

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

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 fixed gas detection equipment

with type designation(s)
IDS 01x1 and IDS 01x2, PIR 7000

Issued to

Dräger Safety AG & Co. KGaA
Lübeck, Germany

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2019/1397**,
item No. MED/3.54. SOLAS 74 as amended, Regulation II-2/4 & VI/3 and FSS Code 15

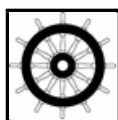
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2025-05-13**.

Issued at **Hamburg** on **2020-05-14**

DNV GL local station:
Hamburg

Approval Engineer:
Dariusz Lesniewski



Notified Body
No.: **0098**

for **DNV GL SE**

Gerhard Aulbert
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 GL 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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 GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") 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.



Job Id: **344.1-009314-1**
Certificate No: **MEDB00005BR**

Product description

Type: explosion proof gas transmitter with infrared sensor technology
Principle of operation: temperature-compensated infrared absorption
Gases: IDS 01x1(2): as the 'EG Type Approval Certificate BVS 08 ATEX G 001 X'
Continuous self-testing in line to IEC 61508:2010
Output signals: 4...20mA, HART (optional)
 =<3,6mA (configurable) - fault, beam block warning, maintenance
Power supply: 20V DC, 3 wire (min. 13V, max. 30V)
Enclosure: Stainless Steel AISI 316 L
Connecting thread: M25 or ¾" NPT
Degree of protection: IP 66 / IP 67 / IP 68
Software version: 3.x.x

Type Examination documentation

	SE23354-2
	SE20448-5 SE20507-5 SE20520-5 SE20525-2 SE20620-1
	9023885-18
	PTB 07 ATEX 1016, Sup. 2 DEMKO 07 ATEX 0654417 X, Sup. 4

Application/Limitation

The equipment is found to comply with following location/application dependent requirements:

Category:	TEMPERATURE	VIBRATION	EMC	ENCLOSURE
Location class:	TMP-D	VIB-B	EMC-B	ECL-C/D

Location class (location or test parameter):

TMP-D : -25°C/+70°C (*ref. IEC 60092-504 (2016) table 1 items 6-7*)
VIB-B : Acceleration 4g (*ref. IEC 60092-504 (2016) table 1 item 10*)
EMC-B : All locations incl. bridge and open deck zone (*ref. IEC 60092-504 (2016) table 1 items 13-20*)
ECL-C/D : IP66/67/68 All locations (*ref. IEC 60092-504 (2016) table 1 items 9 and 12*)

Tests carried out

Applicable test standards:

- IEC 60092-504:2016
- IEC 60533:2015
- EN 60079-0:2012 incl. A11:2013
- EN 60079-29-1:2016

Not applicable test standards:

- EN 50104 (2010)
- IMO MSC.1/Circ.1370

Marking of product

The products to be marked with:

- manufacturer name
- model name