

PULSE ISOLATOR



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



Application:

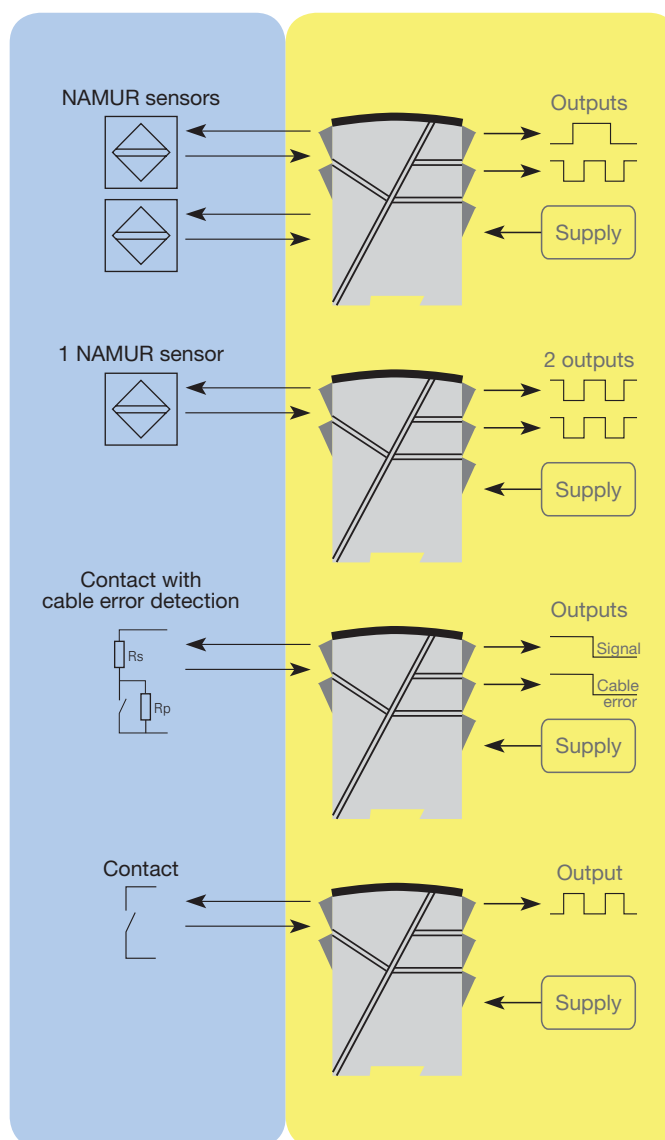
- Pulse isolator with safety barrier for the supply of NAMUR sensors installed in the hazardous area.
- Pulse isolator with safety barrier for the detection of mechanical contacts installed in the hazardous area.
- One input signal can be used on two separate outputs.
- A cable error alarm can be detected 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 thus suitable for application in SIL 2 installations.

Mounting / installation:

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

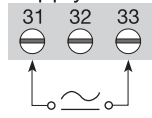


Order: 5202B

Connections:

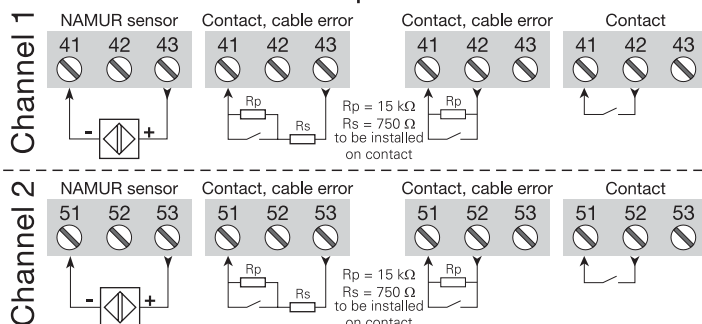
All connection options are shown in the user manual.

Supply:

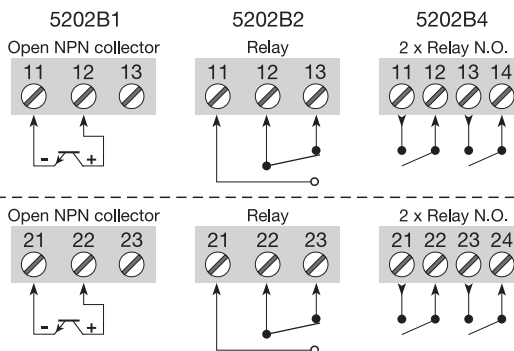


Type	Output
5202B	Open collector NPN : 1
	2 x 1 Relay : 2
	2 x 2 Relays : 4

Inputs:



Outputs:



Electrical specifications:

Specifications range:

-20 to +60°C

Common specifications:

Supply voltage, universal	21.6...253 VAC, 50...60 Hz
	19.2...300 VDC
Internal consumption, 5202B1 and 5202B2.....	≤ 1.5 W (2 channels)
Max. consumption, 5202B1 and 5202B2.....	≤ 1.5 W (2 channels)
Internal consumption, 5202B4	≤ 2.0 W (2 channels)
Max. consumption, 5202B4	≤ 2.0 W (2 channels)
Fuse.....	400 mA SB / 250 VAC
Isolation voltage, test / operation.....	3.75 kVAC / 250 VAC
Calibration temperature.....	20...28°C

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

Auxiliary voltage:

NAMUR supply.....	8 VDC / 8 mA
Max. wire size.....	1 x 2.5 mm ² stranded wire
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
Protection degree.....	IP20
Weight	230 g

Input:

Sensor types:

NAMUR acc. 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 error	< 0.1 mA, > 6.5 mA

Outputs:

Relay outputs:

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

Open NPN collector outputs:

Max. frequency.....	5 kHz
Pulse length.....	> 0.1 ms
Load, max. current / voltage	80 mA / 30 VDC
Voltage drop at 25 mA / 80 mA	< 0.75 VDC / < 2.5 VDC

EEx / I.S. approval:

DEMKO 99ATEX127186	Ex II (1) GD
	[EEx ia] IIC
Applicable for zone.....	0, 1, 2, 20, 21 or 22

Ex / I.S. data, ATEX:

Terminal 41...43, (51...53)	
U _m	: 250 V
U _o	: 10.6 VDC
I _o	: 13.8 mADC
P _o	: 0.038 W
L _o	: 160 mH
C _o	: 1.9 μF
UL	IS, Cl. I, Div. 1, Gr. A, B, C, D
	IS, Cl. I, zone 0 / 1, Gr. IIC
	IS, Cl. II, Div. 1, Gr. E, F, G
UL Control Drawing No.	5202QU01

GOST R approval:

VNIIFTRI, Cert. No.	See homepage
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Observed authority requirements:

EMC 2004/108/EC	EN 61326-1
LVD 2006/95/EC	EN 61010-1
PELV/SELV.....	IEC 364-4-41
	and EN 60742
ATEX 94/9/EC	EN 50014, EN 50020 and
	EN 50281-1-1
UL	UL 913, UL 508