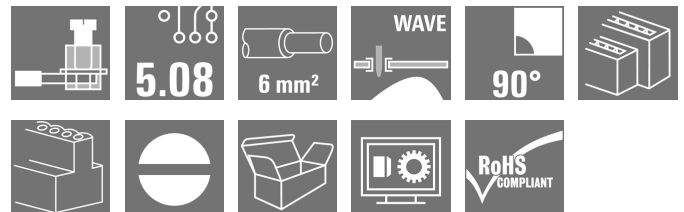


OMNIMATE Signal - series LL LL3R 5.08/48/90 3.2SN OR BX

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

Product image



Similar to illustration

Low single-tier and multi-tier PCB terminals featuring proven clamping-yoke connections, in 5.00mm and 5.08mm pitch, with 90° conductor outlet direction. Suitable for conductor cross-sections up to 6.0 mm².

General ordering data

Type	LL3R 5.08/48/90 3.2SN OR BX
Order No.	1979180000
Version	PCB terminal, 5.08 mm, No. of poles: 48, 90°, Solder pin length (l): 3.2 mm, tinned, Orange, Clamping yoke connection, Clamping range, max.: 6 mm², Box
GTIN (EAN)	4032248674329
Qty.	10 pc(s).
Product data	IEC: 500 V / 32.5 A / 0.5 - 6 mm² UL: 300 V / 20 A / AWG 26 - AWG 12
Packaging	Box

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Technical data

Dimensions and weights

Width	84.39 mm	Width (inches)	3.322 inch
Height	48.3 mm	Height (inches)	1.902 inch
Height of lowest version	45.1 mm	Depth	32 mm
Depth (inches)	1.26 inch	Net weight	107.8 g

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)	5.08 mm
Pitch in inches (P)	0.2 inch	No. of poles	48
Fitted by customer	Yes	Max. adjacent poles per row	24
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	76.2 mm
L1 in inches	3 inch	Touch-safe protection acc. to DIN VDE 0470	IP 20
Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch		

Material data

Insulating material	Wemid (PA)	Colour	Orange
Colour chart (similar)	RAL 2000	Insulating material group	I
CTI	≥ 600	Insulation resistance	≥ 10 ⁸ Ω
UL 94 flammability rating	V-0	Contact material	Copper alloy
Contact surface	tinned	Coating	4-6 µm SN
Tinning type	matt	Layer structure of solder connection	2-4 µm Ni / 4-6 µm Sn matt
Storage temperature, min.	-25 °C	Storage temperature, max.	55 °C
Max. relative humidity during storage	80 %	Operating temperature, min.	-50 °C
Operating temperature, max.	120 °C	Temperature range, installation, min.	-25 °C
Temperature range, installation, max.	120 °C		

Conductors suitable for connection

Clamping range, min.	0.08 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 in accordance with 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 (Tu=20°C)	32.5 A
Rated current, max. no. of poles (Tu=20°C)	26 A	Rated current, min. no. of poles (Tu=40°C)	27.5 A
Rated current, max. no. of poles (Tu=40°C)	22 A	Rated voltage for surge voltage class / pollution degree II/2	500 V
Rated voltage for surge voltage class / pollution degree III/2	320 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 / CSA)	300 V	Rated voltage (Use group D / CSA)	300 V
Rated current (Use group B / CSA)	20 A	Rated current (Use group D / CSA)	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 / UL 1059)	300 V	Rated voltage (Use group D / UL 1059)	300 V
Rated current (Use group B / UL 1059)	20 A	Rated current (Use group D / UL 1059)	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.		

Packaging

Packaging	Box	VPE length	80 mm
VPE width	90 mm	VPE height	200 mm

Classifications

ETIM 3.0	EC001284	ETIM 4.0	EC002643
ETIM 5.0	EC002643	ETIM 6.0	EC002643
UNSPSC	30-21-18-11	eClass 5.1	27-26-11-01
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		

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Technical data

Notes

Notes

- 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

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.

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](#)
[FL INDUSTR.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](#)

Engineering Data

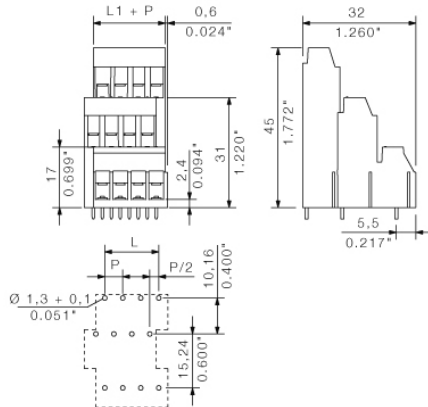
[STEP](#)

OMNIMATE Signal - series LL LL3R 5.08/48/90 3.2SN OR BX

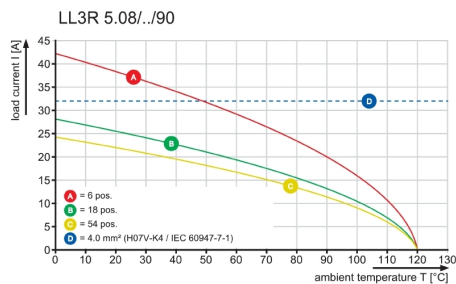
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Drawings

Dimensional drawing



Graph



Recommended wave soldering profiles

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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.