WAVESERIES
WAS5 PRO Thermo

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Only remaining stock available

Thermal signal isolator/converters are capable of recording and linearising thermal voltages and then converting them into standardised DC current/voltage signals.
Conventional thermocouples can be connected on the input side, in accordance with IEC 564. This measures the thermal voltage that is created when two different metal alloys come into contact with each other. A differential amplifier is used to process these values and convert them into standardised signals.
The high-quality signal converters use a micro-processor to simultaneously prepare (filter and linearise) the measurement signal.
Any falsification of the thermal signals caused by terminal points or line influences must also be eliminated.
This is accomplished with the integrated cold-junction compensation mechanism. This mechanism measures the temperature at the terminal (junction) point and uses the value for the micro-processor calculation.
The input and output parameters on the Thermo signal converter can be configured as required. An LED signals when there is a line break on the thermal wire. These devices are available with or without electrical isolation.

They can be used for a wide range of process automation and industrial automation applications where temperatures are being recorded.

General ordering data

Delivery status	This article will no longer be available in the future.
Available until	2020-12-31
Type	WAS5 PRO Thermo
Order No.	8560720000
Version	TC isolating transformer, Input : Temperature, Output : I / U
GTIN (EAN)	4032248207336
Qty.	1 pc(s).
Alternative product	1176030000

Creation date July 9, 2020 9:02:44 AM CEST

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Technical data

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
Weight	100 g	Net weight	128.8 g

Temperatures

Operating temperature, max.	55 °C	Operating temperature, min.	0 °C
Storage temperature, max.	85 °C	Storage temperature, min.	-20 °C
Operating temperature	0 °C...55 °C	Storage temperature	-20 °C...85 °C

Probability of failure

MTTF	270 Jahre

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1

Input

Number of inputs	1	Sensor	Thermo element (IEC 584) type: K,J,T,E,N,R,S,B
Line resistance in measuring circuit	50 Ω	Temperature input range	-200...+1820 °C

Output

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% (switchable)	cold junction compensation	Yes
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		

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General data

Accuracy	Type K & J: -150°C... 1200°C ±(3°C + 0,1% of range), Type T: -150°C... 400°C ±(3°C + 0,1% of range), Type E: -150°C... 1000°C ±(3°C + 0,1% of range), Type N: -150°C... 1300°C ±(3°C + 0,1% of range), Type R & S: 200°C...1760°C ±(6°C + 0,1% of range), Type B: 500°C...1820°C ±(6°C + 0,1% of range)	Configuration	DIP switch
Current-carrying capacity of cross-connect.	≤ 2 A	Galvanic isolation	3-way isolator
Input/Output	configurable	Linearity	Yes
Power consumption	800...850...950 mW at I_{OUT} = 20 mA	Rail	TS 35
Step response time	without filter: max. 1.4 s; with filter: max. 7.5 s	Voltage supply	24 V DC ± 20 %

Insulation coordination

Clearance & creepage distances	≥ 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	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 mm²	Clamping range, min.	0.5 mm²
Clamping range, max.	2.5 mm²		

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	UNSPSC	31-12-10-07

Product information

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

Approvals

Approvals	
ROHS	Conform

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Downloads

Approval/Certificate/Document of Conformity	DNV GL Certificate Declaration of Conformity
Brochure/Catalogue	CAT 4.1 ELECTR 16/17 EN
Engineering Data	EPLAN, WSCAD
Software	WaveTool.zip
User Documentation	Instruction sheet

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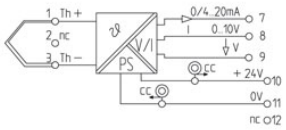
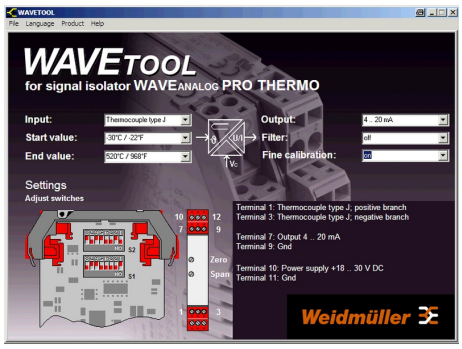
Drawings

Electric symbol



Similar to illustration



Screenshot example, Wave tool software