# MINI MCR-2-I-I(-PT)




## Input signal conditioner

Data sheet
106008_en_06

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## 1 Description

The standard signal 3-way signal conditioner with pluggable connection technology is used to electrically isolate, condition, amplify, and filter standard signals.

**Features**

- 3-way signal conditioner with plug-in connection technology
- Approval for Ex zone 2 (ec)
- Screw or push-in connection available
- Input, output signal range 0(4) mA ... 20 mA
- Reinforced insulation according to IEC 61010-1
- Supply voltage range 9.6 V DC ... 30 V DC

This device offers the option of NFC communication.

You can use the Signal Conditioner app to call-up comprehensive module information via the NFC interface of your mobile end device.

The Signal Conditioner smartphone app is available free of charge.

Alternatively, you can use the CLIPX ENGINEER DEVICE PARAMETRIZATION - software (item no.: 1371665) and the TWN4 MIFARE NFC USB ADAPTER - programming adapter (item no.: 2909681).

Make sure you always use the latest documentation.
It can be downloaded from the product at phoenixcontact.com/products.

This document is valid for the products listed in the “Ordering data” chapter.

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# 3 Ordering data

| Description | Type | Item no. | Pcs./Pkt. |
|---|---|---|---|
| 3-way signal conditioner with plug-in connection technology for the electrical isolation of analog signals. Input signal: 0(4) mA ... 20 mA, output signal: 0(4) mA ... 20 mA, screw connection technology | MINI MCR-2-I-I | 2901998 | 1 |
| 3-way signal conditioner with plug-in connection technology for the electrical isolation of analog signals. Input signal: 0(4) mA ... 20 mA, output signal: 0(4) mA ... 20 mA, push-in connection technology. | MINI MCR-2-I-I-PT | 2901999 | 1 |

| Accessories | Type | Item no. | Pcs./Pkt. |
|---|---|---|---|
| DIN rail connector (TBUS), 5-pos., for bridging the supply voltage, can be snapped onto NS 35/... DIN rail in accordance with EN 60715 | ME 6,2 TBUS-2 1,5/5-ST-3,81 GY | 2695439 | 10 |
| DIN rail connector for DIN rail mounting. Universal for TBUS housing. Gold-plated contacts, 5-pos. | ME 6,2 TBUS-2 1,5/5-ST-3,81 GN | 2869728 | 10 |
| Universal Termination Carrier for connecting 16 MINI Analog Pro signal conditioners to digital or analog I/O cards, via D-SUB connector, 37-pos. (1:1 connection), with HART multiplexer connection | TC-D37SUB-AIO16-MP-PS-UNI | 2906640 | 1 |
| Universal Termination Carrier for connecting 16 MINI Analog Pro signal conditioners to digital or analog I/O cards, via D-SUB connector, 37-pos. (1:1 connection) | TC-D37SUB-ADIO16-MP-P-UNI | 2906639 | 1 |
| Eight MINI Analog Pro signal conditioners and measuring transducers can be connected to a controller with minimal cabling effort and without any errors using system adapters and system cabling. | MINI MCR-2-V8-FLK 16 | 2901993 | 1 |
| Eight MINI Analog Pro signal conditioners and measuring transducers are quickly and easily integrated into a Modbus/RTU network via a communication adapter. | MINI MCR-2-V8-MOD-RTU | 2905634 | 1 |
| Eight MINI Analog Pro signal conditioners and measuring transducers are quickly and easily integrated into a Modbus/TCP network via a communication adapter. | MINI MCR-2-V8-MOD-TCP | 2905635 | 1 |
| Eight MINI Analog Pro signal conditioners and measuring transducers are quickly and easily integrated into a PROFIBUS DP network via a communication adapter. | MINI MCR-2-V8-PB-DP | 2905636 | 1 |
| Eight MINI Analog Pro signal conditioners and measuring transducers can be quickly and easily integrated into a PROFINET network via a communication adapter. | MINI MCR-2-V8-PN | 2905637 | 1 |
| FASTCON Pro plug set consisting of four plugs with screw connection, one for each position on the module. Suitable for all MINI Analog Pro modules. | FASTCON PRO-SET | 2906227 | 1 |
| FASTCON Pro plug set consisting of four plugs with push-in connection, one for each position on the module. Suitable for all MINI Analog Pro modules. | FASTCON PRO-SET-PT | 2906228 | 1 |

| Accessories | Type | Item no. | Pcs./Pkt. |
|---|---|---|---|
| Marker for end clamp, Sheet, white, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: latching, Number of individual labels: 24, text field height: 5 mm, text field width: 30 mm | UCT-EM (30X5) | 0801505 | 10 |
| Marker for end clamp, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snapped into marker carrier, Number of individual labels: 24, text field height: 5 mm, text field width: 30 mm | UCT-EM (30X5) CUS | 0801589 | 1 |
| Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, Number of individual labels: 10, text field height: 5 mm, text field width: 90000 mm | SK 5,0 WH:REEL | 0805221 | 1 |
| Plastic label, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: adhesive, Number of individual labels: 10, text field height: 5 mm, text field width: 15 mm | UC-EMLP (15X5) | 0819301 | 10 |
| Plastic label, Sheet, yellow, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: adhesive, Number of individual labels: 10, text field height: 5 mm, text field width: 15 mm | UC-EMLP (15X5) YE | 0822615 | 10 |
| Plastic label, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: adhesive, text field height: 5 mm, text field width: 15 mm | UC-EMLP (15X5) CUS | 0824550 | 1 |
| Plastic label, can be ordered: by sheet, yellow, labeled according to customer specifications, mounting type: adhesive, text field height: 5 mm, text field width: 15 mm | UC-EMLP (15X5) YE CUS | 0824551 | 1 |
| Plastic label, Sheet, silver, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: adhesive, Number of individual labels: 10, text field height: 5 mm, text field width: 15 mm | UC-EMLP (15X5) SR | 0828095 | 10 |
| Plastic label, can be ordered: by sheet, silver, labeled according to customer specifications, mounting type: adhesive, Number of individual labels: 10, text field height: 5 mm, text field width: 15 mm | UC-EMLP (15X5) SR CUS | 0828099 | 1 |
| Plastic label, Card, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: adhesive, Number of individual labels: 189, text field height: 5 mm, text field width: 15 mm | US-EMLP (15X5) | 0828790 | 10 |

| Accessories | Type | Item no. | Pcs./Pkt. |
|---|---|---|---|
| Plastic label, Card, yellow, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: adhesive, Number of individual labels: 189, text field height: 5 mm, text field width: 15 mm | US-EMLP (15X5) YE | 0828873 | 10 |
| Plastic label, Card, silver, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: adhesive, Number of individual labels: 189, text field height: 5 mm, text field width: 15 mm | US-EMLP (15X5) SR | 0828874 | 10 |
| Plastic label, Card, can be ordered: by card, white, labeled according to customer specifications, mounting type: adhesive, Number of individual labels: 189, text field height: 5 mm, text field width: 15 mm | US-EMLP (15X5) CUS | 0830076 | 1 |
| Plastic label, Card, can be ordered: by card, yellow, labeled according to customer specifications, mounting type: adhesive, Number of individual labels: 189, text field height: 5 mm, text field width: 15 mm | US-EMLP (15X5) YE CUS | 0830077 | 1 |
| Plastic label, Card, can be ordered: by card, silver, labeled according to customer specifications, mounting type: adhesive, Number of individual labels: 189, text field height: 5 mm, text field width: 15 mm | US-EMLP (15X5) SR CUS | 0830078 | 1 |
| Marker for end clamp, Sheet, yellow, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: latching, Number of individual labels: 24, text field height: 5 mm, text field width: 30 mm | UCT-EM (30X5) YE | 0830340 | 10 |
| Marker for end clamp, can be ordered: by sheet, yellow, labeled according to customer specifications, mounting type: snapped into marker carrier, Number of individual labels: 24, text field height: 5 mm, text field width: 30 mm | UCT-EM (30X5) YE CUS | 0830348 | 1 |
| Power terminal with plug-in connection technology for delivering the supply voltage to the DIN rail connector. Monitoring of the supply voltages in combination with the fault monitoring module. Screw connection technology | MINI MCR-2-PTB | 2902066 | 1 |
| Power terminal with plug-in connection technology for delivering the supply voltage to the DIN rail connector. Monitoring of the supply voltages in combination with the fault monitoring module. Push-in connection technology | MINI MCR-2-PTB-PT | 2902067 | 1 |
| Primary-switched power supply, QUINT POWER, screw connection, DIN rail mounting, supply of devices possible via the TBUS DIN rail connector, protective coating, input: single-phase, output: 24 V DC/2.5 A | QUINT4-SYS-PS/1AC/24DC/2.5/SC | 2904614 | 1 |

| Accessories | Type | Item no. | Pcs./Pkt. |
|---|---|---|---|
| Fault monitoring module with plug-in connection technology for evaluating and reporting group errors from the FM system and for monitoring the supply voltages. Error message via N/C contact. Screw connection technology, standard configuration | MINI MCR-2-FM-RC | 2904504 | 1 |
| Fault monitoring module with plug-in connection technology for evaluating and reporting group errors from the FM system and for monitoring the supply voltages. Error message via N/C contact. Push-in connection technology, standard configuration | MINI MCR-2-FM-RC-PT | 2904508 | 1 |
| Actuation tool, for ST terminal blocks, insulated, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip | SZS 0,6X3,5 | 1205053 | 10 |

# 4 Technical data

| | |
|---|---|
| **Hardware/firmware version** | |
| Hardware/firmware version ( 2901998 ) | 13 / - |
| Hardware/firmware version ( 2901999 ) | 13 / - |
| The technical data and safety characteristics are valid as of the specified HW/FW version. | |
| **Input Current input** | |
| Number of inputs | 1 |
| Configurable/programmable | no |
| Current input signal | 0 mA ... 20 mA<br>4 mA ... 20 mA |
| Input resistance current input | approx. 63 Ω (+0.7 V for test diode) |
| **Output Current output** | |
| Number of outputs | 1 |
| Current output signal | 0 mA ... 20 mA<br>4 mA ... 20 mA |
| Max. current output signal | 22 mA |
| Non-load voltage | < 17 V |
| Configurable/programmable | no |
| Ripple | < 20 $mV_{PP}$ (at 600 Ω) |
| Load/output load current output | ≤ 600 Ω (at 20 mA) |
| **Supply** | |
| Nominal supply voltage | 24 V DC |
| Supply voltage range | 9.6 V DC ... 30 V DC (The DIN rail connector (ME 6,2 TBUS-2 1,5/5-ST-3,81 GN, item no. 2869728) can be used to bridge the supply voltage. It can be snapped onto a 35 mm DIN rail in accordance with EN 60715) |
| Typical current consumption | 25 mA (24 V DC)<br>54 mA (12 V DC) |
| Power consumption | ≤ 800 mW (at 9.6 V DC) |
| **Status and diagnostics indicators** | |
| Status display | Green LED (supply voltage) |

| General data | |
|---|---|
| Limit frequency (3 dB) | ≈ 30 Hz |
| Maximum transmission error | 0.1 % (of final value) |
| Signal transmission behavior | In = Out |
| Temperature coefficient, typical | 0.01 %/K |
| Maximum temperature coefficient | 0.01 %/K |
| Step response (10-90%) | ≈ 10 ms |
| Overvoltage category | II |
| Pollution degree | 2 |
| Degree of protection | IP20 (not assessed by UL) |
| Mounting position | any |
| Dimensions W/H/D | 6.2 mm / 109.81 mm / 119.2 mm |
| Type of housing | PBT |

| Electrical isolation | |
|---|---|
| Electrical isolation | 3-way isolation |
| Input/output/power supply<br>Rated insulation voltage<br>Test voltage<br>Insulation | <br>300 $V_{rms}$<br>3 kV AC (50 Hz, 60 s)<br>Reinforced insulation according to IEC/EN 61010-1 |

| Connection data | Screw connection | Push-in connection |
|---|---|---|
| Conductor cross section rigid with ferrule | 0.2 mm² … 1.5 mm² | 0.2 mm² … 2.5 mm² |
| Conductor cross section rigid without ferrule | 0.14 mm² … 2.5 mm² | 0.14 mm² … 2.5 mm² |
| Conductor cross section flexible | 0.14 mm² … 2.5 mm² | 0.14 mm² … 2.5 mm² |
| Conductor cross section AWG flexible | 24 … 12 | 24 … 12 |
| Tightening torque | 0.5 Nm … 0.6 Nm | |
| Stripping length | 10 mm | 10 mm |

| Ambient conditions | |
|---|---|
| Ambient temperature (operation) | -40 °C … 70 °C |
| Ambient temperature (storage/transport) | -40 °C … 85 °C |
| Permissible humidity (operation) | 5 % … 95 % (non-condensing) |
| Maximum altitude for use above sea level | ≤ 2000 m |

| Conformance with EMC directive |
|---|
| Immunity in accordance with EN 61000-6-2<br>When being exposed to interference, there may be minimal deviations. |
| Noise emission in accordance with EN 61000-6-4 |

| Conformance/Approvals | |
|---|---|
| CE<br>CE-compliant | |
| ATEX<br>BVS 19 ATEX E 047 X | II 3 G Ex ec IIC T4 Gc |
| IECEx<br>IECEx BVS 19.0041X | Ex ec IIC T4 Gc |
| CCC / China-Ex | Ex ec IIC T4 Gc |
| UL, USA/Canada | UL 508 Listed<br>Class I, Div. 2, Groups A, B, C, D T6<br>Class I, Zone 2, Group IIC T6 |
| Shipbuilding approval<br>DNV GL TAA00002UA<br>Temperature<br>Humidity<br>Vibration<br>EMC<br>Enclosure | <br><br>B<br>B<br>A<br>A<br>Required protection according to the Rules shall be provided upon installation on board |
| EAC Ex<br>BY/112 02.01 TP012 103.01 00079 | 2Ex ec IIC T4 Gc |

# 5 Safety regulations and installation notes

## 5.1 Installation notes

- The EPL Gc (ATEX category 3) device is suitable for installation in zone 2 potentially explosive areas. It satisfies the requirements of the following standards:
  IEC/EN 60079-0, IEC/EN 60079-7
  GB/T 3836.1, GB/T 3836.3, GB/T 3836.4
  For detailed information, please refer to the declarations of conformity.
- Installation, operation, and maintenance may only be carried out by qualified electricians. Follow the installation instructions as described.
- When installing and operating the device, observe the applicable regulations and safety directives (including national safety directives), as well as the generally recognized technical regulations.
- Observe the safety information, conditions, and limits of use specified in the product documentation. Comply with them.
- While the devices are in operation, contact-dangerous voltages may be present on the control elements. For this reason parameterization, conductor connection, and opening of the module lid are allowed only when devices are in a de-energized state unless the connected circuits are exclusively SELV or PELV circuits.
- The device must not be opened or modified. Do not repair the device yourself, replace it with an equivalent device. Repairs may only be carried out by the manufacturer. The manufacturer is not liable for damage resulting from violation.
- The IP20 degree of protection (IEC/EN 60529) specifies that the device is intended for use in a clean and dry environment. Do not subject the device to mechanical and/or thermal stress that exceeds the specified limits.
- The device is not designed for use in atmospheres with a danger of dust explosions.
- The device complies with the EMC regulations for industrial areas (EMC class A). When using the device in residential areas, it may cause radio interference.
- If the device is not used as described in the documentation, the intended protection can be negatively affected.
- To protect the device against mechanical or electrical damage, install it in suitable housing with an appropriate degree of protection according to IEC/EN 60529.
- Provide a switch/circuit breaker close to the device, which is labeled as the disconnecting device for this device.
- Provide for a overcurrent protection device (I ≤ 4 A) in the installation.
- Thanks to its housing, the device has basic insulation to the neighboring devices, for 300 $V_{eff}$. If several devices are installed next to each other, this has to be taken into account, and additional insulation has to be installed if necessary! If the neighboring device is equipped with basic insulation, no additional insulation is necessary.
- The voltages present at the input, output and supply are extra-low voltages (ELV). Depending on the application, dangerous voltage (> 30 V) against ground could occur. For this event, safe electrical isolation from the other connections has been implemented.
- The device must be stopped if it is damaged, has been subjected to an impermissible load, stored incorrectly, or if it malfunctions.
- UL requirement: Use copper cables approved for at least 75 °C.

## 5.2 Installation in Zone 2

- Observe the specified conditions for use in potentially explosive areas. Install the device in a suitable approved housing with at least IP54 protection in accordance with IEC/EN 60529 or another recognized degree of protection in accordance with IEC/EN 60079-0, Section 1 or GB/T 3836.1. Ensure sufficient UV protection.
- Only devices which are designed for operation in Ex zone 2 and are suitable for the conditions at the installation location may be connected to the circuits in the Ex zone.
- In potentially explosive areas, connecting and disconnecting cables and plugs in non-intrinsically safe circuits and the latching of devices onto and unlatching devices from the DIN rail connector is only permitted in a de-energized state or when the atmosphere is not potentially explosive.
- The device must be stopped and immediately removed from the Ex area if it is damaged, was subject to an impermissible load, stored incorrectly or if it malfunctions.
- The specified ambient temperature range of -40°C ≤ $T_{amb}$ ≤ +70°C refers to the temperature inside the IP54 housing.
- In Ex zone 2, the device may only be operated when all connectors are fully plugged in.

## 5.3 UL notes

**INDUSTRIAL CONTROL EQUIPMENT FOR HAZARDOUS LOCATIONS 45FP**

1 Suitable for use in class 1, division 2, groups A, B, C and D hazardous locations, or nonhazardous locations only.

2 WARNING - EXPLOSION HAZARD: Do not disconnect equipment unless power has been removed or the area is known to be non-hazardous.

3 NFC communication and Bluetooth communication must not be used unless the area is known to be non-hazardous.

4 This device is open-type and is required to be installed in an enclosure suitable for the environment and can only be accessed with the use of a tool or key.

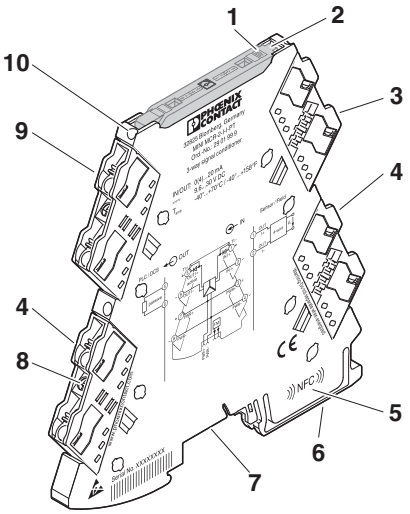
# 6 Installation

## 6.1 Connection notes

The device contains components that can be damaged or destroyed by electrostatic discharge. When handling the device, observe the necessary safety precautions against electrostatic discharge (ESD) according to EN 61340-5-1 and EN 61340-5-2.

## 6.2 Structure

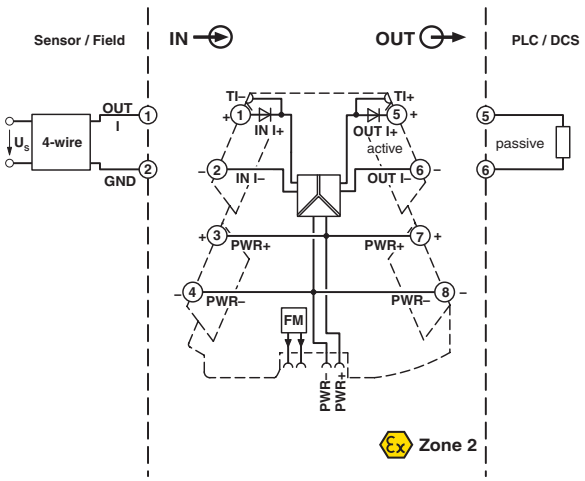
Figure 1 Structure




**1** Green “PWR” LED, power supply
**2** Cover with labeling option
**3** Input: Standard signals
**4** Supply voltage
**5** NFC coil
**6** Universal snap-on foot for EN DIN rails
**7** Connection for DIN rail connector
**8** Spindle screw
**9** Output: Standard signals
**10** Current measuring socket

## 6.3 Block diagram

Figure 2 Block diagram




## 6.4 Power supply

You must refer to the “MACX and MINI Analog power manual“ for the design of the power supply; it is available to download at www.phoenixcontact.com/products under the item listing.

**NOTE**

**Never connect the supply voltage directly to the DIN rail connector. Drawing power from individual devices is not permitted!**.

### Supply via the module

Where the total current consumption of the aligned modules does not exceed 400 mA, the power can be supplied directly at the connection terminal blocks of the module.

We recommend connecting a 630 mA fuse (normal-blow or slow-blow) upstream.

**Supply via a power terminal block**

The MINI MCR-2-PTB power terminal block (Item No. 2902066) or the MINI MCR-2-PTB-PT power terminal block (Item No. 2902067) of the same shape is used to supply the supply voltage to the DIN rail connector.

We recommend connecting a 4 A fuse upstream.

**Supply via a system power supply unit**

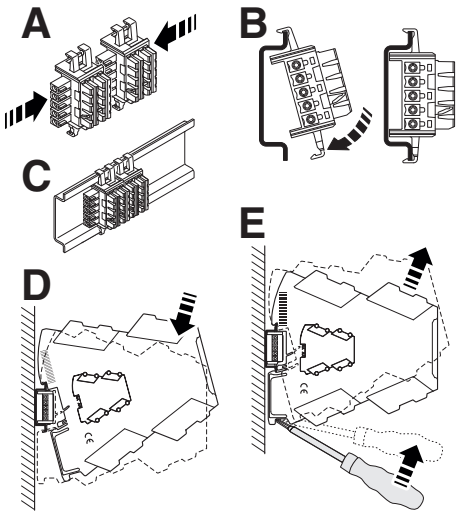
Use the QUINT4-SYS-PS/1AC/24DC/2.5/SC (Item No. 2904614) as the system power supply.

The power supply can be installed on all 35 mm DIN rails in accordance with EN 60715. The normal mounting position is horizontal (input terminals facing down). The minimum clearance to other devices is 30 mm above/below.

If you would like to supply adjacent items using the power supply, use a DIN rail bus distributor. To do so, insert the DIN rail bus adapter ME 22,5 TBUS ADAPTER KMGY (Item No.: 2201756) and the DIN rail connector ME 17,5 TBUS 1,5/ 5-ST-3,81 KMGY (Item No.: 2713645) plugged together in the DIN rail.

## 6.5 Mounting

Figure 3 Mounting and removing




– Mount the module on a 35 mm DIN rail in accordance with EN 60715.
– When using the DIN rail connector, first place it into the DIN rail (see A – C). It is used to bridge the power supply. It is also absolutely vital that you snap the module and the DIN rail connector into position in the correct direction: the snap-on foot should be at the bottom and the connector on the left.

## 6.6 FASTCON Pro plugs

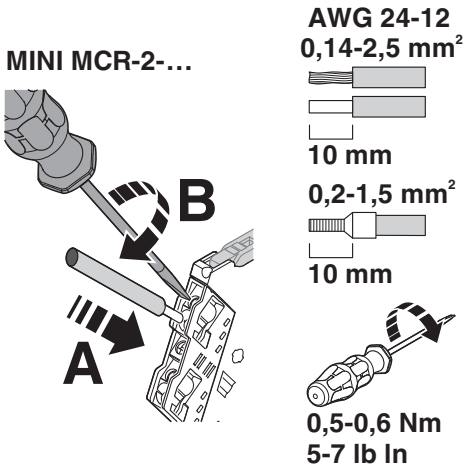
The device has pluggable connection terminals with an integrated test disconnect terminal block, with either push-in or screw-in connection technology.

You can plug or screw the FASTCON Pro plugs onto the device directly without tools. You can use the integrated spindle screw to easily remove the plugs from the module or set the isolating position, even when the plugs are connected. For this purpose, use a screwdriver of sufficient width, e.g., SZF 1-0.6x3.5 (Item No.: 1204517).

4-way coding prevents incorrect insertion into the module.

**Screw connection:**

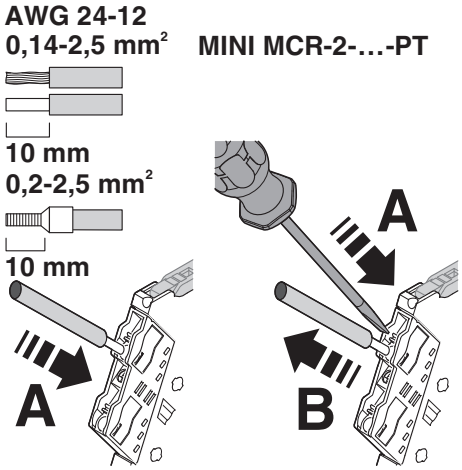
Figure 4 Screw connection




- Insert the wire into the corresponding connection terminal block.
- Use a screwdriver to tighten the screw in the opening above the connection terminal block.

**Push-in connection:**

Figure 5 Push-in connection




If you want to use conductors with ferrule:

- Push the pushbutton in with a screwdriver.
- Insert the wire into the corresponding connection terminal block.
- Push in the pushbutton with a screwdriver to release.

If you want to use conductors without ferrule:

- Push the pushbutton in with a screwdriver.
- Insert the wire into the corresponding connection terminal block.
- Push in the pushbutton with a screwdriver to release.

### 6.7 Fault monitoring FM

A module or power supply failure is reported to the form-matched MINI MCR-2-FM-RC fault monitoring module (Item no. 2904504) or MINI MCR-2-FM-RC-PT fault monitoring module (Item no. 2904508) via the DIN rail connector. The module reports the error centrally via a N/C contact.

A fault monitoring module is only required once in a group. There is no need for individual evaluation of up to 115 connected Mini Analog Pro signal conditioners.

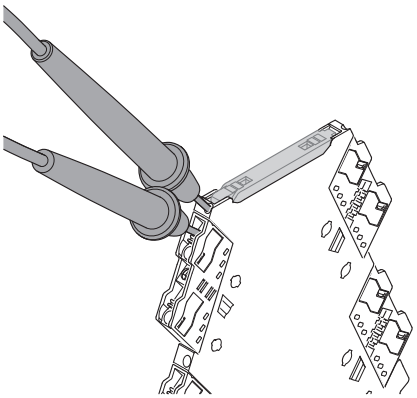
### 6.8 Current measurement

Thanks to integrated measurement diodes, the device enables the current to be measured without disconnecting the conductors.

Test sockets which support current measurement are marked TI+ or TI-.

For the current measurement, use 2 mm probe tips of the type Fluke TL75-1 or probe tips with a comparable tip shape.

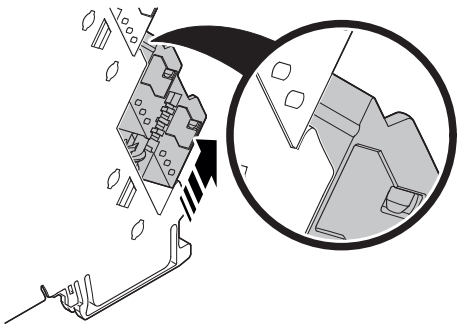
Figure 6 Test disconnect terminal block



Furthermore, individual circuits can be specifically disconnected, e.g. for commissioning.

You can set the isolating position by turning the integrated spindle screw through 180°. The isolating position is indicated by the marking on the plugs.

Figure 7 Disconnect position



### 6.9 Marking

Standard UCT-EM... or UC-EMLP... tags are available for marking the devices and can be printed as per customer requirements. In addition, the covers provide enough space for the use of freely chosen sticky labels such as SK 5.0 WH:REEL without concealing the LED diagnostic indicators.

# 7 Status indicator

| Name | Color/ status | Description |
|---|---|---|
| PWR | Green | Supply voltage |
| | Lit | Supply voltage present |

# 8 Digital nameplate

The digital nameplate provides the option of obtaining product-specific data related to a specific serial number.

If you scan the QR code (digital nameplate) on the device, you can, for example, retrieve documents on the production status as well as clearly identify the hardware and firmware status of the device at hand.

# 9 Revision history

| Document revision | Hardware revision | Firmware revision | Date | Description |
|---|---|---|---|---|
| 06 | 13 (2901998) | - | 2025-01-09 | UKCA approval removed |
| | 13 (2901999) | | | Digital nameplate and Revision history sections added |
| | | | | Adaptation within the scope of an update of the CCC Ex approval |