

IN.10

2x AC CURRENT /VOLTAGE INPUT, ISOLATED



AC CURRENT /VOLTAGE INPUT

AC 0...10 V / 0...120 V / 0...250 V / 0...450 V
0...60 mV / 0...150 mV / 0...300 mV / 0...1 A / 0...2,5 A / 0...5 A

Measured quantities

Voltage, Current, Active power, Reactive power, Apparent power, Frequency, Power factor, Phase shift

Rate

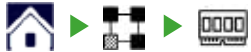
1/10 periods

Accuracy

0,3 % of range



CARD SETTINGS



The following parameters are edited in the setting

Select the **Position of the card** to be set. Use buttons to scroll among the fitted cards.

Type of the card fitted in the specified position.

Data transfer **priority** of the selected card. Bigger number of plugged-in cards slows down data flow on the bus. It can be optimized by setting priorities. The real value of the data flow can be then controlled in diagnostics. The maximum achievable data flow in slots A is 1100 frames/s, in slots B 550 frames/s.

Channel to be set. Use buttons ◀ ◀◀ ▶▶ ▶ to scroll among the channels. Number of possible selectable channels is determined by the card, which is being set



Button ⚙️ is used to navigate to the settings of the selected channel.

| | |
|------------------|---|
| Voltage range | AC 0...120 V ▶ 0...250 V ▶ 0...450 V |
| Current range | AC 0...1 A ▶ 0...5 A |
| Filter selection | Floating floating arithmetic average of the number of measured values Exponential integration filter of the first order with a time constant measurement |
| Filter constant | Indicates the size of the filter |

INSTALLATION OF A NEW CARD

When installing a new card, always make sure the recorder is disconnected from the power supply!

1. Remove the recorder's back cover and break off the plugs covering the position where you intend to insert the new card. It is recommended to place analogue cards into faster slots in column „A“ (Speed of the bus: Slot „A“ 1 ms, Slot „B“ 2 ms).
2. Remove the card from its shipping container and from the ESD packaging and slide it carefully into the selected slot until you feel a gentle click
3. Replace the back cover and turn the device on
4. Setting of the card is described in the preceding paragraph

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TECHNICAL DATA

INPUTS

| | | | |
|---------------------|---|-----------------|-------------------|
| Number | 2, isolated | | |
| AC | Range | 0...1 A | < 150 mV 1 |
| | | 0...5 A | < 150 mV 1 |
| | Input frequency | 0...120 V | > 2 MΩ 2 |
| | | 0...250 V | > 2 MΩ 2 |
| 0...450 V | | > 2 MΩ 3 | |
| Measured quantities | Voltage (V_{RMS}) Current (A_{RMS}) Active power (P) Frequency (Hz) Reactive power (Q) Apparent power Phase shift Power factor | | |

TECHNICAL SPECIFICATION

| | |
|-------------------|---|
| TC | 50 ppm / °C |
| Accuracy | ±0,3 % of range (valid for 10 measur./s) |
| Rate | <1 period Voltage, Current, Frequency, Power factor 10 period Active/Reactive/Apparent power |
| Overload capacity | 10x (t < 100 ms) not for 5 A and 250 V, 2x (long term) |
| Digital filters | Floating average, Exponential average |
| Watch-dog | reset after 500 ms |
| Calibration | at 25°C and 40 % r.h. |

POWER SUPPLY

| | |
|--------------|---------------|
| Power supply | 5 VDC, 24 VDC |
| Consumption | max. 2,5 W |

MECHANIC PROPERTIES

| | |
|--------------|------------|
| Dimensions | 65 x 98 mm |
| Installation | to OMR 700 |

OPERATING CONDITIONS

| | |
|------------------------|--|
| Connection | connector terminal board, cross section < 1,5 mm ² |
| Working temperature | -20°...60°C |
| Storage temperature | -20°...85°C |
| IP rating | IP00 |
| Construction | safety class I |
| El. safety | EN 61010-1, A2 |
| Dielectric strength | 2,5 kVAC over 1 min between bus and inputs 1 kVAC over 1 min between inputs |
| Insulation resistance* | for pollution degree II, measuring cat. III. Input / Bus - 300 V (PI), 150 (DI) Input / Input - 150 V (PI), 100 (DI) |
| EMC | EN 61326-1 (Industrial use) |
| Seismic resistance | IEC 980: 1993, čl.6 |

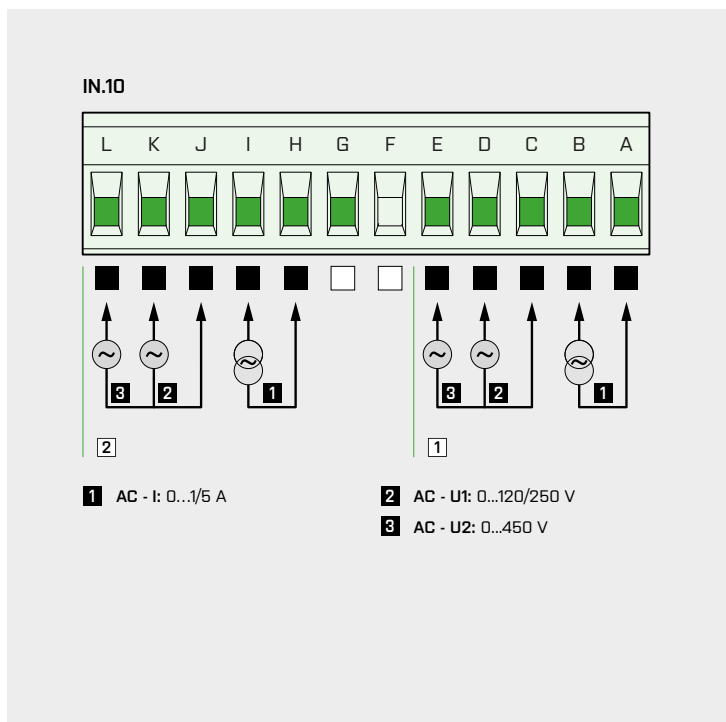
* PI - Primary insulation, DI - Double insulation

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CONNECTION

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ORDER CODE



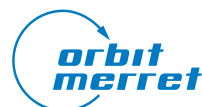
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Specifications

Used only for customised versions



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ORBIT MERRET, spol. s r. o.
Vodňanská 675/30
198 00 Praha 9
Czech republic

tel.: +420 281 040 200

fax.: +420 281 040 299

orbit@merret.eu

www.orbit.merret.eu

