

Model DN103

Frequency Converter

Frequency Monitoring



Product features

- Fully configurable with pocket configurator
- Input: magnetic pick-up, contact NAMUR, open collector, logic level signal located in hazardous area
- EMC acc. EN 61326, NE21
- Galvanic isolation between input, output and power supply
- Output mA/V, Frequency, trip point
- Application: Frequency-, flow-, revolution measurement and monitoring

Technical data:

Input	Magnetic pick-up, proximity to DIN 19234 logic level signal open-collector-transistor
Input range	< 50 kHz
Resolution	100 μ Hz/5 Hz-range, 1 mHz / 50 Hz-range, 10 mHz/500 Hz, 100 mHz/5 kHz, 1 Hz/50 kHz
Integration time	100 ms
Output	0/4-20 mA, < 500 Ω , limited at 22 mA
Resolution	0/1-5 V, 0/2-10 V, limited at 11 V
Output factor	current 2 μ A, voltage 1 mV
Response time	100 ms (10-90%)
Transistor output	50 mA at 35 V, 100 mA at 12 V, UCE sat < 1.5 V
Power supply	20 - 30 V DC, < 2.2 W
Weight	160 g
Ambient temperature	-20 °C ... + 60 °C
Relative humidity	< 75 % (average) < 95 % (30 d/a), no condensation

Explosion protection:

Category	II (1) GD[EEEx ia] II C
EC-Type Examination	DMT 03 ATEX E070 X
Safety values	Voc:10.56 V, Isc:1.07 mA, Po: 2.85 mW @ 1 and 4
	Voc:10.56 V, Isc: 21.41 mA, Po: 57 mW @ 2 and 4
	Voc:10.56 V, Isc: 21.64 mA, Po: 57.62 mW @ 3 and 4
	Voc:11.56 V, Isc:11.79 mA, Po: 34 mW @ 2 and 3

Ordering details

Type	Function	Ex-protection	Order No.
DN103	Frequency-Analog-Converter	ia/ib	GHG 121 3110 D 1009
Accessories	Pocket configurator	-	GHG 139 0033 C 0000

