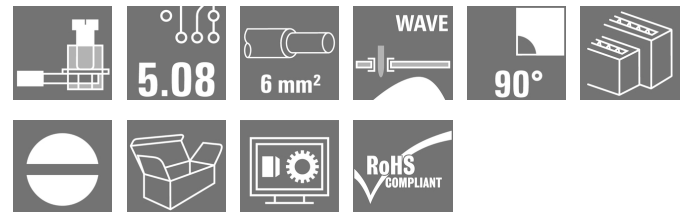


OMNIMATE Signal - series LP LP3R 5.08/18/90 3.2SN OR BX

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 mm².

- 0.20 - 6.0mm² (IEC) / 26 - 12 AWG (UL)
- 500 V (IEC) / 300 V (UL)
- 32 A (IEC) / 20 A (UL)

General ordering data

Delivery status	This article will no longer be available in the future.
Available until	2018-12-31
Type	LP3R 5.08/18/90 3.2SN OR BX
Order No.	1596380000
Version	PCB terminal, 5.08 mm, No. of poles: 18, 90°, Solder pin length (l): 3.2 mm, tinned, Orange, Clamping yoke connection, Clamping range, max. : 6 mm ² , Box
GTIN (EAN)	4008190088293
Qty.	25 pc(s).
Product data	IEC: 500 V / 32 A / 0.5 - 6 mm ² UL: 300 V / 20 A / AWG 26 - AWG 12
Packaging	Box

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Technical data**Dimensions and weights**

Net weight	41.4 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	18	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	25.4 mm	L1 in inches	1 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 ⁸ 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 ²	Clamping range, max.	6 mm ²
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 ²	Solid, max. H05(07) V-U	6 mm ²
Flexible, min. H05(07) V-K	0.5 mm ²	Flexible, max. H05(07) V-K	4 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, min.	0.5 mm ²	w. plastic collar ferrule, DIN 46228 pt 4, max.	2.5 mm ²
w. wire end ferrule, DIN 46228 pt 1, min.	0.5 mm ²	w. wire end ferrule, DIN 46228 pt 1, max.	2.5 mm ²
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"> • 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.
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

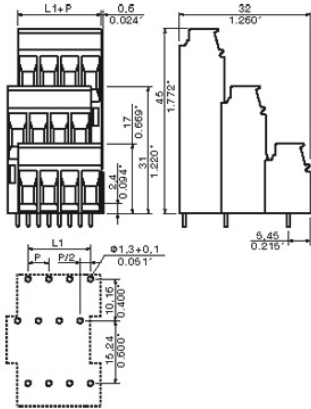
Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Brochure/Catalogue	FL DRIVES EN FL ANALO.SIGN.CONV. EN MB DEVICE MANUF. EN FL DRIVES DE CAT 2 PORTFOLIOGUIDE EN FL BUILDING SAFETY EN FL APPL LED LIGHTING EN FLIndustr.CONTROLS EN FL MACHINE SAFETY EN FL HEATING ELECTR EN FL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

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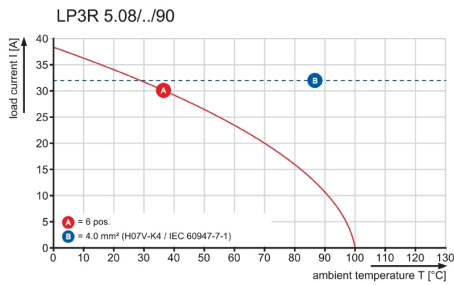
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Drawings

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 3	1472300000	PCB terminal, Accessories, Cross-connector, No. of poles: 3	4008190093914	50 pc(s).	UL:	Box
LPA QB 4	1472400000	PCB terminal, Accessories, Cross-connector, No. of poles: 4	4008190053918	50 pc(s).	UL:	Box
LPA QB 2	1472200000	PCB terminal, Accessories, Cross-connector, No. of poles: 2	4008190096298	50 pc(s).	UL:	Box

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

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
LPBB MU OR	1747530000	PCB terminal, Accessories, Mounting block, Orange, No. of poles: 1	4008190992217	100 pc(s).	UL:	Box
Discontinued	2014-05-20T00:00:00+02:00	LPBB MU SW	1747550000	PCB terminal, Accessories, Mounting block,	4008190992231	100 pc(s).

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Accessories

Discontinued	2010-05-12T00:00:00+02:00	LPBB SW	1747560000	Black, No. of poles: 1	PCB terminal, Accessories, Mounting block, Black, No. of poles: 1	4008190992248	100 pc(s).
LPBB OR	1747540000	PCB terminal, Accessories, Mounting block, Orange, No. of poles: 1		4008190992224	100 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 BZ2	1497260000	PCB terminal, Accessories, Marker holder, Black, No. of poles: 2	4008190027902	100 pc(s).	UL:	Box
LPA BZ3	1497360000	PCB terminal, Accessories, Marker holder, Black, No. of poles: 3	4008190127022	100 pc(s).	UL:	Box

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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 FA3	1496060000	PCB terminal, Accessories, Function indicator, Black, No. of poles: 3	4008190062330	50 pc(s).	UL:	Box
LPA FA3 BZ	1496260000	PCB terminal, Accessories, Function indicator, Black, No. of poles: 3	4008190101862	50 pc(s).	UL:	Box
LPA FA2	1495960000	PCB terminal, Accessories, Function indicator, Black, No. of poles: 2	4008190173500	50 pc(s).	UL:	Box
LPA FA2 BZ	1496160000	PCB terminal, Accessories, Function indicator, Black, No. of poles: 2	4008190100988	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.

