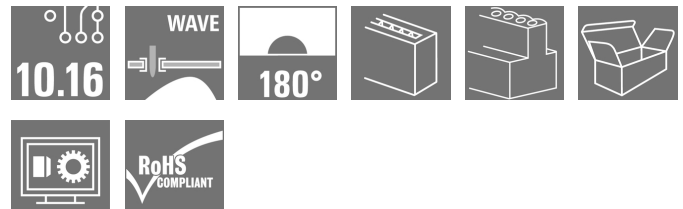


OMNIMATE Power - series BU/SU 10.16 BUL 10.16HP/04/180 4.5AG BK BX SO

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Product image



OMNIMATE Power BU / SU 7.62HP - 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

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

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Technical data

Dimensions and weights

Net weight	14.732 g
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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)	0.4 inch
No. of poles	4	L1 in mm	10.16 mm
L1 in inches	0.4 inch	Number of rows	1
Pin series quantity	1	Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch
Volume resistance	2.00 mΩ	Can be coded	Yes
Plugging cycles	25	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
CTI	≥ 600	Insulation strength	≥ 10 ⁸ Ω
UL 94 flammability rating	V-0	Contact material	Copper alloy
Contact surface	silver-plated	Layer structure of solder connection	3-µm Ag
Layer structure of plug contact	3-µm Ag	Storage temperature, min.	-25 °C
Storage temperature, max.	55 °C	Max. relative humidity during storage	80 %
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. no. of poles (Tu=20°C)	76 A
Rated current, max. no. of poles (Tu=20°C)	76 A	Rated current, min. no. of poles (Tu=40°C)	69 A
Rated current, max. no. of poles (Tu=40°C)	62.5 A	Rated voltage for surge voltage class / pollution degree II/2	1,000 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	Clearance, min.	0 mm
Creepage distance, min.	0 mm		

Rated data acc. to CSA

Institute (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.		

OMNIMATE Power - series BU/SU 10.16
BUL 10.16HP/04/180 4.5AG BK BX SO
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Klingenbergstraße 16

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Germany

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Technical data
Rated data acc. to UL 1059

Institute (UR)



Certificate No. (UR)

E60693

Rated voltage (Use group B / UL 1059) 300 V

Rated voltage (Use group D / UL 1059) 600 V

Rated current (Use group C / UL 1059) 57 A

Clearance distance, min. 8.4 mm

Reference to approval values
Specifications are maximum values, details - see approval certificate.

Rated voltage (Use group C / UL 1059) 300 V

Rated current (Use group B / UL 1059) 57 A

Rated current (Use group D / UL 1059) 5 A

Creepage distance, min. 11.2 mm

Packing

Packaging	Box	VPE length	38 mm
VPE width	147 mm	VPE height	240 mm

Classifications

ETIM 3.0	EC001284	ETIM 4.0	EC002637
ETIM 5.0	EC002637	ETIM 6.0	EC002637
eClass 6.2	27-26-07-04	eClass 7.1	27-44-04-02
eClass 8.1	27-44-04-02	eClass 9.0	27-44-04-02
eClass 9.1	27-44-04-02		

Notes

Notes

- Additional colours 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.

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

OMNIMATE Power - series BU/SU 10.16 BUL 10.16HP/04/180 4.5AG BK BX SO

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Technical data

Downloads

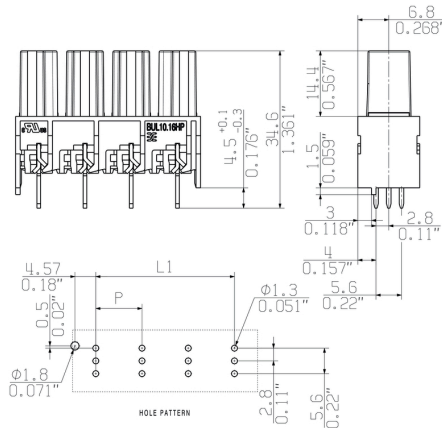
Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Brochure/Catalogue	FL DRIVES EN MB DEVICE MANUF. EN FL DRIVES DE CAT 2 PORTFOLIOGUIDE EN FL HEATING ELECTR EN FL APPL. INVERTER EN FL_BASE_STATION_EN FL ELEVATOR EN FL POWER SUPPLY EN FL 72H SAMPLE SER EN PO OMNIMATE EN
Engineering Data	EPLAN, WSCAD
Motion controllers white paper	Download Whitepaper
White Paper UL 600 V	Download Whitepaper

OMNIMATE Power - series BU/SU 10.16 BUL 10.16HP/04/180 4.5AG BK BX SO

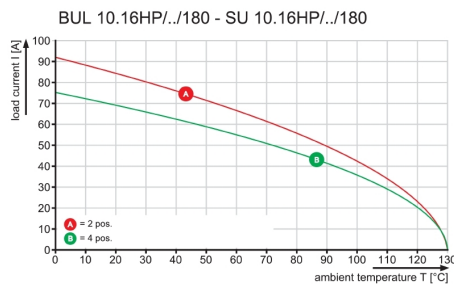
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Drawings

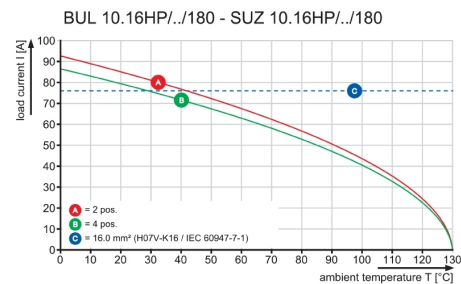
Dimensioned drawing



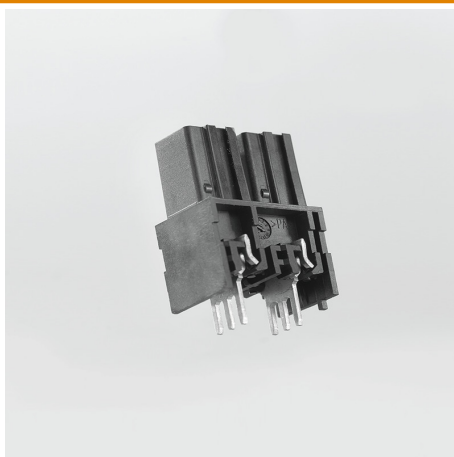
Graph



Graph

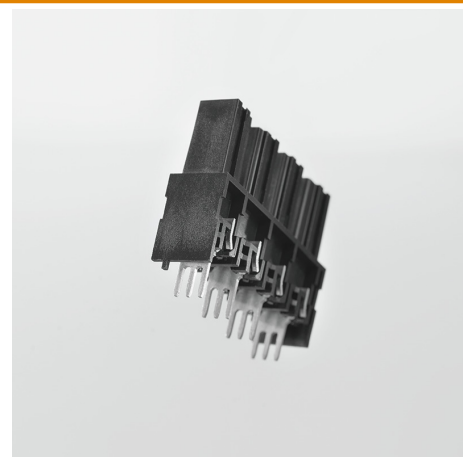


Product benefits



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

Product benefits



High performance
Max. current with max. stability

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Drawings

Product benefits



Cross plugging impossible
Individual coding

Product benefits



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

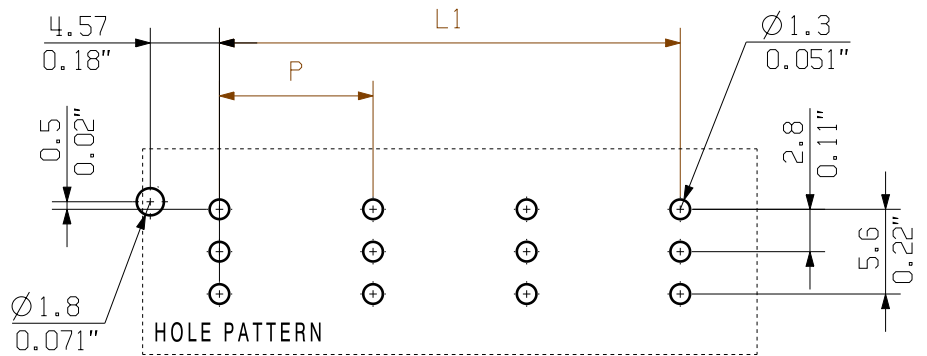
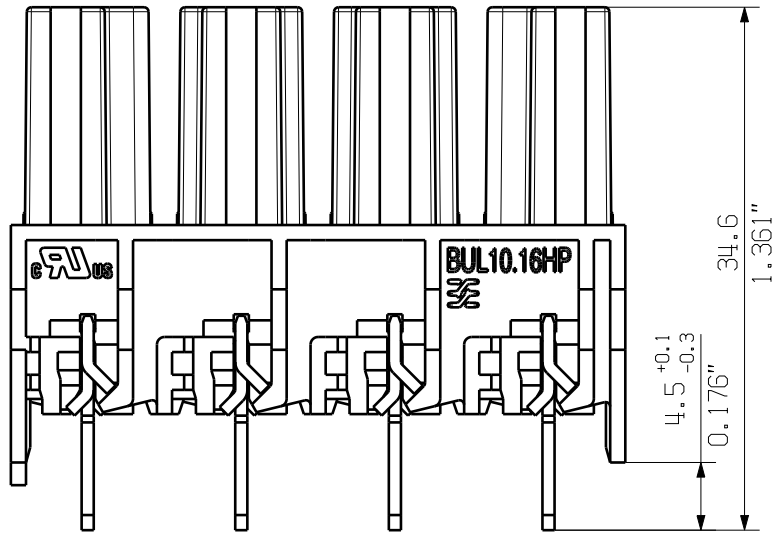
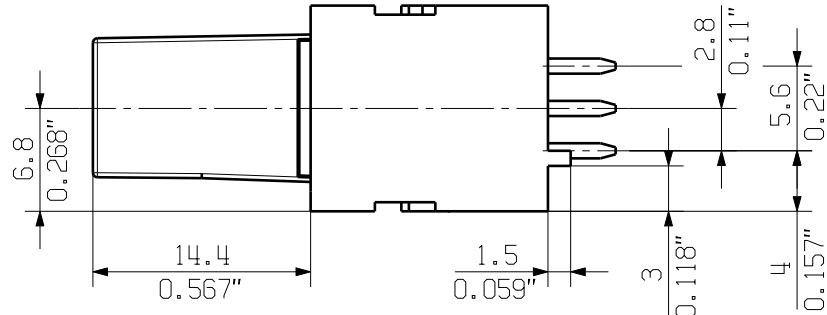
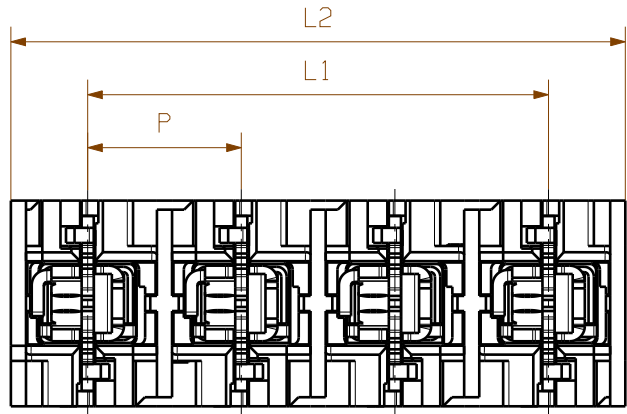
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WEIDMUELLER INTERFACE GmbH & Co.KG

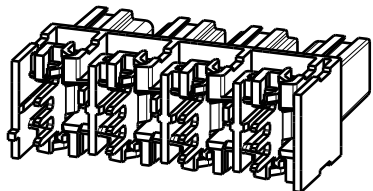
MASSE OHNE TOLERANZ SIND KEINE PRUEFMASSE
DIMS. WITHOUT TOLERANCE ARE NOT CONTROL DIMS.

ALLGEMEINGUELTIGE KUNDENZEICHNUNG, AKTUELLER STAND NUR AUF ANFRAGE
GENERAL CUSTOMER DRAWING, TOPICAL VERSION ONLY IF REQUIRED

DIE DEUTSCHE VERSION IST VERBINDLICH
THE GERMAN VERSION IS BINDING



M 1/1



For the mounting of PCBs, it should be noted that the rated data relates only to the PCB components alone.
The necessary creepage and clearance paths must be observed in connection with the respective applicant in accordance to IEC 664 / VDE 0110.
The current-carrying capacity and pitch tolerance is to be determined according to DIN IEC 326 part 3 very fine.

Weidmüller PCB components are tested to the DIN EN 61984 standard, and are valid for its field of application.
Provided that the components are used to the intended purpose, all requirements with respect to the occurring of electrical, mechanical, thermic and corrosive stress will be satisfied.

SHOWN: BUL 10.16HP/04/180 SO

P=10.16 RASTER PITCH

4	30.48	1.2	40.64	1.6
3	20.32	0.8	30.48	1.2
2	10.16	0.4	20.32	0.8
n	POLZAHL POLES	L1 [mm]	L1 [inch]	L2 [mm]
		L2 [inch]		

64894/5
21.08.12 DUDZIAK_J 01

MODIFICATION

CAT.NO.: .

DRAWN 27.05.2011 FRIELING_L

RESPONSIBLE SCHMITZ_T

CHECKED 23.08.2012 HECKERT_M

APPROVED HANKE_D

C 53595 02

DRAWING NO. SHEET 01 OF 01 SHEETS

ISSUE NO.

BUL 10.16HP/.../180...
BUCHSENLEISTE
FEMALE HEADER

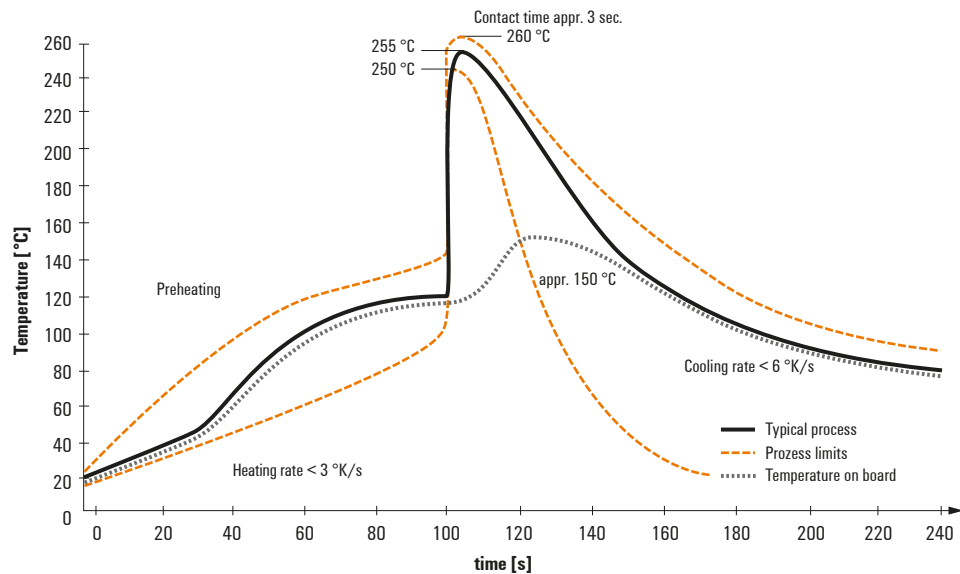
PRODUCT FILE: BU 10.16 7165

SCALE: 2/1
SUPERSEDES: .

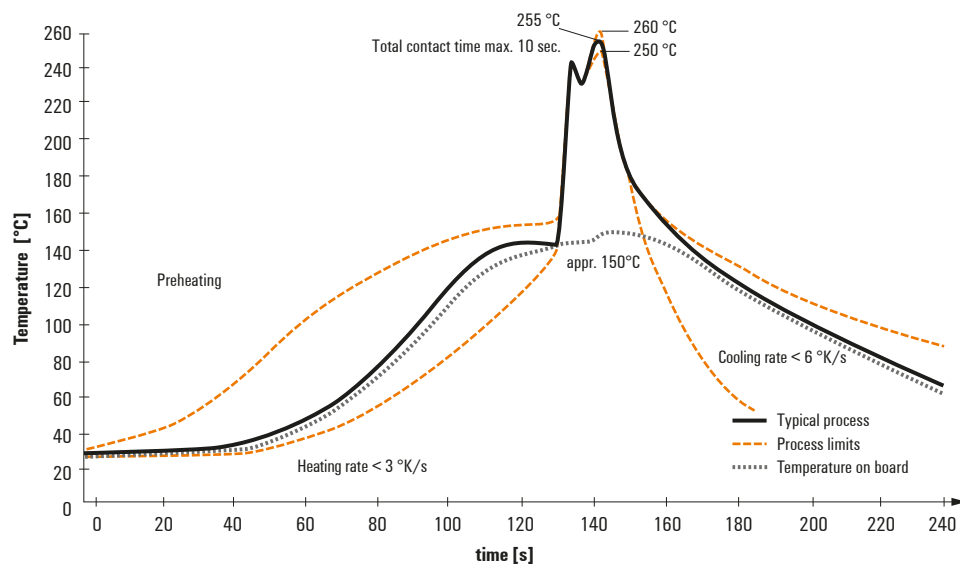
Recommended wave soldering profiles

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Single Wave:



Double Wave:



Wave soldering profiles

Wired connection elements should be processed in accordance with the DIN EN 61760-1 standard. We have included two recommendations for practical wave soldering profiles, with which Weidmüller PCB terminals and connectors are qualified.

When choosing a suitable profile for your application, the following factors also need to be considered:

- PCB thickness
- Proportion of Cu in the layers
- Single/double-sided assembly
- Product range
- Heating and cooling rates

The single and double wave profiles each indicate the recommended operating range, including the maximum soldering temperature of 260°C. In practice, the maximum soldering temperature is quite often well below the above maximum profile.

We reserve the right to make technical changes.