



[1] **EC-TYPE EXAMINATION CERTIFICATE**

[2] **Equipment or Protective Systems or Component Intended for use  
in Potentially explosive atmospheres  
Directive 94/9/EC**

[3] EC-Type Examination Certificate number:

**CESI 00 ATEX 035**

[4] Equipment: Electronic pressure transmitters series 600T EN

[5] Manufacturer: **ABB Instrumentation spa**

[6] Address: Via Statale 113, Lenno (Como), Italy

[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] CESI, notified body n° 0722 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° EX-A0/024718.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

**EN 50014: 1997 + A1..A2    EN 50018: 1994    EN 50284: 1999    EN 50281-1-1:1999**

[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 EC-TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified equipment or protective system. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment or protective system.

[12] The marking of the equipment or protective system shall include the following:

**II 1/2 GD    EEx d IIC T6,T5    IP 67    T80°C, T95°C**

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date            July 21<sup>st</sup>, 2000            translation issued on July 25<sup>th</sup>, 2000

prepared      CERT - M. Balaz

verified

approved      CERT - U. Colombo

**CESI**

**CENTRO ELETTROTECNICO SPERIMENTALE ITALIANO**  
Responsabile Area Certificazione

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## Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE N° CESI 00 ATEX 035**

[15] Description of equipment

The pressure transmitters series 600T EN are microprocessor-based SMART transmitters which adopt both inductive and capacitive sensors. The 600T EN series includes an analogic version, an analogic version with HART digital communication and a digital version with protocol PROFIBUS or FOUNDATION.  
The pressure transmitters series 600T EN are identified by a code as follows:

6    ÷    ÷    E    ÷    (5 main characters plus 11 characters for various options)  
a    b    c    d    e

- a: 6 (fixed) means 600T series
  - b: it is for Tx performance (accuracy) and may be either 1 (low), 2 (standard) or 3 (high)
  - c: it is for Tx type with reference to the process primary transducer and may be either 1 (Differential type), 2 (High Static Diff. Type) or 4 (Gauge Type)
  - d: E (fixed) means "EN" (Enhanced) series
  - e: it is for pressure measurement, e.g. A (absolute), D (differential), G (Gauge)
- For the complete description of the different models see the Technical Note n° 1H5-15-071XE ATEX annexed to this certificate.

### Electrical characteristics

Max. supply voltage	42 [Vdc]
Max. supply power	2 [W]
Output signal	4 ÷ 20 [mA] + digital signal

### Temperature class of transmitters Category 1/2 G

T6 for ambient temperature - 40 ÷ + 70 °C

T5 for ambient temperature - 40 ÷ + 85 °C

### Maximum surface temperature T of the enclosure of transmitters Category 1/2 D

T80 °C for ambient temperature -40 ÷ + 70 °C

T95 °C for ambient temperature -40 ÷ + 85 °C

Degree of protection                      IP 67

The accessories used for the cable entry and for closing unused holes shall guarantee a degree of protection IP 67 and shall be certified according to the standards EN 50014 and 50018.

### Plate warnings

Supply by cable with maximum service temperature not less than:

75 °C for T6, Tamb. + 70 °C

90 °C for T5, Tamb. + 85 °C

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### Schedule

[14] EC-TYPE EXAMINATION CERTIFICATE N° CESI 00 ATEX 035

[16] Report N° EX-A0/024718

#### Routine tests

The manufacturer shall carry out the routine tests prescribed at clause 24 of the EN 50014 standard.

The manufacturer is exempted from the routine overpressure test on the pressure transmitters series 600T EN since these transmitters have passed the type test performed with the static method at a pressure of 52 bar, equal to 4 times the reference pressure.

#### Descriptive documents (prot. EX-A0/024720)

- Technical note n° 1H5-15-071XE ATEX (3 p.)	dated 19.05.2000
- Drawing n° 1H5-15-00710/1 (2 p.)	dated 17.04.1996
- Drawing n° 1H5-15-00711/1 (2 p.)	dated 17.04.1996
- Drawing n° 1H5-15-00712/1	dated 17.04.1996
- Drawing n° 1H5-15-00714	dated 30.11.1998
- Drawing n° 1H5-15-00716	dated 15.05.2000
- Drawing n° 1H5-15-00717/1	dated 21.04.2000
- Drawing n° 1H5-15-00718	dated 21.04.2000
- Supplementary technical note n° 1H5-15-00711E/3	dated 01.12.1998
- Safety instructions n° 1H5-15-071XA (12 p.)	dated 16.06.2000
- EC declaration of conformity	dated 29.06.2000

One copy of all documents is kept in CESI files.

[17] Special conditions for safe use

None.

[18] Essential Health and Safety Requirements

Covered by standards

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