

Weidmüller Interface GmbH & Co. KG Klingenbergstraße 26 D-32758 Detmold

www.weidmueller.com

Germany

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^2

- 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

| Version | Printed circuit board terminals, 5.00 mm, Number of poles: 6, 180°, Solder pin length (I): 3.5 mm, tinned, orange, PUSH IN with actuator, Clamping range, max. : 2.5 mm ² , Box |
|--------------|---|
| Order No. | <u>1330220000</u> |
| Туре | LMF 5.00/06/180 3.5SN OR BX |
| GTIN (EAN) | 4050118134162 |
| Qty. | 45 pc(s). |
| Product data | IEC: 400 V / 24 A / 0.5 - 2.5 mm² UL: 300 V / 20 A / AWG 24 - AWG 12 |
| Packaging | Box |

Creation date January 22, 2022 4:47:00 PM CET



Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

Technical data

| Depth | 14.8 mm | Depth (inches) | 0.583 inch |
|--------------------------|------------|-----------------|------------|
| Height | 22.7 mm | Height (inches) | 0.894 inch |
| Height of lowest version | 19.2 mm | Width | 32.7 mm |
| Width (inches) | 1.287 inch | Net weight | 10.844 g |

System parameters

| Product family | OMNIMATE Signal - series | Wire connection method | DUCLUN with actuator |
|---------------------------------------|--------------------------|---|------------------------|
| | LMF | | PUSH IN with actuator |
| Mounting onto the PCB | THT solder connection | Conductor outlet direction | 180° |
| Pitch in mm (P) | 5 mm | Pitch in inches (P) | 0.197 inch |
| Number of poles | 6 | Pin series quantity | 1 |
| Fitted by customer | No | Max. adjacent poles per row | 24 |
| Solder pin length (I) | 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 | 25 mm | L1 in inches | 0.984 inch |
| Touch-safe protection acc. to DIN VDE | | Touch-safe protection acc. to DIN VDE | |
| 0470 | IP 20 | 57 106 | Safe from finger touch |
| Protection degree | IP20 | | |

Material data

| Insulating material | Wemid (PA) | Colour | orange |
|---------------------------------------|------------|---------------------------------------|---------------|
| Colour chart (similar) | RAL 2000 | Comparative Tracking Index (CTI) | ≥ 600 |
| 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 | 46 µm Sn matt |
| Storage temperature, min. | -40 °C | Storage temperature, max. | 70 °C |
| 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 ² |
|--|----------------------|
| Clamping range, max. | 2.5 mm ² |
| 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 ² |
| Solid, max. H05(07) V-U | 2.5 mm ² |
| Flexible, min. H05(07) V-K | 0.25 mm ² |
| Flexible, max. H05(07) V-K | 2.5 mm ² |
| w. plastic collar ferrule, DIN 46228 pt 4 min. | 4, 0.25 mm² |
| w. plastic collar ferrule, DIN 46228 pt 4 max. | 1, 2.5 mm² |
| w. wire end ferrule, DIN 46228 pt 1, min. | 0.25 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 | 2.4 mm x 1.5 mm |

Creation date January 22, 2022 4:47:00 PM CET

Technical data

Clampable conductor



Weidmüller Interface GmbH & Co. KG Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

| | Cross-section for conductor connection | Туре | fine-wired |
|--|--|----------------------------------|----------------------|
| | | nominal | 0.5 mm ² |
| | wire end ferrule | Stripping length | nominal 12 mm |
| | | Recommended wire- end ferrule | <u>H0,5/16 OR</u> |
| | | Stripping length | nominal 10 mm |
| | | Recommended wire- end ferrule | <u>H0,5/10</u> |
| | Cross-section for conductor connection | Туре | fine-wired |
| | | nominal | 0.75 mm ² |
| | wire end ferrule | Stripping length | nominal 12 mm |
| | | Recommended wire- end ferrule | <u>H0,75/16 W</u> |
| | | Stripping length | nominal 10 mm |
| | | Recommended wire- end ferrule | <u>H0,75/10</u> |
| | Cross-section for conductor connection | Туре | fine-wired |
| | | nominal | 1 mm ² |
| | wire end ferrule | Stripping length | nominal 12 mm |
| | | Recommended wire- end ferrule | <u>H1,0/16D R</u> |
| | | Stripping length | nominal 10 mm |
| | | Recommended wire- end ferrule | <u>H1,0/10</u> |
| | Cross-section for conductor connection | Туре | fine-wired |
| | | nominal | 1.5 mm ² |
| | wire end ferrule | Stripping length | nominal 10 mm |
| | | Recommended wire- end ferrule | <u>H1,5/10</u> |
| | | Stripping length | nominal 12 mm |
| | | Recommended wire- end ferrule | <u>H1,5/16 R</u> |
| | Cross-section for conductor connection | Туре | fine-wired |
| | | nominal | 2.5 mm ² |
| | wire end ferrule | Stripping length | nominal 10 mm |
| | | Recommended wire- end ferrule | H2,5/10 |

Reference text

Length of ferrules is to be chosen depending on the product and the rated voltage., The outside diameter of the plastic collar should not be larger than the pitch (P)

Rated data acc. to IEC

| tested acc. to standard | | Rated current, min. number of poles | 0.4.4 |
|---|------------------------|---|-------------------|
| | IEC 60664-1, IEC 61984 | (Tu=20°C) | 24 A |
| Rated current, max. number of poles | | Rated current, min. number of poles | |
| (Tu=20°C) | 24 A | (Tu=40°C) | 24 A |
| Rated current, max. number 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 |

Technical data

Rated data acc. to CSA

Weidmüller 🔀

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

| Institute (CSA) | - | Certificate No. (CSA) | |
|---------------------------------------|--|---------------------------------------|-----------------|
| | | | |
| | (3P* | | |
| | | | 20039-1815154 |
| 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 |
| Nire cross-section, AWG, min. | AWG 24 | 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 | | | |
| nstitute (cURus) | | Certificate No. (cURus) | |
| | c R us | | 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) | |
| Vire cross-section, AWG, min. | AWG 24 | Wire cross-section, AWG, max. | AWG 12 |
| Reference to approval values | Specifications are maximum values, details - see approval certificate. | | |
| Packing | | | |
| | Pau | VDE log ath | 488 mm |
| Packaging /PE width | Box 349 mm | VPE length VPE height | 488 mm 31 mm |
| | 343 11111 | VFL HeigHt | 5111111 |
| Classifications | | | |
| TIM 6.0 | EC002643 | ETIM 7.0 | EC002643 |
| TIM 8.0 | EC002643 | ECLASS 9.0 | 27-44-04-01 |
| ECLASS 9.1 | 27-44-04-01 | ECLASS 10.0 | 27-44-04-01 |
| ECLASS 11.0 | 27-46-01-01 | | |
| | | | |

Technical data

Important note



Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

| 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 propertie in accordance with IPC-A-610 "Class 2". Further claims on the products can be evaluated on request. |
|--|--|
| 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 t be designed in accordance with the relevant application standards. |
| | The test point can only be used as potential-pickup point. |
| | • Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 month |
| Approvals | |
| | |
| Approvals | |
| ROHS | Conform |
| UL File Number Search | E60693 |
| | |
| Downloads | |
| | |
| Approval/Certificate/Document of | Declaration of the Manufacturer |
| Approval/Certificate/Document of Conformity | Declaration of the Manufacturer CAD data – STEP |
| Approval/Certificate/Document of Conformity Engineering Data | CAD data – STEP |
| Approval/Certificate/Document of Conformity Engineering Data Engineering Data | <u>CAD data – STEP</u> EPLAN, WSCAD |
| Approval/Certificate/Document of Conformity Engineering Data Engineering Data Catalogues | <u>CAD data – STEP</u> EPLAN, WSCAD <u>Catalogues in PDF-format</u> |
| Approval/Certificate/Document of Conformity Engineering Data Engineering Data Catalogues | <u>CAD data – STEP</u> EPLAN, WSCAD |
| Approval/Certificate/Document of Conformity Engineering Data Engineering Data Catalogues | CAD data – STEP EPLAN, WSCAD Catalogues in PDF-format FL DRIVES EN FL ANALO.SIGN.CONV. EN MB DEVICE MANUF. EN |
| Approval/Certificate/Document of Conformity Engineering Data Engineering Data Catalogues | CAD data – STEP EPLAN, WSCAD Catalogues in PDF-format FL DRIVES EN FL ANALO.SIGN.CONV. EN MB DEVICE MANUF. EN FL DRIVES DE |
| Approval/Certificate/Document of Conformity Engineering Data Engineering Data Catalogues | CAD data – STEP EPLAN, WSCAD Catalogues in PDF-format FL DRIVES EN FL ANALO.SIGN.CONV. EN MB DEVICE MANUF. EN FL DRIVES DE FL BUILDING SAFETY EN |
| Approval/Certificate/Document of Conformity Engineering Data Engineering Data Catalogues | CAD data – STEP EPLAN, WSCAD Catalogues in PDF-format FL DRIVES EN FL ANALO.SIGN.CONV. EN MB DEVICE MANUF. EN FL DRIVES DE FL BUILDING SAFETY EN FL APPL LED LIGHTING EN |
| Approval/Certificate/Document of Conformity Engineering Data Engineering Data Catalogues | CAD data – STEP EPLAN, WSCAD Catalogues in PDF-format FL DRIVES EN FL ANALO.SIGN.CONV. EN MB DEVICE MANUF. EN FL DRIVES DE FL BUILDING SAFETY EN FL APPL LED LIGHTING EN FL INDUSTR.CONTROLS EN |
| Approval/Certificate/Document of Conformity Engineering Data Engineering Data Catalogues | CAD data – STEP EPLAN, WSCAD Catalogues in PDF-format FL DRIVES EN FL ANALO.SIGN.CONV. EN MB DEVICE MANUF. EN FL DRIVES DE FL BUILDING SAFETY EN FL APPL LED LIGHTING EN |
| Approval/Certificate/Document of Conformity Engineering Data Engineering Data Catalogues | CAD data – STEP EPLAN. WSCAD Catalogues in PDF-format FL DRIVES EN FL ANALO.SIGN.CONV. EN MB DEVICE MANUF. EN FL DRIVES DE FL BUILDING SAFETY EN FL APPL LED LIGHTING EN FL INDUSTR.CONTROLS EN FL HEATING ELECTR EN FL APPL_INVERTER EN |
| Downloads Approval/Certificate/Document of Conformity Engineering Data Engineering Data Catalogues Brochures | CAD data – STEP EPLAN, WSCAD Catalogues in PDF-format FL DRIVES EN FL ANALO.SIGN.CONV. EN MB DEVICE MANUF. EN FL DRIVES DE FL BUILDING SAFETY EN FL APPL LED LIGHTING EN FL INDUSTR.CONTROLS EN FL HEATING ELECTR EN FL APPL_INVERTER EN FL APPL_INVERTER EN FL APPL_INVERTER EN FL BASE_STATION_EN |
| Approval/Certificate/Document of Conformity Engineering Data Engineering Data Catalogues | CAD data – STEP EPLAN, WSCAD Catalogues in PDF-format FL DRIVES EN FL ANALO.SIGN.CONV. EN MB DEVICE MANUF. EN FL DRIVES DE FL BUILDING SAFETY EN FL APPL LED LIGHTING EN FL INDUSTR.CONTROLS EN FL HEATING ELECTR EN FL APPL_INVERTER EN FL APPL_INVERTER EN FL APPL_INVERTER EN FL APPL_INVERTER EN FL ELEVATOR EN |
| Approval/Certificate/Document of Conformity Engineering Data Engineering Data Catalogues | CAD data – STEP EPLAN, WSCAD Catalogues in PDF-format FL DRIVES EN FL ANALO.SIGN.CONV. EN MB DEVICE MANUF. EN FL DRIVES DE FL BUILDING SAFETY EN FL APPL LED LIGHTING EN FL INDUSTR.CONTROLS EN FL MACHINE SAFETY EN FL MACHINE SAFETY EN FL MACHINE SAFETY EN FL HEATING ELECTR EN FL APPL INVERTER EN FL BASE.STATION_EN FL ELEVATOR EN FL POWER SUPPLY EN |
| Approval/Certificate/Document of Conformity Engineering Data Engineering Data Catalogues | CAD data – STEP EPLAN, WSCAD Catalogues in PDF-format FL DRIVES EN FL ANALO.SIGN.CONV. EN MB DEVICE MANUF. EN FL DRIVES DE FL BUILDING SAFETY EN FL APPL LED LIGHTING EN FL INDUSTR.CONTROLS EN FL HEATING ELECTR EN FL APPL_INVERTER EN FL APPL_INVERTER EN FL APPL_INVERTER EN FL APPL_INVERTER EN FL ELEVATOR EN |

Drawings

Product image





Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

Dimensional drawing



Graph

Graph





Product benefits



Optional conductor outlet direction Stable mechanical design

Product benefits



High reliability of the current capacity

Creation date January 22, 2022 4:47:00 PM CET



Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

Accessories

Additional accessories



No task is too small when creating the perfect solution.

Connections form just one part of the overall process. Small details are often the key to the perfect solution in applications where potentials are tested, grouped or even isolated.

A system is not a system without small but essential details:

Test plugs ensure reliable pick-up from diagnostic sockets

In tandem with the manufacturing process and application.

General ordering data

| Туре | PS 2.0 MC | Version | Product data | Packaging |
|------------|------------------|--|--------------|-----------|
| Order No. | <u>031000000</u> | PCB plug-in connector, Accessories, Test plug, red, Number of poles: | 1 | Box |
| GTIN (EAN) | 4008190000059 | | | |
| Qty. | 20 pc(s). | | | |

Slotted screwdriver



VDE insulated slot-head screwdriver, SDI DIN 7437, ISO 2380/2, drive output acc. to DIN 5264, ISO 2380/1. SoftFinish grip

General ordering data

| | • | |
|------------|-------------------|--------------------------|
| Туре | SDIS 0.6X3.5X100 | Version |
| Order No. | <u>9008390000</u> | Screwdriver, Screwdriver |
| GTIN (EAN) | 4032248056354 | |
| Qty. | 1 pc(s). | |

Drawings

Product benefits



Direct conductor entry Cross section up to 2.5 mm²



Weidmüller Interface GmbH & Co. KG Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

Product benefits



Maintenance through test point





ZUWIDERHANDLUNGEN VERPELICHTEN ZU SCHADENERSATZ. ALLE RECHTE FUER DEN FALL DER PATENT-, GEBRAUCHSMUSTER- ODER GESCHMACKSMUSTEREINTRAGUNG VORBEHALTEN. THE REPRODUCTION, DISTRIBUTION AND UTILIZATION OF THIS DOCUMENT AS WELL AS THE COMMUNICATION OF ITS CONTENTS TO OTHERS WITHOUT EXPLICID AUTHORIZATION IS PROHIBITED. OFFENDERS WILL BE HELD LIABLE FOR THE PAYMENT OF DAMAGES. WEIDMUELLER EXCLUSIVELY RESERVES THE RIGHT TO FILE FOR PATENTS, UTILITY MODELS OR DESIGNS.

C WEIDMUELLER INTERFACE GmbH & Co.KG

WEITERGABE SOWIE VERVIELFAELTIGUNG DIESES DOKUMENTS, VERWERTUNG UND MITTEILUNG SEINES INHALTS SIND VERBOTEN, SOWEIT NICHT AUSDRUECKLICH GESTATTET





D



























Ð

00 00



SHOWN: LMFS 5.00/04/180 3.5







М

Ð HOLE PATTERN

Wave Solder Profile

Recommended wave solderding profiles

Weidmüller 🟵

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 16 D-32758 Detmold Germany Fon: +49 5231 14-0 Fax: +49 5231 14-292083 www.weidmueller.com



Double Wave:

Single 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.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Barrier Terminal Blocks category:

Click to view products by Weidmuller manufacturer:

Other Similar products are found below :

 CR151D20104
 670A-RZ-15-KT20
 6C1N03
 6PCR-02
 6PCR-02-008
 6PCR-05-008
 6PCR-08-008
 6PCR-09-008
 6PCR-13-006
 6PCR-15

 006
 6PCR-21-006
 6PCV-06-008
 6PCV-06-716
 6PCV-09-001
 6PCV-10-009
 6PCV-15-008
 6PCV-17-1206
 6PCV-20-323
 6PCV-30-006

 6STR-06-006
 6STR-08-006
 6STR-12-008
 6STR-13-006
 6STR-14-008
 6STR-16-008
 6STR-17-008
 6STR-21-008
 6STR-25-008
 6STR-27

 008
 6STV-03-006
 6STV-04-006
 6STV-09-006
 6STV-10-006
 6WWR-03-693
 6WWV-12-008
 6WWV-16-008
 72212603

 72504-C-50
 72506-C
 72507-C-50
 73203
 75505-C
 75510-C
 77010-50
 7C1N08
 812-GP-3/4ST-09
 8-1437402-5
 8-1437402-7