

■ **Analog to Frequency Converter Type AF 9001**

Highlights

- Voltage/Current to Frequency Converter
- Adjustable Output Frequency
- Isolated Input/Output Channels
- High Reliability
- Small Dimensions
- Low Power Consumption



General

The unit **AF 9001** is an analog to frequency converter for converting an analog input into a proportional and adjustable output frequency.

Function

The input signal (either voltage or current) is processed by a converter into a frequency. The actual frequency at the output can be adjusted by an internal adjustable frequency divider. An input signal of 20 mA resp. 10 V and a divider value of "1" results in an output frequency of 25 kHz. The wished dividing value (1...4080) is set by a internal 8-pin DIP switch and 5 jumper. The output frequency is proportional to the input frequency and the puls/pause ratio is 1:1.

Analog Input

The following input configurations are available:

- 0...10 V
- 0...20 mA
- 4...20 mA

The input range has to be specified by the ordering information key.

Isolated Output

The frequency output channel is opto-isolated. The output transistor is able to switch up to 30 V and 25 mA.

Customized solutions possible

The standard output frequency of 25 kHz at the final value of the input can be adjusted in a wide range to customer requirements.

Construction

The unit **AF 9001** is provided for DIN-rail mounting according to EN 50022.

Power Supply

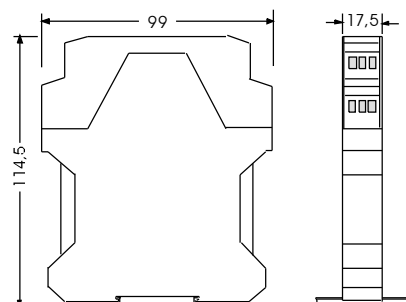
The unit is deliverable for power supply voltages of 5, 12 or 24V DC (see ordering information).

Specifications

Input channel	
Input voltage range	: 0...10 V
Impedance	: 100 kΩ
Input current range	: 0...20 mA
Impedance	: 100 Ω
Output channel	
Output frequency	: max. 25 kHz
Accuracy	: 0,1% of full scale
Divider	: 8-pole DIP switch 5 jumper
Voltage	: max. 30 V
Current	: max. 25 mA
Power supply	: 18 V...36 V
Current consumption	: max. 27 mA (24 VDC)
Construction	
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

AF 9001-			
		Output range	
		0 max 25 kHz	
		1 reserved	
		Input signal	
		0 0...10 V	
		1 0...20 mA	
		2 4...20 mA	
		3 reserved	
		Power supply	
		0 18...36 V DC, (standard)	
		1 4,5...9 V DC, (option)	
		2 9...18 V DC, (option)	
		3 36...48 V DC, (option)	



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