



European notified body
Identification number 0736

EC-Type Examination (Module B) Certificate

Certificate No. **213.048**

Name and address of the manufacturer: **MSA Auer GmbH**
Thiemannstraße 1
12059 Berlin (Germany)

Date of issue: **07.04.2011**

Annex A.1 Item No & Item designation: **A.1/3.30 - Oxygen analysis and gas detection equipment**

Product designation: **Oxygen analysis and gas detection equipment (type 1 + type 2)**

Product Type: **Altair 4X**

Intended purpose: **Oxygen analysis and gas detection equipment complying with SOLAS 74/88 Chapter II-2/4 and VI/3, as amended, IMO Resolution MSC.98(73)-(FSS-Code) 15.**

Testing based on (Specific standard): **EN 60945(2002), IEC 60092-504(2001)*, IEC 60533(1999)***
Category 1: safe area - EN 50104(2002) incl. A1 (2004) Oxygen, EN 60079-29-1(2007)
Category 2: explosive gas atmospheres - EN 50104(2002) incl. A1 (2004) Oxygen, EN 60079-29-1(2007), IEC 60079-0(2004), IEC 60079-1(2007), IEC 60079-10(2002)*, IEC 60079-11(2006), IEC 60079-15(2005)*, IEC 60079-26(2006)
(*) = Testing standards not applicable

Remarks: **see overleaf**

The type tested was found to be in compliance with the Fire Protection requirements of Marine Equipment Directive (MED) 96/98/EC as amended by Directive 2009/26/EC subject to any conditions in the schedule (part of this certificate).

This certificate may only be used in connection with module(s) **D, E or F** of this directive.

Expiry date: **30.04.2016**



Niehus
Signature (Niehus)

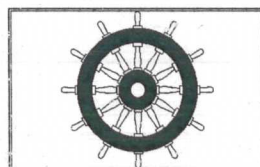


Installed equipment stays approved beyond the validity date until it is revoked!

Note 1: This certificate will not be valid if the manufacturer makes any changes or modifications to the approved equipment, which have not been notified to, and agreed with the notified body named on this certificate.

Note 2: Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply.

Note 3: The Mark of Conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-control phase module (D, E or F) of ANNEX B of the Directive is fully complied with and controlled by a written inspection agreement with a notified body.



xxxx/yy

Note 4: "Wheelmark" Format

YY Last two digits of year mark affixed.

XXXX Notified Body number undertaking surveillance module

Technical data/approved drawings and additional conditions and remarks:

1.

This EC-Type Examination Certificate is based on following documents:

- EMC- test report Nr. D/11/3822/02 issued by "Teseq GmbH", 12623 Berlin (D), dated 09.03.2011
- EC-Type Examination Certificate No. FTZU 07 ATEX 0169X issued by „FTZU- Physical Technical Testing Institute", 716 07 Ostrava Radvanice (CZ), dated 03.12.2007
- 1. Supplement to EC-Type Examination Certificate No. FTZU 07 ATEX 0169X issued by „FTZU- Physical Technical Testing Institute", 716 07 Ostrava Radvanice (CZ), dated 27.05.2008
- 2. Supplement to EC-Type Examination Certificate No. FTZU 07 ATEX 0169X issued by „FTZU- Physical Technical Testing Institute", 716 07 Ostrava Radvanice (CZ), dated 30.07.2008
- 3. Supplement to EC-Type Examination Certificate No. FTZU 07 ATEX 0169X issued by „FTZU- Physical Technical Testing Institute", 716 07 Ostrava Radvanice (CZ), dated 29.09.2009
- 4. Supplement to EC-Type Examination Certificate No. FTZU 07 ATEX 0169X issued by „FTZU- Physical Technical Testing Institute", 716 07 Ostrava Radvanice (CZ), dated 30.07.2010
- 5. Supplement to EC-Type Examination Certificate No. FTZU 07 ATEX 0169X issued by „FTZU- Physical Technical Testing Institute", 716 07 Ostrava Radvanice (CZ), dated 09.09.2010
- 6. Supplement to EC-Type Examination Certificate No. FTZU 07 ATEX 0169X issued by „FTZU- Physical Technical Testing Institute", 716 07 Ostrava Radvanice (CZ), dated 21.12.2010
- Letter of the company MSA AUER GmbH (Mr. Dr. Schubert), dated 17.03.2011

2.

The terms of the documents are part of this EC-Type Examination Certificate.

3.

The movable equipment "Altair 4X" is certified for use as oxygen analyser and for gas detection .

4

Alteration in design and construction have to be approved by the BG Verkehr, Dienststelle Schiffssicherheit.

5.

The equipment shall be marked in accordance with article 11 of the Council Directive 96/98 EC of 20 December 1996 on Marine Equipment as amended.

6.

This EC-Type Examination Certificate may only reproduced in full.