

PULSE ISOLATOR



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



Application:

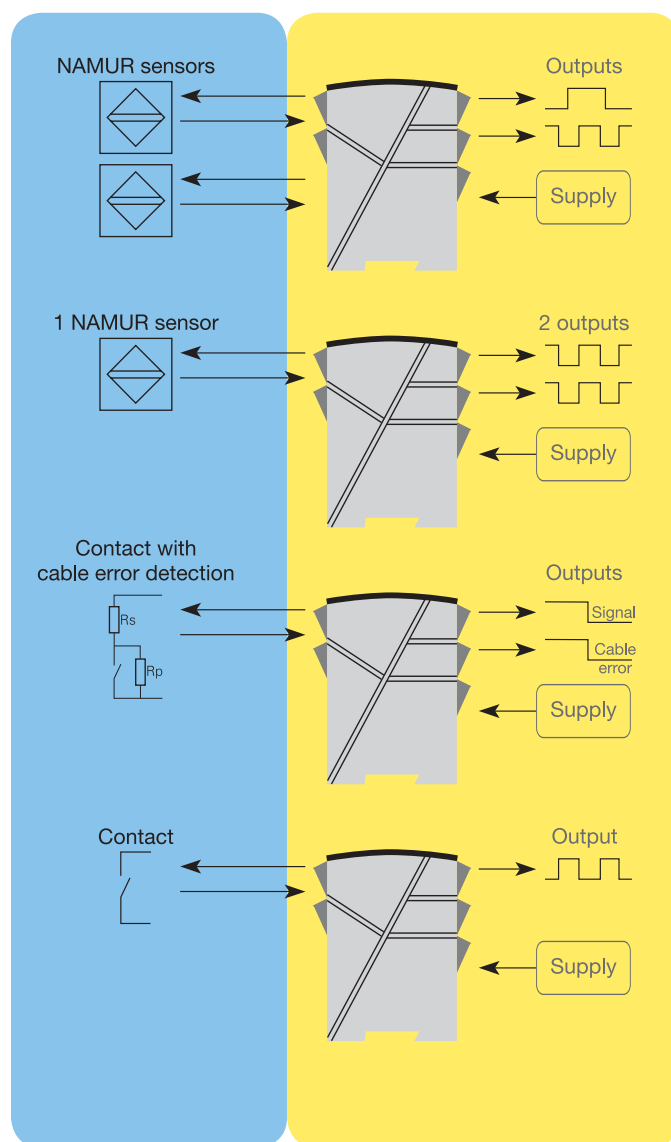
- Pulse isolator with safety barrier for the supply of NAMUR sensors installed in the hazardous area.
- Pulse isolator with safety barrier for the detection of mechanical contacts installed in the hazardous area.
- One input signal can be used on two separate outputs.
- A cable error alarm can be detected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

Mounting / installation:

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



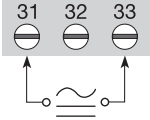
Order: 5202B

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

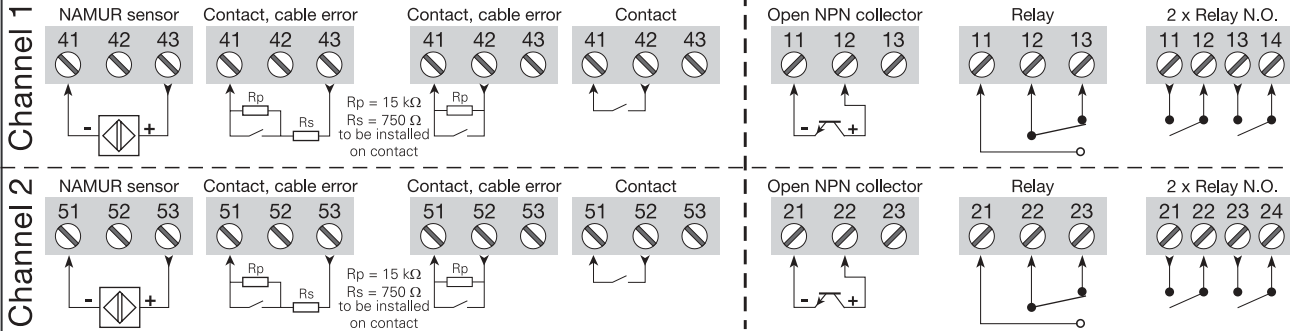
Connections:

All connection options are shown in the user manual.

Supply:



Inputs:



Outputs:

Electrical specifications:

Specifications range:

-20 to +60°C

Common specifications:

Supply voltage universal 24...230 VAC ±10%
 50...60 Hz
 24...250 VDC ±20%

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 mm²
 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

Input:

Sensor types:
 NAMUR acc. to EN 60 947-5-6
 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

Ex data:

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

EEx approval CENELEC:

DEMKO 99 ATEX 127186
 ATEX [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: 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, EN 50 020 and
 EN 50 281-1-1
 UL UL 913, UL 508