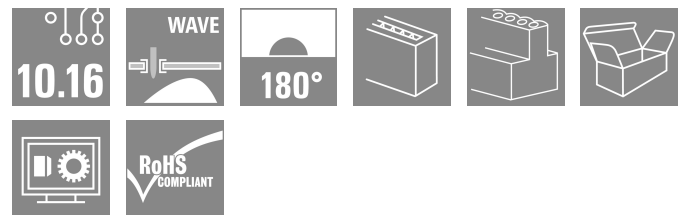
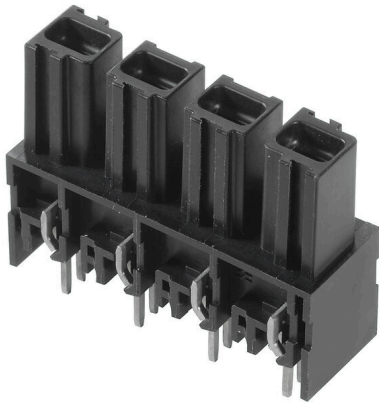


BUL 10.16HP/04/180 4.5AG BK BX SO

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

www.weidmueller.com



OMNIMATE Power BU / SU 10.16HP - the 50 kVA power class

More current for higher performance.

Top of the class in today's connector systems – the OMNIMATE Power SU / BUZ 10.16HP. They feature a very durable contact system which makes it a pluggable power transmission solution with maximum load reserves. HP stands for High Performance – performance exemplified by a long-term usage temperature of 120°C. This custom, pluggable solution is suitable for all applications that must meet 600 V UL or 1,000 V (IEC) with up to 76 A (IEC) and 54 A (UL).

General ordering data

| | |
|--------------|--|
| Version | PCB plug-in connector, female header, closed side, THT solder connection, 10.16 mm, Number of poles: 4, 180°, Solder pin length (l): 4.5 mm, silver-plated, black, Box |
| Order No. | 1289010000 |
| Type | BUL 10.16HP/04/180 4.5AG BK BX SO |
| GTIN (EAN) | 4050118080636 |
| Qty. | 50 items |
| Product data | IEC: 1000 V / 76 A UL: 300 V / 57 A |
| Packaging | Box |

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Technical data

Approvals

Approvals



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

Dimensions and weights

| | |
|------------|---------|
| Net weight | 14.73 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 BU/SU 10.16 | Type of connection | Board connection |
| Pitch in mm (P) | 10.16 mm | Pitch in inches (P) | 0.400 " |
| Number of poles | 4 | L1 in mm | 30.48 mm |
| L1 in inches | 1.200 " | Number of rows | 1 |
| Pin series quantity | 1 | Touch-safe protection acc. to DIN VDE 57 106 | Safe from finger touch |
| Protection degree | IP20 | Volume resistance | 2.00 mΩ |
| Can be coded | Yes | Plugging force/pole, max. | 12.5 N |
| Pulling force/pole, max. | 11 N | | |

Material data

| | | | |
|---------------------------------------|---------------|---------------------------------------|-----------|
| Insulating material | PA GF | Colour | black |
| Colour chart (similar) | RAL 9011 | Insulating material group | I |
| Comparative Tracking Index (CTI) | ≥ 600 | Moisture Level (MSL) | |
| UL 94 flammability rating | V-0 | Contact material | Cu-alloy |
| Contact surface | silver-plated | Layer structure of solder connection | ≥ 3 μm Ag |
| 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 | | |

Rated data acc. to IEC

| | | | |
|--|------------------------|--|--------|
| tested acc. to standard | IEC 60664-1, IEC 61984 | Rated current, min. number of poles (Tu=20°C) | 76 A |
| Rated current, max. number of poles (Tu=20°C) | 76 A | Rated current, min. number of poles (Tu=40°C) | 69 A |
| Rated current, max. number of poles (Tu=40°C) | 62.5 A | Rated voltage for surge voltage class / pollution degree II/2 | 1000 V |
| Rated voltage for surge voltage class / pollution degree III/2 | 630 V | Rated voltage for surge voltage class / pollution degree III/3 | 630 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 | 6 kV |
| Rated impulse voltage for surge voltage class/ contamination degree III/3 | 6 kV | Creepage distance, min. | 0 mm |

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Technical data

Clearance, min. 0 mm

Rated data acc. to CSA

| | | | |
|-----------------------------------|--|-----------------------------------|---------------|
| Institute (CSA) | CSA | Certificate No. (CSA) | 200039-121690 |
| Rated voltage (Use group B / CSA) | 300 V | Rated voltage (Use group C / CSA) | 300 V |
| Rated voltage (Use group D / CSA) | 600 V | Rated current (Use group B / CSA) | 57 A |
| Rated current (Use group C / CSA) | 57 A | Rated current (Use group D / CSA) | 5 A |
| Reference to approval values | Specifications are maximum values, details - see approval certificate. | | |

Rated data acc. to UL 1059

| | | | |
|---------------------------------------|--|---------------------------------------|--------|
| Institute (UR) | UR | Certificate No. (UR) | E60693 |
| Rated voltage (Use group B / UL 1059) | 300 V | Rated voltage (Use group C / UL 1059) | 300 V |
| Rated voltage (Use group D / UL 1059) | 600 V | Rated current (Use group B / UL 1059) | 57 A |
| Rated current (Use group C / UL 1059) | 57 A | Rated current (Use group D / UL 1059) | 5 A |
| Creepage distance, min. | 11.2 mm | Clearance distance, min. | 8.4 mm |
| Reference to approval values | Specifications are maximum values, details - see approval certificate. | | |

Packing

| | | | |
|-----------|-----------|------------|-----------|
| Packaging | Box | VPE length | 240.00 mm |
| VPE width | 149.00 mm | VPE height | 40.00 mm |

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"> • Additional variants on request • Rated current related to rated cross-section & min. No. of poles. • 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. • 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 | EC002637 | ETIM 9.0 | EC002637 |
| ETIM 10.0 | EC002637 | ECLASS 14.0 | 27-46-02-01 |
| ECLASS 15.0 | 27-46-02-01 | | |

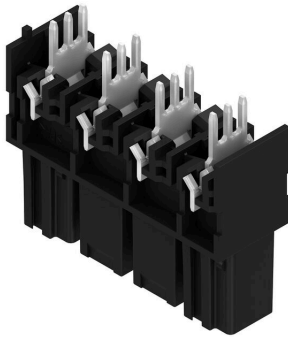
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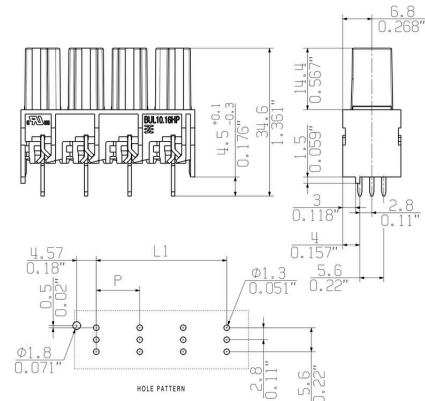
www.weidmueller.com

Drawings

Product image

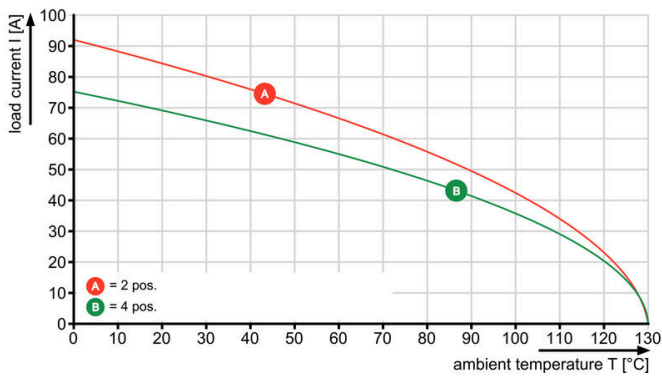


Dimensioned drawing



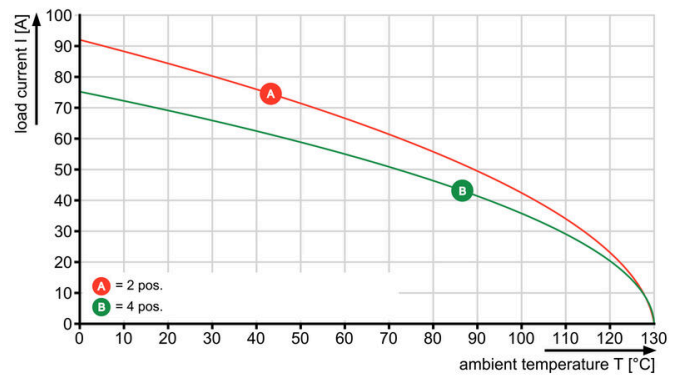
Graph

BUL 10.16HP/./180 - SU 10.16HP/./180



Graph

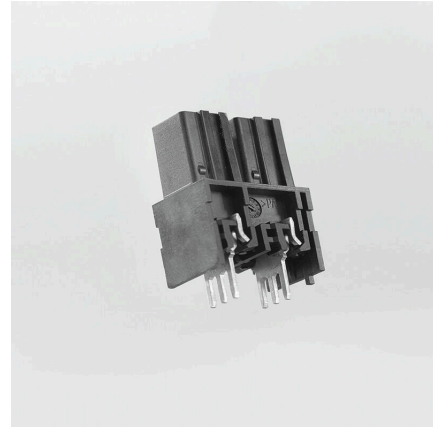
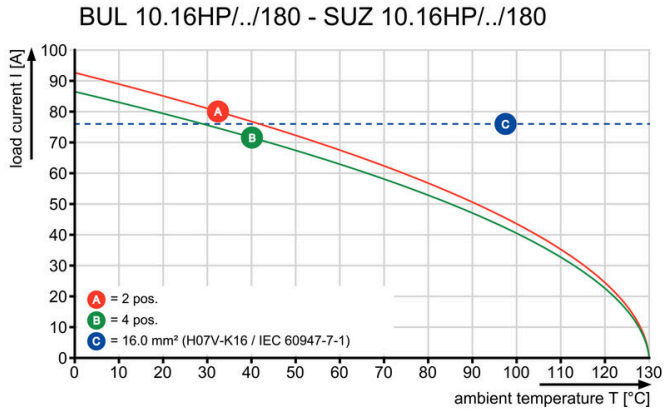
BUL 10.16HP/./180 - SU 10.16HP/./180



Drawings

Graph

Product benefits

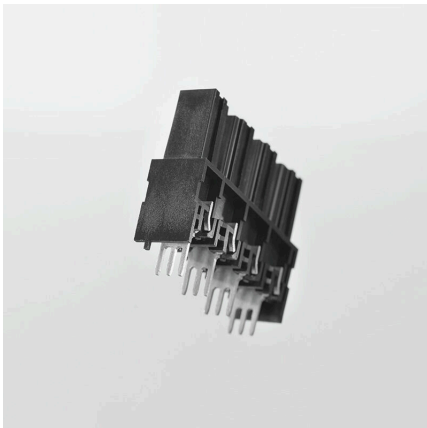


High process reliability 100%
 torsion-proof on the circuit board

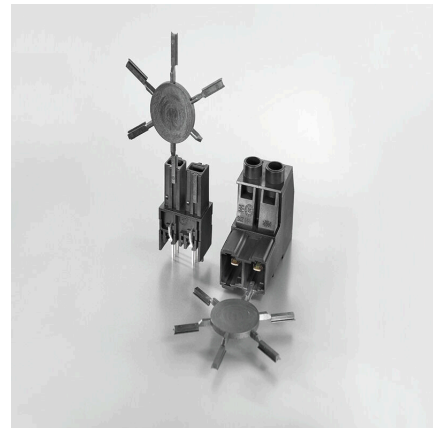
High process reliability 100%
 torsion-proof on the circuit board

Product benefits

Product benefits



High performance Max. current with max. stability



Cross plugging impossible Individual coding

Product benefits



Only connectors with the same number of poles fit 100% mismatching protection

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Accessories

Coding elements



The pluggable connections for power electronics - optimised for modern drive technologies, e.g. motor starters, frequency converters and servo-controllers. OMNIMATE Power sets the new standard – with increased safety and innovative solutions such as the pluggable shield, integrated signal contacts and one-handed operation.

The three product lines offer you further advantages:

- Application-oriented scalability: from the compact 4 mm² connector for 29 A (IEC) or 20 A (UL) up to the sturdy 16 mm² connector for 76 A (IEC) or 54 A (UL)
- Unlimited usage up to 1,000 V (IEC) or 600 V (UL)
- A variety of application optimised mounting options

Our service:

Design your individual connectors simply by using the product configurator.

General ordering data

| | | | |
|------------|----------------------------|---|--|
| Type | KO BU/SU10.16HP BK | Version | |
| Order No. | 1824410000 | PCB plug-in connector, Accessories, Coding element, black, Number | |
| GTIN (EAN) | 4032248326716 | of poles: 1 | |
| Qty. | 50 ST | | |
| Type | KO BU/SU10.16HP WT | Version | |
| Order No. | 2592600000 | PCB plug-in connector, Accessories, Coding element, Natural, Number | |
| GTIN (EAN) | 4050118717389 | of poles: 1 | |
| Qty. | 50 ST | | |

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Counterpart

SU 10.16HP/180G



Single-row, high-current male header, for side-by-side mounting without sacrificing any poles, or with patented flange for fast locking without tools. Maximum connection and operating reliability thanks to a mating profile that prevents incorrect connection, with unique coding diversity, additional fastening and integrable positioning aid. 3.5 mm pin length is optimised for wave soldering, plug-in direction 180° to solder pins.

General ordering data

| Type | SU 10.16HP/04/180G 3.5A... | Version |
|------------|----------------------------|---|
| Order No. | 1813430000 | PCB plug-in connector, male header, closed side, THT solder connection, 10.16 mm, Number of poles: 4, 180°, Solder pin length |
| GTIN (EAN) | 4032248297627 | (l): 3.5 mm, silver-plated, black, Box |
| Qty. | 42 ST | |

SU 10.16HP/270G

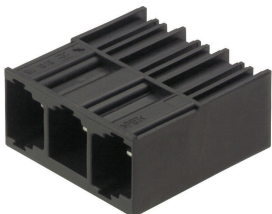


Single-row, high-performance male header for side-by-side mounting without sacrificing any poles or with patented flange for fast fixing without tools. Maximum connection and operating reliability thanks to a mating profile that prevents incorrect connection, with unique coding diversity and additional fastening in the flange. 3.5 mm pin length is optimised for wave soldering, plug-in direction 270° to solder pins.

General ordering data

| Type | SU 10.16HP/04/270G 3.5A... | Version |
|------------|----------------------------|---|
| Order No. | 1813510000 | PCB plug-in connector, male header, closed side, THT solder connection, 10.16 mm, Number of poles: 4, 270°, Solder pin length |
| GTIN (EAN) | 4032248297726 | (l): 3.5 mm, silver-plated, black, Box |
| Qty. | 42 ST | |

SU 10.16HP/90G



Single-row, high-current male header, for side-by-side mounting without sacrificing any poles, or with patented flange for fast locking without tools. Maximum connection and operating reliability thanks to a mating profile that prevents incorrect connection, with unique coding diversity and additional fastening in the flange. 3.5 mm pin length is optimised for wave soldering, plug-in direction 90° to solder pins.

General ordering data

| Type | SU 10.16HP/04/90G 3.5AG... | Version |
|------------|----------------------------|---|
| Order No. | 1813350000 | PCB plug-in connector, male header, closed side, THT solder connection, 10.16 mm, Number of poles: 4, 90°, Solder pin length (l): |
| GTIN (EAN) | 4032248297542 | 3.5 mm, silver-plated, black, Box |
| Qty. | 42 ST | |

BUL 10.16HP/04/180 4.5AG BK BX SO

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Counterpart

| | | |
|------------|----------------------------|---|
| Type | SU 10.16HP/04/90G 3.5AG... | Version |
| Order No. | 1340450000 | PCB plug-in connector, male header, closed side, THT solder |
| GTIN (EAN) | 4050118145021 | connection, 10.16 mm, Number of poles: 4, 90°, Solder pin length (l): |
| Qty. | 42 ST | 3.5 mm, Traffic grey (RAL), Box |