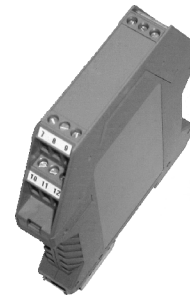


■ **Frequency To Analog Converter Typ FA 9002**

Highlights

- Frequency to Current Conversion (0/4...20 mA)
- Selectable Input Voltage Levels
- Adjustable Frequency Divider
- Suitable for incremental encoders
- Low Power consumption
- High Reliability
- Compact housing



General

The unit **FA 9002** is a frequency to analog converter for converting a frequency into a proportional output current of either 0 to 20 mA or 4 to 20 mA.

Function

The input frequency is processed by a frequency divider, a microprocessor and a digital to analog converter. The value of frequency dividing (1-256) can be set by a 8-pin DIP switch. The output current is proportional to the input frequency.

Isolated Digital Input Channel

There are 2 input channels available for the A and B channel of a incremental encoder.

- With the aid of jumpers the input threshold level can be chosen by the user. Input levels of 5, 12, or 24V are selectable.
- The max. input frequency is 50 kHz when using only one input channel otherwise 25 kHz.
- The source current for each input must be > 5mA.

Isolated Output

The analog output channel is opto-isolated and the range of the output current can be selected by a jumper (0-20 mA or 4-20 mA) . The maximum output current is 21 mA and the maximum burden is 1 kΩ.

Microprocessor controlled

Because of the microprocessor-based signal processing it is relatively easy to build customized solutions; even signals with very slow frequencies (below 1 Hz) can be processed.

Construction

The unit **FA 9002** is provided for DIN-rail mounting according to EN 50022.

Power Supply

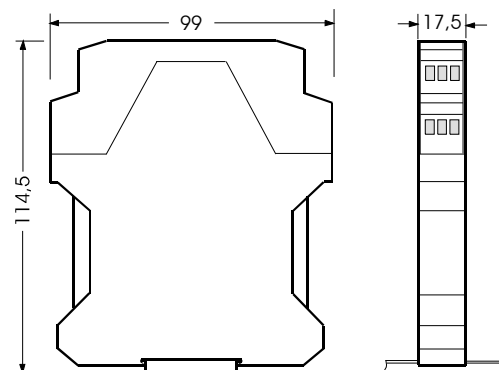
The unit is provided with an isolated power supply and deliverable for voltages of 5, 12, 24V or 48 VDC.

Specifications

Input voltage level	: 5 V, 12 V, 24 V selectable
Input current per channel	: 5 mA source current
max. input frequency	: 50 kHz (single channel mode)
max. input frequency	: 25 kHz (two channel mode)
Analog output	: 0/4...20 mA, isolated
External impedance	: max. 1 k
Response time	: 200ms + period time
Ripple	: max. 20 µA
Power supply	: isolated (500V)
Supply voltage	: see ordering information
Current consumption	: max. 40 mA (24 VDC)
EMV	: Accord. ENV 50121-3-2
Protection	: IP40
Mounting	: EN 50022
Operating temperature	: -5 to +55 °C
Dimensions	: 99 x 114,5 x 17,5

Ordering Information

FA 9002-			
		Analog Output (divider = 1)	
		0	500 Hz = 20 mA
		1	50 Hz = 20 mA
		2	5 Hz = 20 mA
		Max. Input Frequency	
		0	50 kHz (A oder B), 25 kHz (A + B)
		1	Reserve
		2	Reserve
		Power Supply	
		0	18...36V DC, (Standard)
		1	4,5...9V DC, (Option)
		2	9...18V DC, (Option)
		3	36...48V DC, (Option)



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