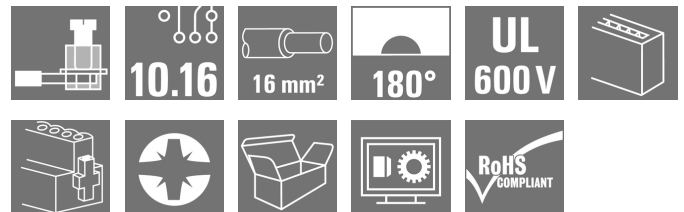


OMNIMATE Power - series BU/SU 10.16IT BUZ 10.16IT/04/180MF4 AG BK BX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Product image



Similar to illustration

180° female plug with 10.16 pitch for IT power networks. Meets the requirements of UL 1059 600 V class C. In combination with male header SU 10.16 IT with leading contact.

Meets the extended requirements on 5.5 mm touch safety for IT power networks as per IEC 61800-5-1 for 400 V to earth.

The self-locking (optionally also screwable) middle flange reduces the space requirements by one pitch width in comparison with conventional solutions.

Also optionally available without middle flange interlock.

General ordering data

| | |
|--------------|--|
| Type | BUZ 10.16IT/04/180MF4 AG BK BX |
| Order No. | 1156640000 |
| Version | PCB plug-in connector, female plug, 10.16 mm, Number of poles: 4, 180°, Clamping yoke connection, Clamping range, max. : 16 mm², Box |
| GTIN (EAN) | 4032248943616 |
| Qty. | 18 pc(s). |
| Product data | IEC: 1000 V / 78.3 A / 0.2 - 16 mm² UL: 600 V / 60 A / AWG 22 - AWG 4 |
| Packaging | Box |

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Technical data**Dimensions and weights**

| | | | |
|------------|----------|-----------------|------------|
| Width | 51.9 mm | Width (inches) | 2.043 inch |
| Height | 36 mm | Height (inches) | 1.417 inch |
| Depth | 52.3 mm | Depth (inches) | 2.059 inch |
| Net weight | 56.822 g | | |

System Parameters

| | | | |
|--|---------------------------------------|--|-------------------------|
| Product family | OMNIMATE Power - series BU/SU 10.16IT | Type of connection | Field connection |
| Wire connection method | Clamping yoke connection | Pitch in mm (P) | 10.16 mm |
| Pitch in inches (P) | 0.4 inch | Conductor outlet direction | 180° |
| Number of poles | 4 | L1 in mm | 40.64 mm |
| L1 in inches | 1.6 inch | Number of rows | 1 |
| Pin series quantity | 1 | Rated cross-section | 16 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 |
| Volume resistance | 4.50 mΩ | Can be coded | Yes |
| Stripping length | 12 mm | Tightening torque, min. | 1.2 Nm |
| Tightening torque, max. | 1.5 Nm | Clamping screw | M 4 |
| Screwdriver blade | 1.0 x 5.5 | Screwdriver blade standard | DIN 5264, ISO 8764/2-PZ |
| Plugging cycles | ≤ 50 | Plugging force/pole, max. | 14.5 N |
| Pulling force/pole, max. | 14.5 N | | |

Material data

| | | | |
|---------------------------------------|--------------|---------------------------------------|---------------------|
| Insulating material | PA GF | Colour | black |
| Colour chart (similar) | RAL 9011 | Insulating material group | I |
| Comparative Tracking Index (CTI) | ≥ 600 | Insulation strength | ≥ 10 ⁸ Ω |
| UL 94 flammability rating | V-0 | GWFI | 960 °C |
| Contact material | Copper alloy | Contact surface | silver-plated |
| Layer structure of plug contact | ≥ 3 μm Ag | 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

| | |
|--|---------------------|
| Clamping range, min. | 0.2 mm ² |
| Clamping range, max. | 16 mm ² |
| Wire connection cross section AWG, min. | AWG 22 |
| Wire connection cross section AWG, max. | AWG 4 |
| Solid, min. H05(07) V-U | 0.2 mm ² |
| Solid, max. H05(07) V-U | 16 mm ² |
| Stranded, min. H07V-R | 6 mm ² |
| Stranded, max. H07V-R | 16 mm ² |
| Flexible, min. H05(07) V-K | 0.5 mm ² |
| Flexible, max. H05(07) V-K | 16 mm ² |
| w. plastic collar ferrule, DIN 46228 pt 4, 0.25 mm ² min. | |
| w. plastic collar ferrule, DIN 46228 pt 4, 16 mm ² max. | |
| w. wire end ferrule, DIN 46228 pt 1, 0.25 mm ² min. | |

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Data sheet**OMNIMATE Power - series BU/SU 10.16IT
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Technical data

w. wire end ferrule, DIN 46228 pt 1, 16 mm²
max.

Plug gauge in accordance with EN 5.3mm (B6)
60999 a x b; ø

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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 |
| | Stripping length | nominal | 15 mm |
| | | Recommended wire-end ferrule | H10.0/22 EB |
| Cross-section for conductor connection | Type | fine-wired | |
| | | nominal | 16 mm ² |
| wire end ferrule | Stripping length | nominal | 12 mm |
| | | Recommended wire-end ferrule | H16.0/12 |
| | Stripping length | nominal | 15 mm |
| | | Recommended wire-end ferrule | H16.0/22 GN |

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Technical data

| | |
|---------------------|--|
| Reference text | Length of ferrules is to be chosen depending on the product and the rated voltage. |
| Max. clamping range | 16 mm ² |


Rated data acc. to IEC

| | | | |
|---|------------------------|---|-------------------|
| tested acc. to standard | IEC 60664-1, IEC 61984 | Rated current, min. number of poles (Tu=20°C) | 78.3 A |
| Rated current, max. number of poles (Tu=20°C) | 67.9 A | Rated current, min. number of poles (Tu=40°C) | 70.6 A |
| Rated current, max. number of poles (Tu=40°C) | 61.3 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 | 1,000 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 mit 1000 A |
| Clearance, min. | 15.1 mm | Creepage distance, min. | 15.1 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) | 60 A |
| Rated current (Use group C / CSA) | 60 A | Rated current (Use group D / CSA) | 5 A |
| Wire cross-section, AWG, min. | AWG 22 | Wire cross-section, AWG, max. | AWG 4 |
| 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) | 60 A |
| Rated current (Use group C / UL 1059) | 60 A | Rated current (Use group D / UL 1059) | 5 A |
| Wire cross-section, AWG, min. | AWG 22 | Wire cross-section, AWG, max. | AWG 4 |
| Reference to approval values | Specifications are maximum values, details - see approval certificate. | | |

Packing

| | | | |
|-----------|--------|------------|--------|
| Packaging | Box | VPE length | 54 mm |
| VPE width | 135 mm | VPE height | 350 mm |

Classifications

| | | | |
|-------------|-------------|------------|-------------|
| ETIM 6.0 | EC002638 | ETIM 7.0 | EC002638 |
| eClass 9.0 | 27-44-03-09 | eClass 9.1 | 27-44-03-09 |
| eClass 10.0 | 27-44-03-09 | | |

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Technical data**Notes**

| | |
|----------------|--|
| Notes | <ul style="list-style-type: none"> • Additional colours 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 • P on drawing = pitch • 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. • MFX and MSFX: X= Position of the middle flange e.g. MF2, MSF3 • For all applications with flange we recommend to fix the pin header with the help of the soldering flange or a self-tapping screw on the board. • Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months |
| 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. |

Approvals

Approvals



ROHS

Conform

Downloads

| | |
|---|---|
| Approval/Certificate/Document of Conformity | Declaration of the Manufacturer |
| Brochure/Catalogue | FL DRIVES EN MB DEVICE MANUF. EN FL DRIVES DE CAT 2 PORTFOLIOGUIDE EN 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 |
| Engineering Data | EPLAN_WSCAD |
| Engineering Data | STEP |
| White paper power electronics connected correctly | Download Whitepaper |
| User Documentation | QR-Code product handling video |
| White paper UL 600 V | Download Whitepaper |

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Catalogue status 14.08.2020 / We reserve the right to make technical changes.

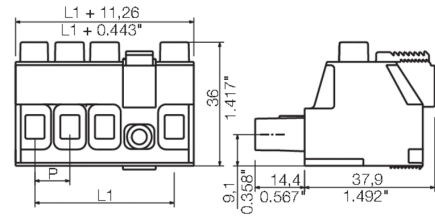
Data sheet

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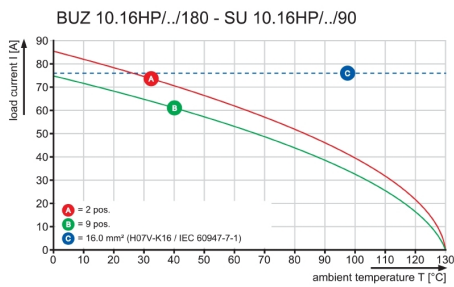
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Drawings

Dimensional drawing



Graph



Graph

