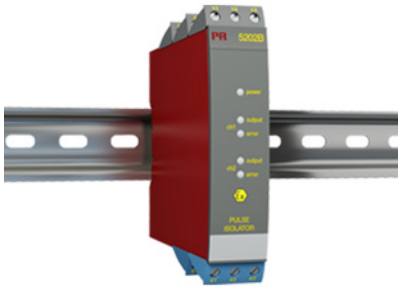
PERFORMANCE MADE SMARTER



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.

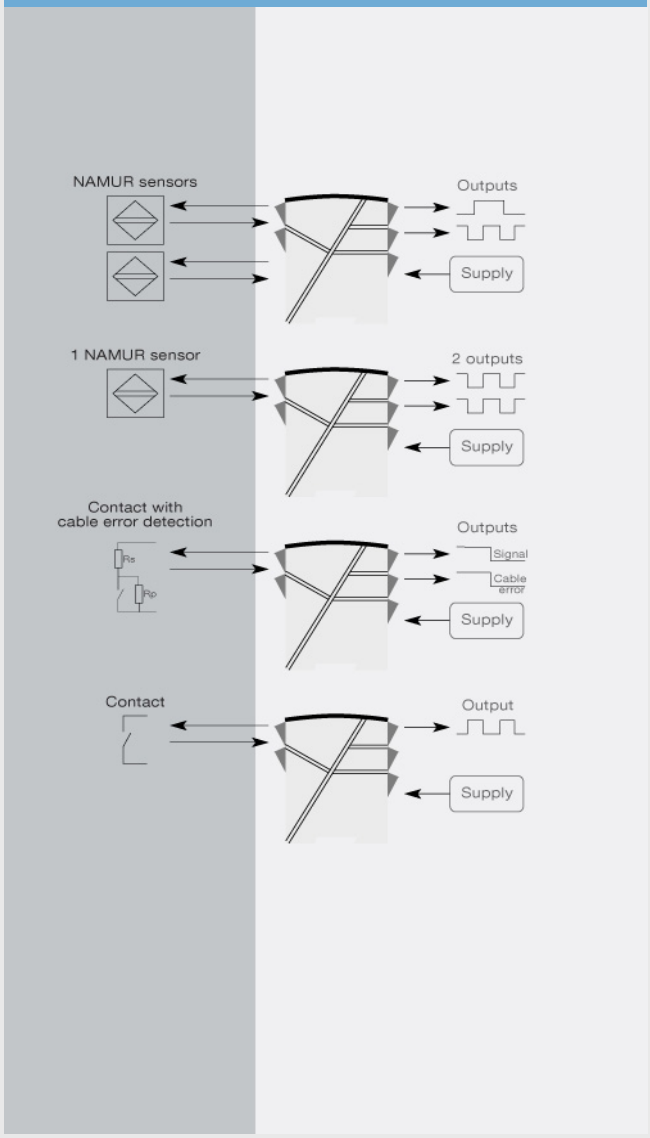
Technical characteristics

- 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.

Connections



Order:

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

Environmental Conditions

Specifications range	-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 voltage, universal	21.6...253 VAC, 50...60 Hz or 19.2...300 VDC
Fuse	400 mA SB / 250 VAC
Max. power consumption	≤ 1.5 W (2 channels), 5202B1 and 5202B2
Max. power consumption	≤ 2.0 W (2 channels), 5202B4
Internal consumption	≤ 1.5 W (2 channels), 5202B1 and 5202B2
Internal consumption	≤ 2.0 W (2 channels), 5202B4
Isolation voltage, test / working	3.75 kVAC / 250 VAC
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
Opto, NPN outputs: Max. switching frequency	5 kHz
Min. pulse length, NPN output	> 0.1 ms
Max. load, current / voltage	80 mA / 30 VDC
Voltage drop at 25 mA / 80 mA	< 0.75 VDC / < 2.5 VDC

Approvals

EMC	EN 61326-1
LVD 2006/95/EC	EN 61010-1
PELV/SELV	IEC 364-4-41 and EN 60742
ATEX 2004/108/EC	DEMKO 99ATEX127186
UL	UL 913, UL 508
EAC TR-CU 020/2011	EN 61326-1
EAC Ex TR-CU 012/2011	RU C-DK.GB08.V.00410