WTZ4 PT100/4 C 0/4-20MA

Product is no longer available, Data sheet for information only
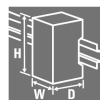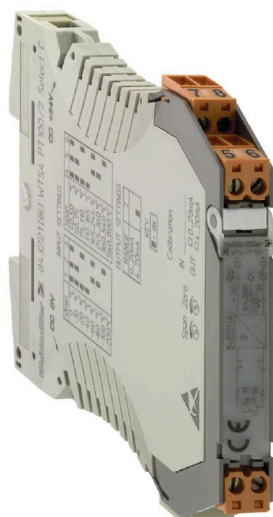
RTD temperature signal converters for connecting resistance temperature sensors and analogue DC current or voltage outputs.

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, PT100, 2-/3-/4-wire connection technology, Configurable, Input : Temperature, PT100 (4- wire), Output : 0(4)-20 mA
Order No.	8432280000
Type	WTZ4 PT100/4 C 0/4-20MA
GTIN (EAN)	4032248110513
Qty.	1 items
Delivery status	This article will no longer be available in the future.
Available until	2023-10-22T00:00:00+02:00
Alternative product	

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Technical data

Approvals

Approvals	CE CSA c(UL)us LISTED
ROHS	Conform
UL File Number Search	UL Website
Certificate no. (cULus)	E141197

Dimensions and weights

Depth	112.4 mm	Depth (inches)	4.4252 inch
Width	12.5 mm	Width (inches)	0.4921 inch
Length	92.4 mm	Length (inches)	3.6378 inch
Net weight	133 g		

Temperatures

Storage temperature	-20 °C...85 °C	Operating temperature	0 °C...55 °C

Probability of failure

SIL in compliance with IEC 61508	None

Environmental Product Compliance

RoHS Compliance Status	Compliant with exemption
RoHS Exemption (if applicable/known)	6c, 7a, 7cl
REACH SVHC	Lead 7439-92-1
SCIP	c2a21576-d875-4548-ae68-5e7f85ddf0c7

Input

Sensor	PT100 (4 wire)	Number inputs	1
Sensor supply	1.45 mA	Temperature input range	Adjustable from -200...+800°C

Output

Number of outputs	1	Load impedance current	≤ 500 Ω
Output current	0...20 mA, 4...20 mA		

General data

Accuracy	100K ≤ MB < 600K: 0,.1 %; MB ≥ 600K: 0.2 %; of the MB	Protection degree	IP20
Supply voltage	24 V DC ± 20 %	Linearity	Yes
Current consumption	< 48 mA @ IOUT = 20 mA	Mounting rail	TS 35
Temperature coefficient	Measuring range ≥ 200 K: ≤ 200 ppm/K (typ. 80 ppm/K) 100 K <= measuring range <200 K: <225 ppm/K (typ. 90 ppm/K)	Nominal power consumption	0.5 VA
Configuration	DIP switch, Potentiometer, and PT100-Simulator		

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Technical data

Insulation coordination

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

Connection data

Type of connection	Tension-clamp connection	Stripping length, rated connection	7 mm
Clamping range, rated connection	1.5 mm²	Clamping range, min.	0.5 mm²
Clamping range, max.	2.5 mm²		

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.

Classifications

ETIM 8.0	EC002919	ETIM 9.0	EC002919
ETIM 10.0	EC002919	ECLASS 14.0	27-21-01-29
ECLASS 15.0	27-21-01-29		

Tender specification sheets

Long specification	PT100 temperature measuring transformer, configured with DIP switches, 4-wire connection technology RTD measurement isolating transformer in 12.5 mm width with external power supply, for transmitting PT100 4-wire signals. Input temperature range -200...+800 °C. Analogue DC signals (0(4) to 20 mA) 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, 4-wireOutput 0/4...20 mALoad resistance Transmission error typ. 200 ppm / °C Auxiliary power 24 VDC +/- 20 %Ambient temperature range 0°C... +55 °C Isolation no electrical isolationApprovals cULus, CSA Type WTZ4 PT100/4 C 0/4-20mA	Short specification	PT100 temperature measuring transformer, configured with DIP switches, 4-wire connection technology RTD measurement isolating transformer in 12.5 mm width with external power supply, for transmitting PT100 4-wire signals. Input temperature range -200...+800 °C. Analogue DC signals 0(4)...20 mA are available on the output side. Zero/span compensation with potentiometer.

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Drawings

Electric symbol
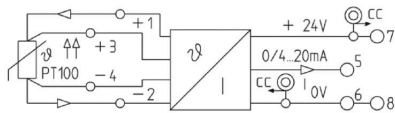
Similar to illustration

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Accessories

Cross-connections

The distribution or multiplication of a potential to adjoining terminal blocks is realized via a cross-connection. Additional wiring effort can be easily avoided. Even if the poles are broken out, contact reliability in the terminal blocks is still ensured. Our portfolio offers pluggable and screwable cross-connection systems for modular terminal blocks.

General ordering data

Type	ZQV 2.5N/2 GE	Version
Order No.	1693800000	W-Series, Cross-connector, 24 A
GTIN (EAN)	4008190883621	
Qty.	60 ST	
Type	ZQV 2.5N/2 RT	Version
Order No.	1717900000	W-Series, Cross-connector, 24 A
GTIN (EAN)	4008190349288	
Qty.	60 ST	
Type	ZQV 2.5N/2 BL	Version
Order No.	1717990000	W-Series, Cross-connector, 24 A
GTIN (EAN)	4008190349295	
Qty.	60 ST	
Type	ZQV 2.5N/2 SW	Version
Order No.	1718080000	W-Series, Cross-connector, 24 A
GTIN (EAN)	4008190349301	
Qty.	60 ST	

Blank
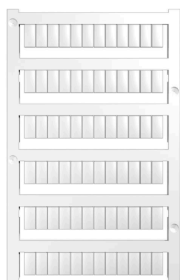
WS markers are the perfect match for the W-series connectors. Thanks to their system compatibility, the WS tags can also be used with the I-series and the Z-series. The large marking surfaces do not only permit long character strings but also multi-line text.
WS markers are ideal for labels with long, customised character strings. Thanks to the proven MultiCard format, printing with PrintJet CONNECT oder/or Plotter is possible.
• Can be fitted in strips or individually
• Markers in proven MultiCard format
For custom printing: Please send us a file of our labeling software M-Print PRO or M-Print PRO Online (without installation) for your labeling specifications.

General ordering data

Type	WS 10/5 MC NE WS	Version
Order No.	1635000000	WS, Terminal marker, 10 x 5 mm, Pitch in mm (P): 5.00 Weidmueller,
GTIN (EAN)	4008190261948	Allen-Bradley, white
Qty.	720 ST	