

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 oxygen analysis and gas detection equipment

with type designation(s)

Polytron 8xxx Series, ITR 0xxx, XTR 0xxx, ETR 0xxx

Issued to

Dräger Safety AG & Co. KGaA
Lübeck, Germany

is found to comply with the requirements in the following Regulations/Standards:

Regulation **(EU) 2018/773,**

item No. MED/3.54. SOLAS 74 as amended, Regulation II-2/4 & VI/3 and FSS Code 15

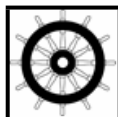
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2024-03-03**.

Issued at **Hamburg** on **2019-03-04**

DNV GL local station:
Hamburg

Approval Engineer:
Dariusz Lesniewski



Notified Body
No.: **0098**

for **DNV GL SE**

Sven Dudzus
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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.



Product description

Gas transmitter for monitoring concentrations of combustible gases and vapours and oxygen

Technical Data:

Supply voltage: 3-wire shielded cable, 10 to 30 VDC

Output: 4 to 20 mA analogue current (normal condition)

3x relay outputs (Alarm, Fault, Maintenance) - optional

Display: Resolution 128x64, back-lit

3x LEDs (Alarm, Fault, Maintenance)

Degree of protection: IP 65/66/67

Software Version: 3.0.x

Transmitter types, coding of type:

(1)TR 0(2)(3)(4)

(1) Sensor

I, X or E : infrared (I), catalytic (X) or electro-chemical (E)

(2) Material of housing

4 or 5 : aluminium (4), stainless steel (5)

(3) Internal sensor (ITR 0xxx)

1 : IDS 0101 (PIR 7000, 334) P8700

2 : IDS 0102 (PIR 7000, 340) P8700

Internal sensor (XTR 0xxx)

0 : IDS 0002 (DrägerSensor IR) P8310

1 : XDS 020x (DrägerSensor DQ) P8200

Internal sensor (ETR 0xxx)

0 : O₂

(4) Interface

0 : XP or "d", 4-20mA

1 : XP or "d", 4-20mA w/Relays

I : "e", 4-20mA

J : "e", 4-20mA w/Relays

Application/Limitation

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

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

*TMP-D:

- XTR 04xx
- ITR 04xx
- XTR 051x
- ETR 0x0x
- EAC 010x aluminium junction box

*ECL-C:

- XTR 050x
- ITR 05xx
- only with stainless steel or nickel-plated blind plugs
- EAC 011x stainless steel junction box

*EMC-B:

- Type approved power supply required

Location class: Location or test parameter

TMP-C: -25°C/+55°C (ref. IEC 60092-504 (2016) table 1 item 6-7)

TMP-D: -25°C/+70°C (ref. IEC 60092-504 (2016) table 1 item 6-7)

VIB-B: Acceleration 4g (ref. IEC 60092-504 (2016) table 1 item 10)

EMC-A: General power distribution zone (ref. IEC 60092-504 (2016) table 1 item 13-20)

Job Id: **344.1-008106-1**
Certificate No: **MEDB0000411**

EMC-B: Bridge and open deck zone (*ref. IEC 60092-504 (2016) table 1 item 13-20*)
ECL-B (IP65): Engine room (*ref. IEC 60092-504 (2016) table 1 12*)
ECL-C (IP66/67): Open deck, masts (*ref. IEC 60092-504 (2016) table 1 item 9 and 12*)

Type Examination documentation

Tests carried out

IEC 60092-504:2016
IEC 60533:2015
EN 50104:2010
EN 60079-0:2012 incl. A11:2013
EN 60079-29-1:2016

Marking of product

- Manufacturer's name or trade mark
- Type designation
- Mark of Conformity (wheel mark), followed by
- Identification number of the NoBo / the year the mark is affixed (example: 0098/2019)