Specification sheet

VEGATOR 142

Double channel controller for level detection for 4 … 20 mA sensors

Application area

The VEGATOR 142 is a controller for level detection for sensors with analogue measured data transmission such as typically capacitive electrodes, hydrostatic pressure transmitters or process pressure transmitters. Simple monitoring and control functions can be realised. Typical applications are two-point control, pump control (On/Off) and monitoring functions such as overfill and dry run protection.

Your benefit

- Compact separator with alarm function for limit level
- Comprehensive monitoring detects short-circuit and measuring line break as well as malfunctions in the sensor
- Simple mounting through carrier rail as well as detachable, coded terminals

Function

The VEGATOR 142 is a double channel limit level alarm and is mainly used for level detection in conjunction with analogue probes. The signal can also originate from the hazardous area. Standard sensors with 4 … 20 mA can be connected. The signal circuit is permanently monitored on line break and short-circuit. An operating relay per channel as limit level alarm for control tasks is available as output.

Approvals

Worldwide approvals are available for VEGA instruments, e.g. for use in hazardous areas, on ships or in hygienic applications.

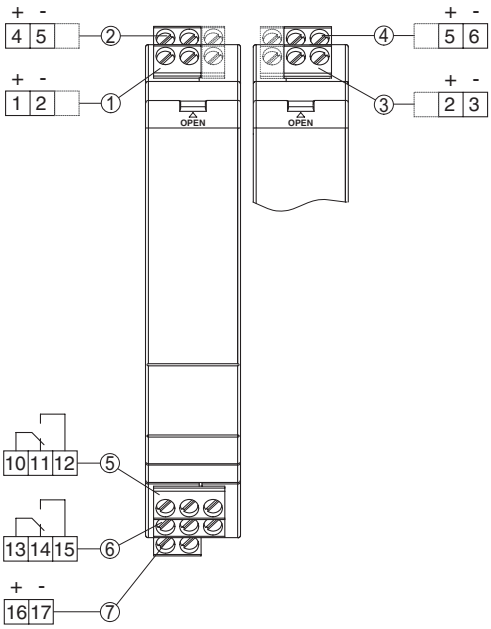
The technical data in the respective safety instructions are valid for approved instruments (e.g. with Ex approval). In some cases, these data can differ from the data listed herein.

You can find detailed information on the existing approvals with the appropriate product on our homepage.

Technical data

General data	
Series	Module unit for mounting on carrier rails 35 x 7.5 acc. to EN 50022/60715
Connection terminals	
– 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 (-15 %, +10 %)
Max. power consumption	3 W (8 VA)
Sensor input	
Quantity	2 x 4 … 20 mA
Type of input (selectable)	
– Active input	Sensor supply through VEGATOR 142
– Passive input	Sensor has an own voltage supply
Measured value transmission	
– 4 … 20 mA	analogue for 4 … 20 mA sensors
Switching threshold	
– Adjustable in the range	4 … 20 mA
Current limitation	23 mA (permanently short-circuit proof)
Terminal voltage (idle state)	18.2 V DC, ± 5 %
Internal resistance	
– Active input	200 Ω, ± 1 %
– Passive input	100 Ω, ± 1 %
Detection line break	≤ 3.6 mA
Detection shortcircuit	≥ 21 mA
Relay output	
Quantity	2 x operating relay
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	150 ms, ± 10 %
– Adjustable delay	2/6/8 s, ± 20 %
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)	
Pollution degree	2

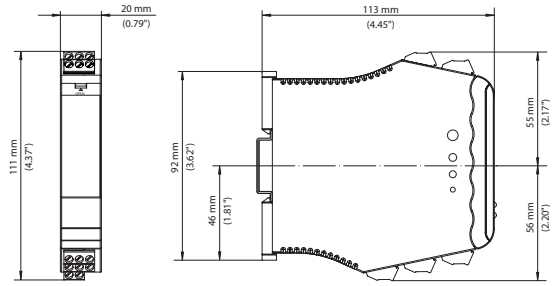
Electrical connection



1 *Sensor circuit, channel 1 (4 … 20 mA), active input*
2 *Sensor circuit, channel 2 (4 … 20 mA), active input*
3 *Sensor circuit, channel 1 (4 … 20 mA), passive input*
4 *Sensor circuit, channel 2 (4 … 20 mA), passive input*
5 *Relay output channel 1*
6 *Relay output channel 2*
7 *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 142

Information

You can find further information on the VEGA product line on our homepage.

In the download section of our homepage you'll find operating instructions, product information, industry brochures and approval documents as well as device and adjustment software.

Contact

You can find your personal contact person at VEGA on our homepage under " *Contact*".