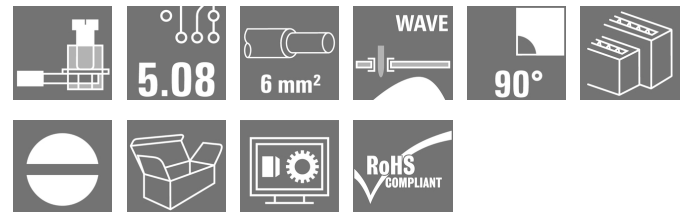


## OMNIMATE Signal - series LP LP3R 5.08/06/90 3.2SN OR BX

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



Single- and multi-row PCB terminal with proven clamping yoke connection at 5.08 mm pitch, conductor outlet direction 90°. Suitable for conductor cross-sections up to 6.0 mm<sup>2</sup>.

- 0.20 - 6.0mm<sup>2</sup> (IEC) / 26 - 12 AWG (UL)
- 500 V (IEC) / 300 V (UL)
- 32 A (IEC) / 20 A (UL)

### General ordering data

Delivery status	<b>This article will no longer be available in the future.</b>
Available until	2018-12-31
Type	LP3R 5.08/06/90 3.2SN OR BX
Order No.	<a href="#">1653930000</a>
Version	PCB terminal, 5.08 mm, No. of poles: 6, 90°, Solder pin length (l): 3.2 mm, tinned, Orange, Clamping yoke connection, Clamping range, max. : 6 mm <sup>2</sup> , Box
GTIN (EAN)	4008190405779
Qty.	50 pc(s).
Product data	IEC: 500 V / 32 A / 0.5 - 6 mm <sup>2</sup> UL: 300 V / 20 A / AWG 26 - AWG 12
Packaging	Box

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**Technical data****Dimensions and weights**

Net weight	13.32 g
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**System parameters**

Product family	OMNIMATE Signal - series LP	Wire connection method	Clamping yoke connection
Mounting onto the PCB	THT solder connection	Conductor outlet direction	90°
Pitch in mm (P)	5.08 mm	Pitch in inches (P)	0.2 inch
No. of poles	6	Fitted by customer	Yes
Max. adjacent poles per row	72	Solder pin length (l)	3.2 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	5.08 mm	L1 in inches	0.2 inch
Touch-safe protection acc. to DIN VDE 0470	IP 20	Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch
Volume resistance	1.20 mΩ		

**Material data**

Insulating material	PA	Colour	Orange
Colour chart (similar)	RAL 2000	Insulating material group	I
CTI	≥ 600	Insulation resistance	≥ 10 <sup>8</sup> Ω
UL 94 flammability rating	V-2	Contact material	Copper alloy
Contact surface	tinned	Coating	1-3 μm Ni, 4-6 μm Sn
Tinning type	matt	Layer structure of solder connection	4-6 μm Ni / 4-6 μm Sn
Storage temperature, min.	-25 °C	Storage temperature, max.	55 °C
Max. relative humidity during storage	80 %	Operating temperature, min.	-50 °C
Operating temperature, max.	100 °C	Temperature range, installation, min.	-25 °C
Temperature range, installation, max.	100 °C		

**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 12
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 acc. to EN 60999 a x b; Ø	2.8 mm x 2.4 mm; 3.0 mm		

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## Technical data


### Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. no. of poles (Ta = 20°C)	32 A
Rated current, max. no. of poles (Ta = 20°C)	28 A	Rated current, min. no. of poles (Ta = 40°C)	30 A
Rated current, max. no. of poles (Ta = 40°C)	24 A	Rated voltage for surge voltage class / pollution degree II/2	500 V
Rated voltage for surge voltage class / pollution degree III/2	250 V	Rated voltage for surge voltage class / pollution degree III/3	250 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	4 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	4 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	4 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)	300 V	Rated voltage (use group D)	300 V
Rated current (use group B)	20 A	Rated current (use group D)	10 A
Wire cross-section, AWG, min.	AWG 26	Wire cross-section, AWG, max.	AWG 12
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)	300 V	Rated voltage (use group D)	300 V
Rated current (use group B)	20 A	Rated current (use group D)	10 A
Wire cross-section, AWG, min.	AWG 26	Wire cross-section, AWG, max.	AWG 12
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

### Classifications

ETIM 3.0	EC001284	ETIM 4.0	EC002643
ETIM 5.0	EC002643	ETIM 6.0	EC002643
UNSPSC	30-21-18-01	eClass 6.2	27-26-11-01
eClass 7.1	27-44-04-01	eClass 8.1	27-44-04-01
eClass 9.0	27-44-04-01	eClass 9.1	27-44-04-01

**Data sheet**

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**Technical data**

**Notes**

Notes	<ul style="list-style-type: none"> <li>• Additional colours on request</li> <li>• Rated current related to rated cross-section &amp; min. No. of poles.</li> <li>• Wire end ferrule without plastic collar to DIN 46228/1</li> <li>• Wire end ferrule with plastic collar to DIN 46228/4</li> <li>• P on drawing = pitch</li> <li>• 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.</li> </ul>
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**

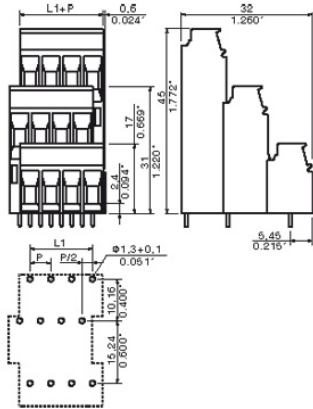
Approval/Certificate/Document of Conformity	<a href="#">Declaration of the Manufacturer</a>
Brochure/Catalogue	<a href="#">FL DRIVES EN</a> <a href="#">FL ANALO.SIGN.CONV. EN</a> <a href="#">MB DEVICE MANUF. EN</a> <a href="#">FL DRIVES DE</a> <a href="#">CAT 2 PORTFOLIOGUIDE EN</a> <a href="#">FL BUILDING SAFETY EN</a> <a href="#">FL APPL LED LIGHTING EN</a> <a href="#">FLIndustr.CONTROLS EN</a> <a href="#">FL MACHINE SAFETY EN</a> <a href="#">FL HEATING ELECTR EN</a> <a href="#">FL APPL INVERTER EN</a> <a href="#">FL_BASE_STATION EN</a> <a href="#">FL ELEVATOR EN</a> <a href="#">FL POWER SUPPLY EN</a> <a href="#">FL 72H SAMPLE SER EN</a> <a href="#">PO OMNIMATE EN</a>
Engineering Data	<a href="#">EPLAN.WSCAD</a>

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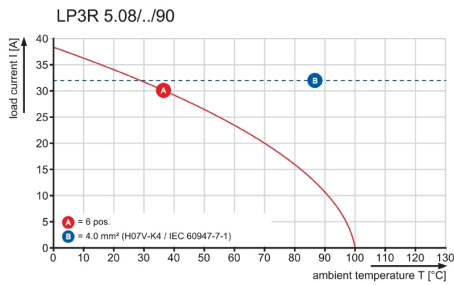
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**Drawings**

**Dimensional drawing**



**Graph**



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# Accessories

## Cross-connections



### Large potential for small terminals.

For efficient electrical distribution directly at the connection:

- Isolated comb rail
- Available with the most standard pole numbers
- Easy to shorten

Simply reduce in size to match the number of poles and connect with the conductor in a single working procedure.

For retrofitting or deliberate reduction of the thermal load on the PCB.

### General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
LPA QB 2	<a href="#">1472200000</a>	PCB terminal, Accessories, Cross-connector, No. of poles: 2	4008190096298	50 pc(s).	UL:	Box

## Marker holder



### Finds space on the smallest terminal:

The marking holder is easy to retrofit and provides a large additional labelling space - the Weidmüller LP series is one of the most versatile and efficient terminal printing systems with 5mm pitch.

3 steps to clear, legible labels:

The most professional, convenient method of marking clamping points direct on the module - no confusion between clamping points and no incorrect wiring connections.

Minimum effort, maximum effect.

### General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
LPA BZ3	<a href="#">1497360000</a>	PCB terminal, Accessories, Marker holder, Black, No. of poles: 3	4008190127022	100 pc(s).	UL:	Box
LPA BZ2	<a href="#">1497260000</a>	PCB terminal, Accessories, Marker holder, Black, No. of poles: 2	4008190027902	100 pc(s).	UL:	Box

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**Accessories**
**Mounting blocks**

**Minor component, major effect:**

Clip-on attachment elements increase the mechanical resilience of the circuit board terminals.

Clip-on or pre-assembled - always the right solution:

- Hard-wearing, precise fitting dovetail joint
- Hard-wearing metal threaded inserts
- Suitable for all outlet directions

Maximum stability, minimum effort:

- Extremely resilient for frequent fastening operations
- Complete set for easy selection

The result: soldering points, contacts and overall module are more resilient against mechanical stress such as vibrations and tensile loads.

**General ordering data**

Delivery status	Available until	Type	Order No.	Version	GTIN (EAN)	Qty.
Discontinued	2014-05-20T00:00:00+02:00	LPBB MU SW	<a href="#">1747550000</a>	PCB terminal, Accessories, Mounting block, Black, No. of poles: 1	4008190992231	100 pc(s).
LPBB OR	<a href="#">1747540000</a>	PCB terminal, Accessories, Mounting block, Orange, No. of poles: 1	4008190992224	100 pc(s).	UL:	Box
LPBB MU OR	<a href="#">1747530000</a>	PCB terminal, Accessories, Mounting block, Orange, No. of poles: 1	4008190992217	100 pc(s).	UL:	Box
Discontinued	2010-05-12T00:00:00+02:00	LPBB SW	<a href="#">1747560000</a>	PCB terminal, Accessories, Mounting block, Black, No. of poles: 1	4008190992248	100 pc(s).

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# Accessories

## Function indicators



### Everything under control:

The function indicator is easy to retrofit and clearly indicates the switching state at the clamping point - also available with large format marking holder. One of the most versatile and efficient terminal printing systems with 5mm pitch: the Weidmüller LP series.

- Holder for 3mm standard LEDs
- Simple installation on the back of SP series terminals.
- Optional marking holder for advanced marking options (WS10/5 and WS12/5, see markings)

The easiest, most reliable way of monitoring switching states.

In brief: minimum effort, maximum reliability.

## General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
LPA FA2	<a href="#">1495960000</a>	PCB terminal, Accessories, Function indicator, Black, No. of poles: 2	4008190173500	50 pc(s).	UL:	Box
LPA FA2 BZ	<a href="#">1496160000</a>	PCB terminal, Accessories, Function indicator, Black, No. of poles: 2	4008190100988	50 pc(s).	UL:	Box
LPA FA3	<a href="#">1496060000</a>	PCB terminal, Accessories, Function indicator, Black, No. of poles: 3	4008190062330	50 pc(s).	UL:	Box
LPA FA3 BZ	<a href="#">1496260000</a>	PCB terminal, Accessories, Function indicator, Black, No. of poles: 3	4008190101862	50 pc(s).	UL:	Box

## Recommended wave soldering profiles

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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.