

Ex POWER SUPPLY



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

**Application:**

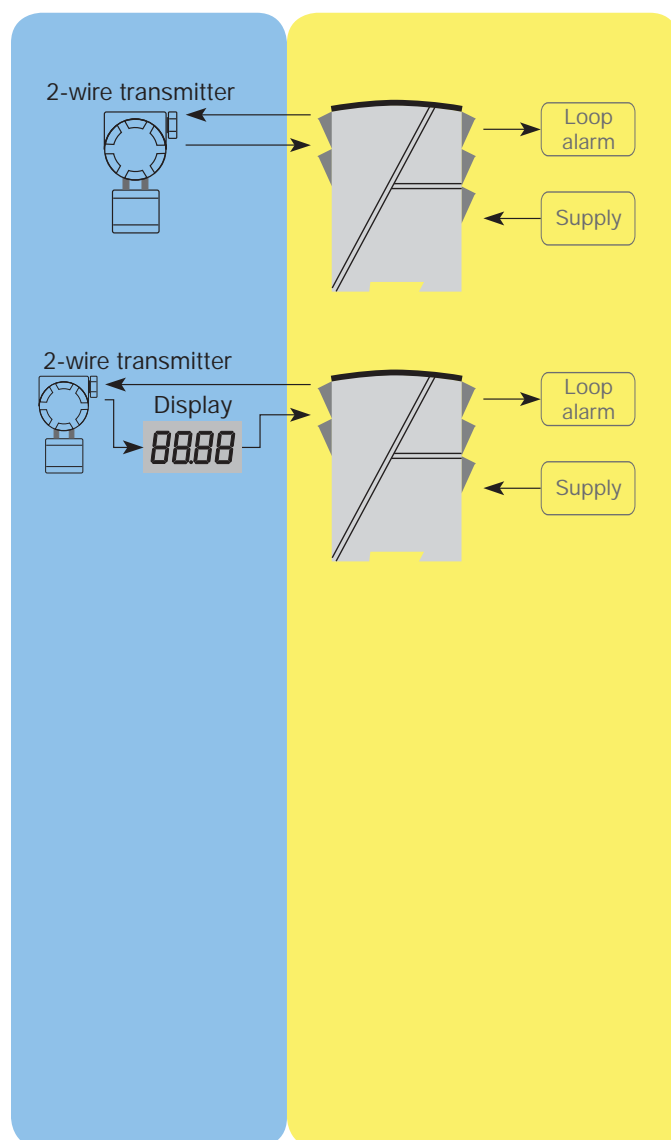
- Voltage supply with safety barrier for the supply of equipment mounted in hazardous area.
- Voltage supply with failsafe detection of active current loop from 2-wire transmitters mounted in hazardous area.

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 can be mounted per metre.

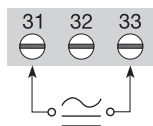


Order : 5420B

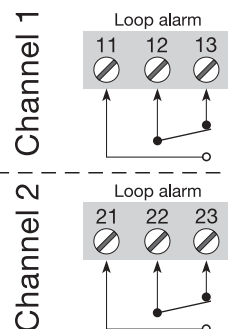
Type	Channel
5420B	Double : 2

Connexions:

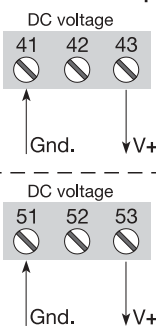
Supply:



Safe area:



Outputs for Ex area:



Electrical specifications:

Specifications range:

-20°C to +60°C

Common specifications:

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%

Max. wire size..... 1 x 2.5 mm² multicore
cable
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 215 g

Input:

Supply voltage universal 24...230 VAC ±10%
50...60 Hz
24...250 VDC ±20%
Internal consumption..... ≤ 2 W (2 channels)
Max. consumption..... ≤ 4 W (2 channels)

Outputs:

Output voltage..... > 18 VDC at 20 mA
Output current, per channel (max.) ... 28 mA

Relay outputs:

ON within limit > 3.8...< 20.5 mA
Vmax. 250 VRMS
Imax. 2 ARMS
Max. AC output 100 VA
Max. load at 24 VDC 1 A

Ex data:

U_m..... : 250 V
U_o..... : 28 VDC
I_o..... : 93.0 mADC
P_o..... : 0.65 W
L_o..... : 3 mH
C_o..... : 0.08 µF

Ex / I.S. approval:

DEMKO 99. ATEX 126256  II (1) G D
[EEx ia] IIC
Applicable in..... Zone 0, 1, 2, 20, 21 or 22

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
EN 50 281-1-1