

OMNIMATE Power - series BU/SU 10.16 BUF 10.16IT/03/180F 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

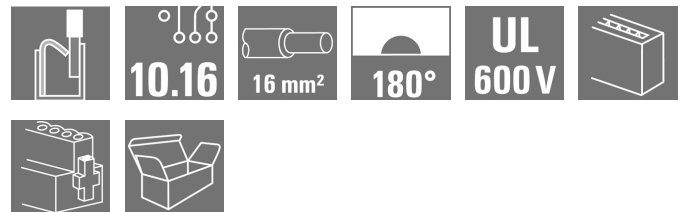


Abbildung ähnlich

Device connectivity | OMNIMATE® Power BUF 10.16
PUSH IN PCB connector, 16mm², with wire-ready
function

- PUSH IN technology with settable wire-ready contact point simplifies the connection of stranded wires without wire-end ferrules and wires with particularly rigid insulation
- Direct and tool-free connection of solid wires and wires with crimped wire-end ferrules for fast and safe wiring
- Single-hand operation of the plug-in connector and automatic connection thanks to the middle flange with snap-on mechanism and optionally with additional screw fastening

General ordering data

Type	BUF 10.16IT/03/180F AG BK BX
Order No.	2493310000
Version	PCB plug-in connector, female plug, 10.16 mm, Number of poles: 3, 180°, PUSH IN with actuator, Clamping range, max. : 16 mm ² , Box
GTIN (EAN)	4050118503098
Qty.	24 pc(s).
Product data	IEC: 1000 V / 76 A / 2.5 - 16 mm ² UL: 600 V / 34 A / AWG 12 - AWG 6
Packaging	Box

Creation date May 2, 2020 9:54:18 AM CEST

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Technical data**Dimensions and weights**

Net weight	39.19 g
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System Parameters

Product family		Type of connection	
OMNIMATE Power - series BU/SU 10.16		Field connection	
Wire connection method	PUSH IN with actuator	Pitch in mm (P)	10.16 mm
Pitch in inches (P)	0.4 inch	Conductor outlet direction	180°
Number of poles	3	L1 in mm	20.32 mm
L1 in inches	0.8 inch	Number of rows	1
Pin series quantity	1	Rated cross-section	16 mm ²
Touch-safe protection acc. to DIN VDE 57 106		Touch-safe protection acc. to DIN VDE 0470	
Safe from finger touch		IP 20	
Can be coded	Yes	Stripping length	18 mm
Actuating force actuating element, max.	120 N	Screwdriver blade	0.8 x 4.0
Screwdriver blade standard	DIN 5264	Plugging cycles	≤ 50
Plugging force/pole, max.	15 N	Pulling force/pole, max.	15 N

Material data

Insulating material	PA GF	Colour	black
Material of operational elements	PA 66/6, PBT	Colour chart (similar)	RAL 9011
Insulating material group	II	Comparative Tracking Index (CTI)	≥ 400
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.	-25 °C	Storage temperature, max.	50 °C
Max. relative humidity during storage	70 %	Operating temperature, min.	-50 °C
Operating temperature, max.	120 °C		

Conductors suitable for connection

Clamping range, min.	2.5 mm ²
Clamping range, max.	16 mm ²
Wire connection cross section AWG, min.	AWG 12
Wire connection cross section AWG, max.	AWG 4
Solid, min. H05(07) V-U	2.5 mm ²
Solid, max. H05(07) V-U	10 mm ²
Stranded, min. H07V-R	10 mm ²
Stranded, max. H07V-R	16 mm ²
Flexible, min. H05(07) V-K	2.5 mm ²
Flexible, max. H05(07) V-K	16 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, 2.5 mm ² min.	
w. plastic collar ferrule, DIN 46228 pt 4, 16 mm ² max.	
w. wire end ferrule, DIN 46228 pt 1, 2.5 mm ² min.	
w. wire end ferrule, DIN 46228 pt 1, 16 mm ² max.	

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Technical data

Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	2.5 mm ²
wire end ferrule		Stripping length	nominal 20 mm
		Recommended wire-end ferrule	H2.5/25D BL
		Stripping length	nominal 18 mm
		Recommended wire-end ferrule	H2.5/18
Cross-section for conductor connection	Type	fine-wired	
	nominal	4 mm ²	
wire end ferrule		Stripping length	nominal 20 mm
		Recommended wire-end ferrule	H4.0/26D GR
		Stripping length	nominal 18 mm
		Recommended wire-end ferrule	H4.0/18
Cross-section for conductor connection	Type	fine-wired	
	nominal	6 mm ²	
wire end ferrule		Stripping length	nominal 20 mm
		Recommended wire-end ferrule	H6.0/26 SW
		Stripping length	nominal 18 mm
		Recommended wire-end ferrule	H6.0/18
Cross-section for conductor connection	Type	fine-wired	
	nominal	10 mm ²	
wire end ferrule		Stripping length	nominal 21 mm
		Recommended wire-end ferrule	H10.0/28 EB
		Stripping length	nominal 18 mm
		Recommended wire-end ferrule	H10.0/18
Cross-section for conductor connection	Type	fine-wired	
	nominal	16 mm ²	
wire end ferrule		Stripping length	nominal 21 mm
		Recommended wire-end ferrule	H16.0/28 GN
		Stripping length	nominal 18 mm
		Recommended wire-end ferrule	H16.0/18
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

Rated current, min. number of poles (Tu=20°C)	76 A	Rated current, max. number of poles (Tu=20°C)	71 A
Rated current, min. number of poles (Tu=40°C)	70 A	Rated current, max. number of poles (Tu=40°C)	62 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	8 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 800A		

Data sheet

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Technical data

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 current (Use group B / UL 1059)	34 A	Rated current (Use group C / UL 1059)	34 A
Wire cross-section, AWG, min.	AWG 12	Wire cross-section, AWG, max.	AWG 6
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Packing

Packaging	Box	VPE length	0 m
VPE width	0 m	VPE height	0 m

Classifications

ETIM 6.0	EC002637	ETIM 7.0	EC002637
eClass 9.0	27-44-04-02	eClass 9.1	27-44-04-02
eClass 10.0	27-44-04-02		

Notes

Notes

- 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.
- 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.

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



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

Engineering Data	STEP
White paper power electronics connected correctly	Download Whitepaper
User Documentation	Assembly instructions PUSH IN connector with actuator – BUF 10.16 IT QR-Code product handling video
White paper UL 600 V	Download Whitepaper
White paper PUSH IN wire connection	Download Whitepaper

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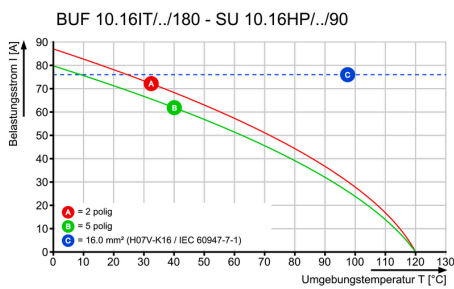
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Drawings

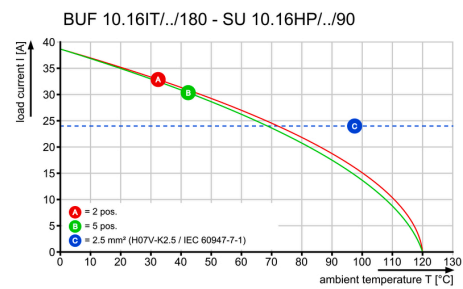
Dimensional drawing

Similar to illustration

Graph



Graph



Product benefits



Easy connection of conductors
WIRE READY

Product benefits



Quick wiring

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Mating connector (fully pluggable)
SU 10.16HP/90F


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/03/90F 3.5AG ...	Version	Product data	Packaging
Order No.	1813580000	PCB plug-in connector, male header, Clip-on flange, THT solder connection, 10.16 mm, Number of poles: 3, 90°, Solder pin length (l): 3.5 mm, silver-plated, black, Box	IEC: 1000 V / 78.3 A	Box
GTIN (EAN)	4032248297795		UL: 300 V / 60 A	
Qty.	36 pc(s).			

SU 10.16HP/180F


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

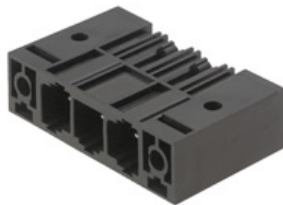
Type	SU 10.16HP/03/180F 3.5A ...	Version	Product data	Packaging
Order No.	1813660000	PCB plug-in connector, male header, Clip-on flange, THT solder connection, 10.16 mm, Number of poles: 3, 180°, Solder pin length (l): 3.5 mm, silver-plated, black, Box	IEC: 1000 V / 78.3 A	Box
GTIN (EAN)	4032248297887		UL: 300 V / 60 A	
Qty.	36 pc(s).			

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Mating connector (fully pluggable)

SU 10.16HP/270F



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/03/270F 3.5A ...	Version	Product data	Packaging
Order No.	1813740000	PCB plug-in connector, male header, Clip-on flange, THT solder connection, 10.16 mm, Number of poles: 3, 270°, Solder pin length (l): 3.5 mm, silver-plated, black, Box	IEC: 1000 V / 78.3 A UL: 300 V / 60 A	Box
GTIN (EAN)	4032248297962			
Qty.	36 pc(s).			

Data sheet

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Accessories

Slotted screwdriver

Slotted screwdriver with rounded blade SD DIN 5265, ISO 2380/2, output to DIN 5264, ISO 2380/1. ChromTop tip, SoftFinish grip



General ordering data

Type	SDS 0.8X4.5X125	Version
Order No.	9009020000	Screwdriver, Blade width (B): 4.5 mm, Blade length: 125 mm, Blade thickness (A): 0.8 mm
GTIN (EAN)	4032248266883	
Qty.	1 pc(s).	

Coding elements



Only connects what is supposed to be connected: the right connection at the right place.

Coding elements and locking devices clearly assign connecting elements during the manufacturing process and operation

The coding elements and locking devices are inserted prior to assembly or during the cable assembly phase. The Weidmüller alternative: configure online using the variant configurator to precode prior to delivery.

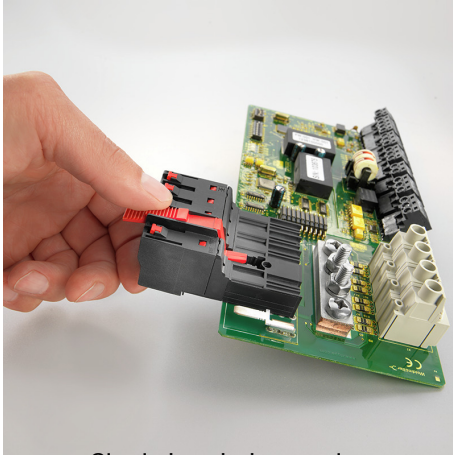
Incorrect assembly on the circuit board and incorrect plugging of connecting elements is no longer possible. The advantage: no troubleshooting during manufacture and no operational errors by the user.

General ordering data

Type	KO BU/SU10.16HP BK	Version	Product data	Packaging
Order No.	1824410000	PCB plug-in connector, Accessories, Coding element, black, Number of poles: 1		Box
GTIN (EAN)	4032248326716			
Qty.	50 pc(s).			

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Product benefits

Single-handed operation
Automatic latching