

Programmable LED Indicator

Model 5714

- 4-Digit, 14-Segment LED Indicator
- Input for RTD, TC, mA, V, and Potentiometer
- Universal Supply Voltage
- Front Key Programmable
- Available with Optional 2 Relays and Analog Output



Application:

- Display for digital readout of temperature, current, voltage or 3-wire potentiometer signals.
- Process control with 2 potential-free relays and / or analog output.

Technical Characteristics:

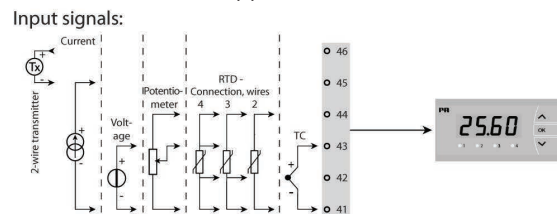
- 4-digit LED indicator with 13.8 mm 14- segment characters. Max. display readout -1999...9999 with programmable decimal point, relay ON/OFF indication.
- Operational parameters can be adjusted via the front panel keypad.
- Help text in eight languages can be selected via front panel.
- Preview 5714 is available fully-configured from the factory or can be field programmed.
- In versions with relay outputs the user can minimize the installation test time by activating/deactivating each relay independently of the input signal.

Mounting/Installation:

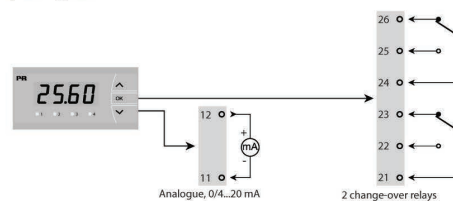
- Front Panel Mount.
- Rubber Gasket (mounted between panel cutout hole and display front panel provides IP65 (NEMA4) rating).
- Optional splash proof cover available for additional protection in extremely wet environments.

Model No.	Optional Features
5714A	Base Model
5714B	Two (2) Relays
5714C	Analog Output
5714D	Analog Output & Two (2) Relays

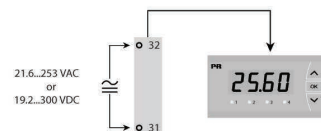
Applications:



Output signals:



Supply:



Conax
TECHNOLOGIES

Ideas. Solutions. Success.

+1 716 684 4500

+1 800 223 2389

conax@conaxtechnologies.com

Specifications

Order: 5714 A,B,C,D

Electrical Specifications

Specifications Range:

- 20°C to +60°C

Common Specifications:

- Supply voltage, universal.....21.6...253 VAC, 50...60 Hz or 19.2...300 VDC

Consumption:

Type	Internal Consumption	Max. Consumption
5714A	2.2 W	2.5 W
5714B	2.7 W	3.0 W
5714C	2.7 W	3.0 W
5714D	3.2 W	3.5 W

Isolation voltage test/operation.....2.3 kVAC / 250 VAC
 Signal / noise ratio.....Min. 60 dB (0...100 kHz)
 Response time (0...90 %, 100...10 %), programmable:
 Temperature input.....1..60 s
 Current / voltage input0.4...60 s
 Calibration temperature.....20...28°C
 Accuracy, the greater of general and basic values:

General Values		
Input Type	Absolute Accuracy	Temperature Coefficient
All	≤ ±0.1% of reading	≤ ±0.01% of reading / °C

Basic Values		
Input Type	Basic Accuracy	Temperature Coefficient
mA	≤ ±4 µA	≤ ± 0.4 µA/°C
Volt	≤ ±20 µV	≤ ±2 µV/°C
Potentiometer	≤ ±0.1 Ω	≤ ± 0.01 Ω/°C
Pt100	≤ ±0.2°C	≤ ±0.02°C/°C
Ni100	≤ ±0.3°C	≤ ±0.03°C/°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 reading

Auxiliary supplies:
 2 wire supply (pin 46...45).....25...15 VDC / 0...20 mA
 Wire size, pin 41-46 (max.).....1 x 1.5 mm² (16 AWG) stranded wire
 Wire size, others (max.).....1 x 2.5 mm² (12 AWG) stranded wire
 Relative Humidity..... < 95% RH (non-cond.)
 Dimensions (HxWxD).....48 x 96 x 120 mm
 Cutout dimensions44.5 x 91.5 mm
 Tightness (mounted in panel).....IP65
 Weight.....230 g

RTD and Potentiometer Input:

RTD Type	Min. Value	Max. Value	Standard
Pt100	-200°C	+850°C	IEC 60751
Ni100	-60°C	+250°C	DIN 43760
Potentiometer	10 Ω	100 kΩ	-----

Input for RTD types:
 Pt10, Pt20, Pt50, Pt100, Pt200, Pt250, Pt300, Pt400, Pt500, Pt1000
 Ni50, Ni100, Ni200, Ni1000
 Cable resistance pr. wire, RTD (max.).....50 Ω
 Sensor current, RTDNom. 0.2 mA
 Effect of sensor cable resistance
 (3- /4- wire), RTD..... < 0.002 Ω / Ω
 Sensor error detection, RTD Yes
 Short circuit detection, RTD..... < 15 Ω

TC Input:

Type	Min. Value	Max. Value	Standard
B	+400°C	+1820°C	IEC 60584-1
E	-100°C	+1000°C	IEC 60584-1
J	-100°C	+1200°C	IEC 60584-1
K	-180°C	+1372°C	IEC 60584-1
L	-200°C	+900°C	DIN 43710
N	-180°C	+1300°C	IEC 60584-1
R	-50°C	+1760°C	IEC 60584-1
S	-50°C	+1760°C	IEC 60584-1
T	-200°C	+400°C	IEC 60584-1
U	-200°C	+600°C	DIN 43710
W3	0°C	+2300°C	ASTM E988-90
W5	0°C	+2300°C	ASTM E988-90
LR	-200°C	+800°C	GOST 3044-84

Cold junction compensation(CJC)..... < ±1.0°C
 via internally mounted sensor..... < ± 1.0 °C
 Sensor error detection, all TC types..... Yes
 Sensor error current:
 when detectingNom. 2 µA
 else0 µA

Current Input:

Measurement range.....-1...25 mA
 Program measurement ranges.....0...20 and 4...20mA
 Input resistance.....Nom. 20 Ω + PTC 25 Ω
 Sensor error detection:
 loop break 4...20 mA.....Yes

Voltage Input:

Measure range.....-20 mV...12 VDC
 Program measurement ranges.....0...1 / 0,2...1/ 0...10 / 2...10 VDC
 Input resistance.....Nom. 10 MΩ

Outputs:

Display:

Display readout.....-1999...9999 (4 digits)
 Decimal pointProgrammable
 Digit height.....13.8 mm
 Display updating2.2 times / s
 Input outside input range is
 indicated by.....Explanatory text

Current Output:

Signal range (span).....0...20 mA
 Programmable signal ranges.....0...20 / 4...20 / 20...0 / 20...4 mA
 Load (max.).....20 mA / 800 Ω / 16 VDC
 Load stability≤ 0.01% of span / 100 Ω
 Sensor error detection0 / 3.5 / 23 mA / none
 NAMUR NE 43 Upscale.....23 mA
 NAMUR NE 43 Downscale3.5 mA
 Output limitation:
 on 4...20 and 20...4 mA signals.....3.8...20.5 mA
 on 0...20 and 20...0 mA signals.....0...20.5 mA
 Current limit≤ 28 mA

Relay Outputs:

Relay function.....Setpoint
 Hysteresis, in % / display counts.....0.1...25% / 1...2999
 On and Off delay0...3600 s
 Sensor error detectionMake / Break / Hold
 Max. voltage.....250 VRMS
 Max. current2 A / AC
 Max. AC power500 VA
 Max. current at 24 VDC.....1 A

Marine Approval*:

Det Norske Veritas, Ships & Offshore.....Stand. for Certific. No. 2.4

GOST R Approval*.....Certificate available upon request.

Observed Authority Requirements: Standard:

EMC 2004/108/EC
 Emission and immunity.....EN 61326-1
 LVD 73/23/EEC.....EN 61010-1
 UL, Standard for SafetyUL 508

Of Span = Of the presently selected range

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

2300 Walden Avenue, Buffalo, New York 14225

+1 800 223 2389 (P) | +1 716 684 7433 (F)

conax@conaxtechnologies.com

Bulletin 6082, Rev A ©2017 Conax Technologies 3/17



conaxtechnologies.com

