

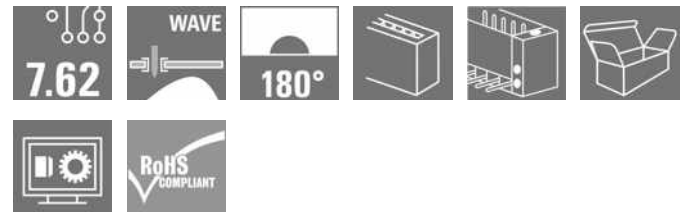
**SV 7.62HP/04/180SF 3.5SN BK BX****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

**Product image**

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**

Version	PCB plug-in connector, male header, Screw/clip-on flange, THT solder connection, 7.62 mm, Number of poles: 4, 180°, Solder pin length (l): 3.5 mm, tinned, black, Box
Order No.	<a href="#">1930840000</a>
Type	SV 7.62HP/04/180SF 3.5SN BK BX
GTIN (EAN)	4032248580811
Qty.	36 pc(s).
Product data	IEC: 1000 V / 57 A UL: 300 V / 40.5 A
Packaging	Box

Creation date October 11, 2023 11:10:22 AM CEST

## SV 7.62HP/04/180SF 3.5SN BK BX

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## Technical data

### Dimensions and weights

Depth	11.4 mm	Depth (inches)	0.449 inch
Height	31.8 mm	Height (inches)	1.252 inch
Height of lowest version	28.3 mm	Width	45.72 mm
Width (inches)	1.8 inch	Net weight	13.028 g

### Temperatures

Operating temperature, min.	-50 °C	Operating temperature, max.	130 °C
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### System specifications

Product family	OMNIMATE Power - series BV/SV 7.62HP			
Type of connection	Board connection			
Mounting onto the PCB	THT solder connection			
Pitch in mm (P)	7.62 mm			
Pitch in inches (P)	0.3 inch			
Outgoing elbow	180°			
Number of poles	4			
Number of solder pins per pole	2			
Solder pin length (l)	3.5 mm			
Solder pin length tolerance	+0.1 / -0.3 mm			
Solder pin dimensions	0.8 x 1.0 mm			
Solder eyelet hole diameter (D)	1.3 mm			
Solder eyelet hole diameter tolerance (D)	+ 0,1 mm			
L1 in mm	22.86 mm			
L1 in inches	0.9 inch			
Number of rows	1			
Pin series quantity	1			
Touch-safe protection acc. to DIN VDE 57 106	Touch-safe above the printed circuit board			
Touch-safe protection acc. to DIN VDE 0470	IP 20			
Protection degree	IP20, when fully mounted			
Volume resistance	2.00 mΩ			
Can be coded	Yes			
Tightening torque for screw flange, min.	0.2 Nm			
Tightening torque for screw flange, max.	0.3 Nm			
Plugging cycles	25			
Tightening torque	Torque type Usage information	Screw flange		
		Thickness	nominal	1.6 mm
			nominal	3.2 mm
		Tightening torque	min.	0.65 Nm
			max.	0.85 Nm
		Recommended screw	Part number	
			Screw type	EJOT Delta PT 30x10 or similar
		Thickness	nominal	4.8 mm
			Tightening torque	min.
		max.		1 Nm
		Recommended screw	Part number	
			Screw type	EJOT Delta PT 30x12 or similar

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## Technical data


## 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 material	Copper alloy	Contact surface	tinned
Layer structure of solder connection	1...3 µm Ni / 4...6 µm Sn matt	Layer structure of plug contact	1...3 µm Ni / 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

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	1,000 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
Clearance, min.	6.9 mm	Creepage distance, min.	9.6 mm

## Rated data acc. to CSA

Institute (CSA)		Certificate No. (CSA)	200039-1121690
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)		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)	40.5 A
Rated current (Use group C / UL 1059)	40.5 A	Rated current (Use group D / UL 1059)	5 A
Clearance distance, min.	6.9 mm	Creepage distance, min.	9.6 mm
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

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**Technical data**
**Packing**

Packaging	Box	VPE length	350 mm
VPE width	139 mm	VPE height	41 mm

**Classifications**

ETIM 6.0	EC002637	ETIM 7.0	EC002637
ETIM 8.0	EC002637	ETIM 9.0	EC002637
ECLASS 9.0	27-44-04-02	ECLASS 9.1	27-44-04-02
ECLASS 10.0	27-44-04-02	ECLASS 11.0	27-46-02-01
ECLASS 12.0	27-46-02-01	ECLASS 13.0	27460201

**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.
- 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.
- Diameter of solder eyelet  $D = 1.4 + 0.1$  mm starting with 8-pole
- Long term storage of the product with average temperature of 50 °C and maximum 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	<a href="#">Declaration of the Manufacturer</a>
Engineering Data	<a href="#">CAD data – STEP</a>
Product Change Notification	<a href="#">PCN_2016_278_PL33_Aenderung_Flanschkontur_SV762_DE</a> <a href="#">PCN_2016_278_PL33_change_flange_contour_SV762_EN</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>
Brochures	<a href="#">FL DRIVES EN</a> <a href="#">MB DEVICE MANUF. EN</a> <a href="#">FL DRIVES DE</a> <a href="#">FL HEATING ELECTR EN</a> <a href="#">FL APPL_INVERTER EN</a> <a href="#">FL_BASE_STATION_EN</a> <a href="#">FL ELEVATOR EN</a> <a href="#">FL POWER SUPPLY EN</a> <a href="#">FL 72H SAMPLE SER EN</a> <a href="#">PO OMNIMATE EN</a> <a href="#">PO OMNIMATE EN</a>

**Data sheet**

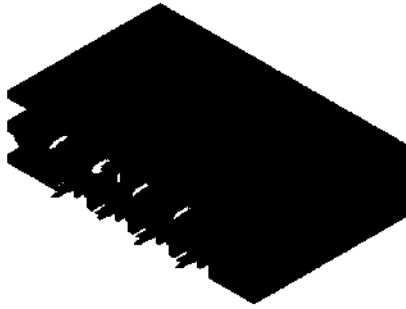
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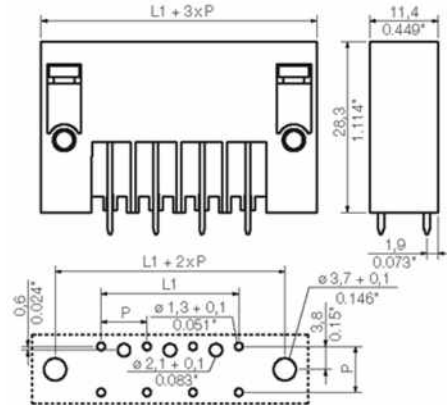
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**Drawings**

**Product image**



**Dimensional drawing**



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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

## General ordering data

Type	BV/SV 7.62HP KO	Version	Product data	Packaging
Order No.	<a href="#">1937590000</a>	PCB plug-in connector, Accessories, Coding element, black, Number		Box
GTIN (EAN)	4032248608881	of poles: 1		
Qty.	50 pc(s).			
Type	VDS180 SV7.62	Version	Product data	Packaging
Order No.	<a href="#">1853940000</a>	PCB plug-in connector, Accessories, black, Number of poles: 1		Box
GTIN (EAN)	4032248389513			
Qty.	50 pc(s).			

## Recommended wave soldering profiles

**Weidmüller Interface GmbH & Co. KG**  
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### Single Wave:



### Double Wave:



### Wave soldering profiles

Wired connection elements should be processed in accordance with the DIN EN 61760-1 standard. We have included two recommendations for practical wave soldering profiles, with which Weidmüller PCB terminals and connectors are qualified.

When choosing a suitable profile for your application, the following factors also need to be considered:

- PCB thickness
- Proportion of Cu in the layers
- Single/double-sided assembly
- Product range
- Heating and cooling rates

The single and double wave profiles each indicate the recommended operating range, including the maximum soldering temperature of 260°C. In practice, the maximum soldering temperature is quite often well below the above maximum profile.