PROGRAMMABLE LED INDICATOR

- **4-digit, 14-segment LED indicator**
- **Input for mA, V, RTD, TC and potmeter**
- **2 relays and analogue output**
- **Universal supply voltage**
- **Front key programmable**

Application:

- Display for digital readout of current, voltage, temperature or 3-wire potentiometer signals.
- Process control with 2 potential-free relays and / or analogue output.
- For local readout in extremely wet atmospheres with a specially designed splash-proof cover.

Technical characteristics:

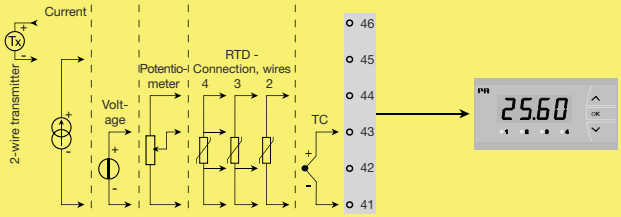
- 4-digit LED indicator with 13.8 mm 14-segment characters. Max. display readout -1999...9999 with programmable decimal point, relay ON / OFF-indication.
- All operational parameters can be adjusted to any application by use of the front keys.
- Help texts in eight languages can be selected via a menu item.
- PReview 5714 is available fully-configured according to specifications ready for process control and visualisation.
- In versions with relay outputs the user can minimise the installation test time by activating / deactivating each relay independently of the input signal.

Mounting:

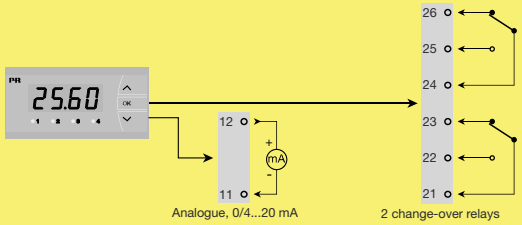
- To be mounted in front panel. The included rubber packing must be mounted between the panel cutout hole and the display front to obtain IP65 (NEMA 4) tightness. For extra protection in extreme environments, PReview 5714 can be delivered with a specially designed splash-proof cover as accessory.

Applications

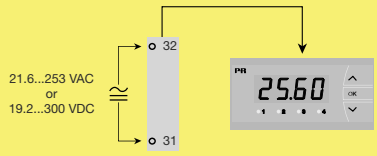
Input signals:



Output signals:



Supply:



PR electronics
DS CERTIFIED QUALITY SYSTEM AND ENVIRONMENTAL MANAGEMENT SYSTEM DS/EN ISO 9001 DS/EN ISO 14001
Lerbakken 10 · DK-8410 Rønde
Tlf. 8637 2677 · Fax 8637 3085
www.prelectronics.dk

Order: 5714

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

NB! Please order the splash-proof cover seperately. Order no. 8335.

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 input..... 0.4...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 stranded wire
Wire size, others (max.) ..... 1 x 2.5 mm² stranded wire
Relative humidity ..... < 95% RH (non cond.)
Dimensions (HxWxD)..... 48 x 96 x 120 mm
Cutout dimensions ..... 44.5 x 91.5 mm
Tightness (mounted in panel) IP65
Weight ..... 230 g

RTD and potentiometer input:

Input type	Min. value	Max. value	Standard
Pt100 Ni100 Potentiometer	-200°C -60°C 10 Ω	+850°C +250°C 100 kΩ	IEC60751 DIN 43760 -

Input for RTD types:
Pt10, Pt20, Pt50, Pt100, Pt200, Pt250,
Pt300, Pt400, Pt500, Pt1000
Ni50, Ni100, Ni120, Ni1000
Cable resistance pr. wire, RTD (max.) 50 Ω
Sensor current, RTD..... Nom. 0.2 mA
Effect of sensor cable resistance
(3- / 4-wire), RTD ..... < 0.002 Ω / Ω
Sensor error detection, RTD..... Yes
Short curcuit 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)
via internally mounted sensor..... < ±1.0 °C
Sensor error detection, all TC types.. Yes
Sensor error current:
when detecting..... Nom. 2 µA
else ..... 0 µA

Current input:
Measurement range ..... -1...25 mA
Program. measurement ranges..... 0...20 and 4...20 mA
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 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 (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 detection..... 0 / 3.5 / 23 mA / none
NAMUR NE 43 Upscale ..... 23 mA
NAMUR NE 43 Downscale..... 3,5 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 delay ..... 0...3600 s
Sensor error detection..... Make / Break / Hold
Max. voltage..... 250 VRMS
Max. current ..... 2 A / AC
Max. AC power..... 500 VA
Max. current at 24 VDC..... 1 A

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

GOST R approval:
VNIIM, Cert. No. ..... Ross DK.ME48.V01899

Observed authority requirements: **Standard:**
EMC 2004/108/EC
Emission and immunity..... EN 61326
LVD 73/23/EEC..... EN 61010-1
UL, Standard for Safety..... UL 508