

# (1) EU-Type-Examination Certificate

(2) Equipment and protective systems intended for use in potentially explosive atmospheres, Directive 2014/34/EU



(3) Certificate Number TÜV CY 21 ATEX 0206546 X

(4) for the equipment: Gas Detector

Type: DF - GD3 - A - \*\*\*\*\*

5) of the manufacturer: DET FIRE S.r.I.

(6) Address: Via Leonardo da Vinci, 146 - 20090

Trezzano sul Naviglio (MI) - Italy

Order number: 0206546

Date of issue: 2021-09-02

(7) The design of this equipment or protective system and any acceptable variation thereto are specified in the schedule to this EU-Type-Examination Certificate and the documents therein referred to.

- (8) TÜV CYPRUS Ltd, notified body No. 2261 in accordance with Article 17 of the Council Directive of 2014/34/EU of February 26, 2014, 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 the confidential report No. 21 0206546.
- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0: 2018 EN 60079-1: 2014 EN 60079-31: 2014

- (10) If the sign "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 EU-Type-Examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this equipment which are not covered by this certificate.
- (12) The marking of the equipment or protective system must include the following:



II 2G Ex db IIC T4 Gb II 2D Ex tb IIIC T130°C Db

TÜV CYPRUS Ltd (TUV NORD Group),

The head of the notified body,

D. Demost lenous

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## (13) SCHEDULE

## (14) EU-Type-Examination Certificate No. TÜV CY 21 ATEX 0206546 X

### (15) Description of equipment

The Gas Detectors type DF-GD3-A-\*\*\*\* are used to detect the concentration of combustible or toxic gases based on catalytic, electrochemistry, semiconductor or infrared measuring principle. The detectors are composed by a gas sensor containing a sensitive element in execution Ex d, coupled with an Ex d enclosure (component subject of separate certification) containing the electronic circuit for the elaboration and memorization of signals and the terminal block.

These devices are suitable for fixed installation in explosive atmospheres with presence of gases, vapours and dust according to Group II category 2G EPL Gb and category 2D EPL Db.

#### Type key:

Gas Detector

Type: DF - GD3 - A - \*\*\*\*\*

- DF = DET FIRE series
- GD3 = Gas Detector
- A = Analogic output
- I = Digital output
- \*\*\*\* = Code (table with type of gas below)

Code	Type of gas	Measuring range
06300	Acetone (propanone)	[0-100% LIE]
G6300	Turpentine	[0-100% LIE]
54300	Ethyl alcohol (ethanol)	[0-100% LIE]
B6300	Methyl alcohol (methanol)	[0-100% LIE]
14300	Ammonia (nitrogen trihydride)	[0-100% LIE]
26\$20	Carbon dioxide	[0-5000ppm]
26T20	Carbon dioxide	[0-1%V/V]
26420	Carbon dioxide	[0-2%V/V]
26720	Carbon dioxide	[0-5%V/V]
82300	Hexane	[0-100% LIE]
60300	Ethylene	[0-100% LIE]
B0300	GPL	[0-100% LIE]
88300	Hydrogen	[0-100% LIE]
B4300	Methane	[0-100% LIE]
D3300	Nonane	[0-100% LIE]
30010	Carbon oxide	[0-300ppm]
D6A10	oxygen	[0-30%V/V]
98G10	Hydrogen sulphide	[0-20ppm]
14L10	Ammonia	[0-100ppm]



D2L10	Nitrogen monoxide	[0-100ppm]
D0I10	Nitrogen dioxide	[0-30ppm]
32F10	Chlorine	[0-10ppm]
68U10	Formaldehyde	[0-8000ppb]
E6300	Propane	[0-100% LIE]
G4300	Toluene	[0-100% LIE]
76300	Gasoline vapors	[0-100% LIE]
H2300	Xylene	[0-100% LIE]

#### Technical data:

Rated supply voltage: 12 to 24 Vdc ±5%

Maximum rated current: 90 mA

The degree of ingress protection is IP 65.

Allowable ambient temperature range: -40°C ÷ +60°C

#### Warning Markings:

#### WARNING - WAIT 60 SECONDS BEFORE OPENING

(16) Test documents are listed in the test report No. 21 0206546

#### (17) Special conditions for safe use

- The flame-paths are specified in the manufacturer's documentation. For information regarding the dimension of the flameproof joints the manufacturer shall be contacted.
- The gas detector installation must be performed following the instructions in the manufacturer manual.
- The accessories used for cable entry and for the unused holes shall be separately certified according to the applicable type of protection and shall guarantee the minimum degree of protection as indicated on device nameplate.

#### (18) Essential Health and Safety Requirements

This certificate of conformity covers only the Essential Health and Safety Requirements related to the Directive 2014/34/EU, excluding 1.5.5, 1.5.6 and 1.5.7.