



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx DEK 11.0064X issue No.:0 Certificate history:

Status: Current

Date of Issue: 2011-07-25 Page 1 of 3

Applicant: Yokogawa Europe B.V. (YPA)
Euroweg 2
3825 HD Amersfoort
The Netherlands

Electrical Apparatus: pH Sensors Types FU20, FU24, PH20, SC24V and SC25V
Optional accessory:

Type of Protection: Ex i

Marking: Ex ia IIC T3...T6 Ga

Approved for issue on behalf of the IECEx
Certification Body:

C.G. van Es

Position:

Certification Manager

Signature:
(for printed version)

Date:

2011-07-25

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

DEKRA Certification B.V.
Utrechtseweg 310
6812 AR Arnhem
The Netherlands

All testing, inspection, auditing and certification activities of the former KEMA Quality are an integral part of the DEKRA Certification Group.





IECEx Certificate of Conformity

Certificate No.: IECEx DEK 11.0064X

Date of Issue: 2011-07-25

Issue No.: 0

Page 2 of 3

Manufacturer: **Yokogawa Europe B.V. (YPA)**
Euroweg 2
3825 HD Amersfoort
The Netherlands

Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2007-10 Edition: 5	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-11 : 2006 Edition: 5	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "I"
IEC 60079-26 : 2006 Edition: 2	Explosive atmospheres - Part 26: Equipment with equipment protection level (EPL) Ga

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

NL/DEK/ExTR11.0068/00

Quality Assessment Report:

NL/KEM/QAR10.0013/00



IECEx Certificate of Conformity

Certificate No.: IECEx DEK 11.0064X

Date of Issue: 2011-07-25

Issue No.: 0

Page 3 of 3

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

pH Sensors series FU20, FU24, PH20, SC24V and SC25V for connection to a certified associated pH/ORP transmitter, are used for measurement of pH, redox (ORP) and temperature.

Electrical data

Sensor input circuits (connector or permanently connected cable):

in type of protection intrinsic safety Ex ia IIC, only for connection to a certified intrinsically safe circuit, with the following maximum values: $U_i = 18 \text{ V}$; $I_i = 170 \text{ mA}$; $P_i = 0.4 \text{ W}$; $C_i = 0 \text{ nF}$ (connector) or 3.6 nF (permanently connected cable); $L_i = 0 \text{ mH}$;

or for connection to certified intrinsically safe Yokogawa Transmitter Model FLXA21 series or Model PH202S series.

CONDITIONS OF CERTIFICATION: YES as shown below:

Ambient temperature range: -40°C to $+40^\circ\text{C}$ for temperature class T6, -40°C to $+55^\circ\text{C}$ for temperature classes T4 and T5 and -40°C to $+105^\circ\text{C}$ for temperature class T3.

Electrostatic charges on the enclosure and cable shall be avoided.