

**SVZ 7.62HP/06/180SFC SN BK BX****Weidmüller Interfaces GmbH & Co. KG**

Postfach 3030

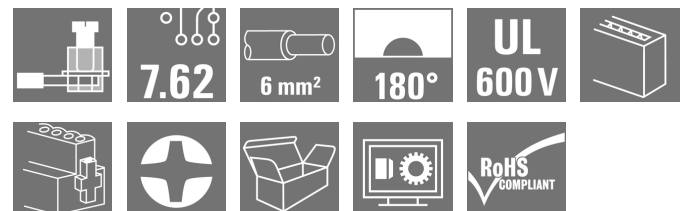
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**Product image**

Similar to illustration

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**

|              |                                                                                                                                  |
|--------------|----------------------------------------------------------------------------------------------------------------------------------|
| Version      | PCB plug-in connector, male plug, 7.62 mm, Number of poles: 6, 180°, Clamping yoke connection, Clamping range, max. : 6 mm², Box |
| Order No.    | <a href="#">1951030000</a>                                                                                                       |
| Type         | SVZ 7.62HP/06/180SFC SN BK BX                                                                                                    |
| GTIN (EAN)   | 4032248629930                                                                                                                    |
| Qty.         | 50 pc(s).                                                                                                                        |
| Product data | IEC: 1000 V / 57 A / 0.2 - 10 mm²<br>UL: 600 V / 42 A / AWG 24 - AWG 8                                                           |
| Packaging    | Box                                                                                                                              |

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## Technical data

## Dimensions and weights

Net weight 32.19 g

## 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                              | 6                                    | L1 in mm                                   | 38.1 mm           |
| L1 in inches                                 | 1.5 inch                             | Number of rows                             | 1                 |
| Pin series quantity                          | 1                                    | Rated cross-section                        | 6 mm <sup>2</sup> |
| Touch-safe protection acc. to DIN VDE 57 106 | Safe from finger touch               | Touch-safe protection acc. to DIN VDE 0470 | IP20 plugged      |
| 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                |

## 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       | 4...6 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. | 125 °C             |

## Conductors suitable for connection

|                                                                      |                         |
|----------------------------------------------------------------------|-------------------------|
| Clamping range, min.                                                 | 0.2 mm <sup>2</sup>     |
| Clamping range, max.                                                 | 6 mm <sup>2</sup>       |
| Wire connection cross section AWG, min.                              | AWG 22                  |
| Wire connection cross section AWG, max.                              | AWG 8                   |
| Solid, min. H05(07) V-U                                              | 0.2 mm <sup>2</sup>     |
| Solid, max. H05(07) V-U                                              | 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, 0.25 mm <sup>2</sup> min. |                         |
| w. plastic collar ferrule, DIN 46228 pt 4, 6 mm <sup>2</sup> max.    |                         |
| w. wire end ferrule, DIN 46228 pt 1, 0.25 mm <sup>2</sup> min.       |                         |
| w. wire end ferrule, DIN 46228 pt 1, 6 mm <sup>2</sup> max.          |                         |
| Plug gauge in accordance with EN 60999 a x b; ø                      | 2.8 mm x 2.0 mm; 2.4 mm |

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|                                        |                                        |                                                                                |                     |
|----------------------------------------|----------------------------------------|--------------------------------------------------------------------------------|---------------------|
| Clampable conductor                    | Cross-section for conductor connection | Type                                                                           | fine-wired          |
|                                        |                                        | nominal                                                                        | 0.5 mm <sup>2</sup> |
| wire end ferrule                       | Stripping length                       | nominal                                                                        | 14 mm               |
|                                        | Recommended wire end ferrule           | <a href="http://www.weidmueller.com">www.weidmueller.com</a> <b>H0,5/18 OR</b> |                     |
| Cross-section for conductor connection | Type                                   | fine-wired                                                                     |                     |
|                                        | nominal                                | 1 mm <sup>2</sup>                                                              |                     |
| wire end ferrule                       | Stripping length                       | nominal                                                                        | 15 mm               |
|                                        | Recommended wire end ferrule           | <b>H1,0/18 GE</b>                                                              |                     |
| Cross-section for conductor connection | Type                                   | fine-wired                                                                     |                     |
|                                        | nominal                                | 1.5 mm <sup>2</sup>                                                            |                     |
| wire end ferrule                       | Stripping length                       | nominal                                                                        | 15 mm               |
|                                        | Recommended wire end ferrule           | <b>H1,5/18D SW</b>                                                             |                     |
|                                        | Stripping length                       | nominal                                                                        | 12 mm               |
|                                        | Recommended wire end ferrule           | <b>H1,5/12</b>                                                                 |                     |
| Cross-section for conductor connection | Type                                   | fine-wired                                                                     |                     |
|                                        | nominal                                | 0.75 mm <sup>2</sup>                                                           |                     |
| wire end ferrule                       | Stripping length                       | nominal                                                                        | 14 mm               |
|                                        | Recommended wire end ferrule           | <b>H0,75/18 W</b>                                                              |                     |
| Cross-section for conductor connection | Type                                   | fine-wired                                                                     |                     |
|                                        | nominal                                | 2.5 mm <sup>2</sup>                                                            |                     |
| wire end ferrule                       | Stripping length                       | nominal                                                                        | 14 mm               |
|                                        | Recommended wire end ferrule           | <b>H2,5/19D BL</b>                                                             |                     |
|                                        | Stripping length                       | nominal                                                                        | 12 mm               |
|                                        | Recommended wire end ferrule           | <b>H2,5/12</b>                                                                 |                     |
| Cross-section for conductor connection | Type                                   | fine-wired                                                                     |                     |
|                                        | nominal                                | 4 mm <sup>2</sup>                                                              |                     |
| wire end ferrule                       | Stripping length                       | nominal                                                                        | 12 mm               |
|                                        | Recommended wire end ferrule           | <b>H4,0/12</b>                                                                 |                     |
|                                        | Stripping length                       | nominal                                                                        | 14 mm               |
|                                        | Recommended wire end ferrule           | <b>H4,0/20D GR</b>                                                             |                     |
| Cross-section for conductor connection | Type                                   | fine-wired                                                                     |                     |
|                                        | nominal                                | 6 mm <sup>2</sup>                                                              |                     |
| wire end ferrule                       | Stripping length                       | nominal                                                                        | 14 mm               |
|                                        | Recommended wire end ferrule           | <b>H6,0/20 SW</b>                                                              |                     |
|                                        | Stripping length                       | nominal                                                                        | 12 mm               |
|                                        | Recommended wire end ferrule           | <b>H6,0/12</b>                                                                 |                     |

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## Technical data

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57 A

41 A

1,000 V

800 V

8 kV

3 x 1s with 420 A

13.8 mm

## Rated data acc. to IEC

tested acc. to standard

IEC 60664-1, IEC 61984

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

41 A

Rated current, max. number of poles  
(Tu=40°C)

41 A

Rated voltage for surge voltage class /  
pollution degree III/2

1,000 V

Rated impulse voltage for surge voltage  
class/ pollution degree II/2

6 kV

Rated impulse voltage for surge voltage  
class/ contamination degree III/3

8 kV

Clearance, min.

13.56 mm

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

57 A

Rated current, min. 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/3

800 V

Rated impulse voltage for surge voltage  
class/ pollution degree III/2

8 kV

Short-time withstand current resistance

3 x 1s with 420 A

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 D / CSA)

600 V

Rated current (Use group C / CSA)

35 A

Wire cross-section, AWG, min.

AWG 24

Reference to approval values

Specifications are  
maximum values, details -  
see approval certificate.

Rated voltage (Use group C / CSA)

600 V

Rated current (Use group B / CSA)

35 A

Rated current (Use group D / CSA)

5 A

Wire cross-section, AWG, max.

AWG 10

## 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 D / UL 1059)

600 V

Rated current (Use group C / UL 1059)

42 A

Wire cross-section, AWG, min.

AWG 24

Reference to approval values

Specifications are  
maximum values, details -  
see approval certificate.

Rated voltage (Use group C / UL 1059)

600 V

Rated current (Use group B / UL 1059)

42 A

Rated current (Use group D / UL 1059)

5 A

Wire cross-section, AWG, max.

AWG 8

## Packing

Packaging

Box

VPE length

337 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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DIN EN 61984 section 6.3 and 6.9.1 / 09.02,  
DIN EN 60512-13-5 / 11.08

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180° turned with coding elements

passed

180° turned without coding elements

passed

DIN EN 60999-1 section 7 and 9.1 / 12.00, DIN

EN 60947-1 section 8.2.4.5.1 / 12.02

Type of conductor and conductor cross-section

solid 0.5 mm<sup>2</sup>

Type of conductor and conductor cross-section

stranded 0.5 mm<sup>2</sup>

Type of conductor and conductor cross-section

solid 6 mm<sup>2</sup>

Type of conductor and conductor cross-section

stranded 6 mm<sup>2</sup>

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

Type of conductor and conductor cross-section

AWG 10/19

Type of conductor and conductor cross-section

AWG 10/19

Type of conductor and conductor cross-section

AWG 10/19

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AWG 10/19

Type of conductor and conductor cross-section

AWG 10/19

## Technical data

Test: Misengagement (Non-interchangeability)

Standard

Test

Evaluation

Test

Evaluation

Test: Clampable cross section

Standard

Conductor type

Evaluation

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## Technical data

Test for damage to and accidental loosening of conductors

|                                                           |                |                                               |                              |
|-----------------------------------------------------------|----------------|-----------------------------------------------|------------------------------|
| Test for damage to and accidental loosening of conductors | Standard       | DIN EN 60999-1 section 7 and 9.1 / 12.00      |                              |
|                                                           | Requirement    | 0.2 kg info@weidmueller.com                   |                              |
|                                                           | 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    | 0.3 kg                                        |                              |
|                                                           | Conductor type | Type of conductor and conductor cross-section | solid 0.5 mm <sup>2</sup>    |
|                                                           |                | Type of conductor and conductor cross-section | stranded 0.5 mm <sup>2</sup> |
|                                                           | Evaluation     | passed                                        |                              |
|                                                           | Requirement    | 1.4 kg                                        |                              |
|                                                           | Conductor type | Type of conductor and conductor cross-section | solid 6 mm <sup>2</sup>      |
|                                                           |                | Type of conductor and conductor cross-section | stranded 6 mm <sup>2</sup>   |
|                                                           |                | 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 <sup>2</sup>    |
|                                                           |                | Type of conductor and conductor cross-section | stranded 0.5 mm <sup>2</sup> |
|                                                           | Evaluation     | passed                                        |                              |
|                                                           | Requirement    | ≥80 N                                         |                              |
|                                                           | Conductor type | Type of conductor and conductor cross-section | solid 6 mm <sup>2</sup>      |
|                                                           |                | Type of conductor and conductor cross-section | stranded 6 mm <sup>2</sup>   |
|                                                           |                | 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          | <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>• Wire end ferrule without plastic collar to DIN 46228/1</li> <li>• Wire end ferrule with plastic collar to DIN 46228/4</li> <li>• P on drawing = pitch</li> <li>• 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.</li> <li>• Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months</li> </ul> |

## Approvals

Approvals



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

## Downloads

|                                             |                                                                                                                                                                                                                                                                                                                                                                                                              |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Approval/Certificate/Document of Conformity | <a href="#">Declaration of the Manufacturer</a>                                                                                                                                                                                                                                                                                                                                                              |
| Engineering Data                            | <a href="#">CAD data – STEP</a>                                                                                                                                                                                                                                                                                                                                                                              |
| Engineering Data                            | <a href="#">EPLAN, WSCAD</a>                                                                                                                                                                                                                                                                                                                                                                                 |
| Product Change Notification                 | <a href="#">20220208 Visual change Temporarily different color for connectors and accessories</a><br><a href="#">20220208 Visuelle Änderung Vorübergehend anderer Farbton für Steckverbinder und Zubehör</a>                                                                                                                                                                                                 |
| User Documentation                          | <a href="#">QR-Code product handling video</a>                                                                                                                                                                                                                                                                                                                                                               |
| Catalogues                                  | <a href="#">Catalogues in PDF-format</a>                                                                                                                                                                                                                                                                                                                                                                     |
| Brochures                                   | <a href="#">FL DRIVES EN</a><br><a href="#">MB DEVICE MANUF. EN</a><br><a href="#">FL DRIVES DE</a><br><a href="#">FL HEATING ELECTR EN</a><br><a href="#">FL APPL INVERTER EN</a><br><a href="#">FL_BASE_STATION_EN</a><br><a href="#">FL ELEVATOR EN</a><br><a href="#">FL POWER SUPPLY EN</a><br><a href="#">FL 72H SAMPLE SER EN</a><br><a href="#">PO OMNIMATE EN</a><br><a href="#">PO OMNIMATE EN</a> |

Creation date September 17, 2022 7:46:40 PM CEST

Catalogue status 09.09.2022 / We reserve the right to make technical changes.

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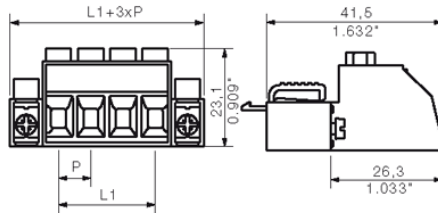
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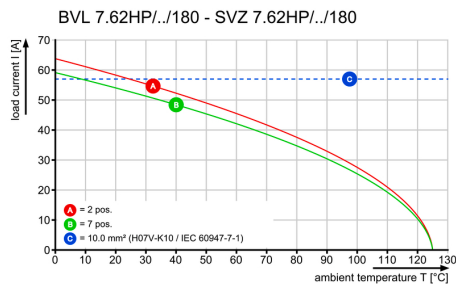
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## Drawings

### Dimensional drawing



### Graph



### Graph

