

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:

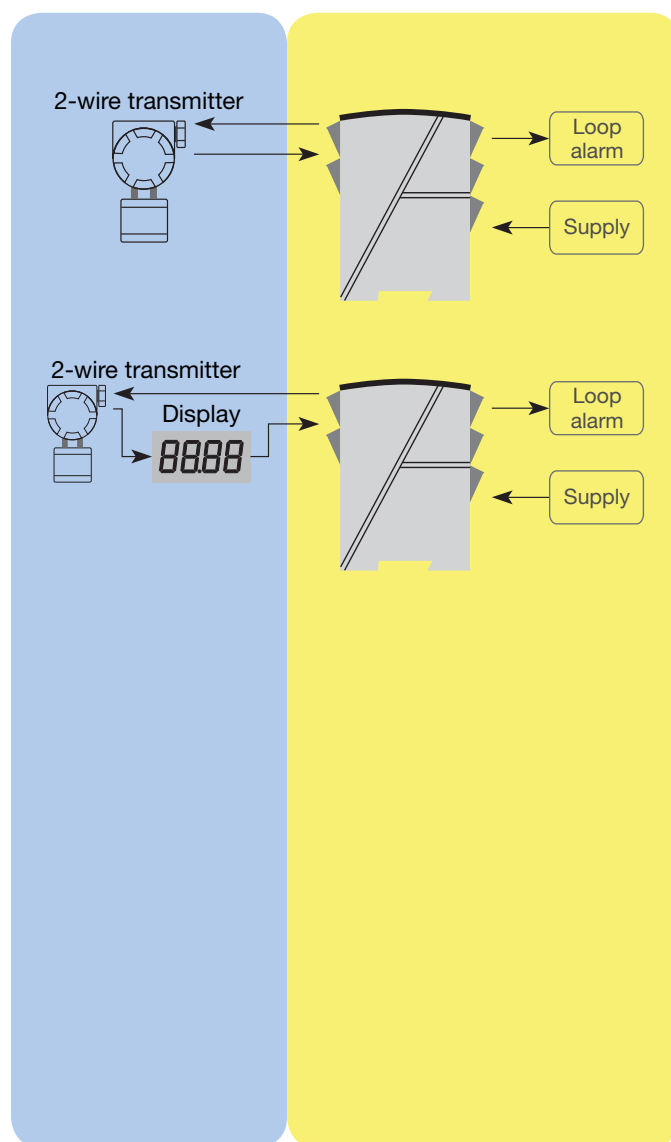
- Voltage supply with safety barrier for the supply of equipment mounted in hazardous area.
- Voltage supply with failsafe detection of active current loop from 2-wire transmitters mounted in hazardous area.

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.

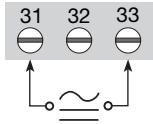


Order : 5420B

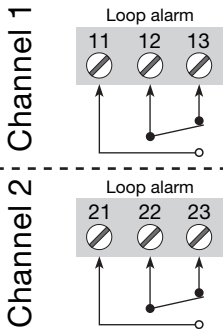
Type	Channel
5420B	Double : 2

Connections:

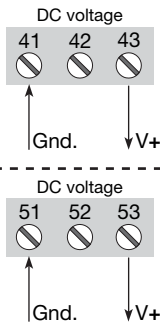
Supply:



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 stranded wire
 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 21.6...253 VAC
 50...60 Hz
 19.2...300 VDC
 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

EEx / I.S. approval:

DEMKO 99ATEX126256 II (1) GD
 [EEx ia] IIC
 Applicable for zone..... 0, 1, 2, 20, 21 or 22

Ex / I.S. 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

GOST R approval:

VNIIFTRI, Cert. No..... Ross DK.GB06.V00100

Observed authority requirements: Standard:

EMC 2004/108/EC
 Emission and immunity EN 61326
 LVD 73/23/EEC..... EN 61010-1
 PELV/SELV..... IEC 364-4-41
 and EN 60742
 ATEX 94/9/EC..... EN 50014 and EN 50020
 EN 50281-1-1