

WAVESERIES
WAS5 PRO Thermo
Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 16

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Germany

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The configurable WAS5/WAZ5 PRO Thermo TC signal isolating converter with external power supply in 17.5 mm width:

for recording, linearising, transforming and isolating thermal voltages into standardised DC current and voltage signals.

Standardised thermocouples of types K, J, T, E, N, R, S and B can be connected to the input side, in compliance with IEC584.

The input and output parameters (e.g. sensor type, temperature range and standardised output signal) can be configured using the DIP switches.

The input/output channels and 24 VDC power supply are completely isolated with 4 kV.

The PRO Thermo is optionally available with screw or tension-clamp wire connections. The 24 VDC supply voltage can be bridged using pluggable ZQV 2.5N jumpers on the module side.

Use the WAVETOOL program available from Weidmüller's website for adjustments and settings.

They can be used in many applications around the world because of their international approvals (cULus, CULusEX and GL).

General ordering data

Type	WAS5 PRO Thermo
Order No.	8560720000
Version	TC isolating transformer, Screw connection
GTIN (EAN)	4032248207336
Qty.	1 pc(s).

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Technical data

Dimensions and weights

Length	92.4 mm	Width	17.5 mm
Depth	112.4 mm	Weight	100 g
Net weight	128.8 g		

Temperatures

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

MTTF	270 Years
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Input

Supply voltage	24 V DC $\pm$ 25 %	Line resistance in measuring circuit	50 Ω
Number of inputs	1	Temperature input range	-200...+1820 °C
Sensor	Thermo element (IEC 584) type: K,J,T,E,N,R,S,B		

Output

Wire break detection	LED flashing (output value: > 20 mA, >10 V)	Fine adjustment	$\pm$ 5% (switchable)
cold junction compensation	Yes	load impedance voltage	$\geq$ 1 k Ω
Number of outputs	1	load impedance current	$\leq$ 600 Ω
Offset voltage	max. 0.05 V	Offset current	max. 100 μ A
Status indicator	Module active: LED on/ wire breakage: LED flashing/ Error: LED off	Output voltage, note	0...10 V
Output current	0(4)...20 mA		

General data

Current-carrying capacity of cross-connect.	$\leq$ 2 A	Galvanic isolation	3-way isolator
Input/Output	configurable	Linearity	Yes
Mounting rail	TS 35	Power consumption	800...850...950 mW at $I_{OUT} = 20$ mA
Step response time	without filter: max. 1.4 s; with filter: max. 7.5 s	Supply voltage	24 V DC $\pm$ 25 %
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 _{eff} / 5 s	Insulation voltage input or output/rail	4 kV _{eff} / 1 min.
Insulation voltage input or output/supply	2 kV _{eff} / 5 s	Pollution severity	2
Rated voltage	300 V	Standards	DIN EN 50178, DIN EN 61000-4-2
Surge voltage category	III		

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Technical data**Classifications**

UNSPSC	31-12-10-07	eClass 5.1	27-21-01-20
eClass 6.2	27-21-01-20	eClass 7.1	27-21-01-20

Approvals

Approvals



ROHS	Conform
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Downloads

Package insert	instruction sheet.pdf
Software	WaveTool.zip
Declaration of Conformity	Declaration of Conformity.pdf
EPLAN	8560720000.ema
3-D model	

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www.weidmueller.com**Drawings****Electric symbol**