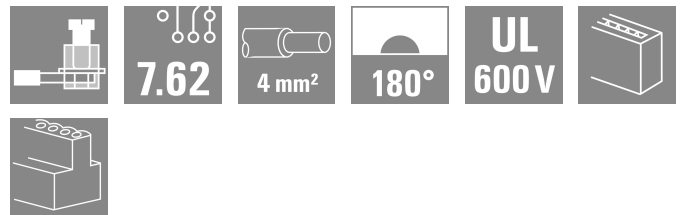


BLZ 7.62HP/02/180 SN BK BX SO

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

www.weidmueller.com

Product image

Power on board - 100% safety, 100% integration, 100% cost-effectiveness:

The compact, efficient solution for UL-600V applications in the lower performance range.

High-performance female header for applications up to 12 kVA:

- 29 A with 400 V (IEC)
- 20 A at 600 V (UL)
- 0.08 - 4 mm² / AWG 28 - 12

Assisting in device approval:

- Meets the requirements of 600 V according to UL 508 / UL 840.
- When plugged, meets the increased requirements on touch safety as per IEC 68100-5-1

The slimming diet for multiple-stage device series:

Reduce the size and cut costs in the high-volume lower performance range without compromising device approval!

General ordering data

| | |
|--------------|---|
| Version | PCB plug-in connector, female plug, 7.62 mm, Number of poles: 2, 180°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box |
| Order No. | 2614260000 |
| Type | BLZ 7.62HP/02/180 SN BK BX SO |
| GTIN (EAN) | 4050118618358 |
| Qty. | 100 items |
| Product data | IEC: 630 V / 29 A / 0.2 - 4 mm ² UL: 600 V / 20 A / AWG 20 - AWG 12 |
| Packaging | Box |

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Technical data

Approvals

Approvals



UL File Number Search [UL Website](#)
Certificate No. (cURus) E60693

Dimensions and weights

| | | | |
|------------|----------|-----------------|-------------|
| Depth | 23.3 mm | Depth (inches) | 0.9173 inch |
| Height | 18.3 mm | Height (inches) | 0.7205 inch |
| Width | 14.52 mm | Width (inches) | 0.5717 inch |
| Net weight | 4.01 g | | |

Environmental Product Compliance

| | | | |
|--------------------------|-----------------------------|-----------------|--|
| RoHS Compliance Status | Compliant without exemption | | |
| REACH SVHC | No SVHC above 0.1 wt% | | |
| Product Carbon Footprint | Cradle to gate | 0.094 kg CO2eq. | |

System Parameters

| | | | |
|--|--------------------------------------|--|---------------------|
| Product family | OMNIMATE Power - series BL/SL 7.62HP | Type of connection | Field connection |
| Wire connection method | Clamping yoke connection | Pitch in mm (P) | 7.62 mm |
| Pitch in inches (P) | 0.300 " | Conductor outlet direction | 180° |
| Number of poles | 2 | L1 in mm | 7.62 mm |
| L1 in inches | 0.300 " | Number of rows | 1 |
| Pin series quantity | 1 | Rated cross-section | 2.5 mm ² |
| 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 | 5.00 mΩ |
| Can be coded | Yes | Stripping length | 7 mm |
| Tightening torque, min. | 0.4 Nm | Tightening torque, max. | 0.5 Nm |
| Clamping screw | M 2.5 | Screwdriver blade | 0.6 x 3.5 |
| Screwdriver blade standard | DIN 5264 | Plugging cycles | 25 |
| Plugging force/pole, max. | 9.5 N | Pulling force/pole, max. | 8.5 N |

Material data

| | | | |
|---------------------------------------|----------------------------|---------------------------------------|---------|
| Insulating material | PBT | Colour | black |
| Colour chart (similar) | RAL 9011 | Insulating material group | IIIa |
| Comparative Tracking Index (CTI) | ≥ 200 | 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...8 μm Sn hot-dip tinned | Storage temperature, min. | -40 °C |
| Storage temperature, max. | 70 °C | Operating temperature, min. | -50 °C |
| Operating temperature, max. | 100 °C | Temperature range, installation, min. | -25 °C |
| Temperature range, installation, max. | 100 °C | | |

Conductors suitable for connection

| | |
|---|----------------------|
| Clamping range, min. | 0.08 mm ² |
| Clamping range, max. | 4 mm ² |
| Wire connection cross section AWG, min. | AWG 28 |

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Technical data

| | |
|---|---------------------|
| Wire connection cross section AWG, max. | AWG 12 |
| Solid, min. H05(07) V-U | 0.2 mm ² |
| Solid, max. H05(07) V-U | 4 mm ² |
| Flexible, min. H05(07) V-K | 0.2 mm ² |
| Flexible, max. H05(07) V-K | 4 mm ² |
| w. plastic collar ferrule, DIN 46228 pt 4, min. | 0.2 mm ² |
| w. plastic collar ferrule, DIN 46228 pt 4, max. | 2.5 mm ² |
| w. wire end ferrule, DIN 46228 pt 1, min. | 0.2 mm ² |
| w. wire end ferrule, DIN 46228 pt 1, max. | 2.5 mm ² |
| Plug gauge in accordance with EN 60999 a x b; ø | 2.8 mm x 2.4 mm |

| Clampable conductor | Cross-section for conductor connection | Type | fine-wired |
|---------------------|--|------------------------------|------------------------------|
| | | nominal | 0.25 mm ² |
| wire end ferrule | wire end ferrule | Stripping length | nominal 10 mm |
| | | Recommended wire-end ferrule | H0,25/12 HBL |
| | | nominal | 0.34 mm ² |
| wire end ferrule | wire end ferrule | Stripping length | nominal 10 mm |
| | | Recommended wire-end ferrule | H0,34/12 TK |
| | | nominal | 0.5 mm ² |
| wire end ferrule | wire end ferrule | Stripping length | nominal 6 mm |
| | | Recommended wire-end ferrule | H0,5/6 |
| | | nominal | 0.75 mm ² |
| wire end ferrule | wire end ferrule | Stripping length | nominal 6 mm |
| | | Recommended wire-end ferrule | H0,75/6 |
| | | nominal | 1 mm ² |
| wire end ferrule | wire end ferrule | Stripping length | nominal 6 mm |
| | | Recommended wire-end ferrule | H1,0/6 |
| | | nominal | 1.5 mm ² |
| wire end ferrule | wire end ferrule | Stripping length | nominal 7 mm |
| | | Recommended wire-end ferrule | H1,5/7 |
| | | nominal | 2.5 mm ² |
| wire end ferrule | wire end ferrule | Stripping length | nominal 7 mm |
| | | Recommended wire-end ferrule | H2,5/7 |
| | | nominal | 2.5 mm ² |

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) | 29 A |
| Rated current, max. number of poles (Tu=20°C) | 26.5 A | Rated current, min. number of poles (Tu=40°C) | 25 A |

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Technical data

| | | | |
|---|---------|---|-------------------|
| Rated current, max. number of poles (Tu=40°C) | 23 A | Rated voltage for surge voltage class / pollution degree II/2 | 630 V |
| Rated voltage for surge voltage class / pollution degree III/2 | 500 V | Rated voltage for surge voltage class / pollution degree III/3 | 400 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 180 A |
| Creepage distance, min. | 11.3 mm | Clearance, min. | 9.8 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) | 20 A |
| Rated current (Use group C / CSA) | 20 A | Rated current (Use group D / CSA) | 5 A |
| Wire cross-section, AWG, min. | AWG 20 | Wire cross-section, AWG, max. | AWG 12 |

Rated data acc. to UL 1059

| | | | |
|---------------------------------------|--|---------------------------------------|--------|
| Institute (cURus) | 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) | 20 A |
| Rated current (Use group C / UL 1059) | 20 A | Rated current (Use group D / UL 1059) | 5 A |
| Wire cross-section, AWG, min. | AWG 20 | Wire cross-section, AWG, max. | AWG 12 |
| Reference to approval values | Specifications are maximum values, details - see approval certificate. | | |

Packing

| | | | |
|-----------|----------|------------|-----------|
| Packaging | Box | VPE length | 138.00 mm |
| VPE width | 94.00 mm | VPE height | 77.00 mm |

Type tests

| | | | | |
|---|----------------|--|-------------------------------|--|
| Test: Durability of markings | Standard | draft DIN VDE 0627 section 6.2.2 / 09.91 | | |
| | Test | mark of origin, type identification, rated cross-section, rated voltage, pitch, approval marking SEV, type of material | | |
| | Evaluation | passed | | |
| | Test | approval marking UL, approval marking CSA | | |
| Test: Misengagement (Non-interchangeability) | Evaluation | on packaging label | | |
| | Standard | draft DIN VDE 0627 section 5.9.1 / 09.91, DIN IEC 60512 part 7 section 5 / 05.94 | | |
| | Test | 180° turned with coding elements | | |
| Test: Clampable cross section | Evaluation | passed | | |
| | Standard | DIN EN 60999 section 6 and 8.1 / 04.94, DIN EN 60947-1 section 8.2.4.5.1 / 07.98 | | |
| | Conductor type | Type of conductor and conductor cross-section | solid 0.08 mm ² | |
| | | Type of conductor and conductor cross-section | stranded 0.08 mm ² | |
| | | Type of conductor and conductor cross-section | solid 2.5 mm ² | |
| Type of conductor and conductor cross-section | | stranded 2.5 mm ² | | |

Technical data

| | | | |
|---------------|----------------|---|------------------------------|
| | | Type of conductor and conductor cross-section | AWG 28/1 |
| | | Type of conductor and conductor cross-section | AWG 28/19 |
| | | Type of conductor and conductor cross-section | AWG 12/1 |
| | | Type of conductor and conductor cross-section | AWG 12/19 |
| | Evaluation | passed | |
| | Standard | DIN EN 60999 section 8.4 / 04.94 | |
| | Requirement | 0.2 kg | |
| | Conductor type | Type of conductor and conductor cross-section | AWG 28/1 |
| | | Type of conductor and conductor cross-section | AWG 28/7 |
| | Evaluation | passed | |
| | Requirement | 0.3 kg | |
| | 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 |
| | Evaluation | passed | |
| | Requirement | 0.7 kg | |
| | Conductor type | Type of conductor and conductor cross-section | solid 2.5 mm ² |
| | | Type of conductor and conductor cross-section | stranded 2.5 mm ² |
| | Evaluation | passed | |
| | Requirement | 0.9 kg | |
| | Conductor type | Type of conductor and conductor cross-section | AWG 12/1 |
| | | Type of conductor and conductor cross-section | AWG 12/19 |
| | Evaluation | passed | |
| | Standard | DIN EN 60999 section 8.5 / 04.94 | |
| | Requirement | ≥5 N | |
| | Conductor type | Type of conductor and conductor cross-section | AWG 28/1 |
| | | Type of conductor and conductor cross-section | AWG 28/7 |
| | Evaluation | passed | |
| | Requirement | ≥50 N | |
| | Conductor type | Type of conductor and conductor cross-section | H07V-U2.5 |
| | | Type of conductor and conductor cross-section | H07V-K2.5 |
| | Evaluation | passed | |
| Pull-out test | | | |

Technical data

| | | |
|----------------|---|-----------|
| Requirement | ≥60 N | |
| Conductor type | Type of conductor and conductor cross-section | AWG 12/1 |
| | Type of conductor and conductor cross-section | AWG 12/19 |
| Evaluation | passed | |

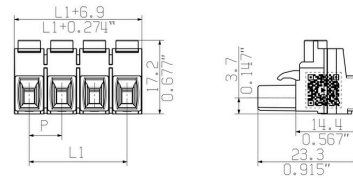
Important note

| | |
|----------------|---|
| 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 | <ul style="list-style-type: none"> 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 Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months |

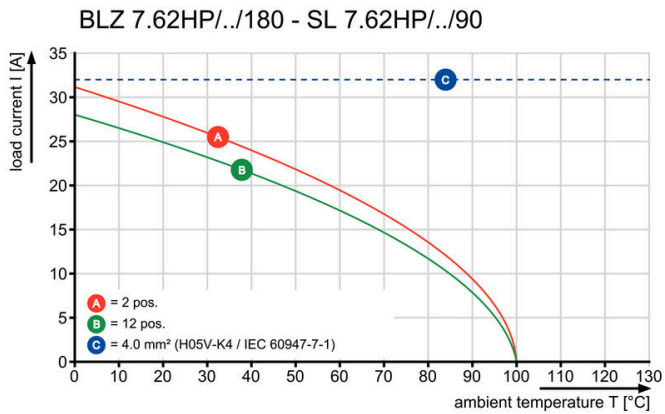
Classifications

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

Dimensional drawing



Graph



Graph

