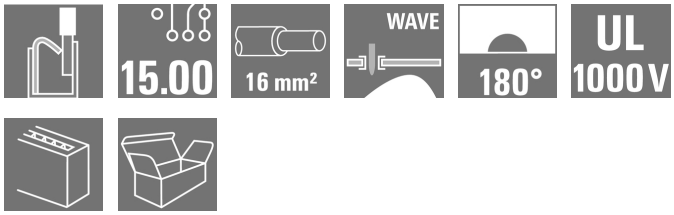
OMNIMATE Power - series LU
LUFS 15.00/02/180V 5.0SN BK BX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
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	LUFS 15.00/02/180V 5.0SN BK BX
Order No.	2491820000
Version	Printed circuit board terminals, 15.00 mm, No. of poles: 2, 180°, Solder pin length (l): 5 mm, black, PUSH IN without actuator, Clamping range, max. : 16 mm², Box
GTIN (EAN)	4050118564709
Qty.	40 pc(s).
Product data	IEC: 1000 V / 76 A / 0.5 - 16 mm² UL: 600 V / 57 A / AWG 18 - AWG 4
Packaging	Box

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Technical data

Dimensions and weights

Width	26.58 mm	Width (inches)	1.046 inch
Height	36.3 mm	Height (inches)	1.429 inch
Height of lowest version	31.3 mm	Depth	24.7 mm
Depth (inches)	0.972 inch	Net weight	19.921 g

System parameters

Product family	OMNIMATE Power - series LU	Wire connection method	PUSH IN without actuator
Mounting onto the PCB	THT solder connection	Conductor outlet direction	180°
Pitch in mm (P)	15 mm	Pitch in inches (P)	0.591 inch
No. of poles	2	Fitted by customer	No
Solder pin length (l)	5 mm	Solder pin dimensions	d = 1.2 mm, Octagonal
Solder eyelet hole diameter (D)	1.7 mm	Solder eyelet hole diameter tolerance (D)	+ 0,1 mm
Number of solder pins per pole	2	Screwdriver blade	0.8 x 4.0
Stripping length	18 mm	L1 in mm	15 mm
L1 in inches	0.59 inch	Touch-safe protection acc. to DIN VDE 0470	IP20 plugged/ IP10 unplugged
Touch-safe protection acc. to DIN VDE 57 106	touch-safe with connected connectors from 6 mm²		

Material data

Insulating material	Wemid (PA)	Colour code	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	E-Cu
Storage temperature, min.	-25 °C	Storage temperature, max.	55 °C
Max. relative humidity during storage	80 %	Operating temperature, min.	-40 °C
Operating temperature, max.	120 °C		

Conductors suitable for connection

Clamping range, min.	0.5 mm²	Clamping range, max.	16 mm²
Wire connection cross section AWG, min.	AWG 18	Wire connection cross section AWG, max.	AWG 4
Solid, min. H05(07) V-U	0.5 mm²	Solid, max. H05(07) V-U	16 mm²
Stranded, min. H07V-R	10 mm²	Stranded, max. H07V-R	16 mm²
Flexible, min. H05(07) V-K	0.5 mm²	Flexible, max. H05(07) V-K	16 mm²
w. plastic collar ferrule, DIN 46228 pt 4, min.	0.5 mm²	w. plastic collar ferrule, DIN 46228 pt 4, max.	16 mm²
w. wire end ferrule, DIN 46228 pt 1, min	0.5 mm²	w. wire end ferrule, DIN 46228 pt 1, max.	16 mm²

Rated data acc. to IEC

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)	76 A	Rated current, max. no. of poles (Tu=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	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

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Technical data

Rated data acc. to CSA

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)	57 A
Rated current (Use group C / CSA)	57 A	Rated current (Use group D / CSA)	5 A
Wire cross-section, AWG, min.	AWG 18	Wire cross-section, AWG, max.	AWG 4

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 voltage (Use group E / UL 1059)	1,000 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	Rated current (Use group E / UL 1059)	57 A
Wire cross-section, AWG, min.	AWG 18	Wire cross-section, AWG, max.	AWG 4
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Packaging

Packaging	Box	VPE length	235 mm
VPE width	130 mm	VPE height	45 mm

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	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.

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Technical data

Approvals

Approvals	

Downloads

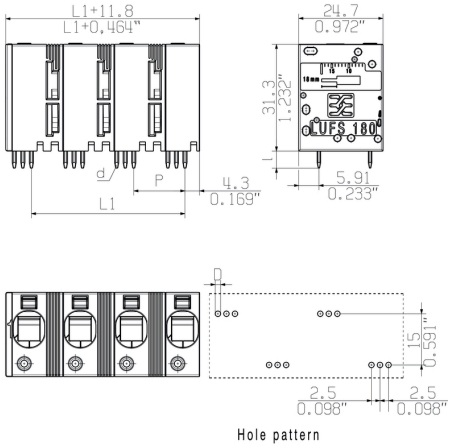
Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Engineering Data	STEP
Motion controllers white paper	Download Whitepaper
User Documentation	QR-Code product handling video
White Paper UL 600 V	Download Whitepaper

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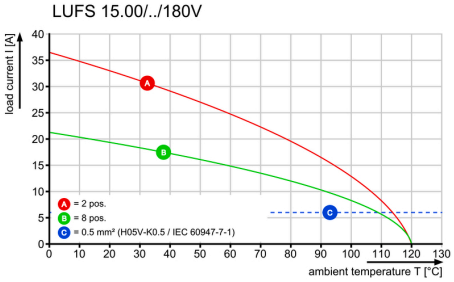
Drawings

Dimensional drawing

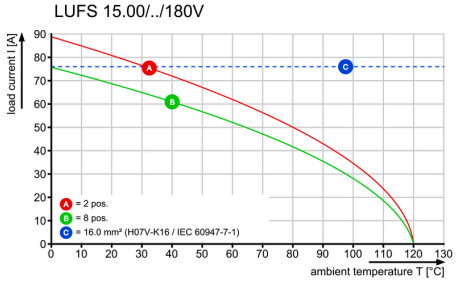


Hole pattern

Derating curve



Derating curve



Product benefits

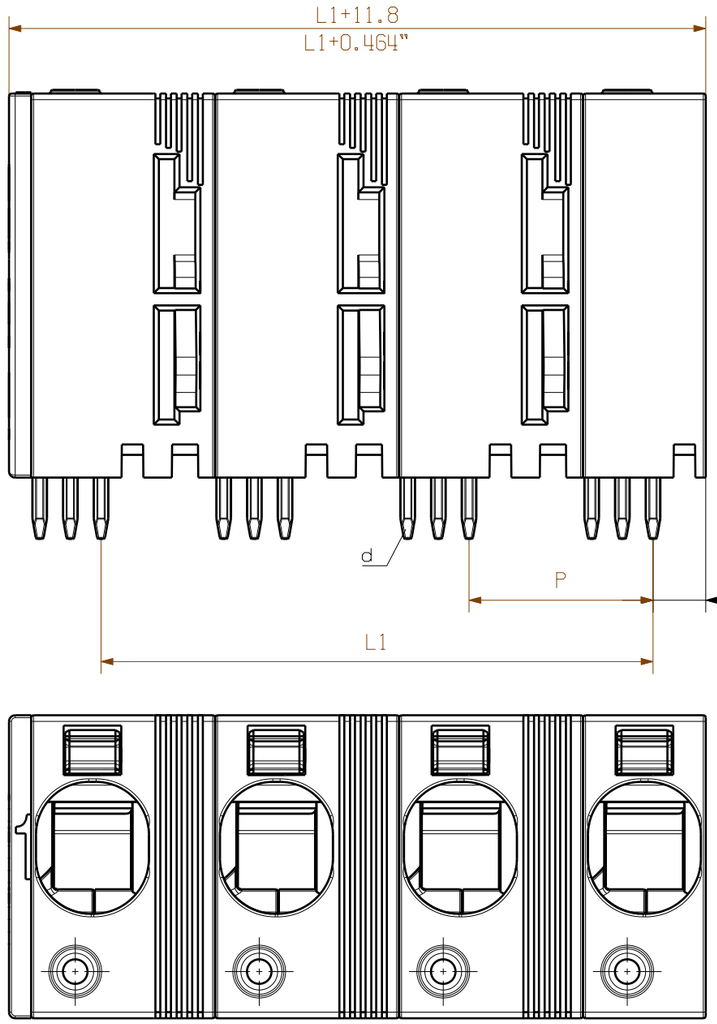


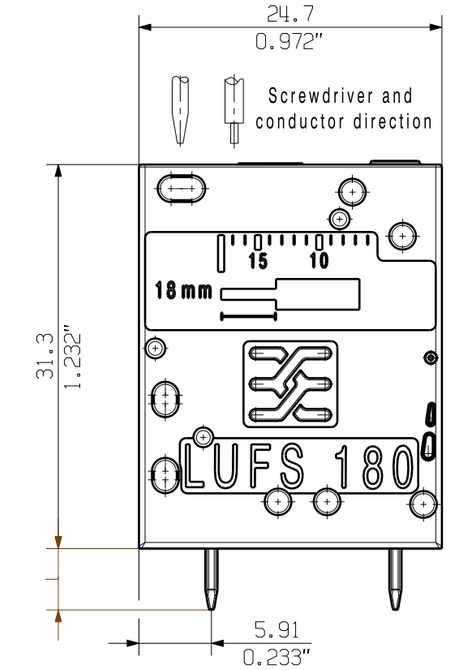
- Power up to UL 600 V
- Offset solder pins

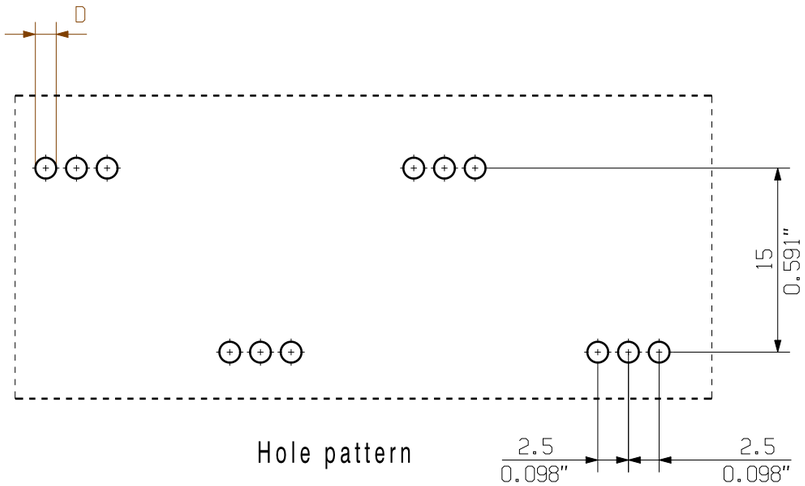
Dimensions without tolerances are no check dimensions

The English version is binding

Allgemeingueltige Kundenzeichnung, aktueller Stand nur auf Anfrage
General customer drawing, topical version only if required







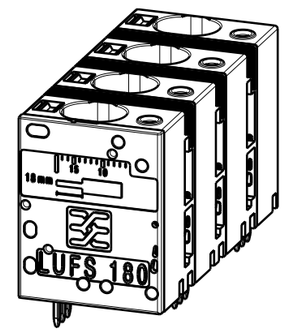
P = 15.00 Pitch
0,590" Raster

D = Ø1.7 +0.1
0.066"

d = 1.24x1.2
0.049"x0.047"

l = 5.0
0.197"

M 1/1



n Poles Polzahl	L1 [mm]	L1 [mm]
12	165.00	6.496
11	150.00	5.905
10	135.00	5.314
9	120.00	4.724
8	105.00	4.133
7	90.00	3.543
6	75.00	0.952
5	60.00	2.362
4	45.00	1.771
3	30.00	1.181
2	15.00	0.590

For the mounting of PCBs, it should be noted that the rated data relates only to the PCB components alone.
The neccessary 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 occuring of electrical, mechanical, thermic and corrosive stress will be satisfied.

General tolerance:
DIN ISO 2768-mK

RoHS COMPLIANT

96560/4
23.04.18 KRECHT_M 01
.
Modification

. .

Cat.no.: .

Weidmüller

3 64092 04
Drawing no. Issue no.

Sheet 01 of 01 sheets

	Date	Name
Drawn	27.10.2016	KRECHT_M
Responsible		SCHMITZ_T
Checked	28.05.2018	HELIS_MA
Approved		NOLTE_S

Scale: 5/1

Supersedes: .

HO LUFS .../180
GEHAEUSE
HOUSING

Product file: LUF 10.00 7412

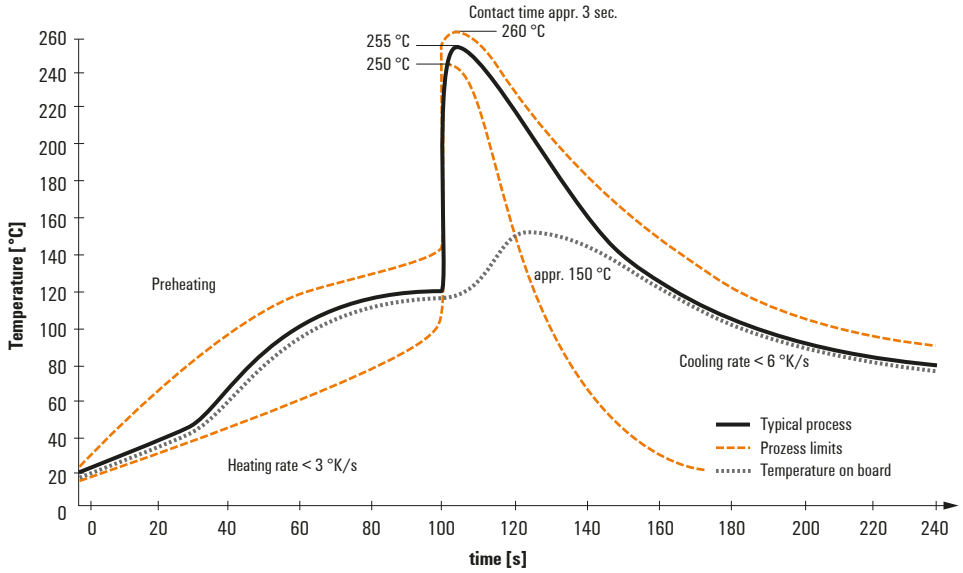
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Wave Solder Profile

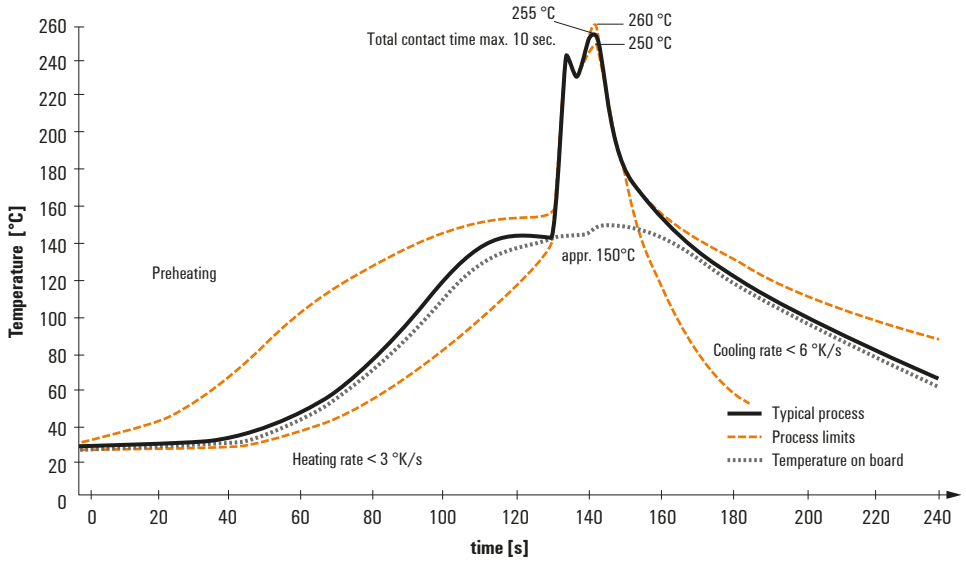
Recommended wave solderding profiles

Weidmüller Interface GmbH & Co. KG
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Germany
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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.

Unikeyic Electronics

Global Electronic Components Distributor

Click to view pricing, inventory, delivery, and lifecycle information:

WeidmÃ¼ller:

1609820000 1608570000 1608830000 2535780000 1013450000 1804580000 8951460000 1121990000
1221360000 1950200000 8690200000 9037380000 1622940000 1786450000 2642470000 1031470000
1289470000 1649300000 1818090500 9456650000 1127570000 1760040000 1779950000 1784180000
1890260000 1906650000 024892 SAKS3 0303620000 1124150000 1607520000