OMNIMATE Signal - series LMZF
LMZFL 5/5/135 3.5SW BED

Weidmüller Interface GmbH & Co. KG
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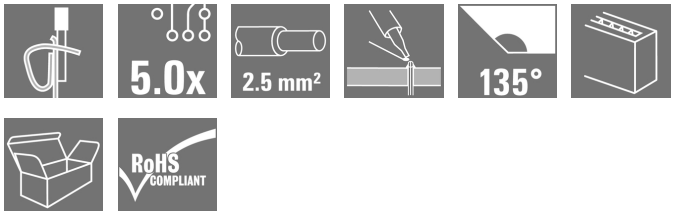

The compact installation terminal for the standard wire cross-section size of 2.5mm².
Tension clamp connection with a 135° outlet direction, in variable pitch: 5.00 - 5.08 mm (1 part with 2 pitches).

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	LMZFL 5/5/135 3.5SW BED
Order No.	1939400000
Version	Printed circuit board terminals, 5.00 mm, No. of poles: 5, 135°, Solder pin length (l): 3.5 mm, tinned, black, Tension clamp connection with actuator, Clamping range, max. : 2.5 mm², Box
GTIN (EAN)	4032248615681
Qty.	100 pc(s).
Product data	IEC: 630 V / 24 A / 0.13 - 2.5 mm² UL: 300 V / 15 A / AWG 26 - AWG 14
Packaging	Box

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Technical data

Dimensions and weights

Width	27.98 mm	Width (inches)	1.102 inch
Height	20.24 mm	Height (inches)	0.797 inch
Height of lowest version	16.74 mm	Depth	14.5 mm
Depth (inches)	0.571 inch	Net weight	6.45 g

System parameters

Product family	OMNIMATE Signal - series LMZF	Wire connection method	Tension clamp connection with actuator
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	5	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	20 mm
L1 in inches	0.787 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 of operational elements	white	Material of operational elements	PA 66
Colour chart (similar)	RAL 9011	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 mm²
Clamping range, max.	2.5 mm²
Wire connection cross section AWG, min.	AWG 26
Wire connection cross section AWG, max.	AWG 14
Solid, min. H05(07) V-U	0.13 mm²
Solid, max. H05(07) V-U	2.5 mm²
Flexible, min. H05(07) V-K	0.13 mm²
Flexible, max. H05(07) V-K	2.5 mm²
w. plastic collar ferrule, DIN 46228 pt 4, min.	0.25 mm²
w. plastic collar ferrule, DIN 46228 pt 4, max.	1.5 mm²
w. wire end ferrule, DIN 46228 pt 1, min	0.25 mm²
w. wire end ferrule, DIN 46228 pt 1, max.	1.5 mm²

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Clampable conductor	Cross-section for conductor connection	Type		fine-wired
		nominal		0.5 mm²
	AEH	Stripping length	nominal	8 mm
		Stripping length	nominal	6 mm
	Cross-section for conductor connection	Type		fine-wired
		nominal		0.75 mm²
	AEH	Stripping length	nominal	8 mm
		Stripping length	nominal	6 mm
	Cross-section for conductor connection	Type		fine-wired
		nominal		1 mm²
	AEH	Stripping length	nominal	8 mm
		Stripping length	nominal	6 mm
	Cross-section for conductor connection	Type		fine-wired
		nominal		0.25 mm²
	AEH	Stripping length	nominal	8 mm
		Stripping length	nominal	5 mm
	Cross-section for conductor connection	Type		fine-wired
		nominal		0.34 mm²
	AEH	Stripping length	nominal	8 mm
Max. clamping range	2.5 mm²			

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.		

Rated data acc. to UL 1059

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

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Packing

Packaging	Box	VPE length	65 mm
VPE width	105 mm	VPE height	275 mm

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		

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

Brochure/Catalogue	FL DRIVES EN FL DRIVES DE

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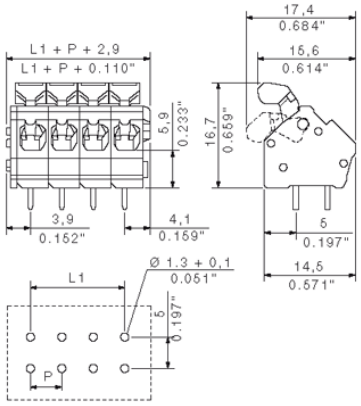
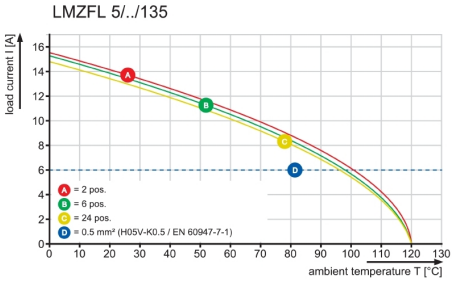
Drawings

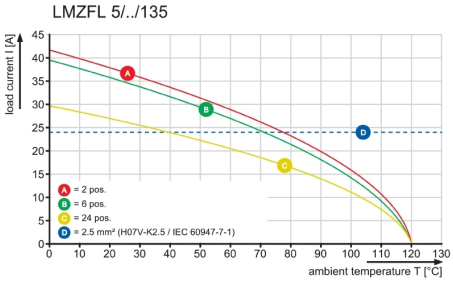
Dimensional drawing



Graph



Graph



Wave Solder Profile

Recommended wave solderding profiles

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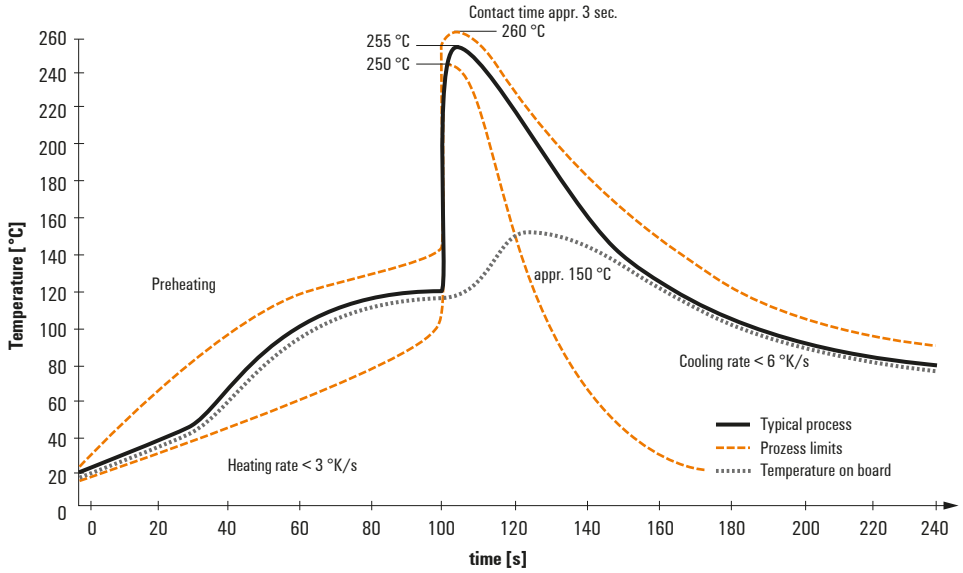
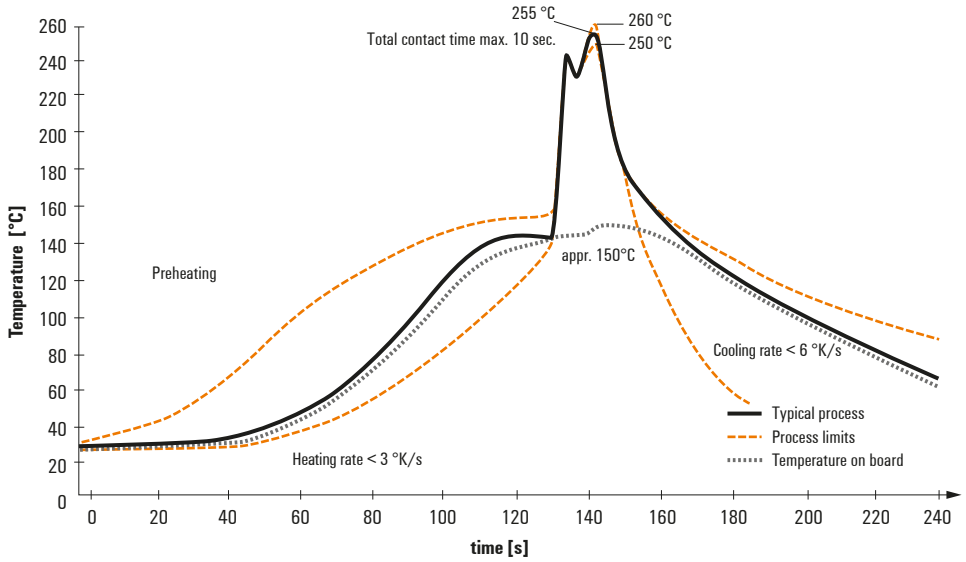
Single Wave:



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.