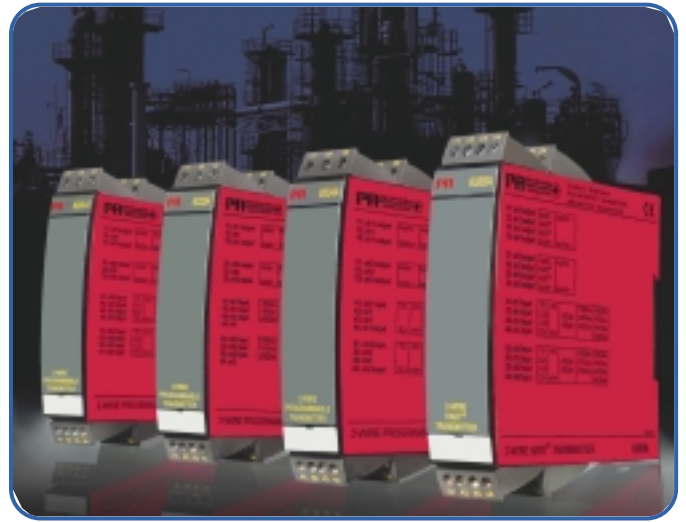


LOOP-POWERED ISOLATOR



- 1-, 2- and 4-channel galvanic isolation
- Slimline channel width of less than 6 mm
- No separate supply
- Low response time
- High noise suppression



Application:

- Galvanic separation of analogue current signals.
- Elimination of ground loops and measurement of floating signals.
- A competitive choice in terms of both price and technology for galvanic isolation of current signals to SCADA systems or PLC equipment.
- Especially useful in applications necessitating an unproblematic transmission of current signals according to NAMUR (sensor error detection).

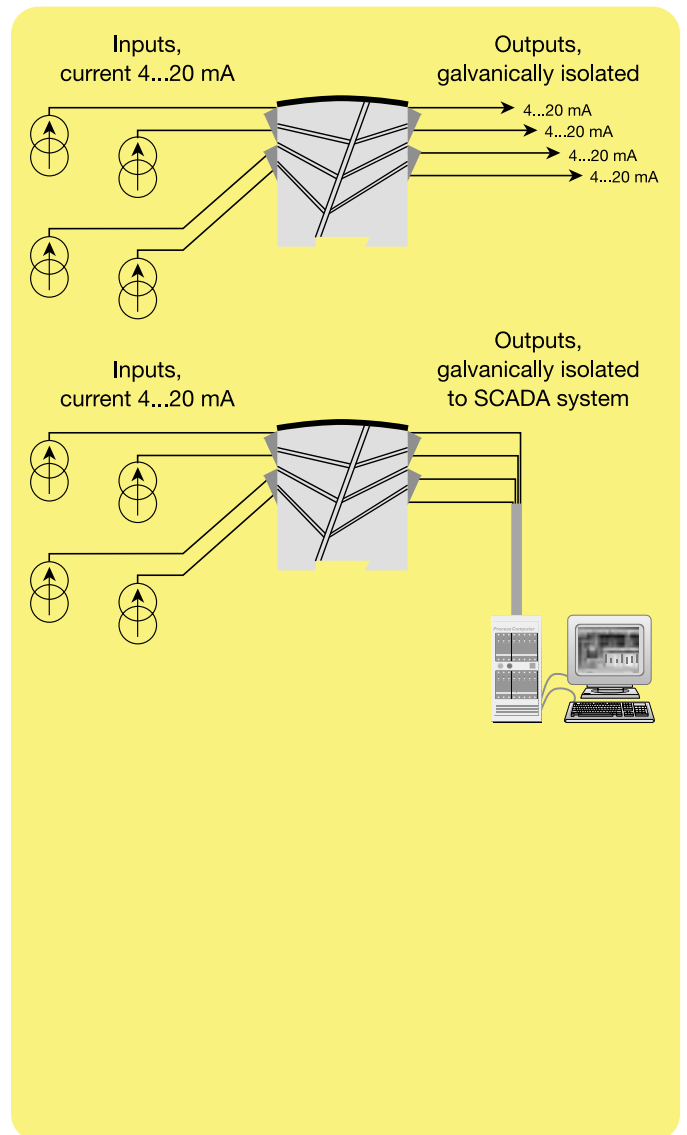
Technical characteristics:

- PR 6185 is powered by the measured signal and loads the loop with max. 1.8 VDC.
- The input is protected against overvoltage and polarity error.
- The drop voltage for each channel can be calculated according to the following expression:

$$V_{drop} = 1.8 + (I_{out} \cdot R_{load})$$
- The output is voltage-limited to 15 VDC.
- Inputs and outputs are floating and galvanically separated.

Mounting / installation:

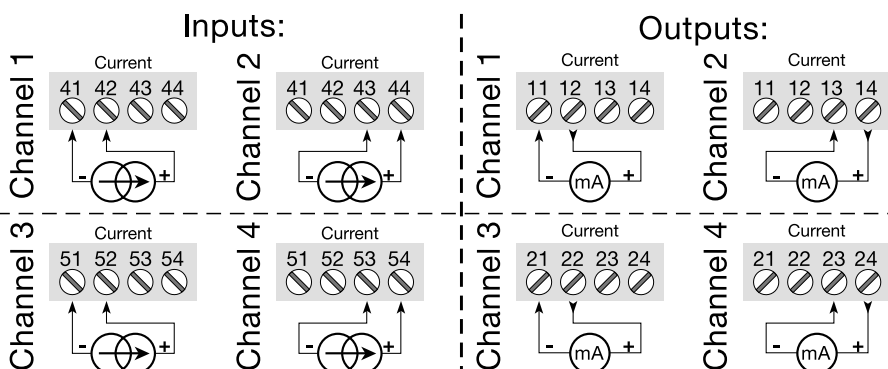
- Mounted vertically or horizontally on a DIN rail. As the modules can be mounted without distance between neighbouring units, up to 168 channels can be mounted per metre.



Order: 6185

Type	Channels
6185	1 channel : A 2 channels : B 4 channels : D

Connections:



Electrical specifications:

Specifications range:

-20 to +60°C

Common specifications:

Internal consumption, max..... 40 mW per channel
Voltage drop, min.< 1.8 VDC
Voltage drop, max.1.8 V + ($I_{out} \cdot R_{load}$)
Isolation voltage, test 2 kVAC
Signal / noise ratio.....> 60 dB (0...100 kHz)
Response time (0...90%, 100...10%)...< 4 ms
Calibration temperature..... 20...28°C
Accuracy, the greater of general and basic values:

General values		
Input type	Absolute accuracy	Temperature coefficient
mA	$\leq \pm 0.1\%$ of span	$\leq \pm 0.01\%$ of span / °C

Basic values		
Input type	Basic accuracy	Temperature coefficient
mA	$\leq \pm 16 \mu A$	$\leq \pm 1.6 \mu A/^{\circ}C$

EMC immunity influence< $\pm 0.5\%$ of span
Wire size (max.)1 x 2.5 mm²
Screw terminal torsion0.5 Nm
Relative humidity< 95% RH (non cond.)
Dimensions (HxWxD).....109 x 23.5 x 104 mm
DIN rail type.....DIN 46277
Tightness (enclosure / terminals).....IP50 / IP20
Weight 1 / 2 / 4 channels.....155 / 180 / 230 g

Current input:

Measurement range 0...23 mA
Min. span..... 1:1
Input resistance at 20 mA $\approx 90 \Omega + R_{load}$

Current output:

Signal range (span)..... 0...23 mA
Min. signal range 1:1
Load (max.)..... 20 mA / 600 Ω / 12 VDC
Load stability.....< 0.03% of span / 100 Ω
Current limit 50 mA
Voltage limit 15 VDC

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

Of span = of the presently selected range