

## Programmable LED indicator

### 5714



- 4-digit 14-segment LED display
- Input for mA, V, Ohm, RTD, TC and potentiometer
- 2 relays and analog output
- Universal supply
- Front key programmable



#### Application

- Display for digital readout of current / voltage / resistance / temperature or potentiometer signals.
- Process control with 2 potential-free relays and / or analog output.
- For local readout in extremely wet atmospheres with a specially designed splash-proof cover.

#### Technical characteristics

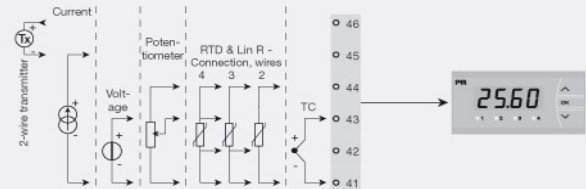
- 4-digit LED indicator with 13.8 mm 14-segment characters. Max. display readout -1999...9999 with programmable decimal point and relay ON / OFF indication.
- All standard operational parameters can be adjusted to any application by way of the front function keys.
- Help texts in eight languages can be selected via a menu item.
- PR5714 is available fully-configured according to specifications ready for process control and visualization.
- 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

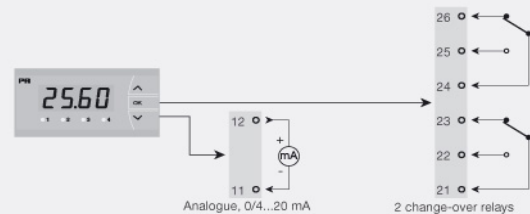
- To be mounted in panel front. The included rubber packing must be mounted between the panel cutout hole and the display front to obtain a protection degree of IP65 (type 4X). For extra protection in extreme environments, PR5714 can be delivered with a specially designed splash-proof cover as accessory.

#### Applications

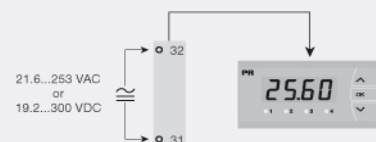
##### Input signals:



##### Output signals:



##### Supply:



Order:

Type	Version
5714	Standard : A
	2 relays : B
	Analog output : C
	Analog output and 2 relays : D

**Environmental Conditions**

Operating temperature..... -20°C to +60°C  
 Calibration temperature..... 20...28°C  
 Relative humidity..... < 95% RH (non-cond.)  
 Protection degree (mounted in panel)..... IP65 / Type 4X, UL50E

**Mechanical specifications**

Dimensions (HxWxD)..... 48 x 96 x 120 mm  
 Cut out dimensions..... 44.5 x 91.5 mm  
 Weight approx..... 230 g  
 Wire size, pin 41-46 (max.)..... 1 x 1.5 mm<sup>2</sup> stranded wire  
 Wire size, others, max..... 1 x 2.5 mm<sup>2</sup> stranded wire  
 Vibration..... IEC 60068-2-6  
 2...13.2 Hz..... ±1 mm  
 13.2...100 Hz..... ±0.7 g

**Common specifications**

**Supply**  
 Supply voltage, universal..... 21.6...253 VAC, 50...60 Hz or 19.2...300 VDC  
 Max. required power..... 2.5 W (5714A)  
 Max. required power..... 3.0 W (5714B/C)  
 Max. required power..... 3.5 W (5714D)  
 Internal power dissipation..... 2.2 W (5714A)  
 Internal power dissipation..... 2.7 W (5714B/C)  
 Internal power dissipation..... 3.2 W (5714D)

**Isolation voltage**  
 Isolation voltage, test / working..... 2.3 kVAC / 250 VAC

**Response time**  
 Temperature input, programmable (0...90%, 100...10%)..... 1...60 s  
 mA / V input (programmable)..... 0.4...60 s

**Auxiliary supplies**  
 2-wire supply (pin 46...45)..... 25...15 VDC / 0...20 mA  
 Signal / noise ratio..... Min. 60 dB (0...100 kHz)  
 Accuracy..... Better than 0.1% of sel. range  
 EMC immunity influence..... < ±0.5% of readout

**Input specifications**

**RTD input**  
 RTD type..... Pt10/20/50/100/200/250; Pt300/400/500/1000; Ni50/100/120/1000; Cu10/20/50/100  
 Cable resistance per wire..... 50 Ω (max.)  
 Sensor current..... Nom. 0.2 mA  
 Effect of sensor cable resistance (3-/4-wire)..... < 0.002 Ω / Ω

**Linear resistance input**  
 Linear resistance min...max..... 0 Ω...10000 Ω

**Potentiometer input**  
 Potentiometer min...max..... 10 Ω...100 kΩ

**TC input**  
 Thermocouple type..... B, E, J, K, L, N, R, S, T, U, W3, W5, LR  
 CJC via int. mounted sensor..... ±(2.0°C + 0.4°C \* Δt)  
 Δt =..... Internal temp.-ambient temp.  
 Sensor error detection..... Yes

Sensor error current: When detecting / else..... Nom. 2 µA / 0 µA

**Current input**  
 Measurement range..... 0...20 mA  
 Programmable measurement ranges..... 0...20 and 4...20 mA  
 Input resistance..... Nom. 20 Ω + PTC 25 Ω  
 Sensor error detection..... Loop break 4...20 mA

**Voltage input**  
 Measurement range..... 0...12 VDC  
 Programmable measurement ranges..... 0/0.2...1; 0/2...10 VDC  
 Input resistance..... Nom. 10 MΩ

**Output specifications**

**Display**  
 Display readout..... -1999...9999 (4 digits)  
 Decimal point..... Programmable  
 Digit height..... 13.8 mm  
 Display updating..... 2.2 times / s  
 Input outside input range is indicated by..... Explanatory text

**Current output**  
 Signal range..... 0...20 mA  
 Programmable signal ranges..... 0...20/4...20/20...0/20...4 mA  
 Load (@ current output)..... ≤ 800 Ω  
 Load stability..... ≤ 0.01% of span / 100 Ω  
 Sensor error indication..... 0 / 3.5 / 23 mA / none  
 NAMUR NE43 Upscale/Downscale..... 23 mA / 3.5 mA  
 Output limitation, on 4...20 and 20...4 mA signals..... 3.8...20.5 mA  
 Output limitation, on 0...20 and 20...0 mA signals..... 0...20.5 mA  
 Current limit..... ≤ 28 mA

**Relay output**  
 Relay functions..... Setpoint  
 Hysteresis..... 0...100%  
 ON and OFF delay..... 0...3600 s  
 Sensor error reaction..... Break / Make / Hold  
 Max. voltage..... 250 VRMS  
 Max. current..... 2 AAC  
 Max. AC power..... 500 VA  
 Max. load at 24 VDC..... 1 A

**Observed authority requirements**

EMC..... 2014/30/EU  
 LVD..... 2014/35/EU  
 EAC..... TR-CU 020/2011

**Approvals**

DNV-GL Marine..... Stand. f. Certific. No. 2.4  
 EU RO Mutual Recognition Type Approval... MRA000000Z  
 UL..... UL 508 / C22.2 no. 14

