

WTZ4 PT100/3 V 0-10V**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Do not use product for new
developments



RTD temperature signal converters for connecting resistance temperature sensors and analogue DC current or voltage outputs.

A variety of resistance thermometers (e.g., PT100) are used to measure temperature in an industrial environment. These are used with 2-, 3-, or 4-wire technology.

We distinguish here between PTC and NTC thermistors. For an exact temperature measurement, the resistance value must be logged, linearised and converted into an analogue signal proportional to the temperature. Signal isolating converters carry out these important functions. They isolate signals between the harsh industrial environments and the downstream electronics. Furthermore, they compensate for potential differences caused by long cable lengths.

Sensor-related inadequacies such as cold joints and linearity errors are also minimised.

General ordering data

Version	RTD transformer, Input : Temperature, PT100 (3-wire), Output : 0-10 V
Order No.	8432130000
Type	WTZ4 PT100/3 V 0-10V
GTIN (EAN)	4032248110131
Qty.	1 pc(s).

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Technical data

Dimensions and weights

Depth	112.4 mm	Depth (inches)	4.425 inch
Length	92.4 mm	Length (inches)	3.638 inch
Net weight	120 g	Width	12.5 mm
Width (inches)	0.492 inch		

Temperatures

Storage temperature	-20 °C...85 °C	Operating temperature	0 °C...55 °C
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Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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Input

Number of inputs	1	Sensor	PT100/3-wire
Sensor supply	1.45 mA	Temperature input range	Adjustable from -200...+800°C

Output

Number of outputs	1	Output voltage, note	0...10 V
load impedance voltage	$\geq 1 \text{ k}\Omega$		

General data

Accuracy	$\pm 0.5 \%$ of measuring range	Configuration	DIP switch, Potentiometer, and PT100-Simulator
Current consumption	$< 38 \text{ mA}$ @ $I_{OUT} = 20 \text{ mA}$	Current-carrying capacity of cross-connect.	$\leq 2 \text{ A}$
Galvanic isolation	Without isolation	Input/Output	PT100/ 0...10 V
Linearity	Yes	Rail	TS 35
Temperature coefficient	Measuring range $\geq 200 \text{ K}$: ≤ 200 ppm/K (typ. 80 ppm/K) 100 K $\leq$ measuring range $< 200 \text{ K}$: < 250 ppm/K (typ. 100 ppm/K)	Type of connection	Tension-clamp connection
Voltage supply	24 V DC $\pm 20 \%$		

Insulation coordination

EMC standards	EN 55011, EN 61000-6	Galvanic isolation	Without isolation
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Connection data

Type of connection	Tension-clamp connection	Stripping length, rated connection	7 mm
Clamping range, rated connection	1.5 mm ²	Clamping range, min.	0.5 mm ²
Clamping range, max.	2.5 mm ²		

Classifications

ETIM 6.0	EC002919	ETIM 7.0	EC002919
ECLASS 9.0	27-21-01-29	ECLASS 9.1	27-21-01-29
ECLASS 10.0	27-21-01-29	ECLASS 11.0	27-21-01-29

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Technical data

Tender specification sheets

Long specification

PT100 temperature measuring transformer, configured with DIP switches, 3-wire connection technology
RTD measurement isolating transformer in 12.5 mm width with external power supply, for transmitting PT100-3-wire signals.
Input temperature range -200...+800 °C.
Analogue DC signals 0...10 V are available on the output side.
Zero/span compensation with potentiometer.
Add-on housing for TS35 rail mounting
Dimensions: L/W/H
92.4/ 12.5/ 112.4 mm
Tension-clamp connection / Nominal cross-section 1.5 mm²
Protection degree: IP 20
Input
PT100, 3-wire
Output
0...10 V
Load resistance > 1 kOhm
Transmission error < 0,5 % v. E. typ.
200 ppm / °C
Auxiliary power
24 VDC +/- 20 %
Ambient temperature range
0°C...+55 °C
Isolation
no electrical isolation
Approvals cULus, CSA

Type
PT100/3 V 0-10V

Short specification

PT100 temperature measuring transformer, configured with DIP switches, 3-wire connection technology
RTD measurement isolating transformer in 12.5 mm width with external power supply, for transmitting PT100-3-wire signals.
Input temperature range -200...+800 °C.
Analogue DC signals 0...10 V are available on the output side.
Zero/span compensation with potentiometer.

WTZ4

Important note

Product information

This product will soon be replaced by a new product.
 Please do not use with new systems. Please contact our technical support.

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Technical data

Approvals

Approvals



ROHS	Conform
UL File Number Search	E141197

Downloads

Approval/Certificate/Document of Conformity	Declaration of Conformity
Engineering Data	EPLAN, WSCAD
User Documentation	Instruction sheet

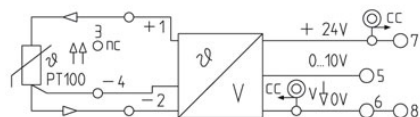
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Drawings

Electric symbol



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