

WAVESERIES WAS4 PRO Freq

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The WAS/WAZ PRO Freq f/DC isolating transformer in its compact housing is just 12.5 mm wide. It converts input frequencies of up to 100 kHz into standardised analogue signals. The devices can be configured as required using the DIP switches.

The connection on the input side is suitable for both 2- and 3-wire PNP/NPN or Namur initiators.

Lower and upper measurement frequencies can be individually configured and assigned to a corresponding standardised current/voltage output using DIP switches or an external frequency generator (from 16 kHz).

They have 4 kV of 3-way isolation and do not need to be calibrated separately.

The 24 VDC supply voltage can be bridged using pluggable ZQV 2.5N jumpers on the module side.

The f/DC isolating transformer comes in either screw or tension-clamp wire connection versions.

General ordering data

Type	WAS4 PRO Freq
Order No.	8581180000
Version	Frequency signal isolating transformer
GTIN (EAN)	4032248234486
Qty.	1 pc(s).

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Technical data
Dimensions and weights

Length	92.4 mm	Width	12.5 mm
Depth	112.4 mm	Net weight	118.7 g

Temperatures

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

MTTF	458 Years
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Input

Supply voltage	Rated input level	Threshold/hysteresis: Namur: approx. 1.7 mA/ approx. 0.2 mA; NPN: approx. 6.5 V/approx. 0.2 V; PNP: approx. 6,7 V/ approx. 0.5 V
	24 V DC \pm 20 %	
Number of inputs	Sensor	2-, 3-wire PNP/NPN, Namur initiator, push-pull step, Frequency
	1	

Output

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	Green LED
Output voltage, note	0...10 V	Output current	0...20 mA, 4...20 mA

General data

Accuracy	< 0.2% of output range	Configuration	DIP switch
Current-carrying capacity of cross-connect.	\leq 2 A	Galvanic isolation	3-way isolator
Input/Output	configurable	Mounting rail	TS 35
Power consumption	Max. 1.6 W at $I_{OUT} = 20$ mA	Step response time	360 ms + 2 times the period time of input frequency
Supply voltage	24 V DC \pm 20 %	Temperature coefficient	Max. 200 ppm/K of output range

Insulation coordination

Clearance & creepage distances	\geq 5.5 mm	EMC standards	EN 55011, EN 61000-6, EN 61326
Galvanic isolation	3-way isolator	Impulse withstand voltage	6 kV
Insulation voltage	4 kV _{eff} / 5 s	Insulation voltage input or output/rail	4 kV _{eff} / 1 min.
Insulation voltage input or output/supply	4 kV _{eff} / 5 s	Pollution severity	2
Rated voltage	300 V	Standards	DIN EN 50178, DIN EN 61000-4-2
Surge voltage category	III		

Data sheet

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Classifications

ETIM 3.0	EC001774	eClass 6.2	27-21-01-20
eClass 7.1	27-21-01-20		

Product information

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

Approvals

Approvals



ROHS Conform

Downloads

Package insert	instruction sheet.pdf
Software	WaveTool.zip
Declaration of Conformity	Declaration of Conformity.pdf
EPLAN	8581180000.ema
3-D model	

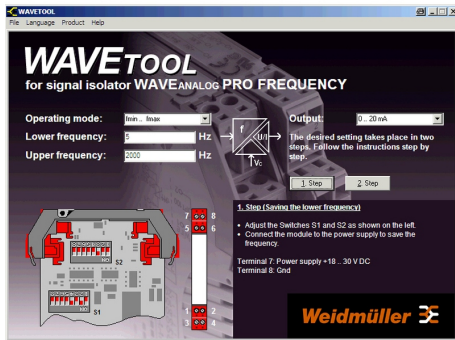
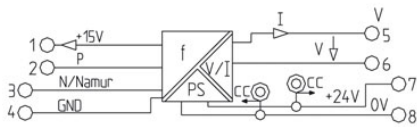
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Drawings

Electric symbol



Screenshot example, Wave tool software