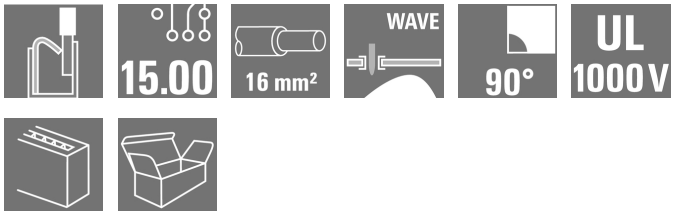
OMNIMATE Power - series LU
LUFS 15.00/06/90V 5.0SN BK BX

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

Product image





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 15.00/06/90V 5.0SN BK BX
Order No.	2500660000
Version	Printed circuit board terminals, 15.00 mm, No. of poles: 6, 90°, Solder pin length (l): 5 mm, black, PUSH IN without actuator, Clamping range, max. : 16 mm², Box
GTIN (EAN)	4050118604481
Qty.	10 pc(s).
Product data	IEC: 1000 V / 76 A / 0.5 - 16 mm² UL: 600 V / 53 A / AWG 18 - AWG 4
Packaging	Box

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Technical data

Dimensions and weights

Width	86.8 mm	Width (inches)	3.417 inch
Height	35 mm	Height (inches)	1.378 inch
Height of lowest version	30 mm	Depth	28.55 mm
Depth (inches)	1.124 inch	Net weight	70.45 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	90°
Pitch in mm (P)	15 mm	Pitch in inches (P)	0.591 inch
No. of poles	6	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	75 mm
L1 in inches	2.953 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	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

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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)	53 A
Rated current (Use group C / CSA)	53 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)	53 A	Rated current (Use group C / UL 1059)	53 A
Rated current (Use group D / UL 1059)	5 A	Rated current (Use group E / UL 1059)	53 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	315 mm
VPE width	110 mm	VPE height	51 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

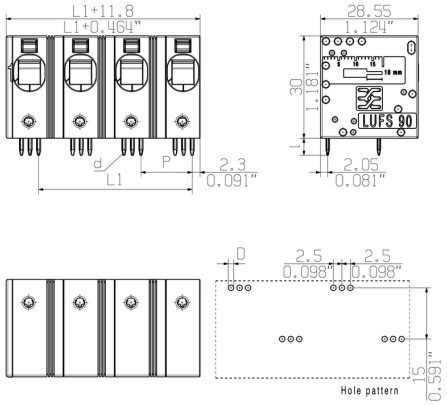
Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Engineering Data	STEP
Motion controllers white paper	Download Whitepaper
User Documentation	QR-Code product handling video
White Paper UL 600 V	Download Whitepaper

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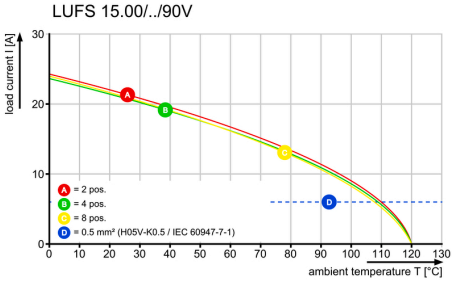
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Drawings

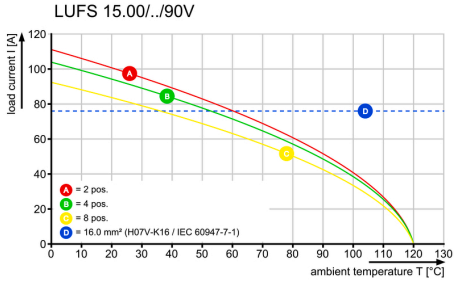
Dimensional drawing



Derating curve



Derating curve



Product benefits

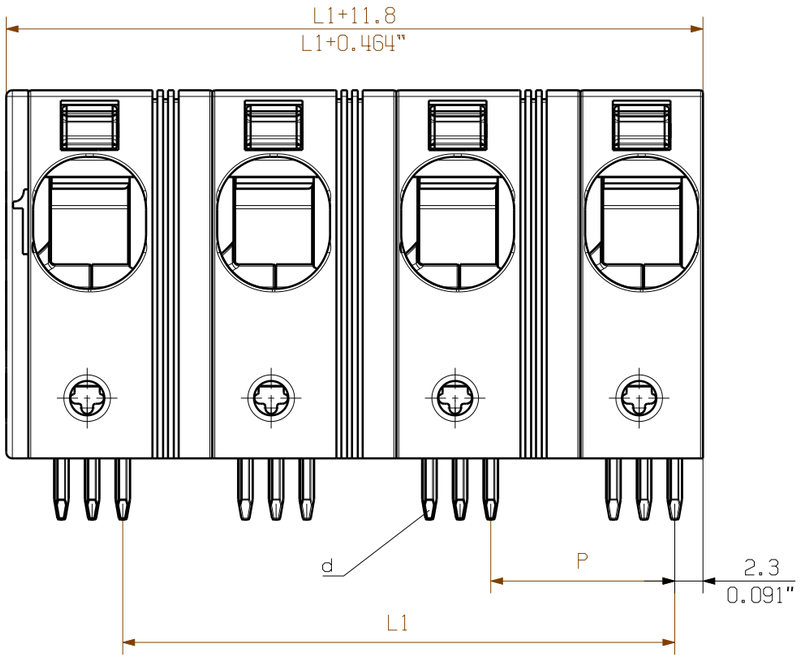


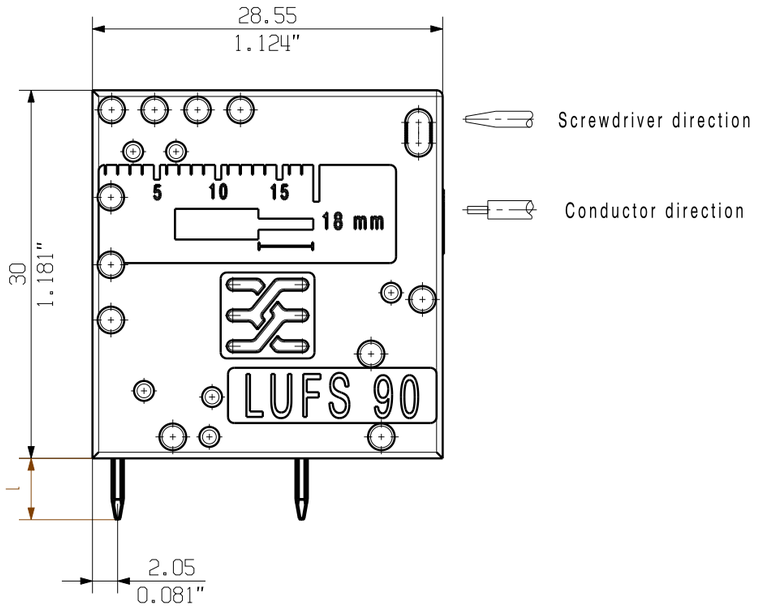
- Power up to UL 600 V
- Offset solder pins

Dimensions without tolerances are no check dimensions

The English version is binding

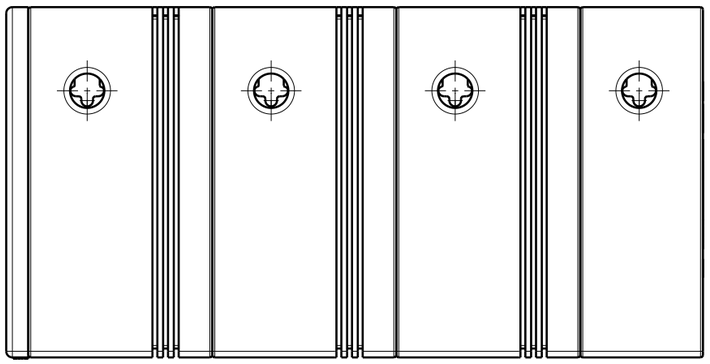
Allgemeingueltige Kundenzeichnung, aktueller Stand nur auf Anfrage
General customer drawing, topical version only if required

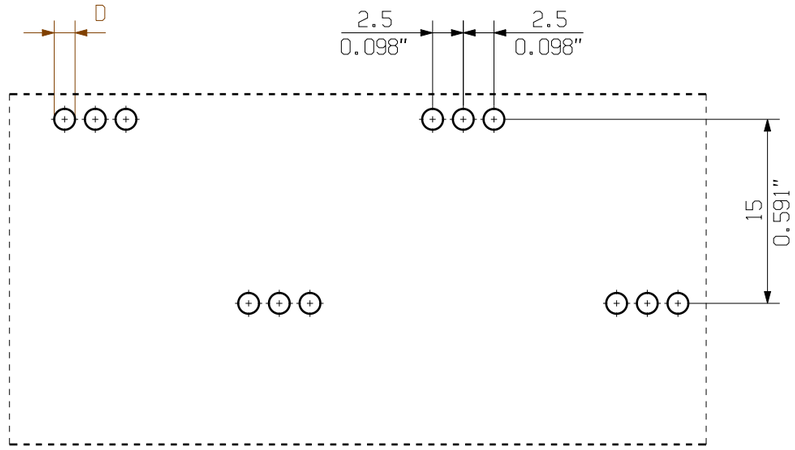




Screwdriver direction

Conductor direction





Hole pattern

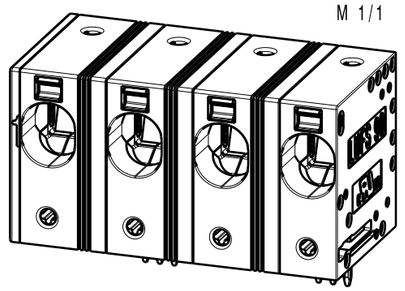
P= 15.00 Pitch
0,590" Raster

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

95782/3
17.08.17 KRECHT_M 01
.
Modification

. .

Cat.no.: .

Weidmüller

3 64094 01
Drawing no. Issue no.

Sheet 01 of 01 sheets

	Date	Name
Drawn	02.12.2016	KRECHT_M
Responsible		SCHMITZ_T
Checked	07.09.2017	HELIS_MA
Approved		NOLTE_S

Scale: 2/1

Supersedes: .

LUFS 15.00/../90
LEITERPLATTENKLEMME
PCB TERMINAL

Product file: LUF 10.00 7419

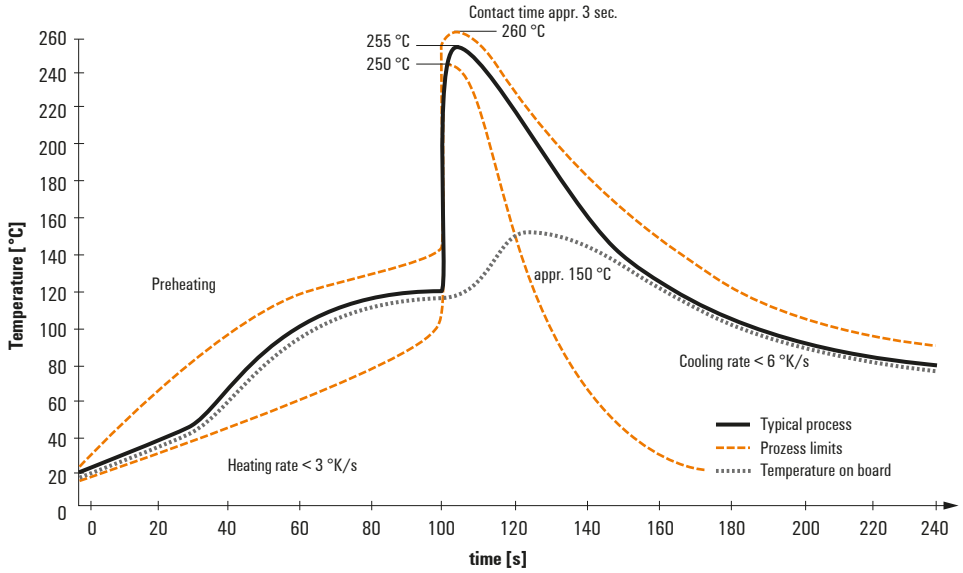
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Wave Solder Profile

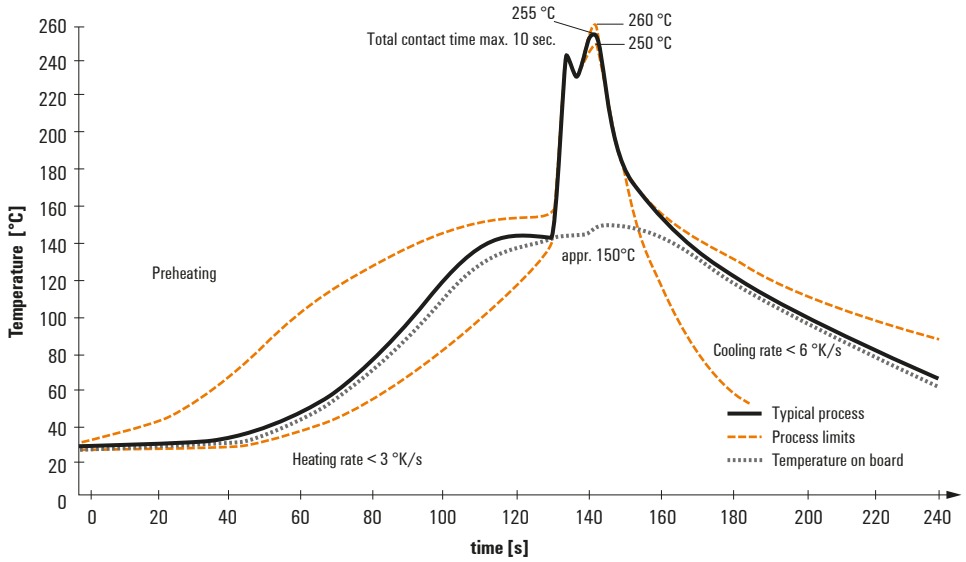
Recommended wave solderding profiles

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

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