

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:**

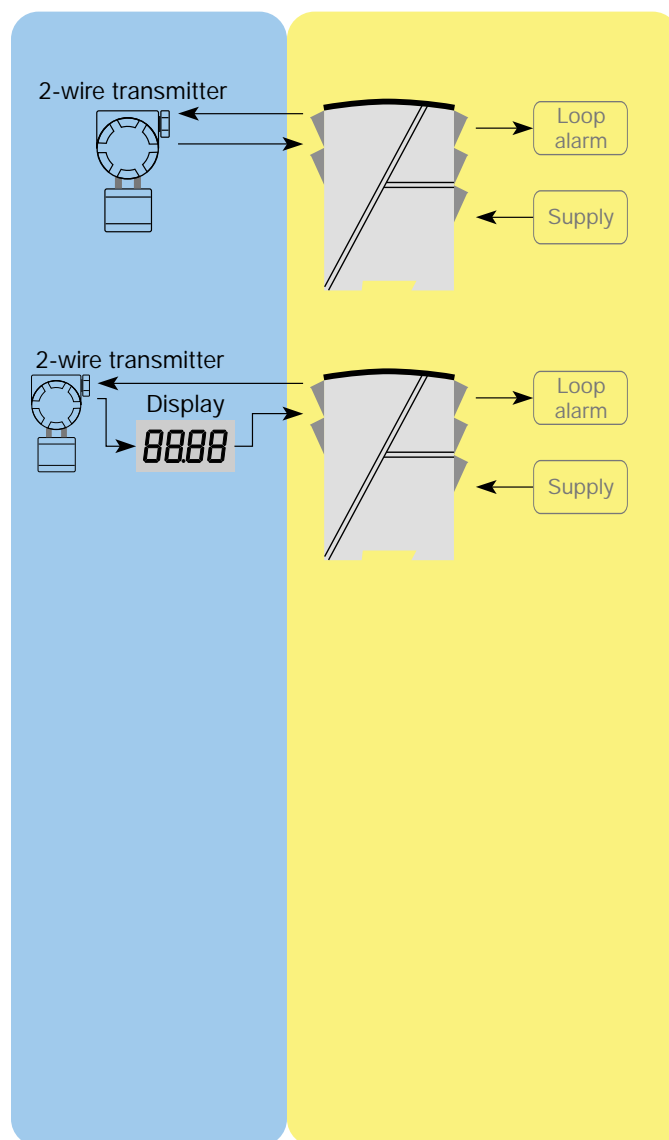
- Voltage supply with safety barrier for the supply of equipment mounted in hazardous area.
- Voltage supply with failsafe detection of active current loop from 2-wire transmitters mounted in hazardous area.

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 per metre can be mounted.

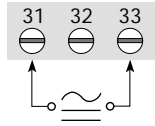


Order : 5420B

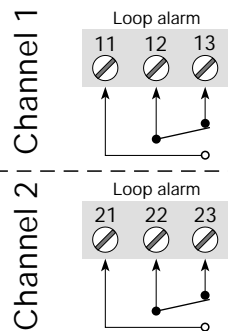
Type	Channel
5420B	Double : 2

Connections:

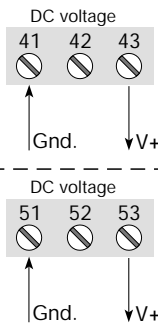
Supply:



Safe area:



Outputs for Ex area:



Electrical specifications:

Specification 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
Screw terminal torsion 0.5 Nm
Relative humidity 0...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
V-max 250 VRMS
I-max 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 mADC
P_o ≤ 0.65 W
L_o ≤ 3 mH
C_o ≤ 0.08 µF

EEx approval CENELEC:

[EEx ia] IIC
ATEX  II (1) G
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
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