Frequency signal to current signal converter
BAMOTOP 281

- **Frequency input, in particular from: BAMOFLU 780, BAMOTUR 781, BAMOMATIC 775,**
- **Input configuration by 3 switches**
- **Ranges: 1 to 25000 Hz**
- **Output: 0/4-20 mA or 0-5/10 V, galvanic insulated**
- **Response time: 5 ms to 10 s**
- **Main power: 85 to 250 V AC**
- **Sensor supply: 12 V DC**

PRINCIPLE

The converter BAMOTOP 281 transforms numerically a frequency signal to transmit an analogic current or voltage.

Inputs types are: free voltage contacts, all switches, CMOS, TTL, Hall Effect sensors, NPN/PNP...

The output range is configured on site by switches.

There are two more configurable parameters:

- Minimal response time, to fix the minimal period for signal output actualization; it also filters any over gap or high frequency signals.

- Maximal response time, to fix the low frequency limit.

The converter BAMOTOP 281 is particularly well adapted for our BAMOFLU, BAMOTUR, BAMOMATIC, FFG, MICRO-STREAM and all counters with pulse signal output with a frequency above 1 Hz.

TECHNICAL FEATURES

Main power:	85 to 250 V AC - 48 to 62 Hz - 6.5 VA
Sensor supply:	12 V CC ± 25% / 60 mA as a maximum
Electrical connections:	Screw connectors
Frequency range:	Scalable between 1 to 25 kHz
Output:	0/4 - 20 mA (maximal 500 Ω)
	or 0-5/10 V (minimal 1 kΩ)
Accuracy:	± 0.1 %
Resolution:	5 μA min / 3.5 mV min
Response time:	Adjustable from 5 ms to 10 s
Ambient temperature:	0 to 50°C (storage – 40...+80°C)

CODE NUMBERS AND REFERENCES

Code	Reference	Designation
281 300	BAMOTOP 281	Frequency converter

CONFIGURATION

Only three steps are necessary to configure the converter.
The range, output, response time are adjusted through 4 elements:
- Dip switches for programming mode
- Rotary selector (0 to 9) to set up values
- Two LED for status indication
- A switch to validate the configuration.

Programming a converter BAMOTOP 281 is quick and easy. We send it pre-adjusted if all process parameters are mentioned on the order; if not, the default configuration is 4-20 mA for an input signal of 0...10 kHz, response time 5 ms.

ELECTRICAL CONNECTIONS

The BAMOTOP 281 is available also for a main power supply of 24 V CC: in this case the electrical connections are different from these examples (this converter does not have sensor supply).
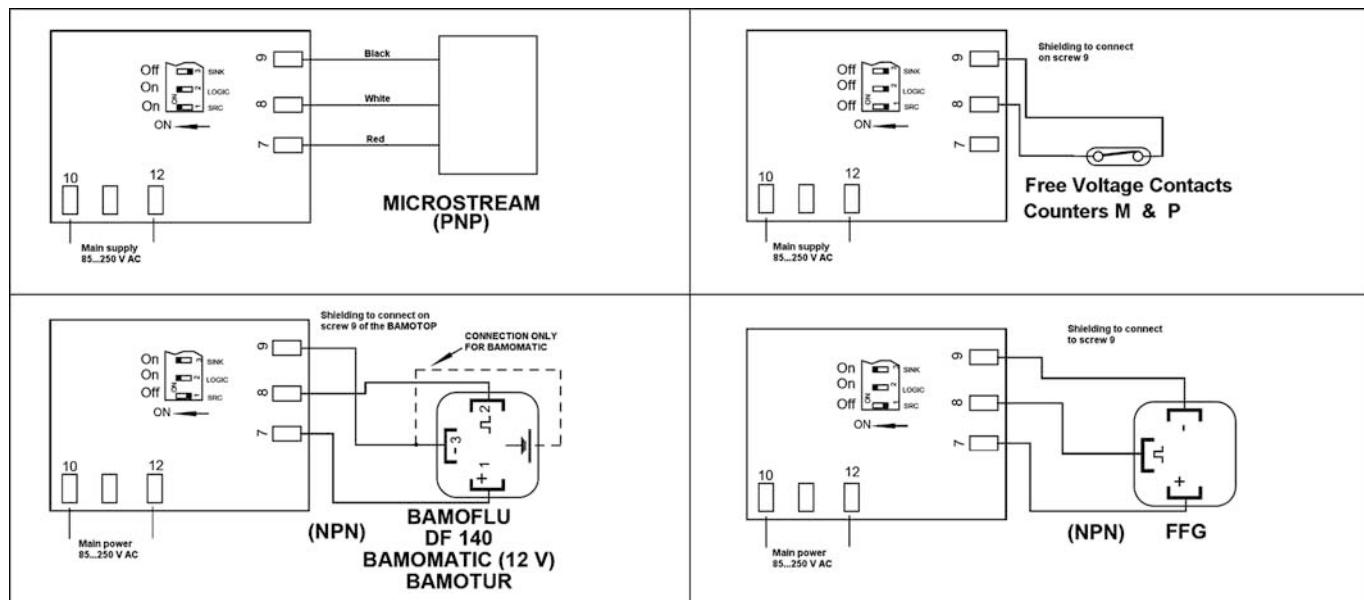
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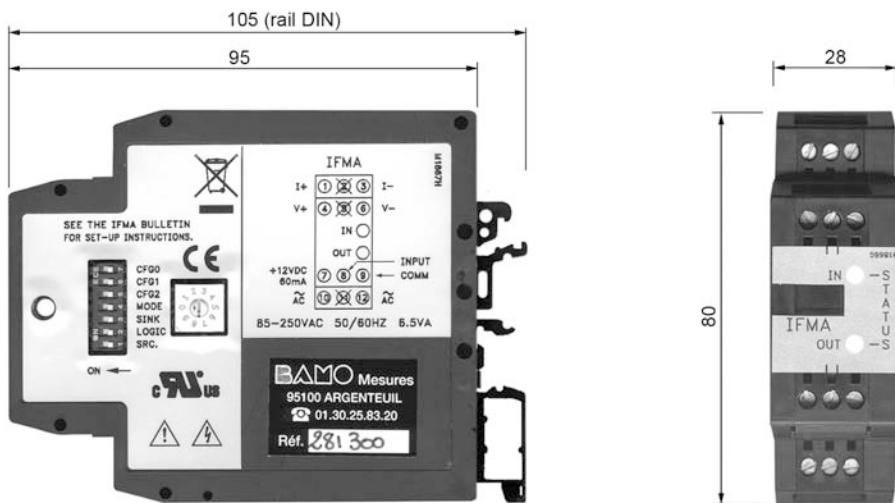
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