



EU – Type Examination Certificate

- 2 Equipment or Protective System Intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- 3 EU Type Examination Certificate Number: KIWA 15ATEX0031 X Issue: 2
- 4 Product: Pressure-, Level-, Differential pressure and Temperature transmitter

Series 4000, Series 4000-SAN, Series 4000-VALVE, Series DP-4000

Series TT-4000, Series TT-4000-Remote

5 Manufacturer: Klay Instruments B.V.

6 Address: Nijverheidsweg 5, 7991 CZ Dwingeloo

The Netherlands

- 7 This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- 8 Kiwa Nederland B.V., Notified Body number 0063 in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential ATEX Assessment Report No. 150401313.

9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0 : 2018 EN 60079-11 : 2012

- 10 If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.
- 11 This EU Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.
- 12 The marking of the product shall include the following:



II 1 G Ex ia IIC T4 Ga II 1 G Ex ia IIC T5 Ga II 1 G Ex ia IIC T6 Ga

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Issue date:

First issue:

24 April 2020

21 January 2016

This certificate shall, as far as applicable, be revised before the date of cessation of presumption of conformity of (one of) the included standards above as communicated in the Official Journal of the European Union.

© Integral publication of this certificate in its entirety and without any change is allowed.



Ron Scheepers

Management Director



13 SCHEDULE

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15.1 **Description of Product**

Transmitters Series 4000 are intrinsically safe Pressure, Level, Differential pressure and Temperature transmitters. The measurement signal of the applied pressure at the sensor is converted into a 4 - 20 mA signal and digital communication (Option HART®).

The following types with their application are available:

Type	Application		
Series 4000	Pressure and Level		
Series 4000-SAN*	Pressure and Level		
Series 4000-VALVE**	Pressure and Level		
Series DP-4000	Differential Pressure		
Series TT-4000	Temperature		
Series TT-4000 Remote	Temperature		

^{*} Transmitters Series 4000 and Series 4000-SAN are identical, with the exception that the process connection of the 4000-SAN is suitable for hygienic applications (e.g. food, chemical and pharmaceutical industries).

As standard the transmitters are provided with a rotatable graphic display for local read-out and control, behind a blind cover. For local read-out a transparent cover can be provided (Option I)

Thermal data

The relation between transmitter option, electrical variant, temperature class, ambient temperature and process temperature is as follows:

Option, Electrical variant	Temperature	Ambient	Process
	Class	Temperature	Temperature
-, Single 4 - 20 mA output G190, with dual 4 - 20 mA output	T4	-20 °C to +70 °C	-20 °C to +100 °C
G185, with single 4 - 20 mA output	T5	-20 °C to +70 °C	-20 °C to +100 °C
	T6	-20 °C to +31 °C	-20 °C to +50 °C

15.2 Electrical Data

Supply and output circuit (terminals + and -):

In type of protection intrinsic safety Ex ia IIC, only for connection to a certified intrinsically safe circuit, with following maximum values per output channel:

 $U_i = 30 \text{ Vdc}$; $I_i = 110 \text{ mA}$; $P_i = 0.9 \text{ W}$; $C_i = 41 \text{ nF}$; $L_i = 0.08 \text{ mH}$.

^{**} Transmitters Series 4000-VALVE are identical to the transmitters Series 4000 and Series 4000-SAN, with the exception that a valve is located between the transmitter and the process.



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15.3 Instructions

The instructions provided with the product shall be followed in detail to assure safe operation.

16 ATEX Assessment Report Number

No. 150401313

17 Specific Conditions of Use

- From a safety point of view, the supply and output circuit is considered to be earthed.
- Refer to section 15.1 for thermal data.

18 Essential Health and Safety Requirements

All relevant Essential Health and Safety Requirements are covered by the standards listed at section 9.

19 **Drawings and Documents**

As listed in ATEX Assessment Report No. 150401313.

20 Description of Certificate Changes (for Issue 2 and above)

Issue 2, Kiwa reference no. 200300337:

- Upgrade from EN 60079-0 : 2012 + A11 : 2013 to EN IEC 60079-0 : 2018.
- Removal of EN 60079-26 (no longer applicable for EPL Ga equipment).