



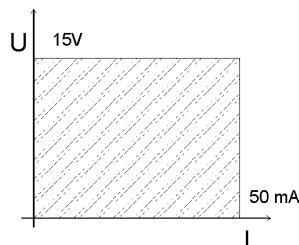
- ☛ Compact supply and interface module for mounting inside hazardous area, replaces the complicated search and selection of single interface components like isolated barriers, zener barriers, EEx i power supplies and Ex d enclosures
- ☛ The VI156 includes:
 - 1 Ex i- power supply (15 V, 50 mA)
 - 2 isolated barriers with relay output
 - 1 electronic open-collector output
 - 2 input converters for operations with non-intrinsically safe signals
 - 1 serial interface TTY / RS232 full duplex (Option)
- ☛ In combination with the DC155 or VZ150 you get a complete dosing control system in hazardous area - without wiring to safe area
- ☛ Wiring without an additional EEx e terminal box, because of certificated EEx e housing
- ☛ Extension with additional EEx e terminals - free purpose terminals for your application (option)

Description

The supply and interface module VI156 allows the DC155 or VZ150 dosing controller to be operated directly with non intrinsically safe signals. This unit can be mounted in the hazardous area too, thus no wiring to the safe area is necessary. All required modules like intrinsically safe input converters and isolated barriers, are integrated.

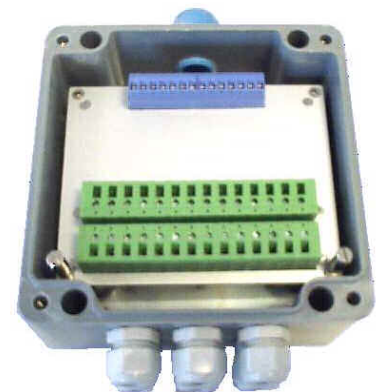
The EEx i- circuit at terminal 32/29-31 supplies the power of 15 V / 50 mA DC with a rectangular characteristic. This satisfy a DC155 or VZ150 with analogous output or TTY- out option. (only one of them; not both).

Non intrinsically safe control signals, e.g. from a DCS or a flow transmitter can be connected via the two input converters (terminal 17/18 respectively 19/20) and intrinsically safe output terminals (34/35 respectively 34/36) to the EEx i dosing controller.



Additional the VI156 has a non intrinsically safe power supply (terminals 13/14; 24 V, 10 mA) to use with passive control signals (e.g. relay contacts or open-collector outputs)

The two isolated barriers with relay output (changeover contacts 250 V AC, 5A) as well as the open collector output ($U < 30 \text{ V}$, $I < 200 \text{ mA}$) can be operated with the three digital outputs of the DC155 (VZ150).



The VI156.x.5.x version has an additional serial interface. This permits the intrinsically safe TTY interface of the DC 155 respectively VZ150 to be coupled with a non intrinsically safe RS232 interface of a printer or higher level control system.

The VI156.x.x.1 version has a 100 mm larger EEx e terminal space with 18 additional EEx e terminals. This terminals are for any use terminal box is unnecessary - your application keeps compact, flexible and well arranged.

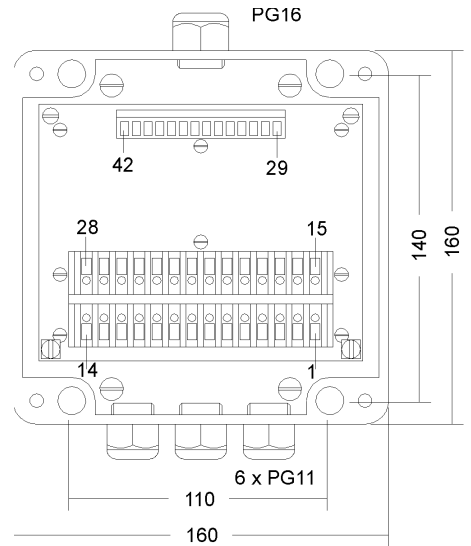
In case of requirement of ex- fuses (e.g. valve fuses) in the application, we offer ex- fuses in many current specifications as well the placement inside the VI156.

Technical Details

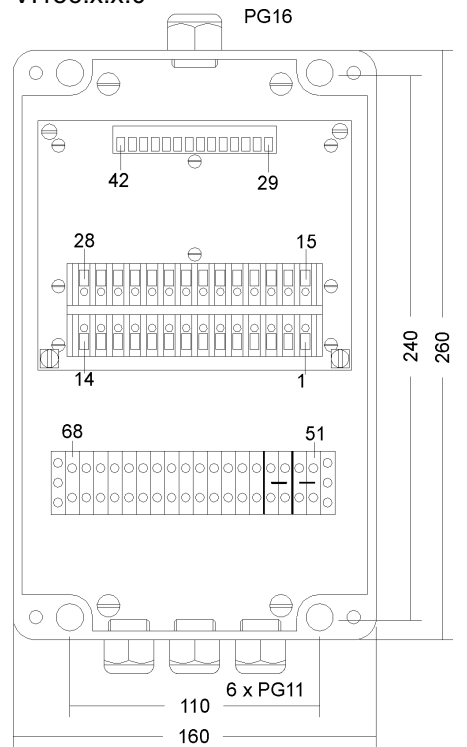
Mounting	hazardous area, zone 1
Ex - protection	E Ex e q [ib] IIC T6
EC-type-examination Nr	PTB 99 ATEX 2085
Housing protection	IP 65
Ambient temperature	-20°C ... +40°C
Dimensions VI156.X.X.0 VI156.X.X.1	H x B x T: 160 mm x 160 mm x 90 mm; 260 mm x 160 mm x 90 mm
Material	Polyester
Main supply (Te. 1-6)	230, 220, 120, 24 V AC - 48-62 Hz, 24 V DC
Power consumption	ca. 5 VA
Relay terminals (Te. 7-9, 10-12)	250 V AC, 5A $\cos \varphi > 0,7$ 30V DC, 5 A

Open-Collector (Kl. 15,16)	$U < 30 \text{ V}$, $I < 200 \text{ mA}$
Control circuits (Te. 17/18, 19/20)	Low: 0.. 2 V, High: 8.. 30 V
Serial interface (Te. 21-26)	TTY, RS232, Transceiver active, receiver passive
Help power (Te.13,14)	24V DC, max. 10 mA, non intrinsically safe
Intrinsically safe power supply (Te.29-32)	$U_0 = 16,8 \text{ V}$, $I_0 = 55 \text{ mA}$, intrinsically safe
Further specifications	see EC-type examination

Dimensions

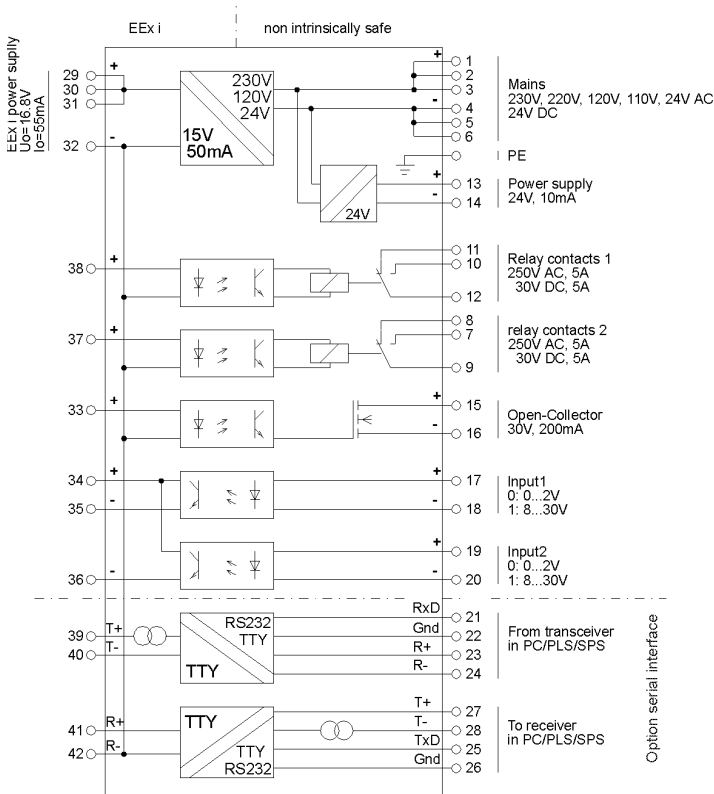


VI156.x.x.0



VI156.x.x.1

Block diagram



Type code

		supply and interface module VI 156	
Line voltage:	230V AC0	
	120V AC2	
	24 V AC5	
<i>more voltages on inquiry</i>	24 V DC6	
Ex TTY/RS232 serial interface:	without0	
	present1	
Extended EEx e terminal space (18 leads):	without0	
	present.....	.1	

Ex- fuses for mounting inside of the VI156 on demand

