

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.

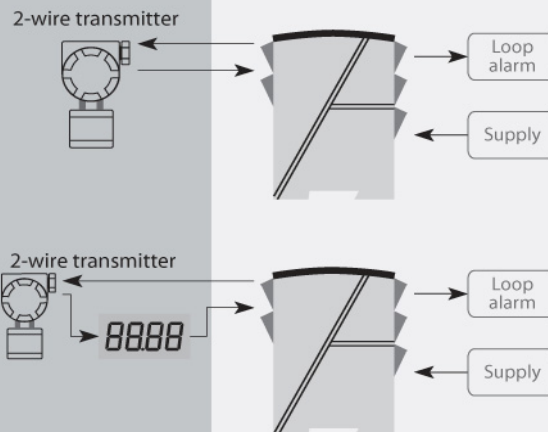
Mounting / installation

- 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 ² 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
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 / working.....	3.75 kVAC / 250 VAC
PELV/SELV.....	IEC 61140
EMC immunity influence.....	< ±0.5%
Extended EMC immunity: NAMUR 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) GD [Ex ia] IIC
EAC Ex.....	RU C-DK.HA65.B.00355/19