

# CERTIFICATE

## (1) EC-Type Examination

### (2) Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC

(3) EC-Type Examination Certificate Number: **DEKRA 11ATEX0064 X** Issue Number: **1**

(4) Equipment: **pH SENCOM Sensors Model FU20F, FU24F, PH20F, SC24F and SC25F**

(5) Manufacturer: **Yokogawa Europe B.V. (YPA)**

(6) Address: **Euroweg 2, 3825 HD Amersfoort, The Netherlands**

(7) This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) DEKRA Certification B.V., notified body number 0344 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the directive.

The examination and test results are recorded in confidential test report number NL/DEK/ExTR11.0069/xx.

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

**EN 60079-0 : 2009**

**EN 60079-11 : 2007**

**EN 60079-26 : 2007**

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment according to the Directive 94/9/EC. Further requirements of the directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.

(12) The marking of the equipment shall include the following:



**II 1 G Ex ia IIC T3...T6 Ga**

This certificate is issued on 9 March 2012 and, as far as applicable, shall be revised before the date of cessation of presumption of conformity of (one of) the standards mentioned above as communicated in the Official Journal of the European Union.

DEKRA Certification B.V.

C.G. van Es  
Certification Manager

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(13) **SCHEDULE**

(14) **to EC-Type Examination Certificate DEKRA 11ATEX0064 X**

Issue No. 1

(15) **Description**

pH SENCOM Sensors Model FU20F, FU24F, PH20F, SC24F and SC25F for connection to a certified associated PH/ORP transmitter are used for measurement of pH, redox (ORP) and temperature.

Ambient temperature range: -40 °C to +60 °C for temperature class T6,  
-40 °C to +75 °C for temperature class T5,  
-40 °C to +110 °C for temperature class T4,  
-40 °C to +125 °C for temperature class T3.

**Electrical data**

Sensor supply and output circuits (connector):  
in type of protection intrinsic safety Ex ia IIC, only for connection to a certified intrinsically safe circuit, with the following maximum values:

$U_i = 6,1 \text{ V}$ ;  $I_i = 230 \text{ mA}$ ;  $P_i = 1,2 \text{ W}$ ;  $C_i = 30 \text{ }\mu\text{F}$ ;  $L_i = 4 \text{ }\mu\text{H}$ ;

or for connection to the certified intrinsically safe Yokogawa transmitter Model FLXA21 series.

**Installation instructions**

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

(16) **Test Report**

No. NL/DEK/ExTR11.0069/xx.

(17) **Special conditions for safe use**

For ambient temperature see (15).

Electrostatic charges on the enclosure shall be avoided.

(18) **Essential Health and Safety Requirements**

Covered by the standards listed at (9).

(19) **Test documentation**

As listed in Test Report No. NL/DEK/ExTR11.0069/xx.