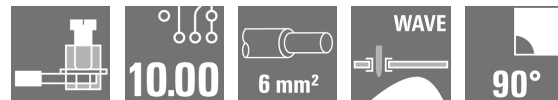


## LL 10.00/03/90 4.5SN OR BX

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergstraße 26  
 D-32758 Detmold  
 Germany

www.weidmueller.com

### Product image



PCB terminal with proven clamping-yoke connection in 10 and 10.16 mm pitches, with 90° wire outlet angle. Suitable for conductor cross-sections up to 6.0 mm<sup>2</sup>.

### General ordering data

Version	Printed circuit board terminals, 10.00 mm, Number of poles: 3, 90°, Solder pin length (l): 4.5 mm, tinned, orange, Clamping yoke connection, Clamping range, max. : 6 mm <sup>2</sup> , Box
Order No.	<a href="#">2613330000</a>
Type	LL 10.00/03/90 4.5SN OR BX
GTIN (EAN)	4050118674774
Qty.	50 Stück
Product data	IEC: 1000 V / 32 A / 0.5 - 6 mm <sup>2</sup> UL: 300 V / 30 A / AWG 26 - AWG 10
Packaging	Box

Erstellungs-Datum May 25, 2023 3:14:21 PM CEST

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## Technische Daten

### Dimensions and weights

Depth	11 mm	Depth (inches)	0.433 inch
Height	20.3 mm	Height (inches)	0.799 inch
Height of lowest version	17.1 mm	Width	25 mm
Width (inches)	0.984 inch	Net weight	5.58 g

### Temperatures

Operating temperature, min.	-50 °C	Operating temperature, max.	120 °C
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### System parameters

Product family	OMNIMATE Signal - series LL	Wire connection method	Clamping yoke connection
Property, clamping point	WireReady	Mounting onto the PCB	THT solder connection
Conductor outlet direction	90°	Pitch in mm (P)	10 mm
Pitch in inches (P)	0.394 inch	Number of poles	3
Pin series quantity	1	Fitted by customer	Yes
Number of rows	1	Max. adjacent poles per row	12
Solder pin length (l)	4.5 mm	Solder pin dimensions	0.75 x 0.9 mm
Solder eyelet hole diameter (D)	1.3 mm	Solder eyelet hole diameter tolerance (D)+	0, 1 mm
Number of solder pins per pole	1	Screwdriver blade	0.6 x 3.5
Screwdriver blade standard	DIN 5264	Tightening torque, min.	0.5 Nm
Tightening torque, max.	0.6 Nm	Clamping screw	M 3
Stripping length	6 mm	L1 in mm	10 mm
L1 in inches	0.787 inch	Touch-safe protection acc. to DIN VDE 0470	IP 20
Protection degree	IP20		

### Material data

Insulating material	Wemid (PA)	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	I
Comparative Tracking Index (CTI)	≥ 600	UL 94 flammability rating	V-0
Contact surface	tinned	Coating	4-6 µm SN
Layer structure of solder connection	2...4 µm Ni / 4...6 µm Sn	Storage temperature, min.	-40 °C
Storage temperature, max.	70 °C	Operating temperature, min.	-50 °C
Operating temperature, max.	120 °C	Temperature range, installation, min.	-25 °C
Temperature range, installation, max.	120 °C		

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## Technische Daten


### Conductors suitable for connection

Clamping range, min.	0.13 mm <sup>2</sup>	Clamping range, max.	6 mm <sup>2</sup>
Wire connection cross section AWG, min.	AWG 26	Wire connection cross section AWG, max.	AWG 10
Solid, min. H05(07) V-U	0.5 mm <sup>2</sup>	Solid, max. H05(07) V-U	6 mm <sup>2</sup>
Flexible, min. H05(07) V-K	0.5 mm <sup>2</sup>	Flexible, max. H05(07) V-K	4 mm <sup>2</sup>
w. plastic collar ferrule, DIN 46228 pt 4, min.	0.5 mm <sup>2</sup>	w. plastic collar ferrule, DIN 46228 pt 4, max.	2.5 mm <sup>2</sup>
w. wire end ferrule, DIN 46228 pt 1, min.	0.5 mm <sup>2</sup>	w. wire end ferrule, DIN 46228 pt 1, max.	2.5 mm <sup>2</sup>
Plug gauge in accordance with EN 60999 a x b; ø		Reference text	Length of ferrules is to be chosen depending on the product and the rated voltage., The outside diameter of the plastic collar should not be larger than the pitch (P)
	2.8 mm x 2.4 mm; 3.0 mm		


### Rated data acc. to IEC

Rated current, min. number of poles (Tu=20°C)	32 A	Rated current, max. number of poles (Tu=20°C)	32 A
Rated current, min. number of poles (Tu=40°C)	32 A	Rated current, max. number of poles (Tu=40°C)	30.5 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	1,000 V
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 120 A		

### Rated data acc. to CSA

Institute (CSA)		Certificate No. (CSA)	200039-1202191
Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group D / CSA)	300 V
Rated current (Use group B / CSA)	30 A	Rated current (Use group D / CSA)	10 A
Wire cross-section, AWG, min.	AWG 26	Wire cross-section, AWG, max.	AWG 10
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

### 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 C / UL 1059)	150 V
Rated voltage (Use group D / UL 1059)	300 V	Rated current (Use group B / UL 1059)	30 A
Rated current (Use group D / UL 1059)	10 A	Wire cross-section, AWG, min.	AWG 26
Wire cross-section, AWG, max.	AWG 10	Reference to approval values	Specifications are maximum values, details - see approval certificate.

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## Technische Daten

### Packing

Packaging	Box	VPE length	169 mm
VPE width	63 mm	VPE height	49 mm

### Classifications

ETIM 6.0	EC002643	ETIM 7.0	EC002643
ETIM 8.0	EC002643	ECLASS 9.0	27-44-04-01
ECLASS 9.1	27-44-04-01	ECLASS 10.0	27-44-04-01
ECLASS 11.0	27-46-01-01	ECLASS 12.0	27-46-01-01

### Important note

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.
Notes	<ul style="list-style-type: none"> <li>Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months</li> </ul>

### Approvals

Approvals



UL File Number Search	UL Website
Certificate No. (UR)	E60693

### Downloads

Engineering Data	<a href="#">CAD data – STEP</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>

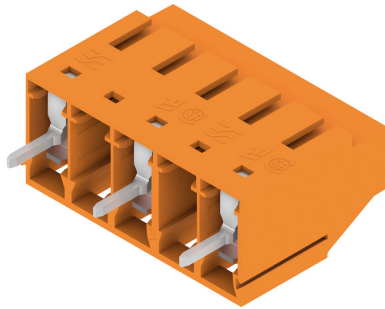
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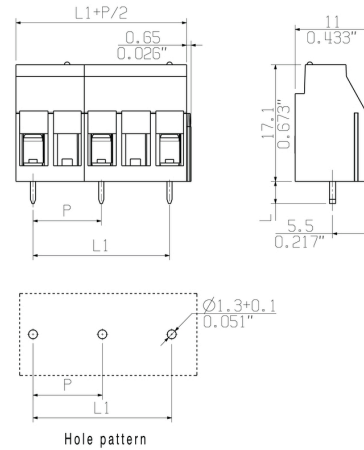
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Zeichnungen

Product image



Dimensional drawing



## Recommended wave soldering profiles

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

### 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.