

## Pulse isolator

### 5202A

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

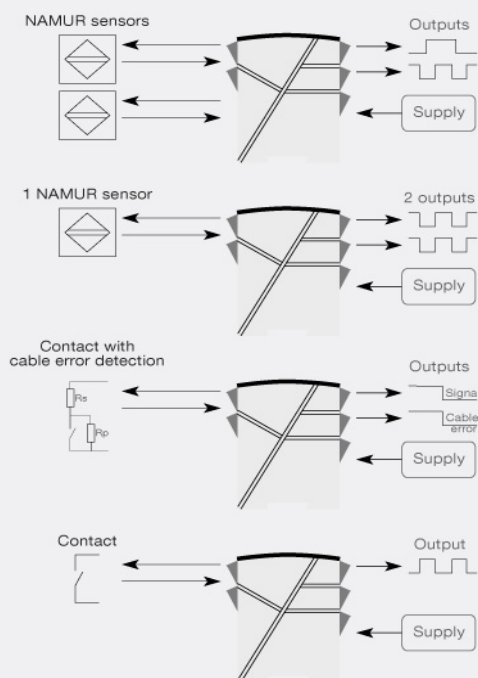
#### Technical characteristics

- PR5202A1 and 5202A2 have relays with change-over contacts or open NPN collectors.
- PR5202A4 has 4 SPST relays, which are activated simultaneously two and two. Each relay can be programmed to the function N.O. or N.C.
- Inputs, outputs and supply are floating and galvanically separated.
- 5202 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



**Order:**

| Type  | Output                 |
|-------|------------------------|
| 5202A | 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 <sup>2</sup> 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                          |
| Internal power dissipation..... | ≤ 1.5 W (2 channels), 5202A1 and 5202A2      |
| Internal power dissipation..... | ≤ 2.0 W (2 channels), 5202A4                 |
| Max. required power.....        | ≤ 1.5 W (2 channels), 5202A1 and 5202A2      |
| Max. required power.....        | ≤ 2.0 W (2 channels), 5202A4                 |

**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 NE21, 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 output**

|                                    |                        |
|------------------------------------|------------------------|
| 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**

|                      |         |
|----------------------|---------|
| c UL us, UL 508..... | E231911 |
|----------------------|---------|