

RTD Signal Conditioners

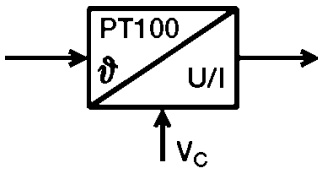
WAVEANALOG RTD

- 2-, 3- and 4-wire technology
- Configurable temperature range -200°C...+800°C
- Configurable output current range 0...20 mA/4...20 mA
- Cross-connectable voltage supply via cross-connectors

Approvals:

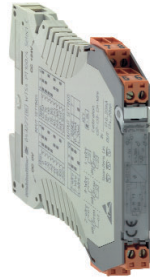


Block diagram



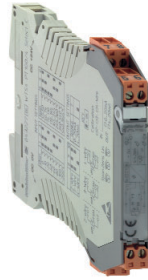
PT100/4

0(4)...20 mA



PT100/4

0...10 V

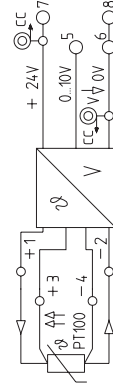
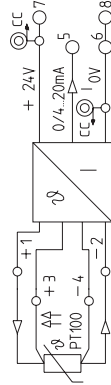


Switch position/setting options

Tmin	1	2	3	Span			4	5	6
0°C	■	■	■	40...50°C			■	■	■
-10°C	■	■		50...75°C			■	■	
-20°C	■		■	75...110°C			■		■
-40°C	■			110...165°C			■		
-60°C		■	■	165...245°C				■	■
-80°C		■		245...360°C				■	
-100°C			■	360...540°C					■
-200°C				540...800°C					

Output 1)		PT 100		
Range	7	8	9	10
0...20 mA			■	■
4...20 mA	■		■	■
			■	■
				■

1) only modules with current output ■ = on
□ = off



Ordering data

Screw connection
Tension clamp connection
Input/output

Technical data**

Input signal
Temperature range
Supply current
Conductor resistance

Output signal
Load resistance
Accuracy at $T_u=23^\circ\text{C}$
100 K \leq measurement range < 600 K
Measurement range \leq 100 K
Measurement range \geq 600 K
Temperature coefficient
Measurement range \geq 200 K

100 K \leq measurement range < 200 K
40 K \leq measurement range < 100 K

General

Voltage supply
Power consumption
Current carrying capacity of cross-connection
Operating temperature
Storage temperature
Standards/specifications
EMC standards

Dimensions W/L/H mm (in.)
Approvals
Dimensions and accessories see

Type Part No.

WTS4 PT100/4 C **8432270000***
WTZ4 PT100/4 C **8432280000***
PT100/4/0(4)...20 mA

PT100/4-wire
-200°C...+800°C
1.45 mA
 \leq 50 Ω (3- & 4-wire)
0(4)...20 mA
 \leq 500 Ω

\pm 0.1% of measurement range
 \pm 0.1 K
 \pm 0.2% of measurement range

\leq 200 ppm/°C
(typ. 80 ppm/°C)
 \leq 225 ppm/°C
(typ. 90 ppm/°C)
 \leq 450 ppm/°C
(typ. 180 ppm/°C)

24 VDC \pm 20%
(19.2...28.8 VDC)
< 48 mA at $I_{out} = 20$ mA
 \leq 2 A
0°C...+55°C
-20°C...+85°C
EN 50178, IEC 751
EN 50081, EN 50082,
EN 55011
12.5/92.4/112.5 (.49/3.64/4.43)
CE, UL, CSA
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Type Part No.

WTS4 PT100/4 V **8432240000***
WTZ4 PT100/4 V **8432250000***
PT100/4/0...10 V

PT100/4-wire
-200°C...+800°C
1.45 mA
 \leq 50 Ω (3- & 4-wire)
0...10 V
 \geq 1 k Ω

\pm 0.1% of measurement range
 \pm 0.1 K
 \pm 0.2% of measurement range

\leq 200 ppm/°C
(typ. 80 ppm/°C)
 \leq 225 ppm/°C
(typ. 90 ppm/°C)
 \leq 450 ppm/°C
(typ. 180 ppm/°C)

24 VDC \pm 20%
(19.2...28.8 VDC)
< 38 mA at $I_{out} = 10$ mA
 \leq 2 A
0°C...+55°C
-20°C...+85°C
EN 50178, IEC 751
EN 50081, EN 50082,
EN 55011
12.5/92.4/112.5 (.49/3.64/4.43)
CE, UL, CSA
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* without balancing
** $T_u = 23^\circ\text{C}$ single module