

Isolation amplifier

2204



- Input galvanically separated from output and supply
- Current or voltage input
- Signal conversion
- Current and voltage output
- 24 VDC supply or universally supplied
- Applicable in PELV/SELV circuits



Advanced features

- Factory-calibrated measurement ranges for input and outputs in the 2204 can be selected by the internal DIP-switches without the need for recalibration.

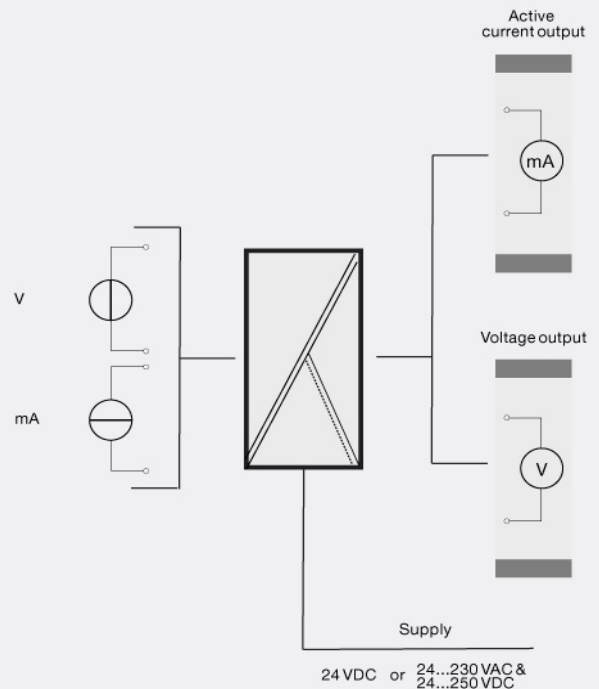
Application

- Signal isolator for analog current / voltage signals.
- 1 : 1 or signal conversion of analog current /voltage signals within the ranges: 0...10 VDC or 0...50 mA on the input and 0...20 mA and 0...10 VDC in fixed ranges on the output.
- Analog signal conditioning with microprocessor based gain and zero offset giving a response time of less than 25 ms.

Technical characteristics

- Universally supplied units have a 3-port galvanic separation between input, supply, and output.
- 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
2204	0...20 mA : A	Special : 0	24 VDC : D
	4...20 mA : B	0...20 mA : 1	24...230 VAC & : P
	0...1 V : C	4...20 mA : 2	24...250 VDC
	0.2...1 V : D	0...5 mA : 3	
	0...10 V : E	0...1 V : 4	
	2...10 V : F	0.2...1 V : 5	
	Special : X	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..... 110 g / 160 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..... ≤ 1.3 W (2204-D)
 Internal consumption..... ≤ 1.8 W (2204-P)
 Isolation voltage, test / working..... 3.75 kVAC / 250 VAC
 Signal / noise ratio..... Min. 60 dB
 Response time (0...90%)..... < 25 ms
 Temperature coefficient..... < ±0.01% of span / °C
 Linearity error..... < 0.1% of span
 Effect of supply voltage change..... < ±0.002% of span / %V
 EMC immunity influence..... < ±0.5% of span

Input specifications

Max. offset..... 20% of max. value
 Current input: Measurement range..... 0...50 mADC
 Min. measurement range (span), current input..... 4 mA
 Input resistance, current input..... Nom. 50 Ω
 Voltage input: Measurement range..... 0...10 VDC
 Min. measurement range (span), voltage input..... 0.2 VDC
 Input resistance, voltage input..... 10 MΩ

Output specifications

Max. offset..... 20% of max. value
 Current output: Signal range..... 0...5 mA / 0...20 mA
 Min. signal range..... 4 mA / 16 mA
 Load (max.)..... 20 mA/600 Ω/12 VDC
 Load stability, current output..... ≤0.01% of span/100 Ω
 Current limit..... 23...28 mA
 *of span..... = of the presently selected range

Approvals

EMC..... EN 61326-1
 LVD..... EN 61010-1
 PELV/SELV..... IEC 364-4-41 and EN 60742
 GOST R..... Yes