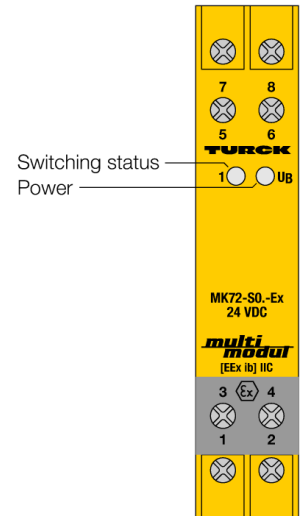
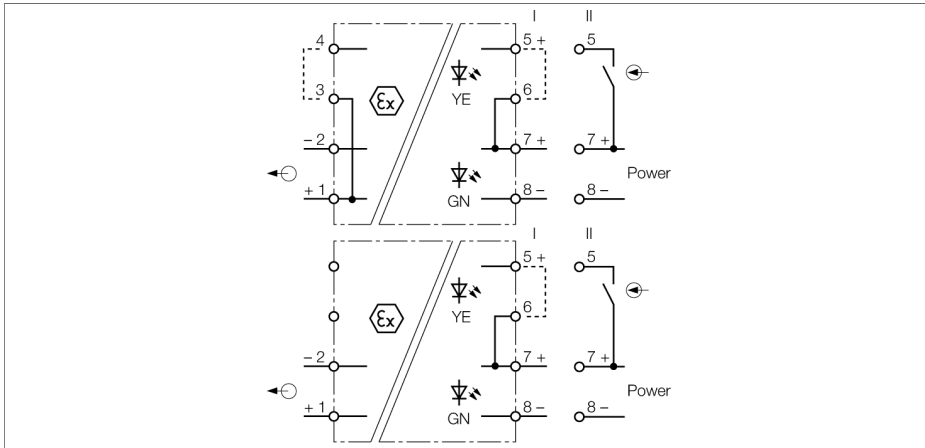


**Valve control module
1-channel
MK72-S01-EX/24VDC**



The solenoid driver MK72-S01-EX/24VDC features an intrinsically safe output with limited current and voltage. Thus making direct connection to loads in the Ex-area possible.

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

The output voltage of the device can be converted from 12 to 6 VDC by bridging terminals 3 and 4.

The loads can be controlled in two different ways:

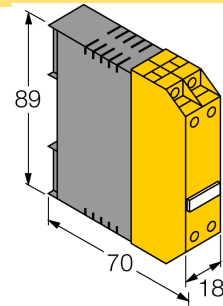
- (I) Power supply: Terminal 5 and 6 have to be bridged. In this operating mode the switching frequency is limited to 25 Hz.
- (II) Power supply steady applied at the input: For this purpose a potential-free contact has to be placed between terminals 5 and 6 or input voltage has to be applied to terminal 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 ib**
- **Application area acc. to ATEX: II (2) G**
- **Output voltage 6 or 12 VDC**
- **Output current ≤ 50 mA**
- **Switching frequency ≤ 250 Hz**
- **Switching frequency via power supply ≤ 25 Hz**
- **Galvanic separation of input and output circuits**

**Valve control module
1-channel
MK72-S01-EX/24VDC**

Dimensions



Type	MK72-S01-EX/24VDC									
Ident-No.	7507005									
Nominal voltage	24 VDC									
Operating voltage range	19...29 VDC									
Power consumption	≤ 1.7 W									
0-signal	0...5 VDC									
1-signal	10...30 VDC									
Current input	1 mA									
Input delay	≤ 2 ms									
Output circuits	intrinsically safe acc. to EN 60079									
Output current	50 mA									
Output voltage	12 V									
Output curve	<p>U [V]</p> <p>12</p> <p>50 I [mA]</p>									
Limit frequency	≤ 250 Hz									
Galvanic separation										
Test voltage	2.5 kV									
Ex approval acc. to conformity certificate	PTB 99 ATEX 2116									
Application area	II (2) G									
Protection type	[EEx ib] IIC									
Max. output voltage U _o	≤ 15.8 V									
Max. output current I _o	≤ 59.4 mA									
Max. output power P _o	≤ 940 mW									
Rated voltage	250 V									
Characteristic	Rectangular									
External inductance/capacitance L _e /C _e	<table border="1"> <thead> <tr> <th></th> <th>EEx ib IIC</th> <th>EEx ib IIB</th> </tr> </thead> <tbody> <tr> <td>Lo [mH]</td> <td>1,5</td> <td>5,0</td> </tr> <tr> <td>Co [nF]</td> <td>110</td> <td>370</td> </tr> </tbody> </table>		EEx ib IIC	EEx ib IIB	Lo [mH]	1,5	5,0	Co [nF]	110	370
	EEx ib IIC	EEx ib IIB								
Lo [mH]	1,5	5,0								
Co [nF]	110	370								
Indication										
Operational readiness	green									
Switching state	yellow									
Protection class	IP20									
Ambient temperature	-25...+60 °C									
Storage temperature	-40...80 °C									
Dimensions	89x 18x 70 mm									
Weight	92 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									