




(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: **ISSeP09ATEX013X**
- (4) Equipment or protective system:
Ultrasonic Transmitter for Level, Volume and Open Channel Flow model Echotel 355.
- (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° 492 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.

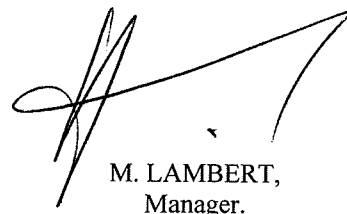
The examination and test results are recorded in confidential report n° 07153.

- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 60079-0 : 2006 (IEC 60079-0 : 2004)
EN 60079-11 : 2007 (IEC 60079-11 : 2006)
EN 60079-26 : 2007 (IEC 60079-26 : 2006)
- (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 G Ex ia II C T4

Colfontaine, the 03.03.2009

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SERVICE PUBLIC
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M. LAMBERT,
Manager.

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(13)

SCHEDULE

(14)

EC TYPE EXAMINATION CERTIFICATE N^R ISSeP09ATEX013X

(15) Description of the equipment or protective system:

Ultrasonic Transmitter for Level, Volume and Open Channel Flow model Echotel 355

Possible and admissible variations :

3 5 5 - 5 X X X - A X X

Signal Output :

0 = 4-20 mA

1 = 4-20 mA + Hart

Options

Accessories

Approval

A = ATEX Ex ia

Housing/conduit connection

0 = Aluminium - 3/4" NPT

1 = Aluminium - M20

2 = SST - 3/4 " NPT

3 = SST - M20

6 = Lexan EXL - 3/4" NPT

7 = Lexan EXL - M20

Transducer

B = 2" NPT Polypropylene

R = 2" NPT Kynar

Electrical parameters :

$U_i = 28.4 \text{ V}$ or $U_i = 28 \text{ V}$
 $I_i = 94 \text{ mA}$ $I_i = 120 \text{ mA}$
 $P_i = 0.67 \text{ W}$ $P_i = 0.84 \text{ W}$

$C_i = 5.5 \text{ nF}$
 $L_i = 370 \text{ } \mu\text{H}$

Routine tests :

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 or sample (clause 27 of EN60079-0).

Eventual prescriptions : T_a : -40°C to +70°C

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EC TYPE EXAMINATION CERTIFICATE N^R ISSeP09ATEX013X

(16) Report n^r 07153 of 02.03.2009

Composed in total of 28 pages, completed by the following descriptive documents :

The Instruction Manual : "Echotel® Model 355 Installation and Operation Manual"

The drawings

Number	Rev.	Date	Pg	Description
99-7222	A	01.2008	2	Model 355 Echotel Atex Ex ia
030-3603	C	08.01.2009	2	Echotel Model 355 Power P.C. Board
09-9333-001	J	19.02.2009	8	
094-6054	D	08.01.2009	2	Schematic Echotel Model 355 Power P.C. Board
030-3604	C	11.02.2009	2	Echotel Model 355 Main P.C. Board
09-9334-001	D	06.02.2008	8	
094-6055	E	26.01.2009	2	Schematic Echotel Model 355 Main P.C. Board
030-3605	D	12.01.2009	2	Echotel Model 355 Sensor PCB
09-9335-001	F	07.01.2009	4	
094-6056	D	09.01.2009	1	Schematic Echotel Model 355 Sensor P.C. Board
009-6270	A	16.11.2007	1	DC Transformer

(17) Special conditions for safe use:

Symbol X

- Materiels marked as Category 1 equipment and used in hazardous area requiring this category shall be installed in such away that, even in the event of rare incidents, the aluminium enclosure cannot be an ignition source due to impact or friction.
- The plastic enclosures don't answer to the specification of clause 7 of EN 60079-0 and 4.5 of EN 60079-26, all precautions shall be taken during installation and use of the material to avoid all electrostatic discharges.

(18) Essential Health and Safety Requirements: covered by the Standards listed in (9)