Protection degree	IP20
Volume resistance	2.00 mΩ	Can be coded	Yes
Plugging cycles	25	Plugging force/pole, max.	7 N
Pulling force/pole, max.	4 N		

## Material data

Insulating material	PA GF	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	II
Comparative Tracking Index (CTI)	≥ 500	Insulation resistance	≥ 10 <sup>8</sup> Ω
Moisture Level (MSL)		UL 94 flammability rating	V-0
Contact material	Cu-alloy	Contact surface	tinned
Layer structure of solder connection	4...6 μm Sn matt	Layer structure of plug contact	4...6 μm Sn matt
Storage temperature, min.	-40 °C	Storage temperature, max.	70 °C
Operating temperature, min.	-50 °C	Operating temperature, max.	130 °C
Temperature range, installation, min.	-25 °C	Temperature range, installation, max.	130 °C

## Rated data acc. to IEC

Rated current, min. number of poles (Tu=20°C)	56.8 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

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Rated voltage for surge voltage class / pollution degree II/2	1000 V	Rated voltage for surge voltage class / pollution degree III/2	630 V
Rated voltage for surge voltage class / pollution degree III/3	630 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	6 kV	Rated impulse voltage for surge voltage class/ contamination degree III/3	6 kV
Short-time withstand current resistance	3 x 1s with 420 A	Creepage distance, min.	9.66 mm
Clearance, min.	6.9 mm		

### Rated data acc. to CSA

Institute (CSA)	CSA	Certificate No. (CSA)	200039-1534443
Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group C / CSA)	300 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
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)	300 V	Rated voltage (Use group C / UL 1059)	300 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
Creepage distance, min.	9.66 mm	Clearance distance, min.	6.9 mm
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

### Packing

Packaging	Box	VPE length	134.00 mm
VPE width	117.00 mm	VPE height	97.00 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 IEC 512 part 7 section 5 / 05.94
	Test	180° turned with coding elements
	Evaluation	passed
	Test	180° turned without coding elements
	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>• P on drawing = pitch</li> </ul>

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## Technical data

- 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	EC002637	ETIM 9.0	EC002637
ETIM 10.0	EC002637	ECLASS 14.0	27-46-02-01
ECLASS 15.0	27-46-02-01		

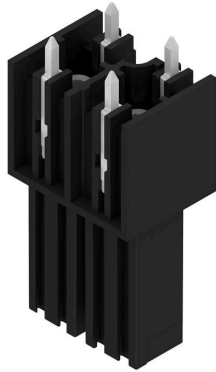
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Drawings

Product image



Dimensional drawing



Graph

BVL 7.62HP/./180 - SVZ 7.62HP/./180



Graph

BVL 7.62HP/./180 - SV 7.62HP/./180



Graph

BVL 7.62HP/./180 - SV 7.62HP/./90



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## Accessories

### 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 product configurator.

### General ordering data

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

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## Counterpart

### SV 7.62HP 180G SN

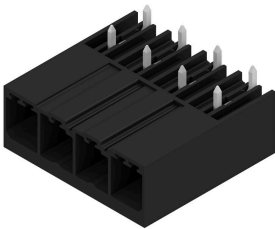


Single-row, high-performance male header for side-by-side mounting without sacrificing any poles or with patented flange for fast fixing without tools. Maximum connection and operating reliability thanks to a mating profile that prevents incorrect connection, with unique coding diversity and additional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

#### General ordering data

Type	SV 7.62HP/02/180G 3.5SN...	Version
Order No.	<a href="#">1930600000</a>	PCB plug-in connector, male header, closed side, THT solder
GTIN (EAN)	4032248580576	connection, 7.62 mm, Number of poles: 2, 180°, Solder pin length (l):
Qty.	120 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/02/270G 3.5SN...	Version
Order No.	<a href="#">1931260000</a>	PCB plug-in connector, male header, closed side, THT solder
GTIN (EAN)	4032248581283	connection, 7.62 mm, Number of poles: 2, 270°, Solder pin length (l):
Qty.	120 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/02/90G 3.5SN ...	Version
Order No.	<a href="#">1930270000</a>	PCB plug-in connector, male header, closed side, THT solder
GTIN (EAN)	4032248580149	connection, 7.62 mm, Number of poles: 2, 90°, Solder pin length (l):
Qty.	120 ST	3.5 mm, tinned, black, Box

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## Counterpart

### SV-SMT 7.62HP 270G BX



OMNIMATE Power BV / SV 7.62HP – the 28 kVA performance class

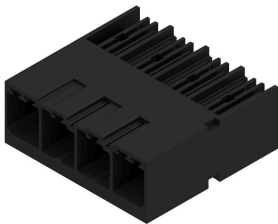
Tailor-made solutions for high performers

More power reserves for higher load bearing capacity: The OMNIMATE Power BV / SV 7.62HP is the middle-class of the power connector systems. It has a large clamping capacity, high overload resistance and the largest range of variants and accessories to choose from: the high performer of the HP range. HP means High Performance – this performance covers a great deal: the full rated current up to 50°C without derating, unlimited 600-V approval according to UL, and the additional finger safety for 400 V-TN systems (+ 3.0 mm) in compliance with the application directive IEC 61800-5-1.

#### General ordering data

Type	SV-SMT 7.62HP/02/270G 2...	Version
Order No.	<a href="#">2499330000</a>	PCB plug-in connector, male header, closed side, THT/THR solder connection, 7.62 mm, Number of poles: 2, 270°, Solder pin length (l): 2.6 mm, tinned, black, Box
GTIN (EAN)	4050118512427	
Qty.	120 ST	
Type	SV-SMT 7.62HP/02/270G 3...	Version
Order No.	<a href="#">2498380000</a>	PCB plug-in connector, male header, closed side, THT/THR solder connection, 7.62 mm, Number of poles: 2, 270°, Solder pin length (l): 3.5 mm, tinned, black, Box
GTIN (EAN)	4050118511543	
Qty.	50 ST	

### SV-SMT 7.62HP 90G BX



OMNIMATE Power BV / SV 7.62HP – the 28 kVA performance class

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#### General ordering data

Type	SV-SMT 7.62HP/02/90G 2...	Version
Order No.	<a href="#">2499320000</a>	PCB plug-in connector, male header, closed side, THT/THR solder connection, 7.62 mm, Number of poles: 2, 90°, Solder pin length (l): 2.6 mm, tinned, black, Box
GTIN (EAN)	4050118512403	
Qty.	120 ST	
Type	SV-SMT 7.62HP/02/90G 3...	Version
Order No.	<a href="#">2498310000</a>	PCB plug-in connector, male header, closed side, THT/THR solder connection, 7.62 mm, Number of poles: 2, 90°, Solder pin length (l): 3.5 mm, tinned, black, Box
GTIN (EAN)	4050118511499	
Qty.	50 ST	

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## Counterpart

### SVF 7.62HP/180G



180° inverted pin header with PUSH IN connection technology for field wiring in 6mm<sup>2</sup> in a 7.62 pitch, as a "three-flange variant" for enclosure feed-through. Suitable for enclosures with a max. wall thickness of 2mm. Also perfect as a touch-safe solution for reverse voltages. Meets the requirements of UL1059 600 V Class C and IEC 61800-5-1.

### General ordering data

Type	SVF 7.62HP/02/180G SN B...	Version
Order No.	<a href="#">1060830000</a>	PCB plug-in connector, male plug, 7.62 mm, Number of poles:
GTIN (EAN)	4032248810871	2, 180°, PUSH IN without actuator, Tension-clamp connection,
Qty.	95 ST	Clamping range, max. : 10 mm <sup>2</sup> , Box

### 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/02/180G SN B...	Version
Order No.	<a href="#">1931620000</a>	PCB plug-in connector, male plug, 7.62 mm, Number of poles: 2,
GTIN (EAN)	4032248581627	180°, Clamping yoke connection, Clamping range, max. : 6 mm <sup>2</sup> , Box
Qty.	100 ST	