

## Ex SOLENOID / ALARM DRIVER



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

**Application:**

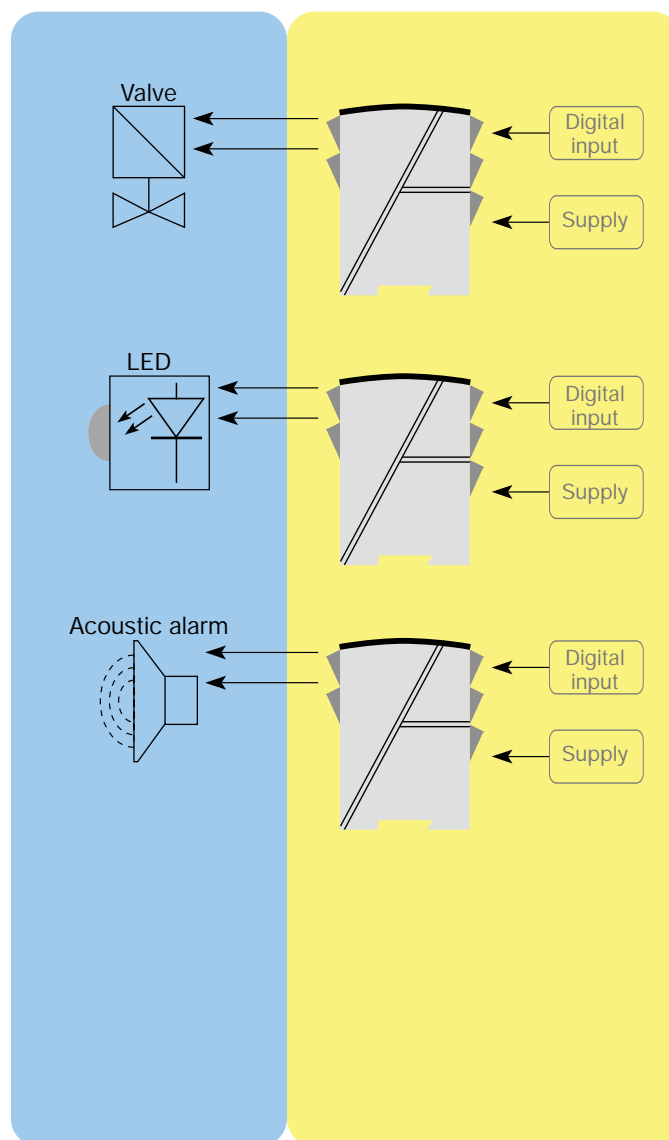
- Driver with safety barrier for the control of ON / OFF solenoids mounted in hazardous area.
- Driver with safety barrier for the supply of LEDs and acoustic alarms mounted in hazardous area.
- Voltage supply with ON / OFF control of other equipment.

**Technical characteristics:**

- PR5203B has a digital input per channel for the control of the Ex 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 can be mounted per metre.

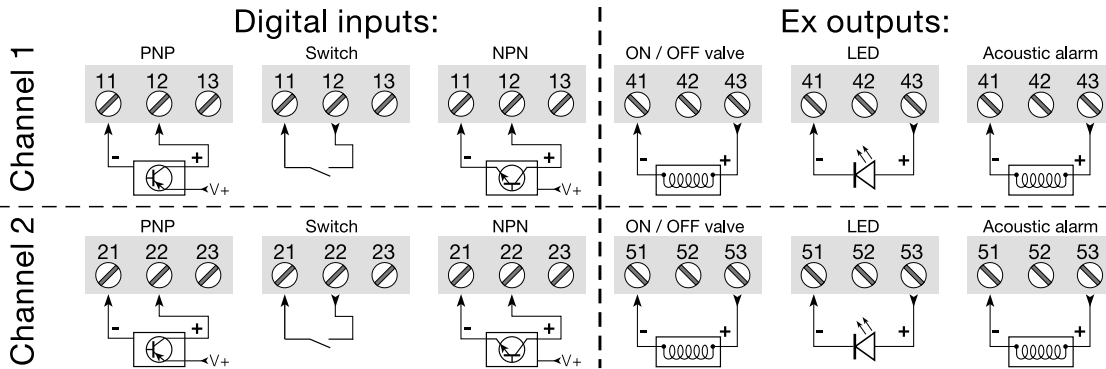
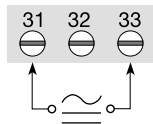


Order : 5203B

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

**Connexions:**

Supply:



**Electrical specifications:**

**Specifications range:**

(@: -20°C to +60°C)

**Common specifications:**

Supply voltage universal .....	24...230 VAC ±10%
	50...60 Hz
	24...250 VDC ±20%
Internal consumption .....	≤ 2 W (2 channels)
Max. consumption.....	≤ 4 W (2 channels)
Fuse.....	400 mA SB / 250 VAC
Isolation voltage, test / operation.....	3.75 kVAC / 250 VAC
Max. frequency.....	20 Hz
Calibration temperature.....	20...28°C

EMC immunity influence .....	< ±0.5%
Extended EMC immunity: NAMUR NE 21, A criterion, burst.....	< ±1%

Max. wire size.....	1 x 2.5 mm <sup>2</sup>
Screw terminal torsion .....	0.5 Nm
Relative humidity .....	< 95% RH (non-cond.)
Dimensions (HxWxD).....	109 x 23.5 x 130 mm
DIN rail type.....	DIN 46277
Tightness (enclosure / terminals).....	IP50 / IP20
Weight .....	230 g

**Inputs:**

**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 V
Trig level HIGH.....	≥ 7.0 V
Max. external voltage.....	28 VDC
Input impedance .....	3.48 kΩ

**Outputs:**

Output voltage.....	See Ex data below
Output current .....	See Ex data below
Output ripple .....	< 40 mVRMS

**Observed authority requirements: Standard:**

EMC 89/336/EEC, Emission.....	EN 50 081-1, EN 50 081-2
Immunity .....	EN 50 082-2, EN 50 082-1
Emission and immunity .....	EN 61 326
LVD 73/23/EEC.....	EN 61 010-1
PELV/SELV .....	IEC 364-4-41 and EN 60 742
ATEX 94/9/EC.....	EN 50 014 and EN 50 020

**Ex data:**

Ex barrier type:	F	H	I				
EEx approval:	[EEx ia] IIC	[EEx ia] IIC	[EEx ia] IIC				
ATEX approval:	⚠ II (1) G	⚠ II (1) G	⚠ II (1) G				
U <sub>m</sub> :	250 V	250 V	250 V				
U <sub>o</sub> :	28 VDC	28 VDC	28 VDC				
I <sub>o</sub> :	115 mADC	110 mADC	93 mADC				
P <sub>o</sub> :	0.81 W	0.77 W	0.65 W				
L <sub>o</sub> :	2 mH	2.6 mH	3 mH				
C <sub>o</sub> :	0.08 μF	0.08 μF	0.08 μF				
V output, unloaded min.:	22.0 VDC	22.0 VDC	22.0 VDC				
V output, loaded min.:	13.0 VDC	14.0 VDC	10.0 VDC				
Output current, max.:	50.0 mADC	35.0 mADC	35.0 mADC				