PROGRAMMABLE LED INDICATOR

- **4-digit 14-segment LED display**
- **Input for mA, V, potm., RTD and TC**
- **4 relays and analogue output**
- **Universal supply**
- **Programmable via front keys and PC**

Application:

- Display for digitial readout of current / voltage / temperature or 3-wire potentiometer signals.
- Process control with 4 pairs of potential-free change-over relays and analogue output.
- For tank level control, with the possibility of customer linearisation ensuring correct level measurement and control in non-linear tanks.

Technical characteristics:

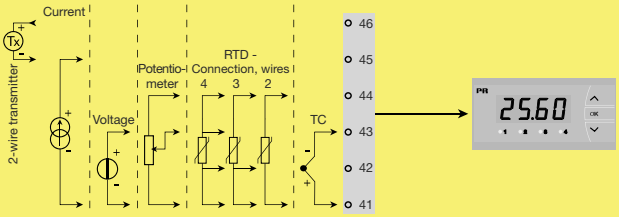
- 4-digit LED indicator with 13.8 mm 14-segment characters. Max. display readout -1999...9999 with programmable decimal point and relay ON / OFF indication.
- All standard operational parameters can be adjusted to any application by way of the front function keys. When programming is carried out by way of a PC and the configuration program PReset, additional configuration options are available, such as customer-defined linearisation a special input signals.
- Help texts in eight languages can be selected via a menu item.
- A menu item allows the user to minimise the installation test time for the relay outputs by activating/deactivating each relay independently of the input signal.

Mounting / installation:

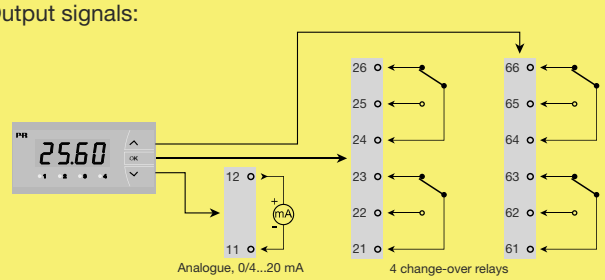
- To be mounted in panel front. The included rubber packing must be mounted between the panel cutout hole and the display front to obtain IP65 (NEMA 4) tightness. For extra protection in extreme environments, PReview 5715 can be delivered with a specially designed splash-proof cover as accessory.

Applications

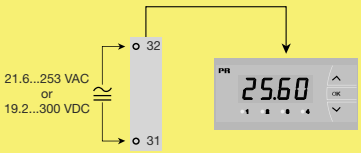
Input signals:



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: 5715

Type	Version
5715	4 relays . . . . . .: B Analogue output and 4 relays : D

NB! Please order the splash-proof cover separately!
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
5715B	3.0 W	3.3 W
5715D	3.5 W	3.8 W

Isolation voltage, test / operation..... 2.3 kVAC / 250 VAC
Signal / noise ratio..... Min. 60 dB (0...100 kHz)
Communications interface ..... USB Loop Link
Response time (0...90%, 100...10%):
Temperature input..... < 1 s
Current / voltage input..... < 400 ms
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 readout	≤ ±0.01% of readout / °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 readout

Auxiliary supply:
2-wire supply ..... 25...16 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
Screw terminal torque ..... 0.5 Nm
Relative humidity ..... < 95% RH (non cond.)
Dimensions (HxBxD)..... 48 x 96 x 120 mm
Cutout dimensions ..... 44.5 x 91.5 mm
Tightness (mounted in panel) IP65
Weight ..... 260 g

RTD and potentiometer input:

Input type	Min. value	Max. value	Standard
Pt100	-200°C	+850°C	IEC60751
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, Ni120, Ni1000
Cable resistance per 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 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)
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
Programm. 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:
Measurement range ..... -20 mV...12 VDC
Programm. measurement ranges..... 0...1, 0.2...1, 0...10 and 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 and 20...4 mA
Load (max.)..... 20 mA / 800 Ω / 16 VDC
Load stability ..... ≤ 0.01% of span / 100 Ω
Sensor error detection..... 23 / 0 / 3.5 mA / none
NAMUR NE 43 Up- / Downscale..... 23 mA / 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

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