

# WAS5 PRO RTD



Electric



## General ordering data

Type	WAS5 PRO RTD
Order No.	8560700000
Version	RTD isolating transformer, Screw connection
GTIN (EAN)	4032248207312
Qty.	1 pc(s).

example, Wave

## Dimensions and weights

Length	92.4 mm
Length (inches)	3.638 inch
Width	17.5 mm
Width (inches)	0.689 inch
Depth	112.4 mm
Depth (inches)	4.425 inch
Net weight	138 g

## Temperatures

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

## Probability of failure

MTTF	270 Years
<b>Input</b>	
Number of inputs	1
Sensor	PT100/2-/3-/4-wire, Ni100/2-/3-/4-wire, potentiometer: min. 100 Ω, max. 100 kΩ, resistance: 0-450 Ω
Line resistance in measuring circuit	50 Ω for 3- and 4-conductor
Temperature input range	Configurable, PT100: -200°C...850°C, NI100: -60°C...+250°C
<b>Output</b>	
Number of outputs	1
Output voltage, note	0...10 V
Output current	0...20 mA, 4...20 mA
Wire break detection	LED flashing (output value: > 20 mA, >10 V)
Fine adjustment	≥ ± 5 %, Version 1 and later: ≥ 12.5 % / potentiometer: 12.5%...25%
load impedance voltage	≥ 1 kΩ
load impedance current	≤ 600 Ω
Offset voltage	max. 0.05 V
Offset current	max. 100 μA
Status indicator	Module active: LED on/ wire breakage: LED flashing/ Error: LED off
<b>General data</b>	
Accuracy	< 0.3 % of measured value
Configuration	DIP switch, Potentiometer
Current-carrying capacity of cross-connect.	≤ 2 A
Galvanic isolation	3-way isolator
Input/Output	configurable
Linearity	Yes
Mounting rail	TS 35
Power consumption	830...880...980mW at I <sub>OUT</sub> = 20 mA  fast/slow: 2-/3-/4-conductor: 1.2 s/2.2 s;

Step response time	potentiometer: 0.5 s/1.1 s
Temperature coefficient	Measuring range $\geq 200$ K: $\leq 200$ ppm/K 100 K $\leq$ measuring range $< 200$ K: $\leq 250$ ppm/K 40 K $\leq$ measuring range $< 100$ K: $\leq 400$ ppm/K
Type of connection	Screw connection

### Insulation coordination

Clearance & creepage distances	$\geq 3$ mm
EMC standards	EN 55011, EN 61000-6
Galvanic isolation	3-way isolator
Impulse withstand voltage	4 kV
Insulation voltage	2 kV <sub>eff</sub> / 5 s
Insulation voltage input or output/rail	4 kV <sub>eff</sub> / 1 min.
Insulation voltage input or output/supply	2 kV <sub>eff</sub> / 5 s
Pollution severity	2
Rated voltage	300 V
Standards	DIN EN 50178, DIN EN 61000-4-2
Surge voltage category	III

### 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 <sup>2</sup>
Clamping range, rated connection, min.	0.5 mm <sup>2</sup>
Clamping range, rated connection, max.	2.5 mm <sup>2</sup>

### Product information

Descriptive text accessories	Cross-connector for power supplies and markers – refer to Accessories
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### Downloads

Package insert	<a href="#"><u>instruction sheet.pdf</u></a>
Software	<a href="#"><u>WaveTool.zip</u></a>

Declaration of Conformity

[Declaration of Conformity.pdf](#)

Tender specification sheets

**RTD measurement isolating transformer;  
configured with DIP switches**

RTD measurement isolating transformer in  
17.5 mm width with external power supply,  
for transmitting and isolating PT100 and Ni100  
2-/3-/4-wire signals, resistors and  
potentiometer signals.

Analogue DC signals 0(4) to 20 mA / 0 to 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/ 17.5/ 112.4 mm  
Screw connection / Nominal cross-section 2.5  
mm<sup>2</sup>  
Protection degree: IP 20

Input PT100, Ni100 2-/3-/4-wire  
Resistance 0...450 Ohm/

Potentiometer 100 Ohm...100  
kOhm

Output 0/4...20 mA  
0...10 V

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 4 kV input  
against output against auxiliary power

Rated  
voltage 300 V AC/DC at  
overvoltage category III and pollution degree 2

Approvals cULus, cULusEX, GL

Type **WAS5**  
**PRO RTD**

**RTD measurement isolating transformer;  
configured with DIP switches**

RTD measurement isolating transformer in

Long specification

Short specification

17.5 mm width with external power supply,  
 for transmitting and isolating PT100 and Ni100  
 2-/3-/4-wire signals, resistors and  
 potentiometer signals  
 .  
 Analogue DC signals 0(4) to 20 mA / 0 to 10 V  
 are available on the output side.  
 Zero/span compensation with potentiometer.

Classifications

ETIM 3.0	EC001774
ETIM 4.0	EC001774
ETIM 5.0	EC001774
ETIM 6.0	EC001774
UNSPSC	30-21-18-01
eClass 5.1	27-21-01-07
eClass 6.2	27-21-01-07
eClass 7.1	27-21-01-07
eClass 8.1	27-21-01-07
eClass 9.0	27-21-01-07

Approvals

Approvals



ROHS

Conform

Related products:



Type: WAS5 PRO RTD 1000  
 Order No.: 8679490000

Version:  
 RTD isolating  
 transformer, Screw  
 connection

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Type: WAS5 PRO RTD Cu

Version:



Order No.: 8638950000

RTD isolating  
transformer, Screw  
connection

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Type: WAZ5 PRO RTD  
Order No.: 8560710000

Version:  
RTD isolating  
transformer,  
Tension clamp  
connection

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