



[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 01 ATEX 015

[4] Equipment: Field Indicator model 695 FI

[5] Manufacturer: **ABB Instrumentation s.p.a.**

[6] Address: Via Statale 113 - 22016 Lenno (CO) - 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-A1/007239.

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

EN 50014: 1997 + A1..A2 EN 50020: 1994 EN 50284: 1997 EN 50281-1-1: 1998

[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.

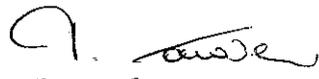
[11] This EC Type examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the directive 94/9/EC.
Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

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

⊕ Ex II 1 GD EEx ia IIC T5, T4 IP 67 T50°C, T95°C

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

date 2 March 2001

prepared CERT - P. Canavesi 

verified CERT - D. Cavanna 

approved CERT - U. Colombo

CESI

CENTRO ELETTROTECNICO SPERIMENTALE ITALIANO
Responsabile Area Certificazione



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[13]

Schedule

[14] EC-TYPE EXAMINATION CERTIFICATE N° CESI 01 ATEX 015

[15] Description of equipment

The field indicator model 695 FI is an instrument which provides a field indication of a process variable, normally converted into $4 \div 20$ mA standard signal.

The indicator is formed by a metallic enclosure, a terminal block and a meter which can be one of the following types:

- digital meter model COMETER;
- digital meter LCD;
- analog meter with linear scale or square root scale.

The accessories used for cable entries and to close the unused entries shall be certified according to EN 50014 and either EN 50281-1-1 or EN 50019 or EN 50018 Standards and guarantee a degree of protection IP 67 at least.

Electrical characteristics

- $U_i = 30$ V
- $I_i = 100$ mA
- $P_i = 0,7$ W
- $C_i = 13$ nF
- $L_i = 0,22$ mH

Class temperature of the field indicator model 695 FI for category 1 G:

- T5 for an ambient temperature: $-40 \div +40$ °C;
- T4 for an ambient temperature: $-40 \div +85$ °C.

Maximum surface temperature of the enclosure of the field indicator model 695 FI for category 1 D:

- T50 °C for an ambient temperature: $-40 \div +40$ °C;
- T95 °C for an ambient temperature: $-40 \div +85$ °C.

Degree of protection IP 67

Warning label

"Use supply cables suitable for 5 °C above maximum ambient temperature"

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[13]

Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE N° CESI 01 ATEX 015**

[16] **Report N° EX-A1/007239**

Routine tests

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

Descriptive documents (prot. EX-A1/007240)

| | | | |
|--------------------------------|--------------------|-------|------------|
| - Technical Note | no. 1H5-15-286XE | dated | 05.02.2001 |
| - Drawing | no. 1H5-15-00286 | dated | 02.10.2000 |
| - Drawing | no. 1H5-15-00286/A | dated | 02.10.2000 |
| - Safety Instruction | no. 1H5-15-076XA | dated | 01.02.2001 |
| - CE declaration of conformity | | dated | 05.02.2001 |

One copy of all documents is kept in CESI files.

[17] **Special conditions for safe use**

None.

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

Assured by compliance to the Standards indicated at pag. 1.

EXTENSION n. 01/02



to EC-Type Examination Certificate CESI 01 ATEX 015

Equipment: **Field Indicator
Type 695 FI**

Manufacturer: **ABB Instrumentation S.p.A.**

Address: **Via Statale 113 – 22016 Lenno (CO) - Italy**

Admitted variations 1) variation of the electrical characteristics with new temperature class:

| Parameter | Value | Unit | Temperature class | Ambient Temperature T _{amb} |
|----------------|-------|------|-------------------|---|
| U _i | 30 | [V] | T6 | -40° ÷ +40°C |
| I _i | 50 | [mA] | | |
| P _i | 0,4 | [W] | | |

2) addition of PROMETER, certified on CESI 01 ATEX 060U, among the already certified meters.

Descriptive documents (prot. EX-A2/026469)

- IH5-15-286XE/1 dated 14.05.2002
- IH5-15-00287 dated 14.05.2002

One copy of all documents is kept in CESI files.

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 01 ATEX 015.

This document may only be reproduced in its entirety and without any change.

date August 26, 2002 - translation issued the August 26, 2002

prepared CERT – Francesco A. Esposito

verified CERT – Damiano Cavanna

approved CERT – Umberto Colombo

CESI

CENTRO ELETTROTECNICO SPERIMENTALE ITALIANO
Business Unit Certificazione

Il Responsabile

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Prot. A2/026481 P: 1 + 2
Keywords 13010R 27420G 48030A 54250O 66540E

EXTENSION n. 02/12

to EC-Type Examination Certificate CESI 01 ATEX 015

Equipment: Field Indicator model 695 FI

Manufacturer: ABB S.p.A.

Address: Via Statale 113 - 22016 Lenno (CO) - Italy

Admitted variation

Change of the Company name, conformity to new edition of the harmonized European standard and new types of protection.

New company name

The manufacturer name ABB Instrumentation S.p.A. changes in: ABB S.p.A.

Conformity to new edition of the harmonized European standard

The apparatus subject of the certificate CESI 01 ATEX 015 and annexed extension are conform to the standards:

EN 60079-0: 2009 EN 60079-11: 2012 EN 60079-26: 2007

The equipment shall be marked as follows:

 II 1GD Ex ia IIC T6, T5, T4 Ga Ex ia IIIC T50 °C, T95 °C Da
 or
 II 2GD Ex ia IIC T6, T5, T4 Gb Ex ia IIIC T50 °C, T95 °C Db

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 01 ATEX 015.

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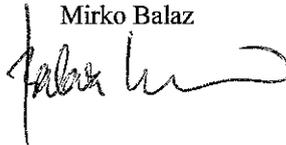
Date 1 March 2012 - Translation issued the 1st March 2012

Prepared

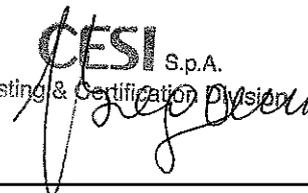
Guido Prazzoli


Verified

Mirko Balaz


Approved

Fiorenzo Bregani

 S.p.A.
 Testing & Certification Division


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EXTENSION n. 02/12

to EC-Type Examination Certificate CESI 01 ATEX 015

Description of equipment

The field indicator model 695 FI have unchanged characteristics compared to those indicated in the certificate CESI 01 ATEX 015 and annexed extensions.

The accessories used for cable entries shall be subject of separate certification according to EN 60079-0 and shall assure a degree of protection IP67 to enclosure.

Types of protection

The field indicator model 695 FI is realized with stainless steel enclosure for type of protection:

II 1GD Ex ia IIC T6, T5, T4 Ga Ex ia IIIC T50 °C, T95 °C Da

The field indicator model 695 FI is realized with stainless steel or aluminium alloy enclosure for type of protection:

II 2GD Ex ia IIC T6, T5, T4 Gb Ex ia IIIC T50 °C, T95 °C Db

Temperature class or surface temperature as function of ambient temperature:

T6, T5, T50 °C with ambient temperature -40 ÷ +40 °C
T4, T95 °C with ambient temperature -40 ÷ +85 °C

Electrical characteristics

| | |
|---|--|
| For temperature class T6: $U_i \leq 30 \text{ V}$ $I_i \leq 50 \text{ mA}$ $P_i \leq 0.40 \text{ W}$ | For temperature class T5, T4 and surface temperature T50 °C and T95 °C: $U_i \leq 30 \text{ V}$ $I_i \leq 100 \text{ mA}$ $P_i \leq 0.75 \text{ W}$ |
| $C_i: 13 \text{ nF}; \quad L_i: 0.22 \text{ mH}$ | |

Report n. EX-B2005877

Routine tests

The manufacturer shall carry out the routine tests prescribed at paragraph 27 of EN 60079-0: 2009 standard.

Descriptive documents (prot. EX-B2005881)

| | | |
|---|-------|------------|
| - Technical Note N. DH 3221 (pg. 3) | dated | 09.01.2012 |
| - Drawing 1H5-15-00286 rev.1 | dated | 09.01.2012 |
| - Drawing labels 1H5-15-00287 rev.1 | dated | 09.01.2012 |
| - Schematic DH 3222 | dated | 29.02.2012 |
| - Drawing terminal block EC 3005/0 | dated | 16.09.2003 |
| - Drawing morsettiera AN 0628/02 rev. 02 (pg. 2) | dated | 16.09.2003 |
| - Drawing terminal block AN 0632/03 rev. 03 (pg. 2) | dated | 16.09.2003 |
| - Safety Instruction IM/695FI_8 (pg. 16) | dated | 14.02.2012 |
| - CE Declaration of conformity | dated | 14.02.2012 |

One copy of all documents is kept in CESI files.

Special conditions for safe use (X)

None.

Essential Health and Safety Requirements

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

- EN 60079-0: 2009 Explosive atmospheres – Part 0: Equipment - General requirements.
- EN 60079-11: 2012 Explosive atmospheres – Part 11: Equipment protection by intrinsic safety “i”.
- EN 60079-26: 2007 Explosive atmospheres – Part 26: Equipment with equipment protection level (EPL) Ga.

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