

# 1 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 16ATEX0027 X** Issue: **1**

4 Product: **Loop powered local display/control unit, Model SMARTMAC 200W**

5 Manufacturer: **KROHNE Messtechnik GmbH**

6 Address: **Ludwig-Krohne-Straße 5, 47058 Duisburg  
Germany**

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 0620 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. 160800846.

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

**EN 60079-0 : 2012 + A11 : 2013      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 2 G Ex ia IIC T4 Gb**

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**Kiwa Nederland B.V.**

  
**Pieter van Breugel**  
Certification Officer

**Issue date:**

17 November 2016

**First issue:**

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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.



## 13 SCHEDULE

### 14 EU – Type Examination Certificate KIWA 16ATEX0027 X Issue No. 1

#### 15.1 Description of Product

Local display/control unit Model SMARTMAC 200W is a 4 - 20 mA loop powered display with metallic enclosure that allows the indication of physical quantities and configuration and calibration of a connected sensor. The apparatus is provided with HART communication.

Ambient temperature range -40 °C to +55 °C.

#### 15.2 Electrical Data

Supply/output circuit (terminals F, G, H):

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

$U_i = 30 \text{ V}$ ;  $I_i = 120 \text{ mA}$ ;  $P_i = 1 \text{ W}$ ;  $C_i = 45 \text{ nF}$ ;  $L_i = 0 \text{ }\mu\text{H}$ .

The connected external capacitance and inductance at the sensor input circuit shall be added to  $C_i$  and  $L_i$  respectively.

Sensor input circuit (terminals S, A, B):

In type of protection intrinsic safety, with following maximum values:

$U_o = 30 \text{ V}$ ;  $I_o = 120 \text{ mA}$ ;  $P_o = 1 \text{ W}$ .

#### 15.3 Instructions

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

## 16 ATEX Assessment Report

No. 160800846.

## 17 Specific Conditions of Use

The equipment shall be installed and maintained such that hazards caused by electrostatic discharge are excluded.

## 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. 160800846.