

WAS5 PRO RTD CU
Weidmüller Interface GmbH & Co. KG

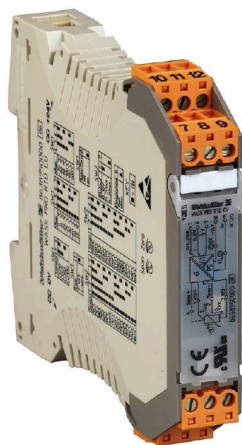
Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

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 isolating transformer, 2-/3-/4- wire RTD, Configurable, Input : Temperature, CU, Output : 0(4)-20 mA, 0-10 V
Order No.	8638950000
Type	WAS5 PRO RTD CU
GTIN (EAN)	4032248309917
Qty.	1 items
Delivery status	Discontinued
Available until	2022-12-31T00:00:00+01:00
Alternative product	ACT20P-PRO-RTCI-AO-DO-S

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Technical data

Approvals

Approvals



ROHS Conform

UL File Number Search [UL Website](#)

Certificate no. (cULus) E141197

Certificate no. (cULusEX) E223527

Dimensions and weights

Depth	112.4 mm	Depth (inches)	4.4252 inch
Width	17.5 mm	Width (inches)	0.689 inch
Length	92.4 mm	Length (inches)	3.6378 inch
Net weight	103.5 g		

Temperatures

Storage temperature	-20 °C...85 °C	Operating temperature	0 °C...55 °C
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Probability of failure

MTTF	267 a
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Environmental Product Compliance

RoHS Compliance Status	Compliant with exemption
RoHS Exemption (if applicable/known)	6c, 7a, 7cl
REACH SVHC	Lead 7439-92-1
SCIP	b25f3b7c-b874-4a4e-a8b2-4f423a7e2a65

Input

Sensor	Cu 10, Cu 25, Cu 50, Cu 100	Number inputs	1
Line resistance in measuring circuit	5 Ω Cu 10; 15 Ω Cu 25; 25 Ω Cu 50; 50 Ω Cu 100	Temperature input range	Adjustable from -200...+260°C

Output

Number of outputs	1	load impedance voltage	≥ 1 kΩ
Load impedance current	≤ 600 Ω	Wire break detection	LED flashing (output value: > 20 mA, >10 V)
Offset voltage	max. 0.05 V	Offset current	max. 100 µA
Output voltage, note	0...10 V	Fine adjustment	± 12.5% of FSR
Output current	0...20 mA, 4...20 mA		

General data

Accuracy	Slow/fast step response time: 0.5% of measuring range or 0.5 K/ 1% of measuring range or 1 K	Protection degree	IP20
Status indicator	Module active: LED on/ wire breakage: LED flashing/Error: LED off	Supply voltage	24 V DC ± 20 %

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Linearity	Yes	Step response time	Fast: 1.2 s/ slow: 2.2 s
Mounting rail	TS 35	Power consumption	880...980...1030 mW at IOUT = 20 mA
Temperature coefficient		Configuration	DIP switch

Insulation coordination

Impulse withstand voltage	4 kV	EMC standards	EN 55011, EN 61000-6
Surge voltage category	III	Pollution severity	2
Galvanic isolation	3-way isolator	Insulation voltage input or output/rail	4 kVeff / 1 min.
Insulation voltage input or output/supply	2 kVeff / 5 s	Insulation voltage	2 kVeff / 5 s
Rated voltage	300 V		

Connection data

Type of connection	Screw connection	Stripping length, rated connection	7 mm
Tightening torque, min.	0.4 Nm	Tightening torque, max.	0.5 Nm
Clamping range, rated connection	2.5 mm ²	Clamping range, min.	0.5 mm ²
Clamping range, max.	2.5 mm ²		

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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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

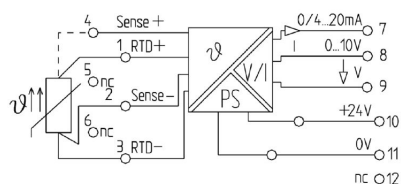
Long specification	<p>RTD measurement isolating transformer; configured with DIP switches</p> <p>RTD measurement isolating transformer in 17.5 mm width with external power supply, for transmitting and isolating 2-/3-/4-wire Cu10/ 25/ 50/ 100 signals.</p> <p>Analogue DC signals 0(4) to 20 mA / 0 to 10 V are available on the output side.</p> <p>Internal potentiometer is used for zero and span calibrations.</p> <p>Add-on housing for TS35 rail mounting</p> <p>Dimensions: L/W/H 92.4/ 17.5/ 112.4 mm</p> <p>Screw connection /</p> <p>Nominal cross-section 2.5 mm²</p> <p>Protection degree: IP 20</p> <p>Input 3-/4-wire Cu 10, Cu 25, Cu 50, Cu 100</p> <p>Output 0/4...20 mA</p> <p>0...10 V</p>	Short specification	<p>RTD measurement isolating transformer; configured with DIP switches</p> <p>RTD measurement isolating transformer in 17.5 mm width with external power supply, for transmitting and isolating 2-/3-/4-wire Cu10/ 25/ 50/ 100 signals.</p> <p>Analogue DC signals 0(4) to 20 mA / 0 to 10 V are available on the output side.</p> <p>Internal potentiometer is used for zero and span calibrations.</p>
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Technical data

Load resistance < 600
Ohm/ Strom/> 1 kOhm/
voltage
Transmission error < 0,8%
v. E. (RTD)
typ. 200 ppm / °C
Auxiliary power 24 VDC
+/- 25 %
Power loss approx. 0.9 W
Ambient
temperature range 0°C...
+55 °C
Isolation EN 50178, 3-way
isolation up to 4 kV AC/DC
of all circuits against each
other
Test voltage 2 kV input
against output against
auxiliary power
Rated
voltage 300 V AC/DC at
overvoltage category III
and pollution degree 2
Approvals cULus, cULusEX
Type WAS5 PRO RTD Cu

Drawings

Electric symbol



Similar to illustration



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Accessories

Cross-connections

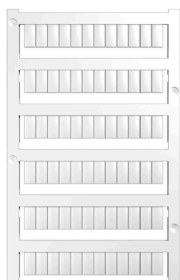


The distribution or multiplication of a potential to adjoining terminal blocks is realized via a cross-connection. Additional wiring effort can be easily avoided. Even if the poles are broken out, contact reliability in the terminal blocks is still ensured. Our portfolio offers pluggable and screwable 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.	1717900000	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	