

# TYPE APPROVAL CERTIFICATE

**This is to certify:**

**That the Miscellaneous**

with type designation(s)

**Analog Signal Isolators WAVESERIES, Waveanalog PRO DC/DC, Waveanalog PRO THERMO,, Waveanalog PRO RTD,, Waveanalog PRO RTD 1000**

Issued to

**Weidmüller Interface GmbH & Co. KG  
Detmold, Germany**

is found to comply with

**DNV GL rules for classification – Ships, offshore units, and high speed and light craft**

**Application :**

**Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.**

Type	Temperature	Humidity	Vibration	EMC	Enclosure
<b>Analog Signal Isolators WAVESERIES</b>					
Waveanalog PRO DC/DC	B	B	B		IP 20
Waveanalog PRO THERMO,	B	B	B		IP 20
Waveanalog PRO RTD,	B	B	B		IP 20
Waveanalog PRO RTD 1000	B	B	B		IP 20

Issued at **Hamburg** on **2017-11-10**

This Certificate is valid until **2022-11-09**.

DNV GL local station: **Essen**

for **DNV GL**

Approval Engineer: **Didier Girardin**

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**Joannis Papanuskas**  
**Head of Section**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.



## Product description

Input signal	(PRO DC/DC)	uni-/bipolar 20 mV up to 200 V
	(PRO RTD)	uni-/bipolar 0,1 mA up to 100 mA
	(PRO THERMO)	PT 100 2,3,4 wire / R / Potentiometer
Output signal		Thermoelement type K,J, T, E, N, R, S, B
Power supply		0 ... +/- 10V, 0.. +/- 20 mA
		20 ... 230 V AC/DC (Thermo / RTD 20...27 V DC)
Gain error		< 0.1 % of final value
Temperature coefficient		< 60 ppm/K of final value
Rated isolation voltage Ui		300 V (PRO DC/DC 600 V ) for overvoltage category III and pollution degree 2
Degree of protection		IP 20
Connection		Screw-type WAS5...; Tension clamp WAZ5...
Detail according catalogue		5618420000/04/2001/VSD/Me

## Application/Limitation

Operating instruction of the manufacturer to be observed

Ex-certification is not covered by this certificate. Application in hazardous area to be approved in each case according to the Rules and Ex-Certification/ Special Condition for Safe Use listed in valid Ex-certificate issued by a notified/recognized Certification Body

## Tests carried out

Applicable tests according to Class Guideline DNVGL-CG-0339, Nov 2016

## Marking of product

The products to be marked with:

- manufacturer name
- model name
- serial number
- power supply ratings

## Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or materials.

The main elements of the assessment are:

- Ensure that type approved documentation is available
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer's product type marking and the type approval certificate

Periodical assessment is to be performed at least every second year and at renewal of this certificate.

END OF CERTIFICATE