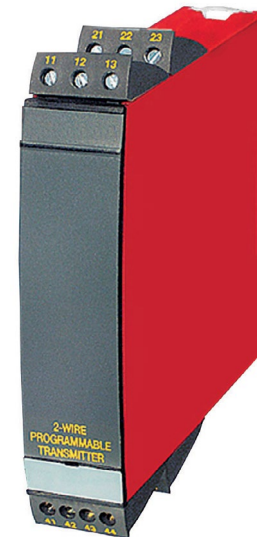


# 2-Wire Programmable Transmitter

Model 6334A

- TC or mV Input
- Extremely High Measurement Accuracy
- 1.5 kVAC Galvanic Isolation
- Programmable Sensor Error Value
- 1- or 2-Channel Version



## Application:

- Linearized temperature measurement with TC sensor.
- Amplification of bipolar mV signals to a 4...20 mA signal, optionally linearized according to a defined linearization function.

## Technical Characteristics:

- Within seconds the user can program a 6334A to measure temperatures within all standard TC ranges.
- Cold junction compensation (CJC) via a built in temperature sensor.
- A limit can be programmed on the output signal.
- Continuous check of vital stored data.

## Mounting/Installation:

- Mounted vertically or horizontally on a DIN rail. Using the 2-channel version up to 84 channels per meter can be mounted.

TC to 4...20mA



2-wire installation in control room



Voltage to 4...20 mA



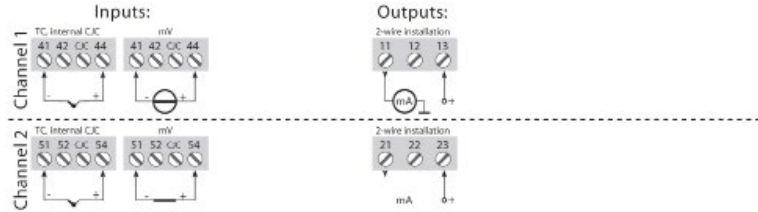
2-wire installation in control room



Ideas. Solutions. Success.

# Specifications

**Order: 6334A2A (Single Channel)  
6334A2B (Dual Channel)**



## Electrical Specifications

### Specifications Range:

-40°C to +60°C

### Common Specifications:

Supply voltage, DC.....7.2...35 VDC  
 Internal consumption .....0.17...0.8 W  
 Voltage drop.....7.2 VDC  
 Isolation voltage, test / operation .....1.5 kVAC / 50 VAC  
 Isolation voltage, ch. 1 / ch. 2.....3.75 kVAC  
 Warm-up time.....5 min.  
 Communications interface .....Loop Link  
 Signal/noise ratio .....Min. 60 dB  
 Response time (programmable).....1...60 s  
 EEPROM error check .....< 3.5 s  
 Signal dynamics, input.....18 bit  
 Signal dynamics, output.....16 bit  
 Calibration temperature.....20...28°C

Accuracy, the greater of general and basic values:

General Values		
Input Type	Absolute Accuracy	Temperature Coefficient
All	≤ ±0.05% of span	≤ ±0.01% of span / °C

Basic Values		
Input Type	Basic Accuracy	Temperature Coefficient
Volt	≤ ±10 μV	≤ ±1 μV/°C
TC Type: E, J, K, L, N, T, U	≤ ±1°C	≤ ±0.05°C / °C
TC Type: B, R, S, W3, W5, LR	≤ ±2°C	≤ ±0.2°C / °C

EMC immunity influence	< ±0.5% of span
Extended EMC immunity: NAMUR NE 21, A criterion, burst	< ±1% of span

Effect of supply voltage variation .....< 0.005% of span / VDC  
 Max. wire size.....1 x 1.5 mm<sup>2</sup> (16 AWG) stranded wire  
 Humidity.....< 95% RH (non-cond.)  
 Dimensions (H x W x D).....109 x 23.5 x 104 mm  
 Protection degree.....IP20  
 Weight (1 / 2 channels).....145 / 185 g

### Electrical Specifications, Input:

Max. offset .....50% of selected max. value

### TC Input:

Type	Min. Temperature	Max. Temperature	Min. Span	Standard
B	+400°C	+1820°C	200°C	IEC584
E	-100°C	+1000°C	50°C	IEC584
J	-100°C	+1200°C	50°C	IEC584
K	-180°C	+1372°C	50°C	IEC584
L	-100°C	+900°C	50°C	DIN 43710
N	-180°C	+1300°C	100°C	IEC584
R	-50°C	+1760°C	200°C	IEC584
S	-50°C	+1760°C	200°C	IEC584
T	-200°C	+400°C	50°C	IEC584
U	-200°C	+600°C	75°C	DIN 43710
W3	0°C	+2300°C	200°C	ASTM E988-90
W5	0°C	+2300°C	200°C	ASTM E988-90
LR	-200°C	+800°C	50°C	GOST 3044-84

Cold junction compensation.....< ±1.0 °C

### Voltage Input:

Measurement range.....-12...150 mV  
 Min. span .....5 mV  
 Input resistance.....10 MΩ

### Current Output:

Signal range .....4...20 mA  
 Min. signal range.....16 mA  
 Updating time .....440 ms  
 Load resistance.....≤ (Vsupply - 7.2) / 0.023[Ω]

### Sensor Error Detection:

Programmable .....3.5...23 mA  
 NAMUR NE43 Upscale.....23 mA  
 NAMUR NE43 Downscale.....3.5 mA

### Observed Authority Requirements: Standard:

EMC 2004/108/EC .....EN 61326-1

**Of Span** = Of the presently selected range

**Loop Link** = PC compatible programming software

\*The transmitter is manufactured by PR electronics. All approvals listed are recognized under the PR name.

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