

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:

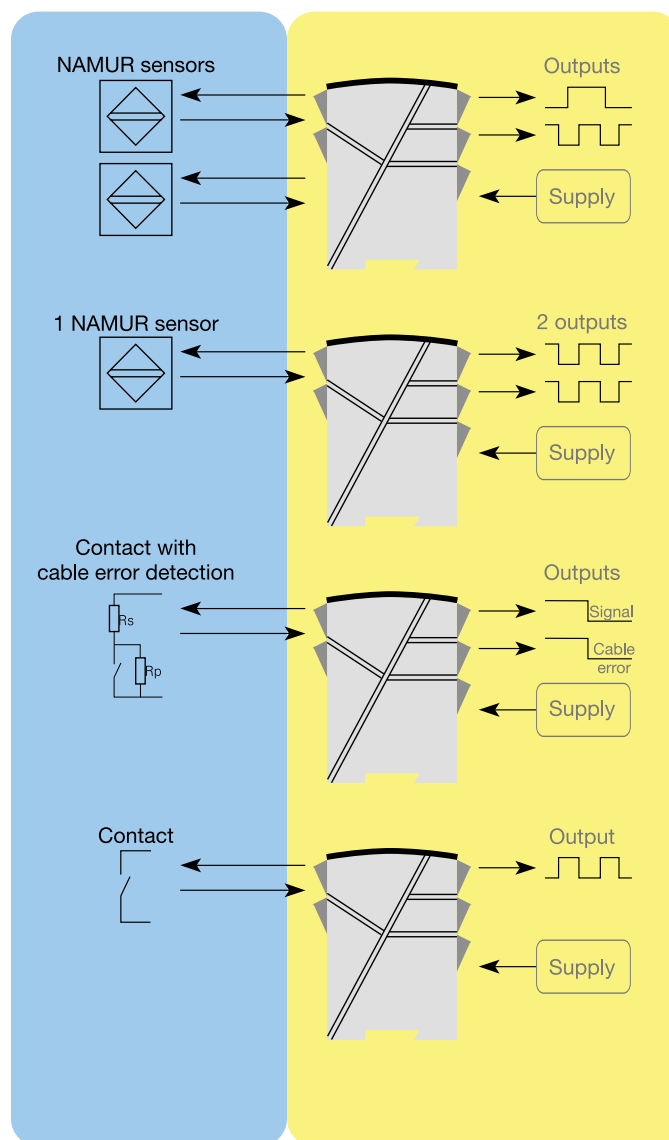
- Pulse isolator with safety barrier for the supply of NAMUR sensors installed in the hazardous area.
- Pulse isolator with safety barrier for the detection of mechanical contacts installed in the hazardous area.
- One input signal can be used on two separate outputs.
- A cable error alarm can be detected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

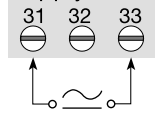


Order: 5202B

Connections:

All connection options are shown in the user manual.

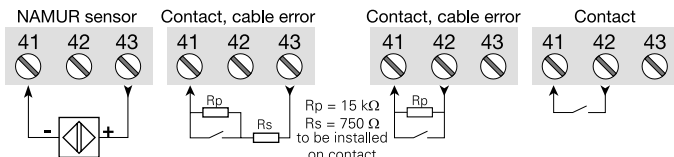
Supply:



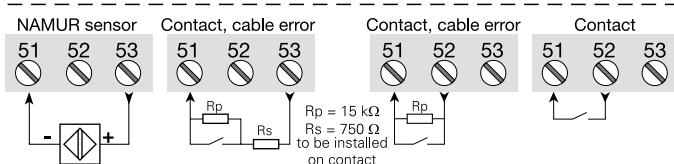
Type	Output
5202B	Open collector NPN : 1
	2 x 1 Relay : 2
	2 x 2 Relays : 4

Inputs:

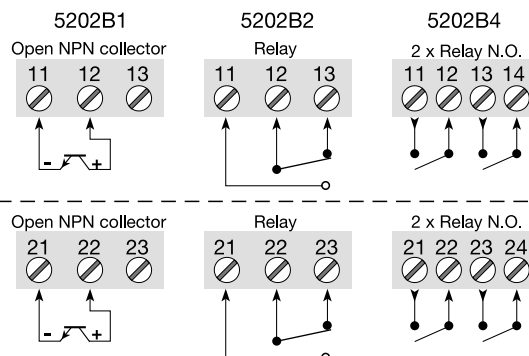
Channel 1



Channel 2



Outputs:



Electrical specifications:

Specifications range:

-20 to +60°C

Common specifications:

Supply voltage universal 24...230 VAC $\pm 10\%$
50...60 Hz
24...250 VDC $\pm 20\%$

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 $< \pm 0.5\%$
Extended EMC immunity:
NAMUR NE 21, A criterion, burst $< \pm 1\%$

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 k Ω
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 μ F

EEx approval CENELEC:

DEMKO 99 ATEX 127186
ATEX 0539 Ex II (1) G
[EEx ia] IIC
Applicable in zone 0, 1, or 2

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 and EN 50 020