Specification sheet

VEGATRENN 152

Double channel separator for 4 … 20 mA sensors

Application area

The double channel VEGATRENN 152 is used for galvanic separation of intrinsically safe applications as well as the signal transmission of Ex approved 4 … 20 mA sensors in hazardous areas. The separator is ideal in conjunction with signal conditioning instruments without own Ex approval. The VEGATRENN 152 is suitable for bidirectional transmission of HART signals. The HART signal can be tapped via the front-mounted HART communication sockets or the terminals. The total transmissibility of HART signals allows unrestricted access to the sensor settings.

Your benefit

- Reliable separation of intrinsically safe and non-intrinsically safe circuits
- Simple installation, because no additional power supply is required (loop-powered)
- Simple mounting through carrier rail as well as detachable, coded terminals

Function

The current signal from the sensor (4 … 20 mA) is transferred linearly and galvanically separated to the output. The VEGATRENN 152 is suitable for bidirectional transmission of HART signals. The HART signal can be tapped via the front-mounted HART communication sockets or the terminals. The total transmissibility of HART signals allows unrestricted access to the sensor settings.

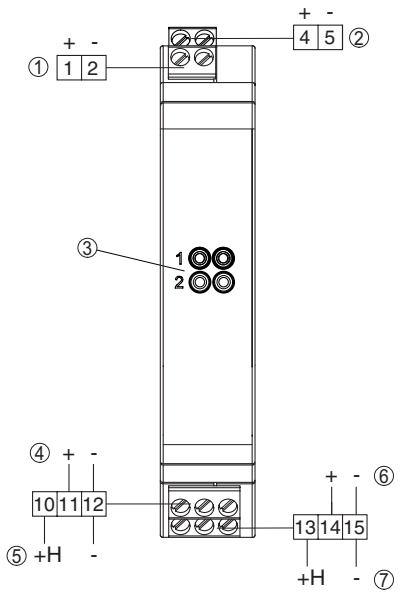
Technical data

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	15 … 35 V DC (loop-powered)
Sensor circuit	
Number of sensors	2 x 4 … 20 mA/HART (5 x HART multidrop per channel)
Input type	Active (sensor power supply by VEGATRENN 152)
Terminal voltage	16 … 10 V at 4 … 20 mA
Voltage loss with 15 V operating voltage	
– at 4 mA	< 3 V
– at 20 mA	< 5 V
Off-load voltage	< 17 V
Short-circuit current	≤ 27 mA
Residual ripple	< 20 mV RMS
Processing circuit	
Quantity	2 x 4 … 20 mA/HART
Type of output	Passive
Operating voltage	15 … 35 V DC
Residual ripple of the output current	< 40 µA RMS
Current without connected sensor	< 500 µA
Ambient conditions	
Ambient temperature at the installation site of the instrument	-20 … +60 °C (-4 … +140 °F)
Electrical protective measures	
Protection rating	IP 20
Protection class	II
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.

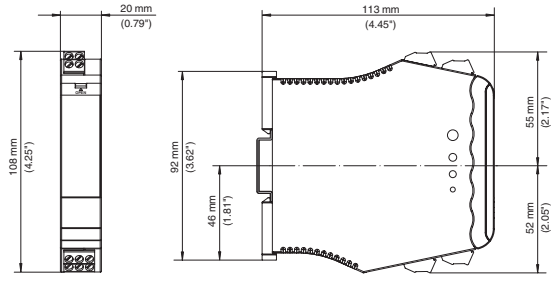
Electrical connection



1 *Sensor circuit 1 (4 … 20 mA/HART, Ex area)*
2 *Sensor circuit 2 (4 … 20 mA/HART, Ex area)*
3 *HART communication sockets for connection of a HART handheld, e.g. a VEGACONNECT*
4 *Processing circuit 1 (4 … 20 mA/HART, passive output)*
5 *Processing circuit 1 (4 … 20 mA/HART, passive output with looped HART resistor)*
6 *Processing circuit 2 (4 … 20 mA/HART, passive output)*
7 *Processing circuit 2 (4 … 20 mA/HART, passive output with looped HART resistor)*

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

Dimensions



Dimensions VEGATRENN 152

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/downloads 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.