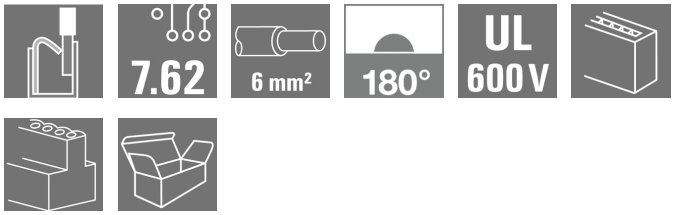
# BVDF 7.62HP/02/180SN BK BX

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

www.weidmueller.com

## Product image






Bus connector with two connections per pole with the time-saving 6mm² 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: 2, 180°, PUSH IN with actuator, Tension-clamp connection, Clamping range, max. : 10 mm², Box |
| Order No. | 2719370000 |
| Type | BVDF 7.62HP/02/180SN BK BX |
| GTIN (EAN) | 4050118780932 |
| Qty. | 57 pc(s). |
| Product data | IEC: 600 V / 46 A / 0.5 - 10 mm²<br>UL: 600 V / 35 A / AWG 24 - AWG 8 |
| Packaging | Box |

Creation date December 5, 2023 8:47:42 AM CET

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## Technical data

### Dimensions and weights

| | | | |
|---|---|---|---|
| Depth | 42.55 mm | Depth (inches) | 1.675 inch |
| Height | 35.05 mm | Height (inches) | 1.38 inch |
| Width | 18.78 mm | Width (inches) | 0.739 inch |
| Net weight | 19.912 g | | |

### 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) | 0.3 inch | |
| Conductor outlet direction | 180° | |
| Number of poles | 2 | |
| L1 in mm | 7.62 mm | |
| L1 in inches | 0.3 inch | |
| 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 | 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 | Operating temperature, min. | -50 °C |
| Operating temperature, max. | 120 °C | | |

### Conductors suitable for connection

| | |
|---|---|
| Clamping range, min. | 0.5 mm² |
| Clamping range, max. | 10 mm² |
| Wire connection cross section AWG, min. | AWG 24 |
| Wire connection cross section AWG, max. | AWG 8 |
| Solid, min. H05(07) V-U | 0.5 mm² |
| Solid, max. H05(07) V-U | 10 mm² |
| Stranded, min. H07V-R | 1.5 mm² |
| Stranded, max. H07V-R | 6 mm² |

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## Technical data

| | | | |
|---|---|---|---|
| Flexible, min. H05(07) V-K | 0.5 mm² | | |
| Flexible, max. H05(07) V-K | 10 mm² | | |
| w. plastic collar ferrule, DIN 46228 pt 4, min. | 0.5 mm² | | |
| w. wire end ferrule, DIN 46228 pt 1, min. | 0.5 mm² | | |
| w. wire end ferrule, DIN 46228 pt 1, max. | 6 mm² | | |
| Clampable conductor | Cross-section for conductor connection | nominal | 0.5 mm² |
| | wire end ferrule | Stripping length | nominal 14 mm |
| | | Recommended wire-end ferrule | H0,5/12 OR |
| | Cross-section for conductor connection | nominal | 0.75 mm² |
| | wire end ferrule | Stripping length | nominal 14 mm |
| | | Recommended wire-end ferrule | H0,75/18 W |
| | Cross-section for conductor connection | nominal | 1 mm² |
| | wire end ferrule | Stripping length | nominal 15 mm |
| | | Recommended wire-end ferrule | H1,0/18 GE |
| | Cross-section for conductor connection | nominal | 1.5 mm² |
| | wire end ferrule | Stripping length | nominal 12 mm |
| | | Recommended wire-end ferrule | H1,5/12 |
| | | Stripping length | nominal 15 mm |
| | | Recommended wire-end ferrule | H1,5/18D SW |
| | Cross-section for conductor connection | nominal | 2.5 mm² |
| | wire end ferrule | Stripping length | nominal 12 mm |
| | | Recommended wire-end ferrule | H2,5/12 |
| | | Stripping length | nominal 14 mm |
| | | Recommended wire-end ferrule | H2,5/19D BL |
| | Cross-section for conductor connection | nominal | 4 mm² |
| | wire end ferrule | Stripping length | nominal 12 mm |
| | | Recommended wire-end ferrule | H4,0/12 |
| | | Stripping length | nominal 14 mm |
| | | Recommended wire-end ferrule | H4,0/20D GR |
| | Cross-section for conductor connection | nominal | 6 mm² |
| | wire end ferrule | Stripping length | nominal 12 mm |
| | | Recommended wire-end ferrule | H6,0/12 |
| | | Stripping length | nominal 14 mm |
| | | Recommended wire-end ferrule | H6,0/20 SW |
| | Cross-section for conductor connection | nominal | 10 mm² |
| 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. | | |

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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) | 46 A |
| Rated current, max. number of poles (Tu=20°C) | 42 A | Rated current, min. number of poles (Tu=40°C) | 41 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 |
| Clearance, min. | 10.36 mm | Creepage distance, min. | 11.03 mm |

### Rated data acc. to UL 1059

| | | | |
|---|---|---|---|
| Institute (cURus) | c UL us | 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 | 355 mm |
| VPE width | 143 mm | VPE height | 61 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 |

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## Technical data

| | | | |
|---|---|---|---|
| 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 |
| | | 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 | |
| Test for damage to and accidental loosening of conductors | 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 | AWG 24/19 |
| | Evaluation | passed | |
| | Requirement | 0.3 kg | |
| | Conductor type | Type of conductor and conductor cross-section | H05V-U0.5 |
| | | Type of conductor and conductor cross-section | H05V-K0.5 |
| | 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 | AWG 8/19 |
| | Evaluation | passed | |

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## Technical data

| | | | |
|---|---|---|---|
| Pull-out test | 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 | AWG 24/19 |
| | Evaluation | passed | |
| | Requirement | ≥20 N | |
| | Conductor type | Type of conductor and conductor cross-section | H05V-U0.5 |
| | | Type of conductor and conductor cross-section | H05V-K0.5 |
| | Evaluation | passed | |
| | Requirement | ≥80 N | |
| | Conductor type | Type of conductor and conductor cross-section | H07V-K6 |
| | Evaluation | passed | |
| | Requirement | ≥ 90N | |
| | Conductor type | Type of conductor and conductor cross-section | H07V-K10 |
| | | Type of conductor and conductor cross-section | AWG 8/19 |
| | Evaluation | passed | |

### Classifications

| | | | |
|---|---|---|---|
| ETIM 6.0 | EC002638 | ETIM 7.0 | EC002638 |
| ETIM 8.0 | EC002638 | ETIM 9.0 | 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 | ECLASS 13.0 | 27460202 |

### 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<br>• Wire end ferrule with plastic collar to DIN 46228/4<br>• Wire end ferrule without plastic collar to DIN 46228/1<br>• P on drawing = pitch<br>• 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.<br>• 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<br>• Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months |

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## Technical data

### Approvals

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

### Downloads

| | |
|---|---|
| Engineering Data | CAD data – STEP |
| Catalogues | Catalogues in PDF-format |

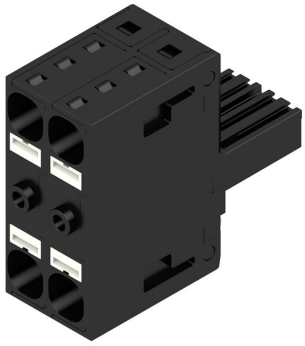
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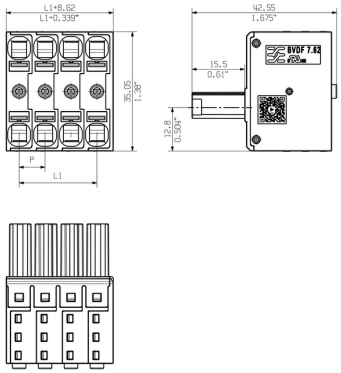
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## Drawings

### Product image

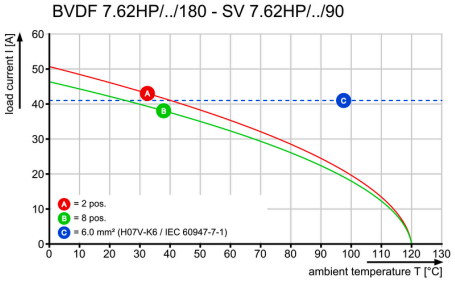


### Dimensional drawing

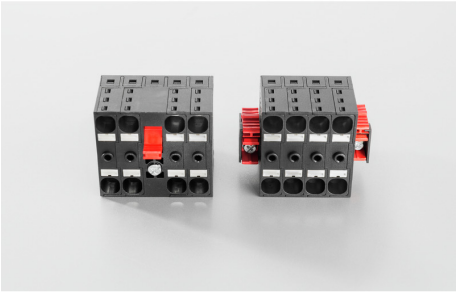


Similar to illustration

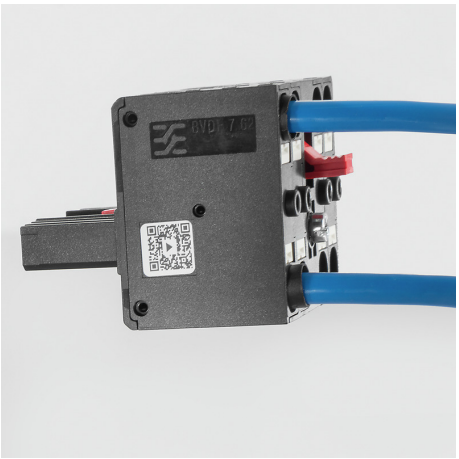
### Derating curve




### Product benefits



### Product benefits



### Product benefits

