

RTD Signal Conditioners

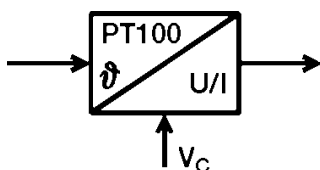
WAVEANALOG RTD

- 2-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:

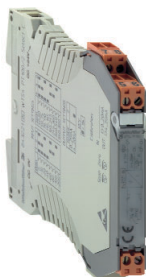


Block diagram



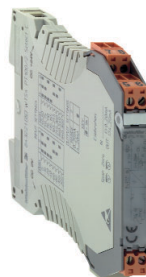
PT100/2

0(4)...20 mA



PT100/2

0...10 V



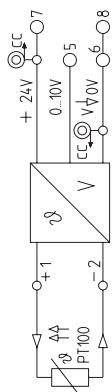
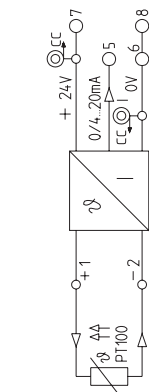
Switch position/setting options

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⁾	
Range	7
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 $T_u=23^\circ\text{C}$

Temperature coefficient

Measurement range $\geq 200\text{ K}$

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

WTS4 PT100/2 C 8432210000*

WTZ4 PT100/2 C 8432220000*

PT100/2/0(4)...20 mA

PT100/2-wire

-200°C...+800°C

1.45 mA

0(4)...20 mA

$\leq 500\ \Omega$

$\pm 0.5\%$ of measurement range

$\leq 200\text{ ppm}/^\circ\text{C}$

(typ. 80 ppm/°C)

$\leq 250\text{ ppm}/^\circ\text{C}$

(typ. 100 ppm/°C)

$\leq 500\text{ ppm}/^\circ\text{C}$

24 VDC $\pm 20\%$

(19.2...28.8 VDC)

< 48 mA at $I_{out} = 20\text{ mA}$

$\leq 2\text{ A}$

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

WTS4 PT100/2 V 8432180000*

WTZ4 PT100/2 V 8432190000*

PT100/2/0...10 V

PT100/2-wire

-200°C...+800°C

1.45 mA

0...10 V

$\geq 1\text{ k}\Omega$

$\pm 0.5\%$ of measurement range

$\leq 200\text{ ppm}/^\circ\text{C}$

(typ. 80 ppm/°C)

$\leq 250\text{ ppm}/^\circ\text{C}$

(typ. 100 ppm/°C)

$\leq 500\text{ ppm}/^\circ\text{C}$

24 VDC $\pm 20\%$

(19.2...28.8 VDC)

< 38 mA at $I_{out} = 10\text{ mA}$

$\leq 2\text{ A}$

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