Specification sheet

VEGATOR 111

Single channel signal conditioning instrument for level detection for NAMUR sensors

Application area

The VEGATOR 111 is a signal conditioning instrument for point level detection with the vibrating level switches VEGASWING, VEGAVIB and VEGAWAVE with electronics version according to NAMUR (IEC 60947-5-6). Simple control functions can be realised with this combination. Typical applications are monitoring functions such as overflow or dry run protection. A fault signal output is available as an option.

Your benefit

- Comprehensive monitoring detects shortcircuit and measuring line break as well as malfunctions in the sensor
- Simple and convenient line monitoring via test key (also for SIL and WHG)
- Simple mounting through carrier rail as well as detachable, coded terminals

Function

The VEGATOR 111 is a single channel instrument and is mainly used for point level detection, for example in conjunction with vibrating level switches. It transmits a binary signal from the field. The signal can also come from a hazardous area. Level switches according to DIN EN 60947-5-6 (NAMUR) can be connected to it. The signal circuit is monitored for line break and shortcircuit. An operating relay (output) is available as limit value signaller for control tasks. Beside the fault indication, an active fault signal via relay is available as an option.

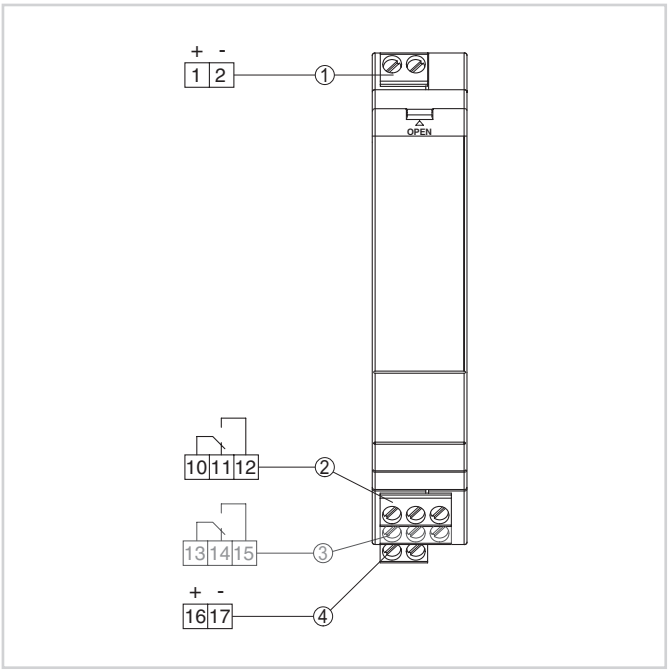
Technical data

General data	
Series	Module unit for mounting on carrier rails 35 x 7.5 acc. to EN 50022/60715
Connection terminals	
– Type of terminal	Screw terminal
– Wire cross-section	0.25 mm² (AWG 23) … 2.5 mm² (AWG 12)
Voltage supply	
Operating voltage	
– Nominal voltage AC	24 … 230 V (-15 %, +10 %) 50/60 Hz
– Nominal voltage DC	24 … 65 V DC (-15 %, +10 %)
Max. power consumption	2 W (8 VA)
Sensor input	
Quantity	1 x NAMUR
Input type	Active (sensor power supply by VEGATOR 111)
Measured value transmission	Analogue 1.2/2.1 mA
Switching threshold	
– On	1.5 mA
– Off	1.7 mA
– Tolerance	± 100 µA
Current limitation	Through internal resistance
Terminal voltage	8.2 V DC, ± 5 %
Internal resistance	1 kΩ, ± 1 %
Detection line break	≤ 0.05 mA
Detection shortcircuit	≥ 6.8 mA
Relay output	
Quantity	1 x operating relay, 1 x fail safe relay (optional)
Contact	Floating spdt
Switching voltage	min. 10 mV DC, max. 253 V AC/50 V DC
Switching current	min. 10 µA DC, max. 3 A AC, 1 A DC
Breaking capacity	min. 50 mW, max. 500 VA, max. 54 W DC
Switch-on/Switch-off delay	
– Basic delay	100 ms
Ambient conditions	
Ambient temperature at the installation site of the instrument	-20 … +60 °C (-4 … +140 °F)
Electrical protective measures	
Protection rating	IP 20
Overvoltage category (IEC 61010-1)	
– up to 2000 m (6562 ft) above sea level	II
– up to 5000 m (16404 ft) above sea level	II - Only with connected overvoltage protection
– up to 5000 m (16404 ft) above sea level	I
Degree of soiling	2

Approvals

You can find detailed information on the existing approvals in the "*configurator*" on our homepage at www.vega.com/configurator.

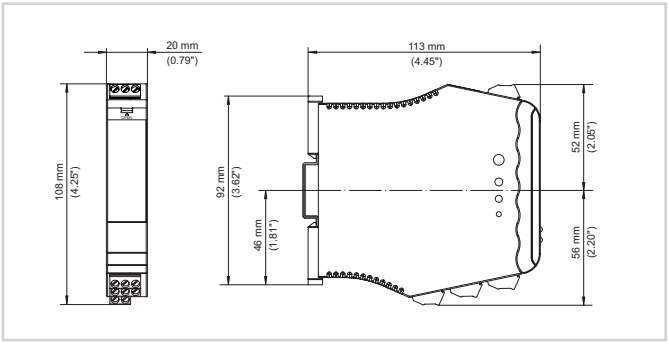
Electrical connection



1 *Sensor circuit (1.2/2.1 mA)*
2 *Relay output*
3 *Fail safe relay (optional)*
4 *Voltage supply*

You can find details on electrical connection in the instrument operating instructions on our homepage at www.vega.com/downloads.

Dimensions



Dimensions VEGATOR 111

Information

You can find further information on the VEGA product line on our homepage www.vega.com.
In the download section under www.vega.com you'll find free operating instructions, product information, brochures, approval documents, instrument drawings and much, much more.

Contact

You can find the VEGA agency serving your area on our homepage www.vega.com.