

OMNIMATE Signal - series LL
LL 6.35/05/90V 5.0SN BK BX
Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 16

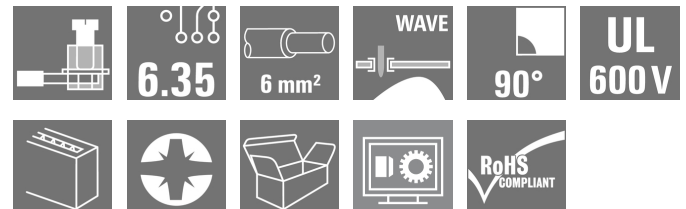
D-32758 Detmold

Germany

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www.weidmueller.com



This PCB terminal, pitch 6.35 mm, with proven clamping yoke connection provides the following features: connections for 1000 V, 32 A, 6 mm² conductor cross-section, and off-set solder pins, 90° conductor outlet direction.

- 0.18 - 6.0 mm² (IEC) / 26 - 10 AWG (UL)
- 1000 V (IEC) / 600 V (UL)
- 32 A (IEC) / 30 A (UL)

General ordering data

Type	LL 6.35/05/90V 5.0SN BK BX
Order No.	1356870000
Version	PCB terminal, 6.35 mm, No. of poles: 5, 90°, Solder pin length (l): 5 mm, tinned, Black, Clamping yoke connection, Clamping range, rated connection, max.: 6 mm ² , Box
GTIN (EAN)	4050118214642
Qty.	50 pc(s).
Product data	IEC: 1000 V / 32 A / 0.18 - 6 mm ² UL: 600 V / 30 A / AWG 26 - AWG 10
Packaging	Box

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Technical data

Dimensions and weights

Net weight	14.925 g
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System parameters

Product family	OMNIMATE Signal - series LL	Wire connection method	Clamping yoke connection
Mounting onto the PCB	THT solder connection	Conductor outlet direction	90°
Pitch in mm (P)	6.35 mm	Pitch in inches (P)	0.25 inch
No. of poles	5	Fitted by customer	No
Max. adjacent poles per row	24	Solder pin length (l)	5 mm
Solder pin dimensions	1.0 x 0.6 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	0.8 x 4.0, PZ 1	Screwdriver blade standard	DIN 5264
Tightening torque, min.	0.5 Nm	Tightening torque, max.	0.6 Nm
Clamping screw	M 3	Stripping length	8 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

Material data

Insulating material	Wemid (PA)	Colour	Black
Colour chart (similar)	RAL 9011	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, rated connection, min.	0.18 mm ²	Clamping range, rated connection, max.	6 mm ²
Wire connection cross section AWG, min.	AWG 26	Wire connection cross section AWG, max.	AWG 10
Solid, min. H05(07) V-U	0.18 mm ²	Solid, max. H05(07) V-U	6 mm ²
Flexible, min. H05(07) V-K	0.22 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.	4 mm ²
Plug gauge acc. to EN 60999 a x b; Ø	3.6 mm x 3.1 mm; 2.7 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)	32 A	Rated current, min. no. of poles (Ta = 40°C)	32 A
Rated current, max. no. of poles (Ta = 40°C)	32 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	800 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	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)	600 V	Rated voltage (Use group C)	600 V
Rated voltage (use group D)	600 V	Rated current (use group B)	30 A
Rated current (use group C)	30 A	Rated current (use group D)	5 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 (cURus)		Certificate No. (cURus)	E60693
Rated voltage (use group B)	600 V	Rated voltage (use group C)	600 V
Rated voltage (use group D)	600 V	Rated current (use group B)	30 A
Rated current (use group C)	30 A	Rated current (use group D)	5 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.		

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 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

- 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](#)
[MB DEVICE MANUF. EN](#)
[FL DRIVES DE](#)
[CAT 2 PORTFOLIOGUIDE 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](#)

Motion controllers white paper

[Download Whitepaper](#)

White Paper UL 600 V

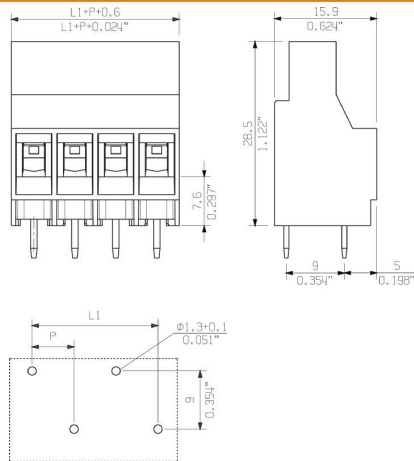
[Download Whitepaper](#)

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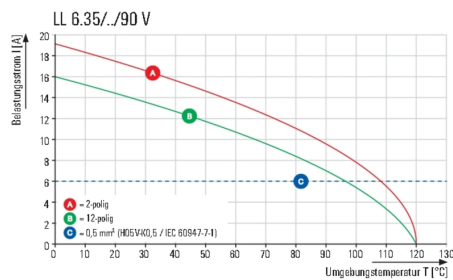
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Drawings

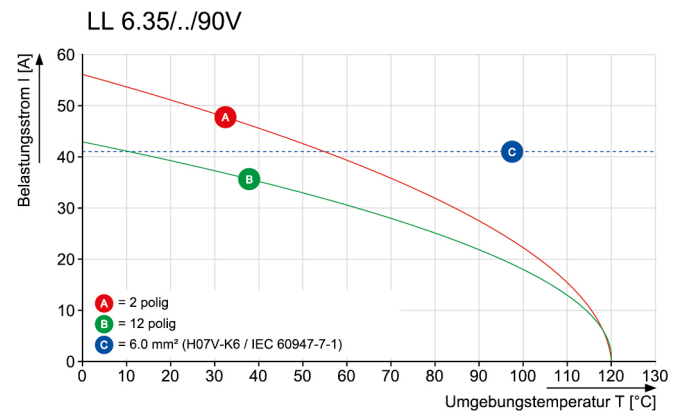
Dimensional drawing



Graph



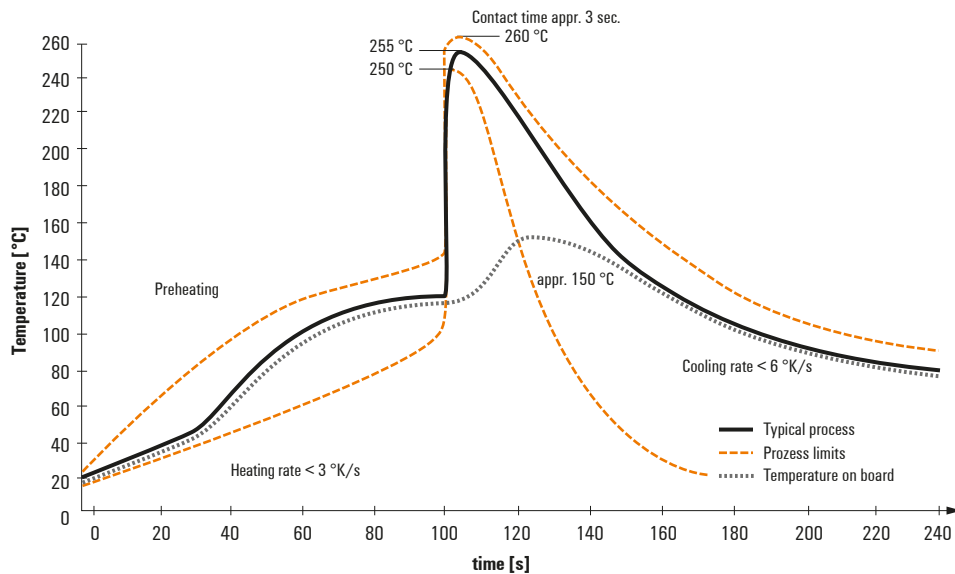
Graph



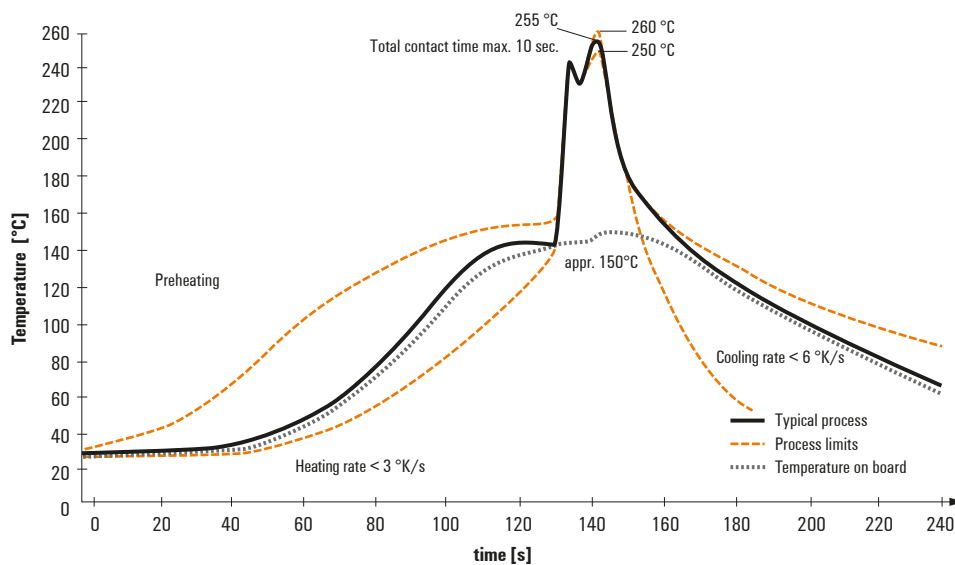
Recommended wave soldering profiles

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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.

We reserve the right to make technical changes.