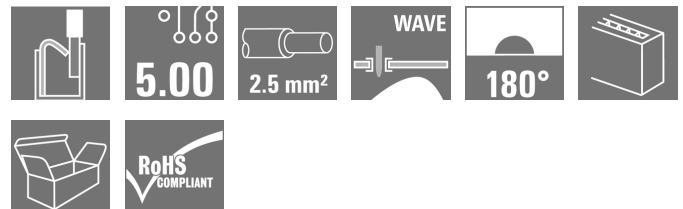


**OMNIMATE Signal - series LMF**  
**LMF 5.00/03/180 3.5SN BK BX**

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 16  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
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**Product image**

The new LMF allows us to meet the current market requirements for a PCB terminal with PUSH IN connection system for wire cross-sections up to 2.5 mm<sup>2</sup>

- PUSH IN connection system
- LMF with pusher for opening the terminal point
- LMFS without pusher, the terminal point is opened with a screwdriver
- Integrated test point
- 90° and 180° wire outlet direction

**General ordering data**

|              |                                                                                                                                                            |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Type         | LMF 5.00/03/180 3.5SN BK BX                                                                                                                                |
| Order No.    | <a href="#">1425040000</a>                                                                                                                                 |
| Version      | Printed circuit board terminals, 5.00 mm, No. of poles: 3, 180°, Solder pin length (l): 3.5 mm, tinned, black, PUSH IN, Clamping range, max.: 2.5 mm², Box |
| GTIN (EAN)   | 4050118229066                                                                                                                                              |
| Qty.         | 90 pc(s).                                                                                                                                                  |
| Product data | IEC: 400 V / 24 A / 0.5 - 2.5 mm²<br>UL: 300 V / 20 A / AWG 24 - AWG 12                                                                                    |
| Packaging    | Box                                                                                                                                                        |

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## Technical data

### Dimensions and weights

|                          |            |                 |            |
|--------------------------|------------|-----------------|------------|
| Width                    | 17.7 mm    | Width (inches)  | 0.697 inch |
| Height                   | 22.7 mm    | Height (inches) | 0.894 inch |
| Height of lowest version | 19.2 mm    | Depth           | 14.8 mm    |
| Depth (inches)           | 0.583 inch | Net weight      | 4.747 g    |

### System parameters

|                                              |                              |                                            |            |
|----------------------------------------------|------------------------------|--------------------------------------------|------------|
| Product family                               | OMNIMATE Signal - series LMF | Wire connection method                     | PUSH IN    |
| Mounting onto the PCB                        | THT solder connection        | Conductor outlet direction                 | 180°       |
| Pitch in mm (P)                              | 5 mm                         | Pitch in inches (P)                        | 0.197 inch |
| No. of poles                                 | 3                            | Fitted by customer                         | No         |
| Max. adjacent poles per row                  | 24                           | Solder pin length (l)                      | 3.5 mm     |
| Solder pin dimensions                        | d = 0.8 mm                   | Solder eyelet hole diameter (D)            | 1.1 mm     |
| Solder eyelet hole diameter tolerance (D)+   | 0.1 mm                       | Number of solder pins per pole             | 2          |
| Screwdriver blade                            | 0.6 x 3.5                    | Screwdriver blade standard                 | DIN 5264   |
| Stripping length                             | 10 mm                        | L1 in mm                                   | 10 mm      |
| L1 in inches                                 | 0.394 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        | orange              | Material of operational elements      | PBT    |
| Colour chart (similar)                | RAL 9011            | CTI                                   | ≥ 600  |
| Insulation strength                   | ≥ 10 <sup>8</sup> Ω | UL 94 flammability rating             | V-0    |
| Contact material                      | CuSn                | Contact surface                       | tinned |
| Coating                               | 4-6 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.                                                 | 0.12 mm <sup>2</sup> |
| Clamping range, max.                                                 | 2.5 mm <sup>2</sup>  |
| Wire connection cross section AWG, min.                              | AWG 24               |
| Wire connection cross section AWG, max.                              | AWG 12               |
| Solid, min. H05(07) V-U                                              | 0.5 mm <sup>2</sup>  |
| Solid, max. H05(07) V-U                                              | 2.5 mm <sup>2</sup>  |
| Flexible, min. H05(07) V-K                                           | 0.25 mm <sup>2</sup> |
| Flexible, max. H05(07) V-K                                           | 2.5 mm <sup>2</sup>  |
| w. plastic collar ferrule, DIN 46228 pt 4, 0.25 mm <sup>2</sup> min. |                      |
| w. plastic collar ferrule, DIN 46228 pt 4, 2.5 mm <sup>2</sup> max.  |                      |
| w. wire end ferrule, DIN 46228 pt 1, min 0.25 mm <sup>2</sup>        |                      |
| w. wire end ferrule, DIN 46228 pt 1, 2.5 mm <sup>2</sup> max.        |                      |
| Plug gauge in accordance with EN 60999 a x b; ø                      | 2.4 mm x 1.5 mm      |

Creation date May 27, 2019 8:47:45 PM CEST

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**Technical data**

|                     |                                        |                  |                      |       |
|---------------------|----------------------------------------|------------------|----------------------|-------|
| Clampable conductor | Cross-section for conductor connection | Type             | fine-wired           |       |
|                     |                                        | nominal          | 0.5 mm <sup>2</sup>  |       |
|                     | AEH                                    | Stripping length | nominal              | 12 mm |
|                     |                                        | Stripping length | nominal              | 10 mm |
|                     | Cross-section for conductor connection | Type             | fine-wired           |       |
|                     |                                        | nominal          | 0.75 mm <sup>2</sup> |       |
|                     | AEH                                    | Stripping length | nominal              | 12 mm |
|                     |                                        | Stripping length | nominal              | 10 mm |
|                     | Cross-section for conductor connection | Type             | fine-wired           |       |
|                     |                                        | nominal          | 1 mm <sup>2</sup>    |       |
|                     | AEH                                    | Stripping length | nominal              | 12 mm |
|                     |                                        | Stripping length | nominal              | 10 mm |
|                     | Cross-section for conductor connection | Type             | fine-wired           |       |
|                     |                                        | nominal          | 1.5 mm <sup>2</sup>  |       |
|                     | AEH                                    | Stripping length | nominal              | 10 mm |
|                     |                                        | Stripping length | nominal              | 12 mm |
|                     | Cross-section for conductor connection | Type             | fine-wired           |       |
|                     |                                        | nominal          | 2.5 mm <sup>2</sup>  |       |
|                     | AEH                                    | Stripping length | nominal              | 10 mm |
| Max. clamping range | 2.5 mm <sup>2</sup>                    |                  |                      |       |

**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         | 400 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**

|                                   |        |                                   |        |
|-----------------------------------|--------|-----------------------------------|--------|
| 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 24 | Wire cross-section, AWG, max.     | AWG 12 |

**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) | 20 A   | Rated current (Use group D / UL 1059) | 10 A   |
| Wire cross-section, AWG, min.         | AWG 24 | Wire cross-section, AWG, max.         | AWG 12 |

**Packing**

|           |        |            |        |
|-----------|--------|------------|--------|
| Packaging | Box    | VPE length | 348 mm |
| VPE width | 135 mm | VPE height | 30 mm  |

## OMNIMATE Signal - series LMF

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## Technical data

### 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          | <ul style="list-style-type: none"> <li>• Additional colours on request</li> <li>• Rated current related to rated cross-section &amp; min. No. of poles.</li> <li>• Wire end ferrule without plastic collar to DIN 46228/1</li> <li>• Wire end ferrule with plastic collar to DIN 46228/4</li> <li>• P on drawing = pitch</li> <li>• 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.</li> <li>• The test point can only be used as potential-pickup point.</li> </ul> |
| 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

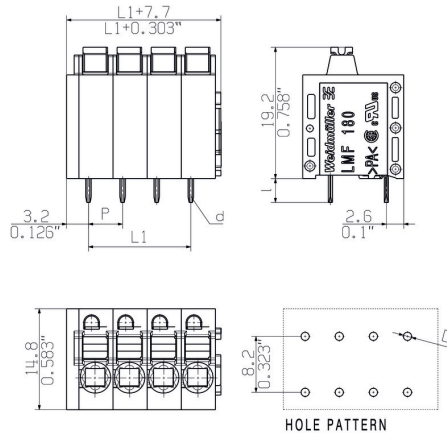
[FL DRIVES EN](#)  
[FL DRIVES DE](#)

## OMNIMATE Signal - series LMF LMF 5.00/03/180 3.5SN BK BX

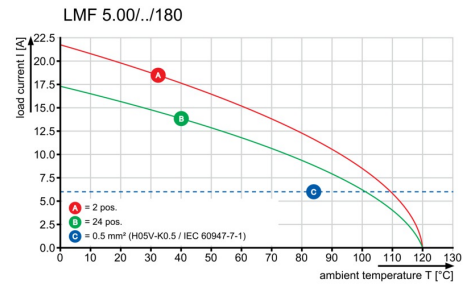
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## Drawings

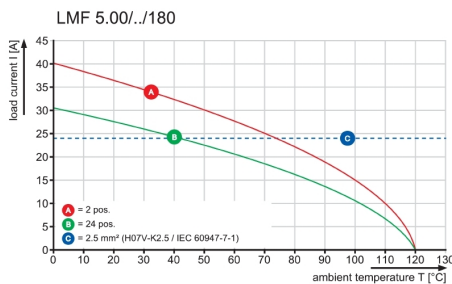
### Dimensional drawing



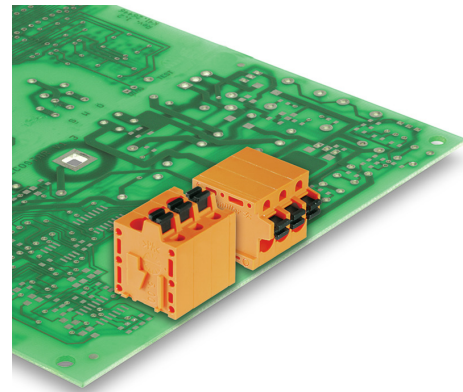
### Graph



### Graph

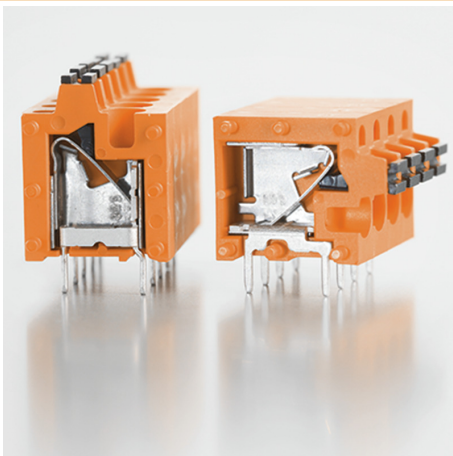


### Product benefits



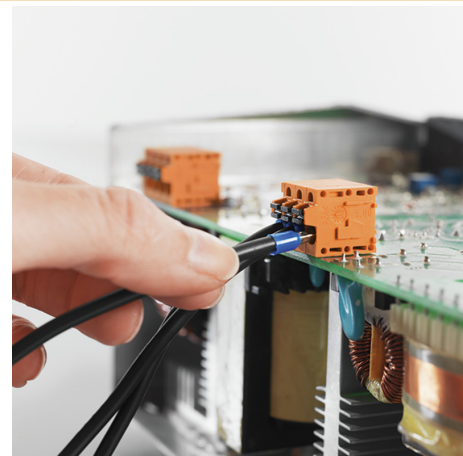
Optional conductor outlet direction  
Stable mechanical design

### Product benefits



High reliability of the current capacity

### Product benefits



Direct conductor entry  
Cross section up to 2.5 mm²

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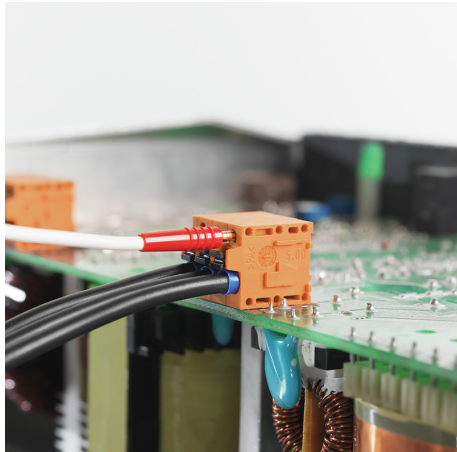
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## Drawings

### Product benefits



Maintenance through test point

## 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.