




- (1) **EC TYPE EXAMINATION CERTIFICATE**
- (2) **Equipment or protective system intended for use
in potentially explosive atmospheres
Directive 94/9/EC**
- (3) EC type examination certificate number: **ISSeP13ATEX024X**
- (4) Equipment: Level or flow sensor Thermanel type TD1/TD2.
- (5) Applicant - Manufacturer - ~~Authorized representative in the Community:~~
Magnetrol International N.V.
- (6) Address: Heikensstraat 6
B - 9240 Zele
- (7) This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- (8) ISSeP, notified body N° 0492 in accordance with article 9 of the Council Directive 94/9/EC of 23 March 1994, 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 confidential report N° 13017.
- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with the documents:
- EN 60079-0: 2012 EN 60079-1: 2007
 - EN 60079-11 : 2012 EN 60079-26: 2007
- (10) If the symbol "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 EC TYPE EXAMINATION CERTIFICATE relates only to the design, examination and tests of the specified equipment or protective system in accordance to the Directive 94/9/EC. Further requirements of this Directive may apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.
- (12) The marking of the equipment or protective system shall include the following indications:

 II 1/2 G / Ex d+ib, d [ib] IIC T5...T4 Ga/Gb

Colfontaine, the 25.07.2013.

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Marcel LAMBERT,
Director.

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(13)

SCHEDULE

(14)

EC TYPE EXAMINATION CERTIFICATE No ISSeP13ATEX024X

(15) Description of the equipment

- Level or flow sensor Thermatel type TD1/TD2.
- The apparatus consists of:
 - An aluminium alloy or stainless steel housing containing the electronic equipments.
 - A bushing of wires screwed on the base of the housing.
 - A detector directly fixed on the bushing or via an extension tube.
- This apparatus bears the type designation: T D X – X X X X – X C X.

Temperature classes

- The temperature class is T5 when the apparatus is used in the ambient temperature range $-40^{\circ} \text{C} \leq T_a \leq +40^{\circ} \text{C}$.
- The temperature class is T4 when the apparatus is used in the ambient temperature range $-40^{\circ} \text{C} \leq T_a \leq +70^{\circ} \text{C}$.

Electrical characteristics

- Model TD1
 - $U_m = 24 \text{ V}$.
 - For the relay: $U_m = 24 \text{ V}$.
- Model TD2
 - $U_m = 250 \text{ VAC}$ or 24 VDC .
 - For the relay: $U_m = 250 \text{ VAC} / I_m = 5 \text{ A}$.

Routine test

- The manufacturer shall make the routine verifications and tests necessary to ensure that the electrical apparatus produced complies with the specification submitted to the testing station together with the prototype.
- The housings are exempted from the overpressure routine test of EN 60079-1. However the extension tube with its detector shall be submitted to an overpressure test under the value of minimum 2000 Pa (20 bar) during at least 10 seconds (maximum 60 seconds).
- Each transformer shall be submitted to voltage tests as prescribed at clause 11.2 of EN 60079-11. The test voltage between the primaries and the secondaries shall be of at least 2500 V.

(16) Report N° 13017 completed by 15 documents.

(17) Special condition for safe use: none

(18) Essential Health and Safety Requirements: covered by the standards listed at point 9 and by the descriptive documents of the manufacturer.

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