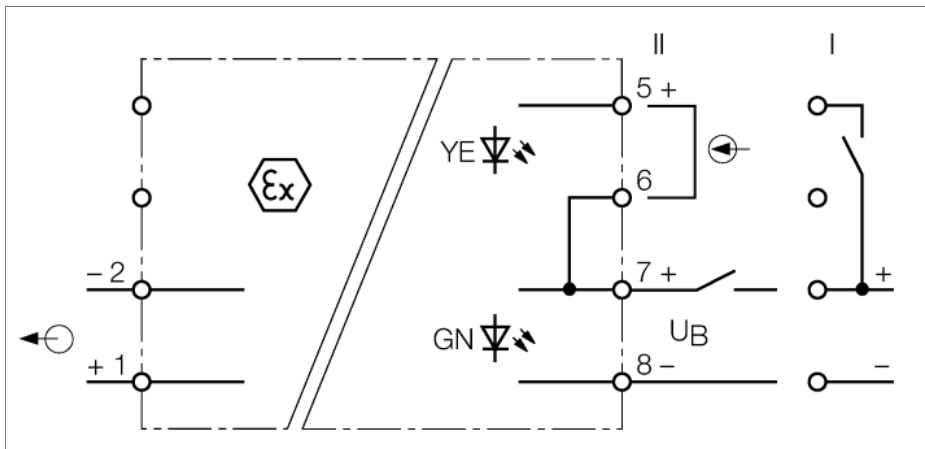


**Valve control module
1-channel
MK72-S10-EX0/24VDC**



The solenoid driver MK72-S10-EX0/24VDC features an intrinsically safe output with limited current and voltage. Thus making direct connection to loads in the Ex-area possible.

Within the area of applicability of the European directive 94/9/EG (ATEX) it is permitted to operate connected loads in potentially explosive atmospheres caused by dust or gas, provided they comply with the applicable regulations.

Typical applications are the control of EExi pilot valves as well as the supply of displays and transmitters.

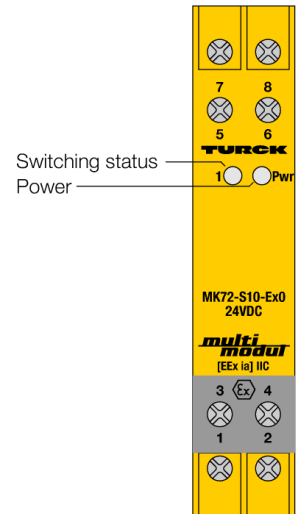
The device features output voltage of 12 VDC and no-load voltage of 14.5V.

The loads can be controlled in two different ways:

- (I) Power supply: Terminal 5 and 6 have to be bridged. In this operating mode the switching frequency is limited to 8 Hz.
- (II) Power supply steady applied at the input: For this purpose a potential-free contact has to be placed between terminals 5 and 6 or input voltage has to be applied to terminal 5. Due to reduced power and the large voltage range the control is still guaranteed, even in cases of low power or high voltage drop at the PCS outputs. This operation mode provides the highest switching frequency (250 Hz).

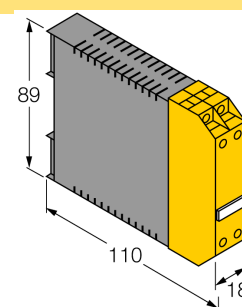
The switching status of the output is indicated by a yellow LED and operational readiness by a green LED.

- Intrinsically safe input circuits EEx ia
- Application area according to ATEX : II (1) GD
- Output voltage 12 VDC
- Output current ≤ 60 mA
- Switching frequency ≤ 250 Hz
- Switching frequency via voltage supply ≤ 8Hz
- Galvanically separated input and output circuits



**Valve control module
1-channel
MK72-S10-EX0/24VDC**

Dimensions



Type	MK72-S10-EX0/24VDC									
Ident-No.	7507331									
Nominal voltage	24 VDC									
Operating voltage range	19...35 VDC									
Power consumption	≤ 2.2 W									
0-signal	0...5 VDC									
1-signal	10...35 VDC									
Current input	1 mA									
Input delay	≤ 2 ms									
Output circuits	intrinsically safe acc. to EN 60079									
Output current	60 mA									
Output voltage	12 V									
Output curve	A graph showing the output voltage U in Volts [V] on the y-axis versus the output current I in milliamperes [mA] on the x-axis. The y-axis has a tick mark at 12. The x-axis has a tick mark at 60. A horizontal line is drawn at U = 12 V from the y-axis to I = 60 mA, and a vertical line is drawn at I = 60 mA from the x-axis to the horizontal line, forming a rectangle.									
Limit frequency	≤ 250 Hz									
Galvanic separation										
Test voltage	2.5 kV									
Ex approval acc. to conformity certificate	TÜV 00 ATEX 1553									
Application area	II (1) GD									
Protection type	[Ex ia] IIC									
Max. output voltage U_o	≤ 14.5 V									
Max. output current I_o	≤ 164.2 mA									
Max. output power P_o	≤ 1280 mW									
Rated voltage	250 V									
Characteristic	Trapezoidal									
External inductance/capacitance L_o/C_o	<table><tr><td></td><td>EEx ia IIC</td><td>EEx ia IIB</td></tr><tr><td>L_o [mH]</td><td>0,46</td><td>3,0</td></tr><tr><td>C_o [nF]</td><td>230</td><td>640</td></tr></table>		EEx ia IIC	EEx ia IIB	L_o [mH]	0,46	3,0	C_o [nF]	230	640
	EEx ia IIC	EEx ia IIB								
L_o [mH]	0,46	3,0								
C_o [nF]	230	640								
Indication										
Operational readiness	green									
Switching state	yellow									
Protection class	IP20									
Ambient temperature	-25...+60 °C									
Storage temperature	-40...80 °C									
Dimensions	89 x 18 x 110 mm									
Weight	125 g									
Mounting instruction	For mounting on DIN rail or mounting panel									
Housing material	Polycarbonate/ABS									
Electrical connection	4 x 2-pole flat terminals with self-lifting pressure plates									
Terminal cross-section	1 x 2.5 mm ² / 2 x 1.5 mm ²									