

## Ex power supply

### 5420B

- 2 channels
- 5-port 3.75 kVAC galvanic isolation
- Output voltage > 18 V to I.S. area
- Active current loop detection
- Universal supply by AC or DC



#### Application

- Voltage supply with safety barrier for the supply of equipment mounted in hazardous area.
- Voltage supply with failsafe detection of active current loop from 2-wire transmitters mounted in hazardous area.

#### Technical characteristics

- PR5420B has a relay with change-over contacts available in the safe area. When the loop current is within the defined limit, the relay is ON.
- Supply and outputs are floating and galvanically separated.

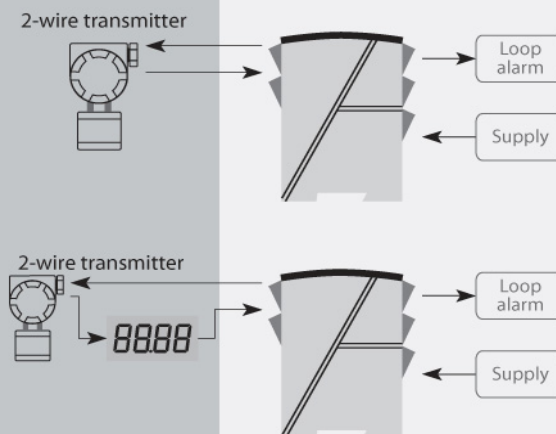
#### Mounting / installation

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

#### Note

- Not suitable for new installations requiring certification to the latest ATEX standards - see ATEX certificate DEMKO 99ATEX126256 and EU Declaration of Conformity for details.

#### Applications



**Order:**

| Type  | Channels   |
|-------|------------|
| 5420B | Double : 2 |

**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.....         | 215 g                                 |
| DIN rail type.....         | DIN 46277                             |
| 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<br>19.2...300 VDC |
| Max. required power.....        | ≤ 4 W (2 channels)                              |
| Internal power dissipation..... | ≤ 2 W (2 channels)                              |
| Fuse.....                       | 400 mA SB / 250 VAC                             |

**Isolation voltage**

|                                                               |                     |
|---------------------------------------------------------------|---------------------|
| Isolation voltage, test /<br>working.....                     | 3.75 kVAC / 250 VAC |
| PELV/SELV.....                                                | IEC 61140           |
| EMC immunity influence.....                                   | < ±0.5%             |
| Extended EMC immunity: NAMUR<br>NE21, A criterion, burst..... | < ±1%               |

**Output specifications****Relay output**

|                                     |                          |
|-------------------------------------|--------------------------|
| Max. voltage.....                   | 250 VRMS                 |
| Max. current.....                   | 2 ARMS                   |
| Max. AC power.....                  | 100 VA                   |
| Max. load at 24 VDC.....            | 1 A                      |
| Output voltage.....                 | > 18 VDC at 20 mA        |
| Output current.....                 | 28 mA per channel (max.) |
| Relay outputs: On within limit..... | > 3.8...< 20.5 mA        |

**Observed authority requirements**

|          |                |
|----------|----------------|
| EMC..... | 2014/30/EU     |
| LVD..... | 2014/35/EU     |
| EAC..... | TR-CU 020/2011 |

**Approvals**

|             |                                              |
|-------------|----------------------------------------------|
| ATEX.....   | DEMKO 99ATEX126256, II (1)<br>GD [Ex ia] IIC |
| EAC Ex..... | RU C-DK.HA65.B.00355/19                      |