CESI certificate of conformity

This certificate is issued for the electrical apparatus

Temperature transmitter model 653T...

manufactured by **ABB Kent-Taylor S.p.A. - Lenno (CO) - Italy**

and submitted for certification by **ABB Kent-Taylor S.p.A. - Lenno (CO) -**

This electrical apparatus and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

CESI, being an approved certification body in accordance with Article 14 of the Council Directive of the European Communities of 18 December 1975 (76/117/EEC), certifies that the apparatus complies with harmonized European Standards for electrical apparatus for potentially explosive atmospheres

EN 50.014 - 1977 + A1..A5 (CEI 31-8) - General requirements

EN 50.018 - 1977 + A1..A3 (CEI 31-1) - Flameproof enclosure "d"

as it has successfully met the verification and test requirements prescribed by these Standards. A confidential test report has been issued resuming the obtained results.

The apparatus shall be marked with the following code

EEx d IIC T6,T5

The supplier of the electrical apparatus referred to in this certificate, by marking the supplied product, has the responsibility to ensure that the apparatus conforms to the specification laid down in the schedule to this certificate and has satisfied the routine verifications and tests specified therein.
This apparatus may be marked with the distinctive Community mark specified in Annex II to the Commission Directive 84/47/EEC of 16 January 1984 and here printed.

no. pages 3

date November 10, 1995 - translation issued on November 10, 1995

prepared CER - M. Balaz

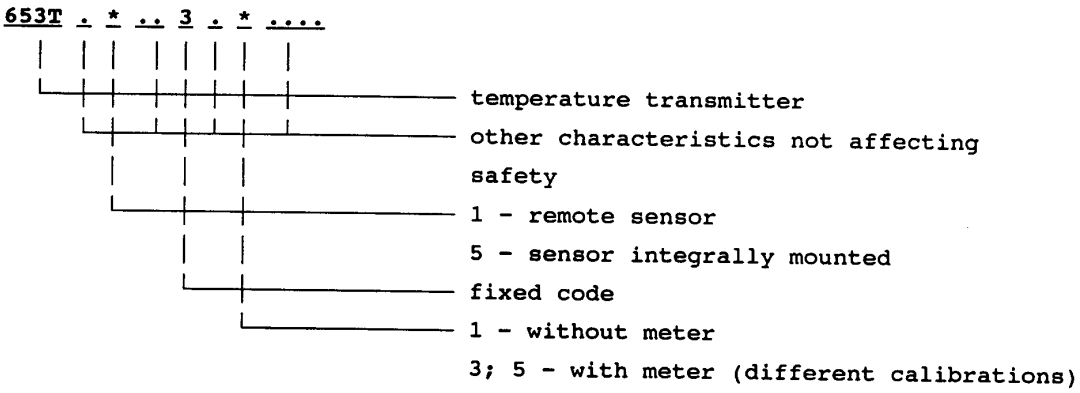
verified CER - M. Toninelli

approved CER - M. Melzi

CESI
CENTRO ELETTROTECNICO SPERIMENTALE ITALIANO
Divisione Certificazione

IDENTIFICATION AND DESCRIPTION OF THE ELECTRICAL APPARATUS

The model 653T... temperature transmitter of the 600 T series is designed to measure temperature by termocouples or thermoresistances. It is identified by a code as follows:



ELECTRICAL CHARACTERISTICS

Supply voltage	:	35 [V dc] max.
Supply current	:	23 [mA dc] max.
Signal	:	4 ÷ 20 [mA]

The temperature classes of the transmitter are the following:

T6 for ambient temperature -20 °C ÷ +70 °C
T5 for ambient temperature -20 °C ÷ +85 °C

Warning label:

The supply cables must be suitable for the operating temperature of:
- 75 °C (with ambient temp. +70 °C);
- 90 °C (with ambient temp. +85 °C).

SPECIAL CONDITIONS FOR SAFE USE (X)

- None

ADDITIONAL CONDITIONS

The accessories used for the cable entries must be certified according to EN 50.014 and EN 50.018 Standards.
If cylindrical threads are used,the coupling between the cable gland and the enclosure must be made according to the requirements indicated in the drawings annexed to this Certificate.

ROUTINE TESTS

The manufacturer must carry out the routine tests prescribed at paragraph 23 of the EN 50.014 Standard and paragraph 15 of EN 50.018 Standard.
The routine overpressure test must be carried out at 12 bar with the static method (par. 14.1.3.1 of EN 50.018 Standard).

VERIFICATION OF DEGREE OF PROTECTION

The temperature transmitters model 653T... , having the sealing gaskets indicated on the document annexed to this Certificate, have been tested in accordance with the specification of IEC 529 (1989) Standard for the degree of protection IP 67.
The transmitters model 653T... comply with IEC 529 (1989) Standard for the degree of protection IP 67.

DESCRIPTIVE DOCUMENTS (prot. EX-95/036696)

- Drawing	no.	1H5-15-00812	(2 sheets)	dated	18.07.1995
- Technical Note	no.	1H5-15-0812E		dated	20.07.1995
- Annex E				dated	30.08.1995

One copy of all documents is kept in CESI files.

extension no. 01/96

The certificate issued on November 10, 1995

to ABB Kent-Taylor S.p.A. - Lenno (CO) -

for Temperature transmitter model 653T..

is extended to the above mentioned electrical apparatus, in accordance with the documents annexed, having the following variations.

Admitted variations: Minimum ambient temperature - 40°C; overpressure tests carried out at a pressure corresponding to four times the reference pressure.

ELECTRICAL CHARACTERISTICS

Minimum ambient temperature - 40°C .

This extension and annexed descriptive documents must be annexed to the certificate of conformity CESI EX-95.D.111.

no. pages 2

date May 7, 1996 - translation issued on May 7, 1996

prepared CER - M. Balaz

verified CER - M. Toninelli

approved CER - F. Gallucci

CESI
CENTRO ELETTROTECNICO SPERIMENTALE ITALIANO
Divisione Certificazione

extension no. 01/96

ROUTINE TESTS

The manufacturer must carry out the routine tests prescribed at paragraph 23 of the EN 50.014 Standards.
The overpressure test on the temperature transmitter model 653T.. was carried out at 52 bar, with the static method, corresponding to four times the reference pressure.

DESCRIPTIVE DOCUMENTS (prot. EX-96/015217)

- Drawing no. 1H5-15-00812/1 (2 sheets) dated 17.04.1996

One copy of all documents is kept in CESI files.

Prot. 96/015225 P: 2 + 2 EX-96/014314
keywords: 13010R 27420G 48010M 54250O 66540E

extension no. 02/97

The certificate issued on November 10, 1995

to **ABB Kent-Taylor - Lenno (CO) -**

for **Temperature transmitter model 653T...**

is extended to the above mentioned electrical apparatus, in accordance with the documents annexed, having the following variations.

Admitted variations: new model 653....

IDENTIFICATION AND DESCRIPTION OF THE ELECTRICAL APPARATUS

The model 653.... temperature transmitter of the 600 T series is identified by a code as follow:

653 . . * .. 3 . * ....

- temperature transmitter
- T: for RTD/TC inputs
- L: for RTD only
- S: for RTD/TC with Hart protocol transmission
- x: any letter for future function/application
- other characteristics not affecting safety
- 1 - remote sensor
- 5 - sensore integrally mounted
- fixed code
- 1 - without meter
- 3; 5 - with meter (different calibrations)

This extension and annexed descriptive documents must be annexed to the certificate of conformity CESI EX-95.D.111.

no. pages 2

date June 25, 1997 - translation issued on June 25, 1997

prepared CERT - M. Balaz

verified CERT - M. Toninelli

approved CERT - M. Melzi

CESI
CENTRO ELETTROTECNICO SPERIMENTALE ITALIANO
Area Certificazione

extension no. 02/97

DESCRIPTIVE DOCUMENTS (prot. EX-97/020522)

- Technical Note	no. 1H5-15-0812E/1	dated	07.03.1997
- Drawing	no. 1H5-15-00812/2	dated	06.03.1997

One copy of all documents is kept in CESI files.