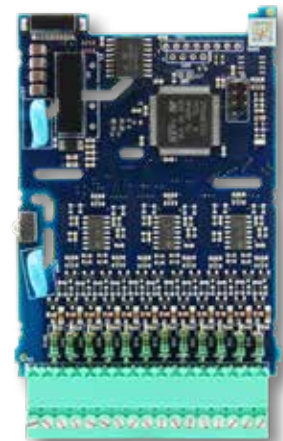# IN.12
12x INPUT FOR COUNTER / FREQUENCY
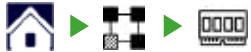
INPUT FOR COUNTER / FREQUENCY

UC   Contact, PNP, NPN

     < 10 kHz

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.

Input type	UC	Contact ▸ 5 V ▸ 10 V ▸ 12 V ▸ 24 V ▸ 30 V
Inverted	☑	input inversion
	☐	without change
Edge		rising ▸ falling ▸ both
		edge selection (for counter reaction)
Filter time		100 µs ▸ 200 µs ▸ 500 µs ▸ 1 ms ▸ 2 ms ▸ 5 ms ▸ 10 ms ▸ 20 ms ▸ 50 ms ▸ 100 ms 200 ms ▸ 500 ms ▸ 1 s ▸ 2 s ▸ 5 s ▸ 10 s 20 s ▸ 50 s ▸ 1 min ▸ 2 min ▸ 5 min ▸ 10 min
		Setting determines how long the input pulse must be to prevent its filtration.
Measur. time		frequency measurement counts number of pulses within this time
Count down	☑	counter counts downwards
	☐	counter counts upwards
Preset		signal Preset sets contents of the counter to this value
Counter scale		constant, which re-multiplies the value of the counter (for conversion to a physical value)
Frequency scale		constant, which re-multiplies the value of the frequency (for conversion to a physical value)
Ofset frequency		offset of the beginning of the measuring range

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

INPUTS

Number	12	
UC	Input	on contact, PNP, NPN 5 V, 10 V, 12 V, 24 V, 30 V
	Input frequency	0,1 Hz...10 kHz

TECHNICAL SPECIFICATION

TC	50 ppm / °C
Accuracy	±0,05 % of range (Frequency)
Overload capacity	10x (t < 100 ms), 2x
Watch-dog	reset after 500 ms
Calibration	at 25°C and 40 % r.h.

POWER SUPPLY

Power supply	3,3 VDC, 24 VDC
Consumption	max. 150 mA

MECHANIC PROPERTIES

Dimensions	65 x 98 mm
Installation	to OMR 700

OPERATING CONDITIONS

Connection	connector terminal board, cross section < 1,5 mm²
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
Insulation resistance*	for pollution degree II, measuring cat. III. Input / Bus - 300 V (PI), 150 (DI)
EMC	EN 61326-1 (Industrial use)
Seismic resistance	IEC 980: 1993, čl.6

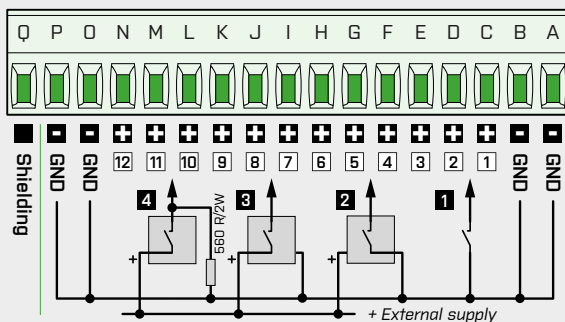* PI - Primary insulation, DI - Double insulation

1	contact	**3**	3-wire sensors, **PNP** NO
2	2-wire sensors, **NPN** NO	**4**	3-wire sensors, **PNP** NO

IN.12 — ☐

Specifications	Used only for customised versions	**00**