

British Approvals Service for Electrical
Equipment in Flammable Atmospheres



Certificate of Conformity

BAS No. Ex 97D2305X

- 1
- 2
- 3 This certificate is issued for the electrical apparatus:
pH/ORP SENSOR MODEL 396P-10/12-50
- 4 Manufactured and submitted for certification by:
**ROSEMOUNT ANALYTICAL INC
of 2400 Barranca Parkway, Irvine, California 92714-5018, USA**
- 5 This electrical apparatus and any acceptable variation thereto is specified in the Schedule to this Certificate and the documents therein referred to.
- 6 BASEEFA being an Approved Certification Body in accordance with Article 14 of the Council Directive of the European Communities of 18 December 1975 (76/117/EEC) certifies that the apparatus has been found to comply with harmonised European Standards:
**EN50 014 (1977) + Amd 1 to 5
EN50 020 (1977) + Amd 1 to 5**

and has successfully met the examination and test requirements recorded in confidential Report number:
97(C)0743 dated 14 July 1998

- 7 The apparatus marking shall include the code:
**EEx ia IIC T4 (T_{amb} = 80°C)
EEx ia IIC T5 (T_{amb} = 40°C)**
- 8 The manufacturer of the electrical apparatus referred to in this certificate, has the responsibility to ensure that the apparatus conforms to the specification laid down in the Schedule to this certificate and has satisfied routine verifications and tests specified therein.
- 9 This apparatus may be marked with the Distinctive Community Mark specified in Annex II to the Council Directive of 16 January 1984 (Doc 84/47/EEC). A facsimile of this mark is printed on sheet 1 of this certificate.

File No: EECS 0911/02/018

Sheet 1 of 3

This certificate is granted subject to the general conditions of the Electrical Equipment Certification Service. It does not necessarily indicate that the apparatus may be used in particular industries or circumstances. Representation of equipment as "Certified" is valid only when the number of this certificate is given on the relevant EECS Manufacturing Licence or Verification Certificate.



I M CLEARE
DIRECTOR
3 August 1998



Registration Number
020
The use of the Accreditation
Mark indicates accreditation in
respect of those activities
covered by the accreditation
certificate number 020.

HSE
Health & Safety
Executive

Electrical Equipment Certification Service
Health and Safety Executive
Harpur Hill, Buxton, Derbyshire. SK17 9JN. United Kingdom
Tel: 01298 28000 Fax: 01298 28244



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APPARATUS DESCRIPTION

The **pH/ORP Sensor Models 396P-10/12-50** is designed to convert the high impedance signal from a pH/ORP electrode to a low impedance signal.

The sensor consists of a pre-amplifier printed circuit board (pcb), pH/ORP sensing electrode and temperature sensor all encapsulated within a plastic enclosure. External connections are made to the integral cable.

Input Parameters:

$$U_i = 12V, I_i = 230mA, P_i = 1.1W$$

$$C_i = 0.562\mu F, L_i = 0$$

Model 396P-10/12-54 is identical to Model 396P-10/12-50 except that it contains an alternative printed circuit board and has the following input parameters.

Input Parameters:

$$U_i = 20V, I_i = 300mA, P_i = 0.9W$$

$$C_i = 0.171\mu F, L_i = 0$$

Model 396P-10/12-55 is identical to Model 396P-10/12-50 except that it contains another alternative printed circuit board and has the following input parameters.

Input Parameters:

$$U_i = 13.44V, I_i = 170mA, P_i = 0.6W$$

$$C_i = 0.317\mu F, L_i = 0$$



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DRAWINGS

<u>Number</u>	<u>Issue</u>	<u>Date</u>	<u>Description</u>
396/P/R sheets 1 to 4	J	8.8.97	General assembly 396/P/R
23670-00/52 sheets 1 to 4	L	4.9.97	Sub assembly
2400205	B	7.13.95	Circuit - pre-amplifier, Model 396P-10/12-50
22941-00	E	1.16.97	PCB assembly Model 396-10/12-50
32790-00 sheets 1 of 4	D	9.20.93	PCB details Model 396-10/12-50
2400267	C	6.30.94	Circuit - dual pre-amplifier, Model 396-10/12-55
23538-00	F	7.21.97	PCB assembly - dual pre-amplifier, Model 396-10/12-55
33284-00	D	6.17.93	PCB details - dual pre-amplifier, Model 396-10/12-55
*2400209 sheets 1 & 2	D	4.12.94	Circuit - pre-amplifier Model 396-10/12-54
*22986-00	F	1.2.97	PCB assembly - pre-amplifier Model 396-10/12-54
*32915-00	E	9.20.93	PCB details - Model 396-10/12-54
9241253-00/02 sheet 1 of 2	B	May 20 98	Label - Model 396P-10/12

*These drawings are common to BASEEFA Certificate No Ex 93C2489X

SPECIAL CONDITIONS FOR SAFE USE

- 1 The pH/ORP Sensor Models 396P-10/12-50, 396P-10/12-54 & 396P-10/12-55 are intended to be in contact with the process fluid and may not meet the 500V r.m.s. a.c. test to earth. This must be taken into consideration at installation.
- 2 External connections to the integral lead must be terminated in a manner suitable for the zone of installation.

BASEEFA List Keywords

2SENSOR