

Ex solenoid / alarm driver

5203B

- 1- or 2-channel version
- Solenoid driver for I.S. area
- 3- / 5-port 3.75 kVAC galvanic isolation
- Digitally controlled voltage supply for I.S. area
- Universal supply by AC or DC



Application

- Driver with safety barrier for the control of ON / OFF solenoids mounted in hazardous area.
- Driver with safety barrier for the supply of LEDs and acoustic alarms mounted in hazardous area.
- Voltage supply with ON / OFF control of other equipment.

Technical characteristics

- PR5203B has a digital input per channel for the control of the I.S. output voltage.
- Supply, inputs, and outputs are floating and galvanically separated.

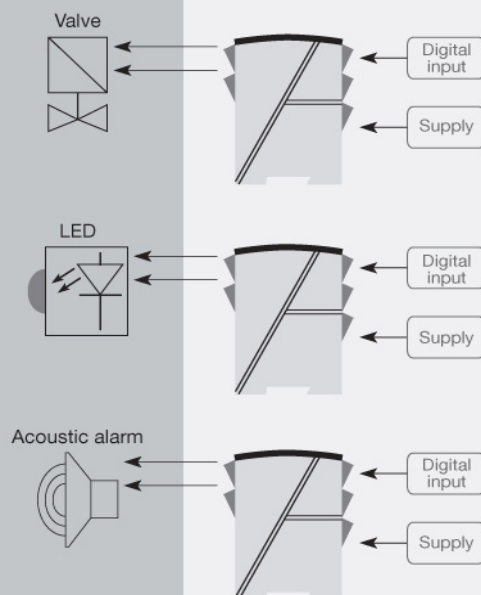
Mounting / installation

- Mounted vertically or horizontally on a DIN rail. By way of the 2-channel version up to 84 channels per meter can be mounted.

Note

- Not suitable for new installations requiring certification to the latest ATEX standards - see ATEX certificate DEMKO 99ATEX126257 and EU Declaration of Conformity for details.

Applications



Order:

Type	Input	Ex barrier	Channels
5203B	PNP : 1	[EEx ia] type : F	Single : 1
	Switch : 2		
	NPN : 3		
		[EEx ia] type : H	Single : 1
		[EEx ia] type : I	Double : 2

Environmental Conditions

Operating temperature.....	-20°C to +60°C
Calibration temperature.....	20...28°C
Relative humidity.....	< 95% RH (non-cond.)
Protection degree.....	IP20

Mechanical specifications

Dimensions (HxWxD).....	109 x 23.5 x 130 mm
Weight approx.....	230 g
Wire size.....	1 x 2.5 mm ² stranded wire
Screw terminal torque.....	0.5 Nm

Common specifications**Supply**

Supply voltage, universal.....	21.6...253 VAC, 50...60 Hz or 19.2...300 VDC
Fuse.....	400 mA SB / 250 VAC
Max. required power.....	≤ 4 W (2 channels)
Internal power dissipation.....	≤ 2 W (2 channels)

Isolation voltage

Isolation voltage, test / working.....	3.75 kVAC / 250 VAC
PELV/SELV.....	IEC 61140
Max. frequency.....	20 Hz
EMC immunity influence.....	< ±0.5% of span
Extended EMC immunity: NAMUR NE21, A criterion, burst.....	< ±1% of span

Input specifications**NPN and mechanical switch**

Trig level LOW.....	≤ 4.0 VDC
Trig level HIGH.....	≥ 7.0 VDC
Max. external voltage.....	28 VDC
Input impedance.....	3.48 kΩ

PNP

Trig level LOW.....	≤ 4.0 VDC
Trig level HIGH.....	≥ 7.0 VDC
Max. external voltage.....	28 VDC
Input impedance.....	3.48 kΩ

Output specifications

Output voltage.....	See Ex data in manual
Output current.....	See Ex data in manual
Output ripple.....	< 40 mVRMS

Observed authority requirements

EMC.....	2014/30/EU
LVD.....	2014/35/EU
EAC.....	TR-CU 020/2011

Approvals

ATEX.....	DEMKO 99ATEX126257, II (1) GD [EEx ia] IIC
c UL us, UL 913.....	E233311
EAC Ex.....	RU C-DK.HA65.B.00355/19