



CESI S.p.A.
Via Rubattino 54
I-20134 Milano - Italy
Tel: +39 02 21251
Fax: +39 02 21255440
e-mail: info@cesi.it
www.cesi.it

[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:
CESI 14ATEX034

[4] **Equipment:** Gas detectors series ST

[5] **Manufacturer:** SENSITRON S.r.l.

[6] **Address:** Viale della Repubblica 48 – 20010 Cornaredo (MI) - 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-B4016226.

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

EN 60079-0:2012 EN 60079-1:2007 CEI EN 60079-1 (2008-11 Annex 1)

[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, examination and tests of the specified equipment or protective system in accordance to the Directive 94/9/EC. Further requirements of the Directive 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:

I M2 Ex d I Mb

This certificate may only be reproduced in its entirety and without any change, schedule included.

Date 01 July 2014 - Translation issued the 01 July 2014

Prepared
Enrico Radaelli

Verified
Mirko Balaz

Approved
Fiorenzo Bregani

CESI S.p.A.
Testing & Certification Division
Business Area Certification
Responsabile
Fiorenzo Bregani

Schema di certificazione

CESI-ATEX



PRD N. 018B
Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC
Signatory of EA, IAF and ILAC Mutual Recognition Agreements

[13]

Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 10 ATEX 034**

[15] **Description of equipment**

The gas detectors series ST are used to detect the concentration of combustible or toxic gases.

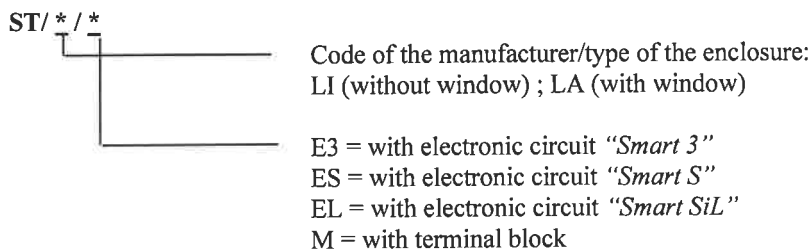
The detectors in subject are composed by a sensor head in execution Ex-d containing the sensing element, coupled with an Ex d I enclosure (component subject of separate certification).

Both the sensor head that the main enclosure are made of stainless steel; the enclosure can be with or without window.

Inside the enclosure are installed the electronic circuit for the elaboration of signals and the terminal block.

There are the following types of sensing elements: pellistor, infrared, and electrochemical cell.

The identification code of the gas detectors ST is as follows:



Complete codes and characteristics of detectors are reported in the documents annexed to this certificate.

The identification code is reported on the label fixed on the sensor head and on the label fixed on the enclosure.

The identification of the gas is reported on the data label fixed on the sensor head.

Electrical characteristics

Rated supply voltage:	12 ÷ 24 Vdc
Maximum current absorbed:	500 mA
Maximum power dissipated:	5.4 W ^[1]
Ambient temperature:	-20 ÷ +50/+55/+60 °C ^[2]

[1] The value is the sum of the maximum power dissipated in the sensor head (max 1.4 W) and the maximum power dissipated by the electronic circuit inside the enclosure (max 4 W).

[2] The ambient temperature values above reported represent the upper and lower limits of the applicable temperature range, taking into account the constructional and functional characteristics of the devices installed in the equipment, as specified in the descriptive documents annexed to the certificate.

The marking label shows the ambient temperature range assigned to the equipment.

Warning label

"WARNING – do not open when energized"

This certificate may only be reproduced in its entirety and without any change, schedule included.

[13] **Schedule**

[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 10 ATEX 034**

Cable entries

The accessories used for the cable entries and to close the unused holes, shall be subject of a separate certification, shall be used according to the instructions reported in the relevant certificate and shall guarantee the same type/degree of protection assigned to the equipment. Moreover the accessories shall be suitable to be use in the ambient temperature range assigned to the equipment.

If cylindrical threads are used, the coupling between the accessories and the enclosure shall be made according to the requirements indicated in the documents annexed to this certificate.

[16] **Report n. EX-B4016226.**

Routine tests

No routine tests are required on the gas detectors subject of this certificate.

Descriptive documents (prot. EX-B4016249)

- Technical Note NTCX3526	(pg. 12)	dated	25.06.2014
- Safety Instructions MTCX3525	(pg. 6)	dated	25.06.2014
- Drawing NTCX3520		dated	26.06.2014
- Drawing NTCX3523		dated	26.06.2014
- Drawing ASCX3517		dated	26.06.2014
- Drawing MECX3518		dated	26.06.2014
- Drawing MECX3519		dated	26.06.2014
- Drawing MECX3522		dated	26.06.2014
- Drawing MECX3529		dated	26.06.2014
- Drawing MECX3530		dated	26.06.2014
- Drawing MECX3531		dated	26.06.2014
- Drawing MECX3532		dated	26.06.2014
- Drawing MECX3533		dated	26.06.2014
- Drawing MECX3534		dated	26.06.2014
- Drawing MECX3535		dated	26.06.2014
- Declaration of Conformity DC3524 (<i>fac-simile</i>)		dated	25.06.2014

One copy of all documents is kept in CESI files.

[17] **Special conditions for safe use (X)**

None.

Note:

the installation, the operating, the maintenance and the repair of the ST equipment shall be in according to the safety instructions supplied by the Manufacturer.

[18] **Essential Health and Safety Requirements**

The Essential Health and Safety Requirements are assured by compliance to the following standards:

- EN 60079-0: 2012 - Explosive atmospheres - Equipment -General requirements.
- EN 60079-1: 2007 - Explosive atmospheres - Equipment protection by flameproof enclosures “d”.