

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:**

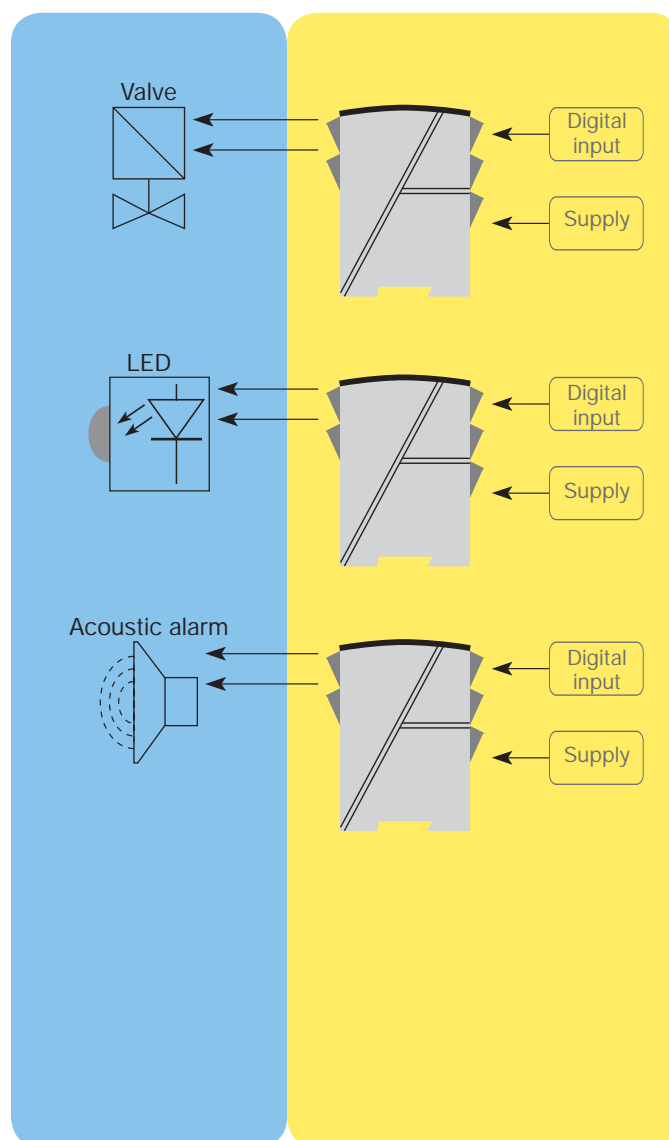
- Driver with safety barrier for the control of ON / OFF solenoids mounted in hazardous area.
- Driver with safety barrier for the supply of LEDs and acoustic alarms mounted in hazardous area.
- Voltage supply with ON / OFF control of other equipment.

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.

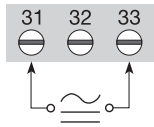


Order: 5203B

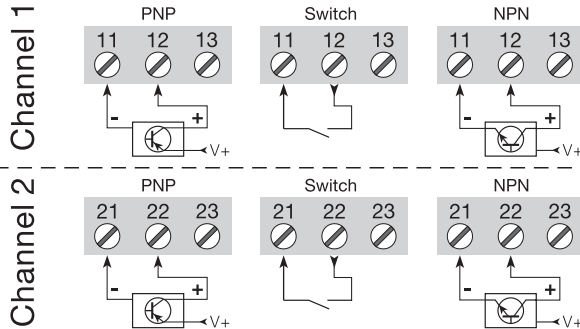
Type	Input	Ex barrier	Channels
5203B	PNP : 1 Switch : 2 NPN : 3	[EEx ia] type : F	Single : 1
		[EEx ia] type : H [EEx ia] type : I	Single : 1 Double : 2

Connections:

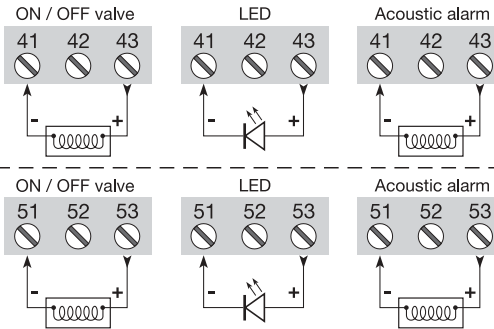
Supply:



Digital inputs:



Ex outputs:



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 ²
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

EEx/I.S. approval:

DEMKO 99	ATEX 126257
ATEX	Ex II (1) G D
	[EEx ia IIC]
Applicable for zone.....	0, 1, 2, 20, 21 or 22
UL, applicable in zone.....	IS, CL. 1, DIV. 1., GP A-D

Observed authority requirements:

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, EN 50 020 and
	EN 50 281-1-1
UL	UL 913, UL 508

Ex data:

Ex barrier type:	F	H	I			
EEx approval:	[EEx ia] IIC	[EEx ia] IIC	[EEx ia] IIC			
ATEX approval:	Ex II (1) G D	Ex II (1) G D	Ex II (1) G D			
U _m :	250 V	250 V	250 V			
U _o :	28 VDC	28 VDC	28 VDC			
I _o :	115 mADC	110 mADC	93 mADC			
P _o :	0.81 W	0.77 W	0.65 W			
L _o :	2 mH	2.6 mH	3 mH			
C _o :	0.08 µF	0.08 µF	0.08 µF			
V output, unloaded min.:	22.0 VDC	22.0 VDC	22.0 VDC			