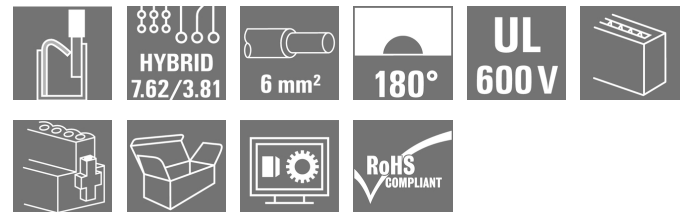


BVF 7.62HP/03/180MSF2 BCF/08R SN BK BX

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

www.weidmueller.com

Product image


Similar to illustration

180° female plug with energy and signal contacts in PUSH IN wire connection in 7.62 pitch. Fulfils the IEC 61800-5-1 requirement and for the energy contact UL 1059 ClassC 600 V.

The self-locking middle flange with automatic interlock reduces the space requirements by one pitch width in comparison with conventional solutions. Optionally also available with additional mounting screw.

General ordering data

| | |
|--------------|---|
| Version | PCB plug-in connector, female plug, 7.62 mm, Number of poles: 3, 180°, PUSH IN with actuator, PUSH IN without actuator, Clamping range, max.: 10 mm², Box |
| Order No. | 1157470000 |
| Type | BVF 7.62HP/03/180MSF2 BCF/08R SN BK BX |
| GTIN (EAN) | 4032248945115 |
| Qty. | 30 pc(s). |
| Product data | IEC: 1000 V / 38 A / 0.5 - 10 mm² UL: 600 V / 35 A / AWG 24 - AWG 8 |
| Packaging | Box |

Creation date September 16, 2022 1:16:35 AM CEST

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Technical data
Dimensions and weights

Net weight 2 g

System Parameters

| Product family | | Type of connection | |
|--|--|--|-------------------|
| | OMNIMATE Power - series BV/SV 7.62HP | | Field connection |
| Wire connection method | | Pitch in mm (P) | |
| | PUSH IN with actuator, PUSH IN without actuator | | 7.62 mm |
| Pitch in inches (P) | | Conductor outlet direction | |
| | 0.3 inch | | 180° |
| Number of poles | | L1 in mm | |
| | 3 | | 22.86 mm |
| L1 in inches | | Number of rows | |
| | 0.9 inch | | 1 |
| Pin series quantity | | Rated cross-section | |
| | 1 | | 6 mm ² |
| Touch-safe protection acc. to DIN VDE 57 106 | | Touch-safe protection acc. to DIN VDE 0470 | |
| | Safe from finger touch | | IP 20 |
| Volume resistance | | Can be coded | |
| | 4.50 mΩ | | Yes |
| Stripping length | | Tightening torque for screw flange, min. | |
| | 12 mm | | 0.2 Nm |
| Tightening torque for screw flange, max. | | Screwdriver blade | |
| | 0.3 Nm | | 0.6 x 3.5 |
| Plugging force/pole, max. | | Pulling force/pole, max. | |
| | 17 N | | 15 N |

Material data

| Insulating material | | Colour | |
|---------------------------------------|--------------------|---------------------------------------|--------|
| | PA GF | | black |
| Colour chart (similar) | | Insulating material group | |
| | RAL 9011 | | II |
| Comparative Tracking Index (CTI) | | UL 94 flammability rating | |
| | ≥ 500 | | V-0 |
| Contact material | | Contact surface | |
| | Copper alloy | | tinned |
| Layer structure of plug contact | | Storage temperature, min. | |
| | 6...8 μm Sn glossy | | -40 °C |
| Storage temperature, max. | | Operating temperature, min. | |
| | 70 °C | | -50 °C |
| Operating temperature, max. | | Temperature range, installation, min. | |
| | 125 °C | | -25 °C |
| Temperature range, installation, max. | | | |
| | 125 °C | | |

Conductors suitable for connection

| | |
|---|---------------------|
| Clamping range, min. | 0.5 mm ² |
| Clamping range, max. | 10 mm ² |
| Solid, min. H05(07) V-U | 0.5 mm ² |
| Solid, max. H05(07) V-U | 10 mm ² |
| Stranded, max. H07V-R | 10 mm ² |
| Flexible, min. H05(07) V-K | 0.5 mm ² |
| Flexible, max. H05(07) V-K | 10 mm ² |
| w. plastic collar ferrule, DIN 46228 pt 4, 1.5 mm ² min. | |
| w. plastic collar ferrule, DIN 46228 pt 4, 6 mm ² max. | |
| w. wire end ferrule, DIN 46228 pt 1, 1.5 mm ² min. | |
| w. wire end ferrule, DIN 46228 pt 1, 10 mm ² max. | |

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Technical data

| | | | |
|--|--|------------------------------|-----------------------------|
| Clampable conductor | Cross-section for conductor connection | Type | fine-wired |
| | | nominal | 0.5 mm ² |
| wire end ferrule | | Stripping length | nominal 14 mm |
| | | Recommended wire-end ferrule | H0.5/18 OR |
| Cross-section for conductor connection | Type | fine-wired | |
| | nominal | 1 mm ² | |
| wire end ferrule | | Stripping length | nominal 15 mm |
| | | Recommended wire-end ferrule | H1.0/18 GE |
| Cross-section for conductor connection | Type | fine-wired | |
| | nominal | 1.5 mm ² | |
| wire end ferrule | | Stripping length | nominal 15 mm |
| | | Recommended wire-end ferrule | H1.5/18D SW |
| | | Stripping length | nominal 12 mm |
| | | Recommended wire-end ferrule | H1.5/12 |
| Cross-section for conductor connection | Type | fine-wired | |
| | nominal | 0.75 mm ² | |
| wire end ferrule | | Stripping length | nominal 14 mm |
| | | Recommended wire-end ferrule | H0.75/18 W |
| Cross-section for conductor connection | Type | fine-wired | |
| | nominal | 2.5 mm ² | |
| wire end ferrule | | Stripping length | nominal 14 mm |
| | | Recommended wire-end ferrule | H2.5/19D BL |
| | | Stripping length | nominal 12 mm |
| | | Recommended wire-end ferrule | H2.5/12 |
| Cross-section for conductor connection | Type | fine-wired | |
| | nominal | 4 mm ² | |
| 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 | Type | fine-wired | |
| | nominal | 6 mm ² | |
| wire end ferrule | | Stripping length | nominal 14 mm |
| | | Recommended wire-end ferrule | H6.0/20 SW |
| | | Stripping length | nominal 12 mm |
| | | Recommended wire-end ferrule | H6.0/12 |
| Cross-section for conductor connection | Type | fine-wired | |
| | nominal | 10 mm ² | |
| wire end ferrule | | Stripping length | nominal 12 mm |
| | | Recommended wire-end ferrule | H10.0/12 |

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) | 38 A |
| Rated current, max. number of poles (Tu=20°C) | 38 A | Rated current, min. number of poles (Tu=40°C) | 34 A |
| Rated current, max. number of poles (Tu=40°C) | 34 A | Rated voltage for surge voltage class / pollution degree II/2 | 1,000 V |
| Rated voltage for surge voltage class / pollution degree III/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 II/2 | 6 kV | Rated impulse voltage for surge voltage class/ pollution degree III/2 | 8 kV |
| Rated impulse voltage for surge voltage class/ contamination degree III/3 | 8 kV | Short-time withstand current resistance | 3 x 1s with 420 A |
| Clearance, min. | 10.4 mm | Creepage distance, min. | 12.7 mm |

Rated data acc. to CSA

| | | | |
|-----------------------------------|--|-----------------------------------|----------------|
| Institute (CSA) |  | Certificate No. (CSA) | 200039-1121690 |
| Rated voltage (Use group B / CSA) | 600 V | Rated voltage (Use group C / CSA) | 600 V |
| Rated voltage (Use group D / CSA) | 600 V | Rated current (Use group B / CSA) | 33 A |
| Rated current (Use group C / CSA) | 33 A | Rated current (Use group D / CSA) | 5 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. | | |

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 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) | 5 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 | 353 mm |
| VPE width | 136 mm | VPE height | 61 mm |

BVF 7.62HP/03/180MSF2 BCF/08R SN BK BX
Weidmüller Interface GmbH & Co. KG

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Technical data
Technical data - hybrid

| | | | |
|---|-----------------------------|---|------------------|
| Pitch in mm (Signal) | 3.81 mm | Pitch in inches (Signal) | 0.15 inch |
| Number of poles (Signal) | 8 | L2 in mm | 11.43 mm |
| L2 in inch | 0.45 inch | Number of rows (Signal) | 2 |
| Contact material (Signal) | CuMg | Contact surface (Signal) | tinned |
| Layer structure of the plug contact (Signal) | 1-3 μ Ni / 4-8 μ Sn | Rated voltage for overvoltage class/pollution severity level II/2 (Signal) | 400 V |
| Rated voltage for overvoltage class/pollution severity level III/2 (Signal) | 320 V | Rated voltage for overvoltage class/pollution severity level III/3 (Signal) | 200 V |
| Rated impulse voltage for overvoltage class/pollution severity level II/2 (Signal) | 4 kV | Rated impulse voltage for overvoltage class/pollution severity level III/2 (Signal) | 4 kV |
| Rated impulse voltage for overvoltage class/pollution severity level III/3 (Signal) | 4 kV | Short-time withstand current resistance (Signal) | 3 x 1s with 80 A |
| Rated voltage (Use group B / CSA) (Signal) | 300 V | Rated voltage (Use group C / CSA) (Signal) | 50 V |
| Rated voltage (Use group D / CSA) (Signal) | 300 V | Rated current (Use group B / CSA) (Signal) | 9 A |
| Rated current (Use group C / CSA) (Signal) | 9 A | Rated current (Use group D / CSA) (Signal) | 9 A |
| Wire connection cross-section AWG (Signal) | AWG 24...AWG 16 | Rated voltage (Use group B / UL 1059] (Signal) | 300 V |
| Rated voltage (Use group C / UL 1059] (Signal) | 50 V | Rated voltage (Use group D / UL 1059] (Signal) | 300 V |
| Rated current (Use group B / UL 1059] (Signal) | 5 A | Rated current (Use group C / UL 1059] (Signal) | 5 A |
| Rated current (Use group D / UL 1059] (Signal) | 5 A | Connector cross-section (Signal) | AWG 26...AWG 16 |

Conductors that can be connected - Hybrid

| | | | |
|---|--------------------------|--|----------------------------|
| Clamping range, rated connection (Power) | 0.5...10 mm ² | Clamping range, rated connection (Signal) | 0.2...1.5 mm ² |
| Connector cross-section (Power) | AWG 24...AWG 8 | Connector cross-section AWG (Signal) | AWG 26...AWG 16 |
| solid, H05(07) V-U (Power) | 0.5...10 mm ² | solid, H05(07) V-U (Signal) | 0.14...1.5 mm ² |
| flexible, H05(07) V-K (Power) | 0.5...6 mm ² | flexible, H05(07) V-K (Signal) | 0.14...1.5 mm ² |
| with wire-end ferrule with collar (Power) | 0.5...6 mm ² | with wire-end ferrule with collar, DIN 46 228/4 (Signal) | 0.25...1.5 mm ² |
| with wire-end ferrule according to DIN 46 228/1 (Power) | 0.5...6 mm ² | with wire-end ferrule according to DIN 46 228/1 (Signal) | 0.25...1.5 mm ² |

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 | 27-46-03-02 |

BVF 7.62HP/03/180MSF2 BCF/08R SN BK BX**Weidmüller Interface GmbH & Co. KG**

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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"> • Technical specifications refer to the power contacts • Technical data of signal contacts: 50V / 5A, stripping length 8mm • Additional variants on request • Rated current related to rated cross-section & min. No. of poles. • Wire end ferrule with plastic collar to DIN 46228/4 • Wire end ferrule without plastic collar to DIN 46228/1 • 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. • Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months |

Approvals

Approvals



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

Downloads

| | |
|---|--|
| Approval/Certificate/Document of Conformity | Declaration of the Manufacturer |
| Engineering Data | CAD data – STEP |
| Engineering Data | EPLAN, WSCAD |
| Product Change Notification | 20220201 Visual change OMNIMATE® Power PCB terminal blocks and connectors 20220201 Visuelle Änderung OMNIMATE® Power Leiterplattenklemmen und -steckverbinder 20220208 Visual change Temporarily different color for connectors and accessories 20220208 Visuelle Änderung Vorübergehend anderer Farbton für Steckverbinder und Zubehör |
| User Documentation | Operating Instruction BVF Operating Instruction BVF hybrid QR-Code product handling video |
| Catalogues | Catalogues in PDF-format |
| Brochures | FL DRIVES EN MB DEVICE MANUF. EN FL DRIVES DE FL HEATING ELECTR EN FL APPL INVERTER EN FL_BASE_STATION_EN FL ELEVATOR EN FL POWER SUPPLY EN FL 72H SAMPLE SER EN PO OMNIMATE EN PO OMNIMATE EN |

Creation date September 16, 2022 1:16:35 AM CEST

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

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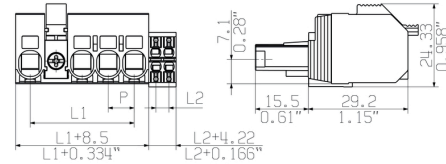
BVF 7.62HP/03/180MSF2 BCF/08R SN BK BX

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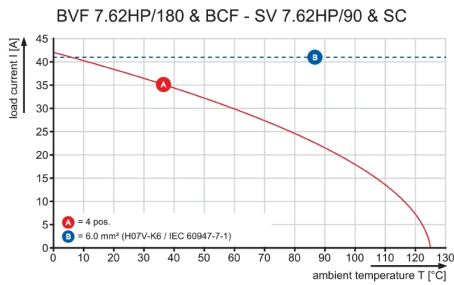
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Drawings

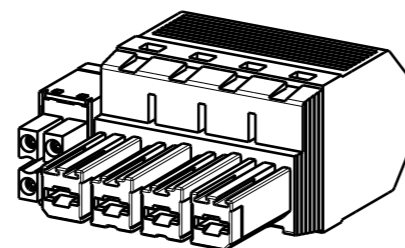
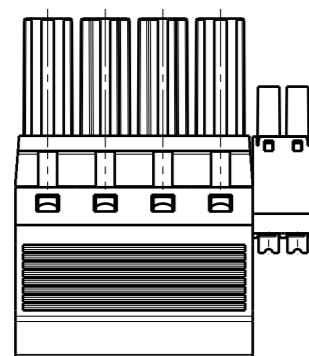
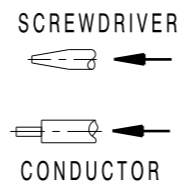
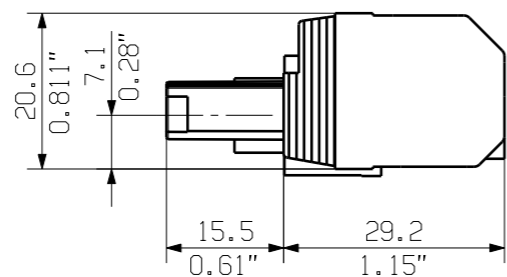
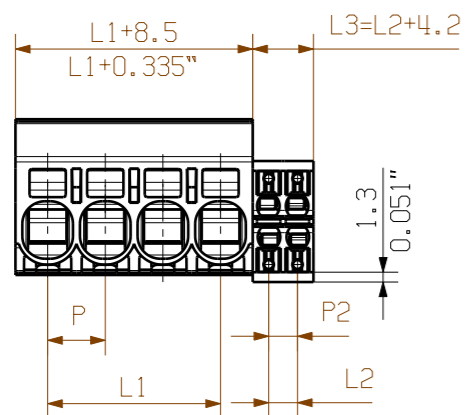
Dimensional drawing



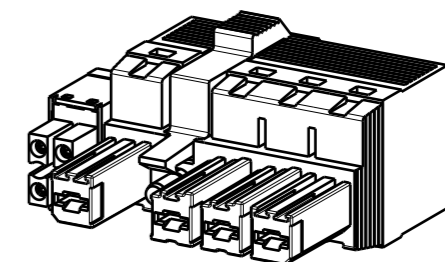
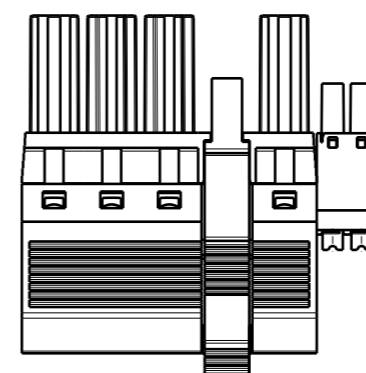
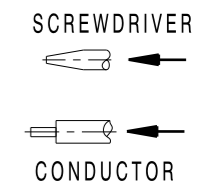
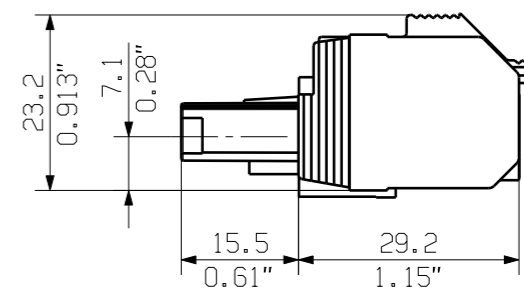
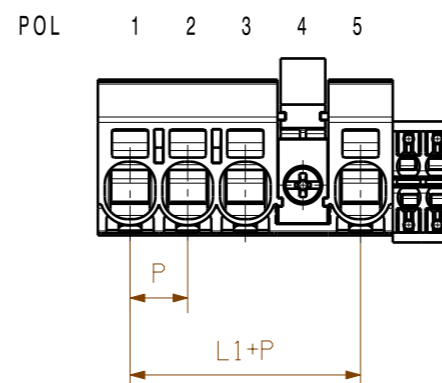
Graph



BVF7.62HP/.../180BCF/...R
 SHOWN: BVF7.62HP/04/180BCF/04R



BVF7.62HP/.../180MF...BCF/...R
 SHOWN: BVF7.62HP/04/180MF4BCF/04R



P = Raster/pitch = 7.62
 P2 = Raster/pitch = 3.81

| | | | | | |
|----------------------------|----------|---------|-------------------------------------|--------------------------------------|---------------------------------------|
| 5 | 30,48 | 7.62 | HYBRID 4POL L3=8.03mm L2=3.81 | HYBRID 6POL L3=11.84mm L2=7.62 | HYBRID 8POL L3=15.65mm L2=11.43 |
| 4 | 22,86 | | | | |
| 3 | 15,24 | | | | |
| 2 | 7,62 | | | | |
| POLZAHL/ NO OF POLES | L1 mm | P mm | | | |

P=POL/POLES
 MF= MITTELFLENSCH/MIDDLE FLANGE

| | | | | | | |
|-------------|-----|----|----|----|---|---|
| 5 MF 4 | P | P | P | MF | P | P |
| 5 MF 3 | P | P | MF | P | P | P |
| 4 MF 4 | P | P | P | MF | P | |
| 4 MF 3 | P | P | MF | P | P | |
| 3 MF 3 | P | P | MF | P | | |
| 3 MF 2 | P | MF | P | P | | |
| 2 MF 2 | P | MF | P | | | |
| POLE | 1 | 2 | 3 | 4 | 5 | 6 |
| NO OF POLES | POS | | | | | |

GENERAL TOLERANCE:
 DIN ISO 2768-m

For the mounting of PCBs, it should be noted that the rated data given in the catalogue relates only to the connection elements. The necessary creepage and clearance paths must be observed in connection with the respective applicant in accordance to VDE 0110. The current-carrying capacity and pitch tolerance is to be determined according to DIN IEC 326 part 3 very fine.

Weidmüller connectors are tested to the DIN VDE 0627 standard, and are valid for its field of application. Provided that the connectors are used to the intended purpose, all requirements with respect to the occurring of electrical, mechanical, thermic and corrosive stress will be satisfied.

| | | | | | | |
|-------------------|--------------------------------|---|----------------|------------------------------|--|--|
| RoHS COMPLIANT | Max. nos. | Prim PLM Part No.:005815 | | Prim ERP Part No.:1080320000 | | |
| | First Issue Date 29.08.2018 | 00 | | | | |
| Modification | | Drawing no. 49284 Issue no. 10 Sheet 01 of 01 sheets | | | | |
| | Drawn | Date | Name | | | |
| | Responsible | 24.10.2018 | Administrator | | | |
| Scale: 2/11 | Size: A3 | Approved | Krug, Matthias | | | |
| Drawings Assembly | | Product file: 7390 BVF/SVF 7.62HP | | | | |

BVF 7.62HP/04/180 BCF
 BUCHSENLEISTE
 SOCKET BLOCK

not released

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