Frequency Converter

AD-FM 250 GVC

Description

The frequency measuring converter AD-FM 250 GVC supplies an initiator or a contact and transforms its impulse sequence to a proportional impressed analogue signal. The output signal is independent from the connected load up to a maximum value. Furthermore, this series of devices is equipped with a configuration interface AD-PC as standard, with which the input and output measuring signal can be freely programmed with the programming software AD-Studio. Input, output and the supply voltage are separated from each other galvanically with high isolation.

Application

The main area of application is the through-flow measuring at water meters, further applications are energy consumption measuring etc.



Specific characteristics

- Inputs: arbitrary
- Outputs: current and voltage
- Programming via configuration software

Business data

Order number

AD-FM 250 GVC

Information

Downloads

Tender text	fm250.zip
Safety instructions	ad-safety-instructions.pdf

Technical specifications

Digital input

Input	NAMUR (EN 60947-5-6), reed contact, open-collector, 3-lead opto-transmitter or 24V active
Input frequency	min. 0 ... 1 mHz; max. 0 ... 10 kHz
Frequency generator supply	active: ca. 13,5V (max. 13mA); NAMUR:8V/8mA
Contact debouncing	activatable, pulse duration > 40 ms

Output current

Output range	0 ... 20 mA; 4 ... 20 mA
Max. burden	500 Ohm
Residual ripple	<50 µAss

Output voltage

Output range	0 ... 10 V, 2 ... 10 V
Min. burden	10 kOhm
Residual ripple	<20 µVss

Accuracy

Unit	+/- 0,3% of full scale
Temperature influence	<100 ppm / K of full scale
Response time	approx. 70 ms

Supply

Supply voltage	20 ... 253 V DC / 50 ... 253 V AC
Max. power consumption	2 W / 3,6 VA

Housing

Dimensions (WxHxD)	18x110x134mm
Type of protection	IP 20
Connection method	detachable terminal clamp
Manner of fastening	DIN rail 35mm (EN 50022)
Weight	~ 130 g

Environmental conditions

Ambient temperature	-10 ... 50 °C
Storage and transport	-10 ... 70 °C (no condensation)

EMC

Product family standard	EN 61326-1
Emitted interference	EN 55011, CISPR11 Cl. B, Gr. 1 In a critical EMC environment, shielded encoder cables are recommended.

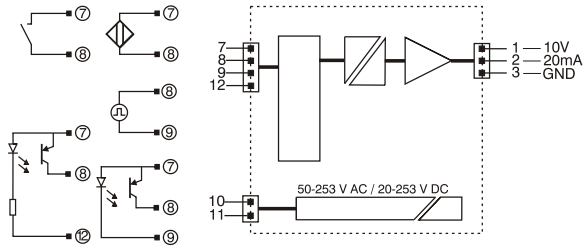
Galvanic isolation, test voltages

Input/output	2 kV RMS (1 min.)
Signal/auxiliary voltage	3 kV RMS (1 min.)

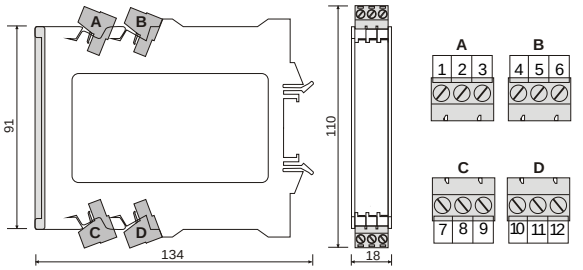
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Block and wiring diagram



Dimensions



Subject to technical changes and printing errors.