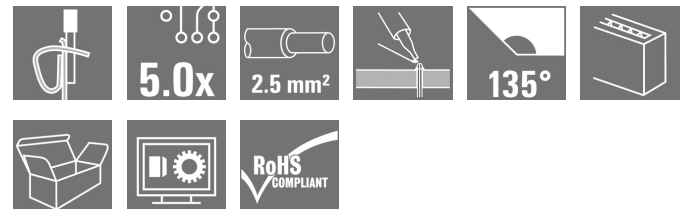


OMNIMATE Signal - series LMZF LMZF 5/16/135 3.5OR

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
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Product image



Similar to illustration

The compact installation terminal for the standard wire cross-section size of 2.5mm².

Tension clamp connection with a 135° outlet direction, in variable pitch: 5.00 - 5.08 mm (1 part with 2 pitches).

Rated data:

- 24A at 40°C / 630V (IEC) or 15A / 300V (UL)
- 0.13 - 2.5 mm² (IEC) / 26 - 14 AWG (UL)
- Flammability class according to UL 94: V0

Application benefits:

- Safe: ATEX certification Ex II 2GD / Ex e II (KEMA07 ATAEX0047U) optional
- Temperature resistant: long-term resistance up to 120°C provided by high-performance Wemid insulation material
- Adaptable: simple pitch adaptation from 5.00 to 5.08 mm (0.200 inch)
- Convenient: optional lever for simple opening of terminal point

General ordering data

Type	LMZF 5/16/135 3.5OR
Order No.	1960170000
Version	Printed circuit board terminals, 5.00 mm, No. of poles: 16, 135°, Solder pin length (l): 3.5 mm, tinned, orange, Clamping range, max. : 2.5 mm ² , Box
GTIN (EAN)	4032248650651
Qty.	100 pc(s).
Product data	IEC: 630 V / 24 A / 0.13 - 2.5 mm ² UL: 300 V / 15 A / AWG 26 - AWG 14
Packaging	Box

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Technical data**Dimensions and weights**

Width	82.5 mm	Width (inches)	3.248 inch
Height	16.4 mm	Height (inches)	0.646 inch
Height of lowest version	12.9 mm	Depth	14.5 mm
Depth (inches)	0.571 inch	Net weight	10 g

System parameters

Product family	OMNIMATE Signal - series LMZF	Mounting onto the PCB	THT solder connection
Conductor outlet direction	135°	Pitch in mm (P)	5 mm
Pitch in inches (P)	0.197 inch	No. of poles	16
Fitted by customer	No	Max. adjacent poles per row	48
Solder pin length (l)	3.5 mm	Solder pin dimensions	0.8 x 0.8 mm
Solder eyelet hole diameter (D)	1.3 mm	Solder eyelet hole diameter tolerance (D)	+ 0,1 mm
Number of solder pins per pole	2	Screwdriver blade	0.4 x 2.5
Screwdriver blade standard	DIN 5264-A	Stripping length	6 mm
L1 in mm	75 mm	L1 in inches	2.953 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 strength	≥ 10 ⁸ Ω
UL 94 flammability rating	V-0	GWIT	960 °C
GWFI	960 °C	Contact material	Copper alloy
Contact surface	tinned	Coating	5-8 μm SN
Tinning type	matt	Layer structure of solder connection	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.	0.13 mm ²
Clamping range, max.	2.5 mm ²
Wire connection cross section AWG, min.	AWG 26
Wire connection cross section AWG, max.	AWG 14
Solid, min. H05(07) V-U	0.13 mm ²
Solid, max. H05(07) V-U	2.5 mm ²
Flexible, min. H05(07) V-K	0.13 mm ²
Flexible, max. H05(07) V-K	2.5 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, min.	0.25 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, max.	1.5 mm ²
w. wire end ferrule, DIN 46228 pt 1, min.	0.25 mm ²
w. wire end ferrule, DIN 46228 pt 1, max.	1.5 mm ²

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Technical data

Clampable conductor	Cross-section for conductor connection	Type	fine-wired	
		nominal	0.5 mm ²	
	AEH	Stripping length	nominal	8 mm
		Stripping length	nominal	6 mm
	Cross-section for conductor connection	Type	fine-wired	
		nominal	0.75 mm ²	
	AEH	Stripping length	nominal	8 mm
		Stripping length	nominal	6 mm
	Cross-section for conductor connection	Type	fine-wired	
		nominal	1 mm ²	
AEH	Stripping length	nominal	8 mm	
	Stripping length	nominal	6 mm	
Cross-section for conductor connection	Type	fine-wired		
	nominal	0.25 mm ²		
AEH	Stripping length	nominal	8 mm	
	Stripping length	nominal	5 mm	
Cross-section for conductor connection	Type	fine-wired		
	nominal	0.34 mm ²		
AEH	Stripping length	nominal	8 mm	
Max. clamping range	2.5 mm ²			

Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. no. of poles (Tu=20°C)	24 A
Rated current, max. no. of poles (Tu=20°C)	24 A	Rated current, min. no. of poles (Tu=40°C)	24 A
Rated current, max. no. of poles (Tu=40°C)	24 A	Rated voltage for surge voltage class / pollution degree II/2	630 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		

Rated data acc. to CSA

Institute (CSA)		Certificate No. (CSA)	200039-1815154
Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group D / CSA)	300 V
Rated current (Use group B / CSA)	10 A	Rated current (Use group D / CSA)	10 A
Wire cross-section, AWG, min.	AWG 26	Wire cross-section, AWG, max.	AWG 14
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Data sheet

**OMNIMATE Signal - series LMZF
LMZF 5/16/135 3.5OR**

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Technical data

Rated data acc. to UL 1059

Institute (cURus)



Certificate No. (cURus)

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)	15 A	Rated current (Use group D / UL 1059)	10 A
Wire cross-section, AWG, min.	AWG 26	Wire cross-section, AWG, max.	AWG 14
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Packing

Packaging	Box	VPE length	105 mm
VPE width	150 mm	VPE height	275 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		

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

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Technical data**Downloads**

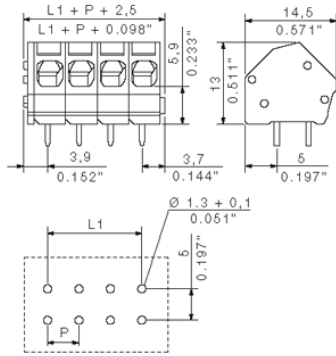
Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Brochure/Catalogue	FL DRIVES EN FL ANALO.SIGN.CONV. EN MB DEVICE MANUF. EN FL DRIVES DE CAT 2 PORTFOLIOGUIDE EN FL BUILDING SAFETY EN FL APPL LED LIGHTING EN FL INDUSTR.CONTROLS EN FL MACHINE SAFETY EN FL HEATING ELECTR EN FL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

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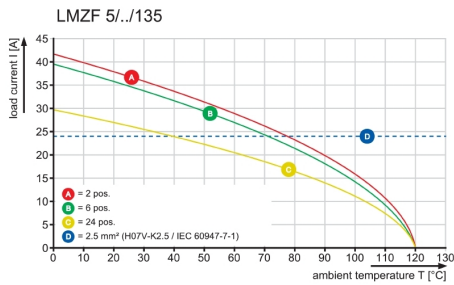
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Drawings

Dimensional drawing



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.