

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB0000224
Revision No:
1

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV GL SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

This is to certify:

That the Portable Oxygen analysis and gas detection equipment: category 2: (explosive gas atmospheres)

with type designation(s)
X-am 2500, X-am 5000, X-am 5600

Issued to
Dräger Safety AG & Co. KGaA
Lübeck, Germany

is found to comply with the requirements in the following Regulations/Standards:
Regulation (EU) 2022/1157,
item No. MED/3.30b. SOLAS 74, Regulation II-2/4, VI/3, XI-1/7, FSS Code 15 and MSC.1/Circ.1477, IMO
MSC.1/Circ.1581.

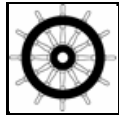
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2027-12-18**.

Issued at **Hamburg** on **2022-12-19**

DNV local station:
Hamburg – CMC North/East

Approval Engineer:
Dariusz Lesniewski



Notified Body
No.: **0098**

for **DNV SE**

Christine Mydlak-Roeder
Head of Notified Body

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-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU. This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV SE of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled. Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Product description

Portable Gas Detector Dräger X-am 2500 (MQG 0011), X-am 5000 (MQG 0010), X-am 5600 (MQG 01**)

Main characteristic:

- Simultaneously measuring of combustible gas concentrations of vapours
 - X-am 2500, X-am 5000, sensor type - catalytic (XDS 00xx) CatEx 125 PR, CatEx 125 PR Gas
 - X-am 5600, sensor type - infrared (IDS 03xx) IR Ex (ES)
 - Battery operated
 - Accessory external X-am Pump, DNV type approved
- Software version: 7.x

Application/Limitation

Ex-certification is not covered by this certificate. Application in hazardous area to be approved in each case according to DNV Rules and Ex-Certification / Special Condition for Safe Use listed in valid Ex-certificate issued by a notified/recognized Certification Body.

Type Examination documentation

Test Report: Treo No. 197-17, issue 3, dated 11.12.2017

Test Report: Treo No. 316-17, issue 3, dated 13.12.2017

Test Report: CEcert No. 417.118.3 Rev.0, dated 20.03.2018

Test Report: CEcert No. 418.060.3 Rev.0, dated 28.08.2018

Test Report: DEKRA No. 41300108P N9, dated 01.08.2017

Test Report: DEKRA No. 41300108P NXI, dated 03.04.2020

Test Report: DEKRA No. 41300108P NXIII, dated 22.07.2022

DEKRA Type Examination Certificate PFG 10 G 001 X, 8th Supplement

EU Type Examination Certificate BVS 10 ATEX E 080 X issue 01

EU Type Examination Certificate BVS 10 ATEX E 080 X Supplement 09

Drawings: SE20370-17, SE20421-06, SE20547-05, SE20553-02

Drawings: SE20555-08, SE20888-01, SE20889-01, SE20890-01

Instruction for Use Dräger X-am[®] 2500 (MQG 0011), Software 7.n (≥ 7.0)", Edition 10 - July 2022

Instruction for Use Dräger X-am[®] 5000 (MQG 0010), Software 7.n (≥ 7.0)", Edition 16 - July 2022

Instruction for Use Dräger X-am[®] 5600 (MQG 0100), Software 7.n (≥ 7.0)", Edition 15 - July 2022

Notes on approval 90 33 890, Edition 06 June 2022

Tests carried out

IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008)

IEC 60092-504:2016

IEC 60533:2015

EN 60079-0:2018, incl. AC:2020

EN 60079-1:2014, incl. AC: 2018-09

EN 60079-10-1:2021*

EN 60079-11:2012

EN 60079-15:2010*

EN 60079-26:2015*

EN 60079-29-1:2016

EN 50104:2019*

*not applicable

Marking of product

The products to be marked with:

- manufacturer name
- model name
- serial number
- power supply ratings