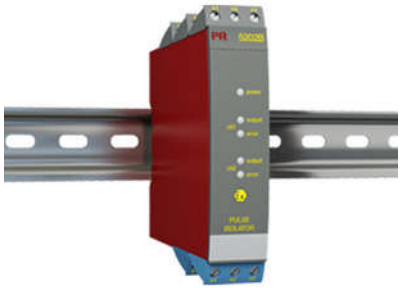
PERFORMANCE MADE SMARTER



Pulse isolator

5202B

– 2 channels - 2 or 4 outputs
– Dual output
– 5-port 3.75 kVAC galvanic isolation
– Cable error detection
– Universal supply by AC or DC

Application

- Pulse isolator with safety barrier for the supply of NAMUR sensors installed in the hazardous area.
- Pulse isolator with safety barrier for the detection of mechanical contacts installed in the hazardous area.
- One input signal can be used on two separate outputs.
- A cable error alarm can be detected on a separate output.

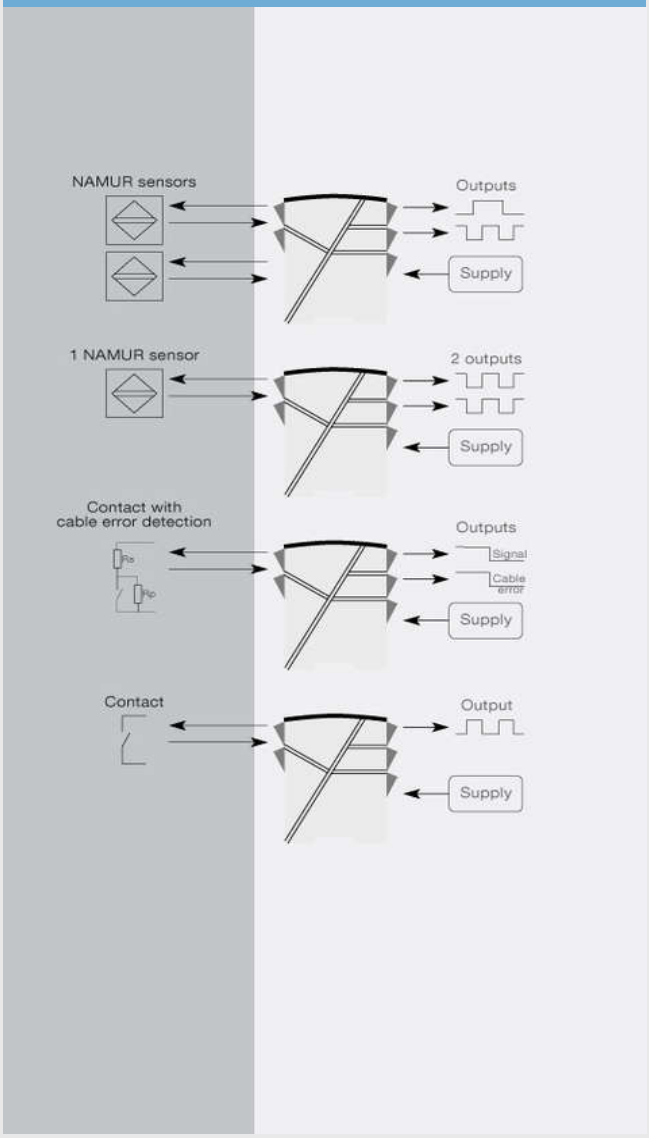
Technical characteristics

- PR5202B1 and 5202B2 have relays with change-over contacts or open NPN collectors available in the safe area.
- PR5202B4 has 4 SPST relays, which are activated simultaneously two and two, available in the safe area. Each relay can be programmed to the function N.O. or N.C.
- Inputs, outputs and supply are floating and galvanically separated.
- 5202B is designed according to strict safety requirements and is therefore suitable for application in SIL 2 installations.

Mounting / installation

- Mounted vertically or horizontally on a DIN rail. Up to 84 channels per meter can be mounted.

Applications



This page is automatically generated on the basis of information provided on www.prelectronics.com and affiliated websites. It is provided to you as a service and for information purpose only. While we have attempted to maintain the information as accurately as possible, the page may contain errors or omissions for which we disclaim any and all liability

Order:

Type	Output	
5202B	Open collector NPN	: 1
	2x1 relay	: 2
	2x2 relays	: 4

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..... ≤ 1.5 W (2 channels), 5202B1 and 5202B2
Max. required power..... ≤ 2.0 W (2 channels), 5202B4
Internal power dissipation..... ≤ 1.5 W (2 channels), 5202B1 and 5202B2
Internal power dissipation..... ≤ 2.0 W (2 channels), 5202B4

Isolation voltage

Isolation voltage, test / working..... 3.75 kVAC / 250 VAC
PELV/SELV..... IEC 61140

Auxiliary supplies

NAMUR supply..... 8 VDC / 8 mA

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

Input specifications

Sensor types..... NAMUR according to EN 60947-5-6 / mechanical contact
Frequency range..... 0...5 kHz
Pulse length..... > 0.1 ms
Input resistance..... 1 kΩ
Trig level, signal..... < 1.2 mA, > 2.1 mA
Trig level, cable fault..... < 0.1 mA, > 6.5 mA

Output specifications

Relay output

Max. switching frequency..... 20 Hz
Max. voltage..... 250 VRMS
Max. current..... 2 AAC
Max. AC power..... 100 VA
Max. load at 24 VDC..... 1 A

NPN outputs

Max. switching frequency..... 5 kHz
Min. pulse length..... > 0.1 ms
Max. load, current / voltage..... 80 mA / 30 VDC

Voltage drop at 25 mA / 80 mA..... < 0.75 VDC / < 2.5 VDC

Observed authority requirements

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

Approvals

ATEX 2014/34/EU..... DEMKO 99ATEX127186, II (1) GD [EEx ia] IIC
UL..... UL 913, UL 508
EAC Ex TR-CU 012/2011..... RU C-DK.GB08.V.00410