

OMNIMATE Power - series LU
LUF 10.00/05/90 5.0SN BK BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 16

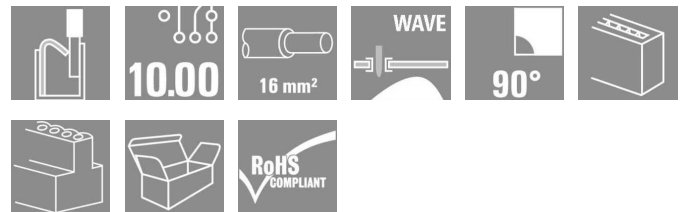
D-32758 Detmold

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www.weidmueller.com



The sturdy, direct connection for extreme current and voltage requirements in all power electronics applications such as solar inverters, frequency converters, servo-controllers and power supplies.

General ordering data

Type	LUF 10.00/05/90 5.0SN BK BX
Order No.	1988630000
Version	PCB terminal, 10.00 mm, No. of poles: 5, 90°, Solder pin length (l): 5 mm, Black, PUSH IN, Clamping range, rated connection, max.: 16 mm², Box
GTIN (EAN)	4050118373059
Qty.	25 pc(s).
Product data	IEC: 1000 V / 76 A / 0.5 - 16 mm² UL: 300 V / 61 A
Packaging	Box

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Technical data

Dimensions and weights

Net weight	50.5 g
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System parameters

Product family	OMNIMATE Power - series LU	Wire connection method	PUSH IN
Mounting onto the PCB	THT solder connection	Conductor outlet direction	90°
Pitch in mm (P)	10 mm	Pitch in inches (P)	0.394 inch
No. of poles	5	Solder pin length (l)	5 mm
Solder pin dimensions	d = 1.2 mm, Octagonal	Solder eyelet hole diameter (D)	1.6 mm
Solder eyelet hole diameter tolerance (D)+	0,1 mm	Number of solder pins per pole	4
Screwdriver blade	0.8 x 4.0	Stripping length	18 mm
L1 in mm	40 mm	L1 in inches	1.575 inch
Touch-safe protection acc. to DIN VDE 0470	IP20 plugged/ IP10 unplugged	Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch

Material data

Insulating material	Wemid (PA)	Colour	Black
Colour chart (similar)	RAL 9011	Insulating material group	I
CTI	≥ 600	Insulation resistance	≥ 10 ⁸ Ω
UL 94 flammability rating	V-0	Contact material	E-Cu
Layer structure of solder connection	4-6 µm Sn matt	Storage temperature, min.	-25 °C
Storage temperature, max.	55 °C	Max. relative humidity during storage	80 %
Operating temperature, min.	-50 °C	Operating temperature, max.	120 °C
Temperature range, installation, min.	-25 °C	Temperature range, installation, max.	120 °C

Conductors suitable for connection

Clamping range, rated connection, min.	0.5 mm ²	Clamping range, rated connection, max.	16 mm ²
Wire connection cross section AWG, min.	AWG 18	Wire connection cross section AWG, max.	AWG 6
Solid, min. H05(07) V-U	0.5 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, min.	0.5 mm ²	w. plastic collar ferrule, DIN 46228 pt 4, max.	16 mm ²
w. wire end ferrule, DIN 46228 pt 1, min.	0.5 mm ²	w. wire end ferrule, DIN 46228 pt 1, max.	16 mm ²
Plug gauge acc. to EN 60999 a x b; Ø	5.3mm (B6)		

Rated data acc. to IEC

tested acc. to standard	IEC 60947-7-4	Rated current, min. no. of poles (Ta = 20°C)	76 A
Rated current, max. no. of poles (Ta = 20°C)	76 A	Rated current, min. no. of poles (Ta = 40°C)	76 A
Rated current, max. no. of poles (Ta = 40°C)	76 A	Rated voltage for surge voltage class / pollution degree II/2	1,000 V
Rated voltage for surge voltage class / pollution degree III/2	690 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		

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Technical data
Rated data acc. to UL 1059

Institute (UR)



Certificate No. (UR)

E60693

Rated voltage (use group B)	300 V
Rated voltage (use group D)	600 V
Rated current (use group C)	61 A
Reference to approval values	Specifications are maximum values, details - see approval certificate.

Rated voltage (use group C)	150 V
Rated current (use group B)	61 A
Rated current (use group D)	5

Classifications

ETIM 3.0	EC001284	ETIM 4.0	EC002643
ETIM 5.0	EC002643	ETIM 6.0	EC002643
eClass 6.2	27-26-11-01	eClass 9.1	27-44-04-01

Notes

Notes

- Additional colours on request
- Rated current related to rated cross-section & min. No. of poles.
- Wire end ferrule without plastic collar to DIN 46228/1
- Wire end ferrule with plastic collar to DIN 46228/4
- 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.
- The test point can only be used as potential-pickup point.

IPC conformity

The products are developed, manufactured and delivered according to the internationally recognised IPC-A-610 standard, category "permissible". More extensive demands on the products can be evaluated on request.

Approvals

Approvals



ROHS

Conform

Downloads

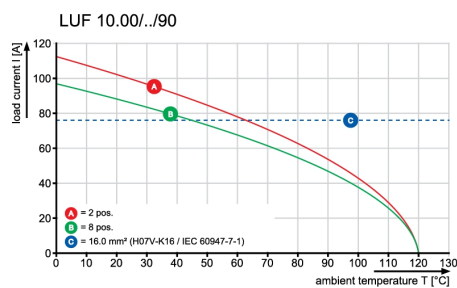
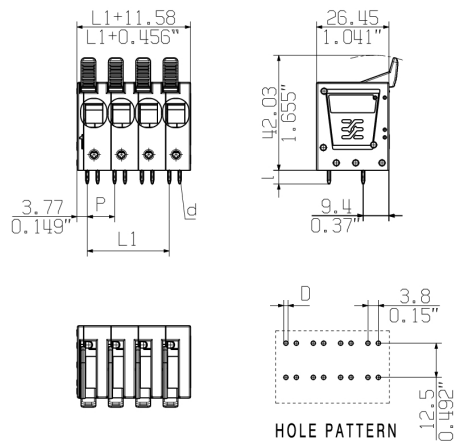
Motion controllers white paper

[Download Whitepaper](#)

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Drawings



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Accessories

Slotted screwdriver

VDE insulated slot-head screwdriver, SDI DIN 7437, ISO 2380/2, drive output acc. to DIN 5264, ISO 2380/1. SoftFinish grip



General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.
SDIS	9008400000	Screwdriver, Blade width	4032248056361	1 pc(s).
0.8X4.0X100		(B): 4 mm, Blade length: 100 mm, Blade thickness (A): 0.8 mm		

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	Order No.	Version	GTIN (EAN)	Qty.
SDS	9008340000	Screwdriver, Blade width	4032248056293	1 pc(s).
0.8X4.0X100		(B): 4 mm, Blade length: 100 mm, Blade thickness (A): 0.8 mm		

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Accessories**Additional accessories****No task is too small when creating the perfect solution.**

Connections form just one part of the overall process. Small details are often the key to the perfect solution in applications where potentials are tested, grouped or even isolated.

A system is not a system without small but essential details:

- Test plugs ensure reliable pick-up from diagnostic sockets

In tandem with the manufacturing process and application.

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
PS 2.0 MC	0310000000	PCB plug-in connector, Accessories, Test plug, Red, No. of poles: 1	4008190000059	20 pc(s).		Box