

SVF 7.62HP/03/180SF SN BK BX SO

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
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 Germany

www.weidmueller.com

Product image


180° inverted pin header with PUSH IN connection technology for field wiring in 6mm² in a 7.62 pitch, as a “three-flange variant” for enclosure feed-through. Suitable for enclosures with a max. wall thickness of 2mm. Also perfect as a touch-safe solution for reverse voltages. Meets the requirements of UL1059 600 V Class C and IEC 61800-5-1.

General ordering data

| | |
|--------------|--|
| Version | PCB plug-in connector, male plug, 7.62 mm, Number of poles: 3, 180°, PUSH IN without actuator, Tension-clamp connection, Clamping range, max. : 10 mm ² , Box |
| Order No. | 2537400000 |
| Type | SVF 7.62HP/03/180SF SN BK BX SO |
| GTIN (EAN) | 4050118548860 |
| Qty. | 40 items |
| Product data | IEC: 1000 V / 57 A / 0.5 - 10 mm ² UL: 600 V / 39 A / AWG 24 - AWG 10 |
| Packaging | Box |

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Technical data

Approvals

| | |
|------|---------|
| ROHS | Conform |
|------|---------|

Dimensions and weights

| | | | |
|------------|---------|-----------------|-------------|
| Depth | 44.7 mm | Depth (inches) | 1.7598 inch |
| Height | 20.6 mm | Height (inches) | 0.811 inch |
| Width | 38.1 mm | Width (inches) | 1.5 inch |
| Net weight | 15.78 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 BV/SV 7.62HP | Type of connection | Field connection |
| Wire connection method | PUSH IN without actuator, Tension-clamp connection | Pitch in mm (P) | 7.62 mm |
| Pitch in inches (P) | 0.300 " | Conductor outlet direction | 180° |
| Number of poles | 3 | L1 in mm | 15.24 mm |
| L1 in inches | 0.600 " | 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 | IP20 plugged |
| Protection degree | IP20 | 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 |
| 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 | Insulation resistance | ≥ 108 Ω |
| Moisture Level (MSL) | | UL 94 flammability rating | V-0 |
| Contact material | Cu-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. | 0.5 mm ² |
| Clamping range, max. | 10 mm ² |
| Solid, min. H05(07) V-U | 0.5 mm ² |
| Solid, max. H05(07) V-U | 6 mm ² |
| Stranded, min. H07V-R | 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. | |

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w. wire end ferrule, DIN 46228 pt 1, min. 1.5 mm²

w. wire end ferrule, DIN 46228 pt 1, max. 6 mm²

| | | | |
|--|--|------------------------------|-----------------------------|
| Clampable conductor | Cross-section for conductor connection | Type | fine-wired |
| | | nominal | 2.5 mm ² |
| 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 | 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 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 | 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 |

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.

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) | 50 A | Rated current, min. number of poles (Tu=40°C) | 57 A |
| Rated current, max. number of poles (Tu=40°C) | 45 A | Rated voltage for surge voltage class / pollution degree II/2 | 1000 V |
| Rated voltage for surge voltage class / pollution degree III/2 | 800 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 |
| Creepage distance, min. | 12.7 mm | Clearance, min. | 12.7 mm |

Rated data acc. to CSA

| | | | |
|-----------------------------------|-------|-----------------------------------|-------|
| 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) | 36 A |

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| Rated current (Use group C / CSA) | 36 A | Rated current (Use group D / CSA) | 5 A |
| Wire cross-section, AWG, min. | AWG 24 | Wire cross-section, AWG, max. | AWG 10 |

Rated data acc. to UL 1059

| | | | |
|---------------------------------------|--------|---------------------------------------|--------|
| 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) | 39 A |
| Rated current (Use group C / UL 1059) | 39 A | Rated current (Use group D / UL 1059) | 5 A |
| Wire cross-section, AWG, min. | AWG 24 | Wire cross-section, AWG, max. | AWG 10 |

Packing

| | | | |
|-----------|-----------|------------|-----------|
| Packaging | Box | VPE length | 350.00 mm |
| VPE width | 135.00 mm | VPE height | 61.00 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 | | |
| | Evaluation | available | | |
| | Test | durability | | |
| Test: Misengagement (Non-interchangeability) | Evaluation | passed | | |
| | Standard | DIN EN 61984 section 6.3 and 6.9.1 / 09.02, DIN EN 60512-13-5 / 11.08 | | |
| | Test | 180° turned with coding elements | | |
| | Evaluation | passed | | |
| Test: Clampable cross section | Test | 180° turned without coding elements | | |
| | Evaluation | passed | | |
| | 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 | solid | 0.5 mm ² |
| | | Type of conductor and conductor cross-section | stranded | 0.5 mm ² |
| | | Type of conductor and conductor cross-section | solid | 6 mm ² |
| | | Type of conductor and conductor cross-section | stranded | 6 mm ² |
| | | 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 14/1 | |
| Type of conductor and conductor cross-section | | AWG 14/19 | | |
| Evaluation | passed | | | |
| Test for damage to and accidental loosening of conductors | Standard | DIN EN 60999-1 section 9.4 / 12.00 | | |
| | Requirement | 0.3 kg | | |
| | Conductor type | Type of conductor and conductor cross-section | H05V-U0.5 | |

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| | | Type of conductor and conductor cross-section | H05V-K0.5 |
| | | Type of conductor and conductor cross-section | AWG 20/1 |
| | | Type of conductor and conductor cross-section | AWG 20/19 |
| | Evaluation | passed | |
| | Requirement | 1.4 kg | |
| | Conductor type | Type of conductor and conductor cross-section | H07V-U6 |
| | | Type of conductor and conductor cross-section | H07V-K6 |
| | | 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 | ≥20 N | |
| | 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 | AWG 20/1 |
| | | Type of conductor and conductor cross-section | AWG 20/19 |
| | Evaluation | passed | |
| | Requirement | ≥80 N | |
| | Conductor type | Type of conductor and conductor cross-section | H07V-U6 |
| | | Type of conductor and conductor cross-section | H07V-K6 |
| | | Type of conductor and conductor cross-section | AWG 10/1 |
| | | Type of conductor and conductor cross-section | AWG 10/19 |
| | Evaluation | passed | |

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

- 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

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- Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months

Classifications

| | | | |
|-------------|-------------|-------------|-------------|
| ETIM 8.0 | EC002638 | ETIM 9.0 | EC002638 |
| ETIM 10.0 | EC002638 | ECLASS 14.0 | 27-46-02-02 |
| ECLASS 15.0 | 27-46-02-02 | | |

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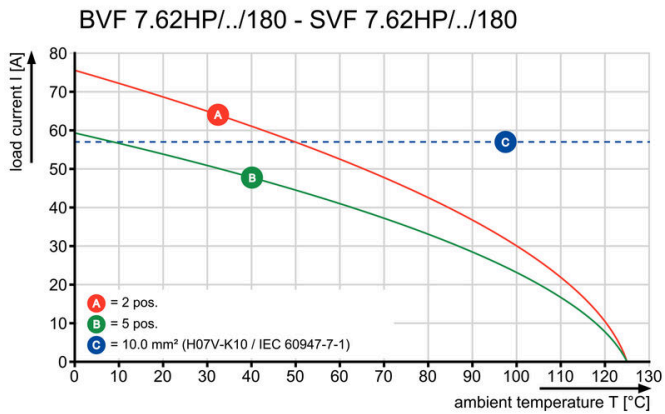
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Drawings

Product image



Graph



Graph

