

(1) **TYPE EXAMINATION CERTIFICATE**

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

(3) Type Examination Certificate Number: **KEMA 07ATEX0049** Issue Number: **2**

(4) Equipment: **PH/ORP Transmitter Type PH202S-B-././ and Type PH202S-D-././**

(5) Manufacturer: **Yokogawa Electric Corporation**

(6) Address: **2-9-32 Naka-cho, Musashino-shi, Tokyo, 180-8750 Japan**

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

(8) KEMA Quality B.V. 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 no. 2112880/2.

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

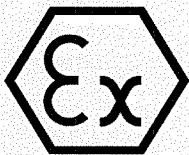
**EN 60079-15 : 2003**

**EN 60079-27 : 2006**

(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 Type Examination Certificate relates only to the design, examination and tests of the specified equipment and not to the manufacturing process and supply of this equipment.

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



**II 3 G EEx nA [nL] IIC T4 ... T6**

This certificate is issued on 1 February 2008 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.

KEMA Quality B.V.



C.G. van Es  
Certification Manager

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(13) **SCHEDULE**

(14) **to Type Examination Certificate KEMA 07ATEX0049**

Issue No. 2

(15) **Description**

PH/ORP Transmitter Type PH202S-B-././ for connection to a Foundation Fieldbus system and Type PH202S-D-././ for connection to a Profibus PA Fieldbus system, are used for PH measurement, using an associated sensor.

Ambient temperature range: -10 °C ... +40 °C for temperature class T6,  
-10 °C ... +55 °C for temperature class T4.

**Electrical data**

Supply and output circuit (terminals + and -):  
maximum 32 Vdc, 26 mA;

or in type of protection energy limitation [EEx nL] IIC, for connection to a FNICO system.

Sensor input circuits (terminals 11 to 17):  
in type of protection energy limitation EEx nL IIC, with the following maximum values:  
 $U_o = 14,4 \text{ V}$ ;  $I_o = 32,3 \text{ mA}$ ;  $P_o = 0,12 \text{ W}$ ;  $C_o = 3,5 \text{ }\mu\text{F}$ ;  $L_o = 76 \text{ mH}$ .

(16) **Test Report**

KEMA No. 2112880/2.

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

None.

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

Covered by the standards listed at (9).

(19) **Test documentation**

As listed in Test Report No. 2112880/2.