

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.

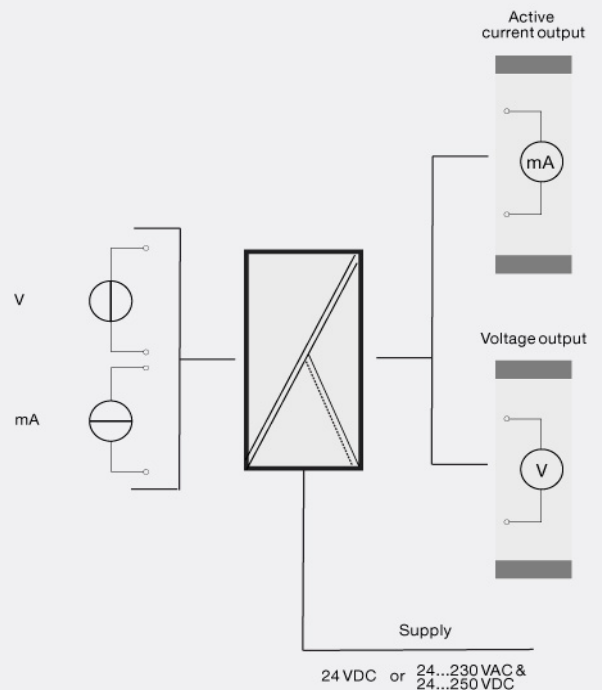
Application

- 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
Accuracy.....	Better than 0.1% of selected range
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 2006/95/EC.....	EN 61010-1
PELV/SELV.....	IEC 364-4-41 and EN 60742
EAC TR-CU 020/2011.....	EN 61326-1