



(1) **EC TYPE EXAMINATION CERTIFICATE**

(2) **Equipment or protective system intended for use  
in potentially explosive atmospheres  
Directive 94/9/EC**

(3) EC type examination certificate number: **ISSeP08ATEX036X**

(4) Equipment or protective system:  
Portable Oxygen Analyser type 3110.

(5) Applicant – Manufacturer – ~~Authorized representative in the Community:~~  
TELEDYNE ANALYTICAL INSTRUMENTS

(6) Address: P.O. Box 1580  
City of Industry  
CA, 91749-1580  
USA

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

(8) ISSeP, notified body n° 492 in accordance with article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system 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 report n° 08042

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:  
EN 60079-0 : 2006 (IEC 60079-0 : 2004)  
EN 60079-11 : 2007 (IEC 60079-11 : 2006)  
EN 60079-26 : 2004 (IEC 60079-26 : 2004)

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

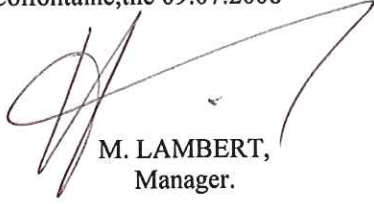
(11) This EC TYPE EXAMINATION CERTIFICATE relates only to the design, examination and tests of the specified equipment or protective system in accordance to the Directive 94/9/EC. Further requirements of this Directive may apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

(12) The marking of the equipment or protective system shall include the following indications:

 II 1 G Ex ia II C T3

Colfontaine, the 09.07.2008

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SERVICE PUBLIC  
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M. LAMBERT,  
Manager.

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(13)

## SCHEDULE

(14)

### EC TYPE EXAMINATION CERTIFICATE N<sup>R</sup> ISSeP08TEX036X

(15) Description of the equipment or protective system:

Portable Oxygen Analyser type 3110.

Electrical parameters :Output signal « 0-1VDC % of Range »

U <sub>o</sub> : 4.65 V	Co : 90 µF
I <sub>o</sub> : 193.74 mA	Lo : 0.7 mH
P <sub>o</sub> : 225.2 mW	Lo/Ro : 157.86 µH/Ω

Routine tests :

The manufacturer shall make the routine verifications and tests necessary to ensure that the electrical apparatus produced complies with the specification submitted to the testing station together with the prototype or sample (clause 27 of EN 60079-0).

Eventual prescriptions : - ta : 0°C to +40°C

- Warning : Do not charge the battery in hazardous area.

(16) Report n<sup>r</sup> 08042 of 04.07.2008

Composed in total of 27 pages, completed by the following descriptive documents :

"Operating Instruction for Model 3110 Portable Trace & Percent Oxygen Analyser"

The drawings

Number	Rev.	Date	Pg	Description
C-80857	1	22.05.2008	4	Model 3110 Final Assy
B-81574	0	09.06.2008		Battery Sub-Assembly Model 3110
D-80858	0	10.01.2008	2	Schematic diagram Main PCB Model 3110
B-80860	0	09.06.2008	2	3110 Fabrication Detail Main PCB
B-80859	0	10.01.2008		3110 PCB PCB Assembly Main PCB
C-80866	0	10.01.2008	2	Model 3110 Rear Case Detail
C-80863	0	10.01.2008		3110 Front Panel Silkscreen Detail
B-80871	0	10.01.2008		Model 3110 Mask Silkscreen Detail
A-73594	0	27.03.2001		Spec. Control Dwg. Micro Fuel Cell Class Insta Trace-XL
A-66797	1	18.11.1997		Spec. Control Dwg. Micro Fuel Cell Class B2C
A-59452	4	31.10.1997		Oxygen Sensor Class B1 Spec. Control Dwg.
A-66795	0	16.04.1997		Micro-Fuel Cell Class A-5 Spec. Control Dwg.
A-78028	0	27.06.2005		Micro-Fuel Cell Class A2CNG Spec. Control Dwg.
A-66793	0	17.04.1997		Micro-Fuel Cell Class A2C Spec. Control Dwg.

The part list

B80859, Revision 0 of 15.05.2008 (2 pages)

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## SCHEDULE

### EC TYPE EXAMINATION CERTIFICATE N<sup>R</sup> ISSeP08TEX036X

(17) Special conditions for safe use:

Symbol X

- The surfaces in plastic material such as the LCD window and oxygen detection cell loading device don't answer to clause 4.5 of EN 60079-26. All precautions shall be taken to avoid all electrostatic hazards when using the material in category 1 zones (zone 0).
- When the material is situated in hazardous are, do not connect anything on the series interface.

(18) Essential Health and Safety Requirements: covered by the Standards listed in (9)

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