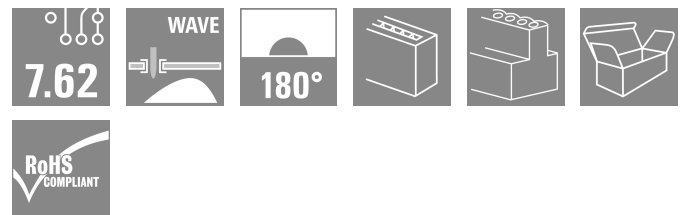


## BVL 7.62HP/04/180 2.7SN BK BX SO

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

www.weidmueller.com

Similar to illustration



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: 4, 180°, Solder pin length (l): 3.5 mm, tinned, black, Box |
| Order No.    | <a href="#">1941220000</a>   |
| Type         | BVL 7.62HP/04/180 2.7SN BK BX SO   |
| GTIN (EAN)   | 4032248616794  |
| Qty.         | 100 items  |
| Product data | IEC: 1000 V / 56.8 A<br>UL: 300 V / 35 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      | 30.48 mm | Width (inches)  | 1.2 inch    |
| Net weight | 10.84 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<br>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                            | 4                                       | L1 in mm                                     | 22.86 mm                        |
| L1 in inches                               | 0.900 "                                 | 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                             |
| Tightening torque for screw flange, min.   | 0.2 Nm                                  | Tightening torque for screw flange, max.     | 0.3 Nm                          |
| 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              |

## Conductors suitable for connection

|                            |                     |                            |                   |
|----------------------------|---------------------|----------------------------|-------------------|
| Flexible, min. H05(07) V-K | 0.2 mm <sup>2</sup> | Flexible, max. H05(07) V-K | 1 mm <sup>2</sup> |
|----------------------------|---------------------|----------------------------|-------------------|

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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)                         | 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                   | 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) | 35 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 | 214.00 mm |
| VPE width | 131.00 mm | VPE height | 80.00 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   |
| Test: Misengagement (Non-interchangeability) | Evaluation | passed   |
|  | 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: Misengagement (Non-interchangeability) | Test       | 180° turned without coding elements  |
|  | Evaluation | passed   |

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## Technical data

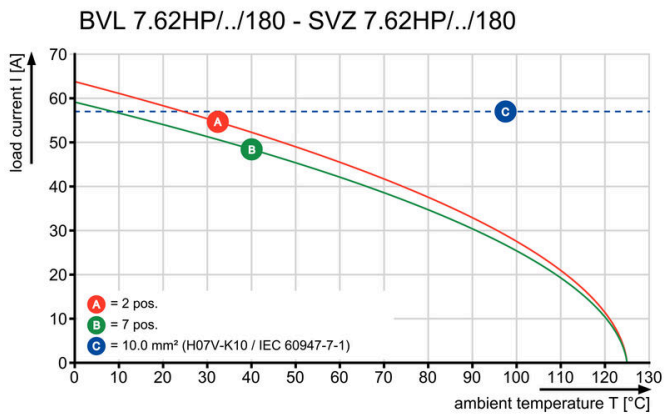
### Important note

|                |  |
|----------------|--|
| 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>• The data given under CSA relates to a cUL approval - E60693</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>• 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</li> <li>• Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months</li> </ul> |

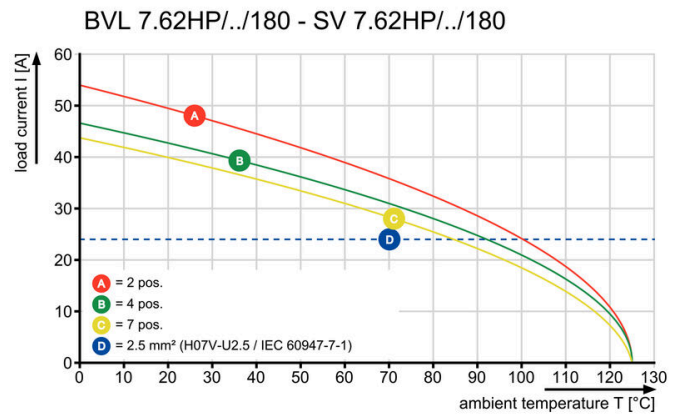
### Classifications

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| 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 |             |             |

Graph



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