PERFORMANCE MADE SMARTER

R/I transmitter

2202

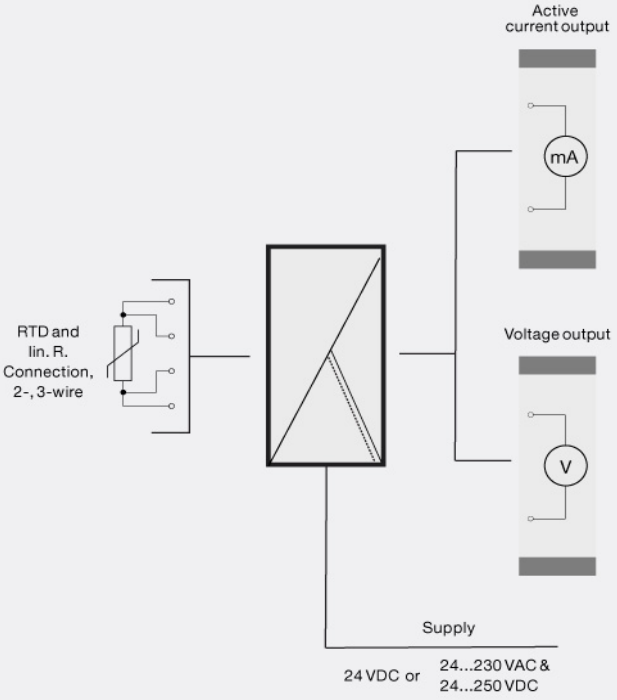
– Input for Pt100, Ni100 or Ohm
– Sensor cable compensation
– Linearized analog output
– 24 VDC or universally supplied
– Individual 0 and 100% adjustment

Advanced features
- 0 and 100% adjustments on the front face can be adjusted individually without interacting.

Application
- Linearized temperature measurement with Pt100 (to IEC 751) or Ni100 (to DIN 43760) sensors.
- Conversion of linear resistance change to standard analog current/voltage signal from for example valves or linear movements with attached potentiometer.
- Signal simulator via externally mounted 10-turn potentiometer, to aid with installation and commissioning plant.
- 3-wire connection cable compensation or 2-wire connection without cable compensation.
- Sensor error detection with Upscale, Downscale or custom set values.
- Reversible inputs with 0% set to maximum value of the desired input range and 100% set to the minimum value of the desired input range.

Technical characteristics
- Analog current and voltage output options include 0/4...20 mA, 0/2...10 VDC and special ranges.
- Galvanic isolation between supply and input / output ground.
- Mounting for a standard 11-pole socket which can be adapted for DIN rail or plate use with PR's 7023 adaptor and 7024 mounting keying.

Connections



Order:

Type	Input	Output	Supply	Range
2202	Pt100 : L	Spec. : 0	24 VDC : D	Acc. to order
	Ni100 : N	0...20 mA : 1	24...230 VAC & : P	
	Lin. R : R	4...20 mA : 2	24...250 VDC	
	Spec. : X	0...5 mA : 3		
		0...1 V : 4		
		0.2...1 V : 5		
		0...10 V : 6		
		2...10 V : 7		

Environmental Conditions

Specifications range..... -20°C to +60°C
Calibration temperature..... 20...28°C
Relative humidity..... < 95% RH (non-cond.)
Protection degree..... IP50

Mechanical specifications

Dimensions (HxWxD)..... 80.5 x 35.5 x 84.5 mm (D is without pins)
Weight DC / universally supplied..... 100 g / 150 g

Common specifications

Supply voltage..... 19.2...28.8 VDC
Supply voltage, universal..... 21.6...253 VAC, 50...60 Hz or 19.2...300 VDC
Internal consumption..... ≤ 0.9 W (2202 _ _ D)
Internal consumption..... ≤ 1.4 W (2202 _ _ P)
Isolation voltage, test / working..... 3.75 kVAC / 250 VAC
Accuracy..... Better than 0.1% of selected range
Signal / noise ratio..... Min. 60 dB
Signal dynamics, input..... 17 bit
Response time (0...90%, 100...10%)..... < 165 ms
Signal dynamics, output..... 16 bit
Temperature coefficient..... ±0.01°C/°Camb. (span < 100°C)
Temperature coefficient..... ±0.01% of span/°Camb. (span > 100°C)
Linearity error..... < 0.1% of span
EMC immunity influence..... < ±0.5%

Input specifications

Max. offset..... 50% of max. value
Adjustment acc. to order..... ±2.5...±25% of span
RTD input..... Pt100, Ni100, lin. R
Cable resistance per wire (max.), RTD..... 10 Ω
Sensor current, RTD..... > 0.2 mA, < 0.4 mA

Output specifications

Max. offset..... 50% of max. value
Current output: Signal range..... 0...20 mA
Min. signal range..... 5 mA
Load (max.)..... 20 mA/600 Ω/12 VDC
Load stability, current output..... ≤0.01% of span / 100 Ω
Sensor error indication, current output..... Upscale / Downscale
Current limit..... ≤ 28 mA
Voltage output: signal range..... 0...10 VDC
Voltage output, min. signal range..... 250 mV
*of span..... = of the presently selected range

Approvals

EMC..... EN 61326-1
EAC TR-CU 020/2011..... EN 61326-1