



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

[2] **Component intended for use on/in equipment or protective system
intended for use in potentially explosive atmospheres
Directive 94/9/EC**

[3] EC-Type Examination Certificate number:

CESI 01 ATEX 081 U

[4] Component: Breathing and draining valve series ECD

[5] Manufacturer: **EL.FIT S. p. A.**

[6] Address: Via Aquileia 8 Villesse (Gorizia - Italy)

[7] This component 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 component has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of components 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-A1/033982.

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

EN 50014: 1997 + A1...A2 EN 50018: 2000

[10] The sign "U" placed after the certificate number indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system.

[11] This EC-TYPE EXAMINATION CERTIFICATE relates only to the design, examination and tests of the specified component in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this component. These are not covered by this certificate.

[12] The marking of the component shall include the following:



II 2 G EEx d IIC

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date 14th November, 2001 - translation issued on 27th November, 2001

prepared CERT - M. Balaz

approved CERT - U. Colombo

CESI

CENTRO ELETTROTECNICO SPERIMENTALE ITALIANO

Business Unit Certificazione

Il Responsabile

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[13]

Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 01 ATEX 081 U**

[15] **Description of component**

The breathing and draining valve series ECD is made in aluminium alloy or in stainless steel.

It is designed for installation on flameproof enclosures with a breathing or draining function according to the type of mounting.

The breathing and draining valve series ECD can be mounted on flameproof enclosures of the group IIC without limits of volume.

In case of use of cylindrical threads the coupling between the valve and the enclosure shall be made according to the documents annexed to this certificate.

[16] **Report n. EX-A1/033982**

Routine tests

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

Descriptive documents (prot. EX-A1/033983)

- n° A4-756 Rev. 0	dated	27.05.1999
- n° A4-757 Rev. 0	dated	27.05.1999
- n° A4-758 Rev. 0	dated	27.05.1999
- n° A4-759 Rev. 0	dated	27.05.1999
- n° A4-760 Rev. 0	dated	27.05.1999
- n° A4-761 Rev. 0	dated	27.05.1999
- n° A4-762 Rev. 0	dated	27.05.1999
- n° A3-215 Rev. 0	dated	27.05.1999
- Safety instructions Annexe A/8 Rev. 0 (4 p.)	dated	27.05.1999
- Attestation of conformity for components	dated	27.05.1999

One copy of all documents is kept in CESI files.

[17] **Schedule of limitations**

None.

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

Covered by standards.

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EXTENSION n. 01/07



to EC-Type Examination Certificate CESI 01ATEX 081U

Component: Breathing and draining valve series ECD.

Manufacturer: **EL.FIT S.p.A.**

Address: Via Aquileia 12, Villesse (GO)

Admitted variation

- Updating to EN 60079-0 (2006), EN 60079-1 (2004), Standards
- New breathing and draining valve type ECD-2.. with new protection modes
- Updating of nameplate
- New ambient temperature range


Components identification

Breathing and draining valves series ECD shall include the following markings:
valves type ECD-1..

 II 2G Ex d II C

 II 2G Ex d II B for Ta - 50 °C ÷ + 150 °C

valves type ECD-2..

 II 2GD Ex d IIC / Ex e II ; Ex tD A21 IP 66

 II 2GD Ex d II B / Ex e II ; Ex tD A21 IP 66 for Ta - 50 °C ÷ + 150 °C

The valves series ECD-... are essentially constituted by a threaded external body containing an operating rods, manufactured in compliance with the par. 5 and 7 of the EN 60079-1 Standard. The valves type ECD-1.. are usable for equipment with protection mode "Ex d". The new valves type ECD-2.., are characterized by a sealing gasket and can be used on equipment with protection mode "Ex d" or "Ex e" or "Ex tD" with the guarantee of a protection degree IP66.

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 01ATEX081U.

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date 05/02/2009 - Rev. 01 of translation of the Extension 01/07 issued on 21/05/2007

prepared Sergio Mezzetti 

verified Mirko Balaz 

approved Fiorenzo Bregani

CESI S.p.A.
Divisione Energia
"Area Tecnica Certificazione"
Responsabile 

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EXTENSION n. 01/07

to EC-Type Examination Certificate CESI 01ATEX 081U

Constructive characteristics

- The threads generally used are of type NPT in sizes of 1/2 " or 3/8 " (ANSI-ASME B.1.20.1); different threads can be used according to the documents annexed to this extension.
- Ambient temperature:
 - for valves type ECD-1.. Ta : - 50 °C ÷ + 60 °C for equipment of group IIC
Ta: - 50 °C ÷ + 150 °C only for equipment of group IIB
 - for valves type ECD-2.. Ta : - 20 °C ÷ + 60 °C for equipment of group IIC
Ta : - 50 °C ÷ + 60 °C for equipment of group IIC (valves with silicon gaskets)
Ta : - 50 °C ÷ + 150 °C only for equipment of group IIB (valves with silicon gaskets)

Report n. EX-A7014010

Routine tests

The manufacturer shall carry out the routine tests prescribed at the following Standards:

- EN 60079-0 (2006) – par.27 for components of Cat. 2G
- EN 60079-0 (2006) – par.27 and EN 61241-0 (2006) – par. 24 for components of Cat. 2GD

Descriptive documents (prot. EX-A7014011)

- Technical Note A4-756 (3 pg.) Rev. 01 dated 13/02/2007
- Drawing n. A3-215 (sheet 1 of 2) Rev. 01 dated 13/02/2007
- Drawing n. A3-215 (sheet 2 of 2) Rev. 01 dated 13/02/2007
- Drawing nA4-760 Rev. 01 dated 03/02/2007
- Attestation of Conformity dated 13/02/2007
- Safety Instruction A/8 (5 pg.) Rev. 01 dated 13/02/2007

One copy of all documents is kept in CESI files.

Schedule of limitations

- The max. operating temperature admitted for valves of type ECD-1.. is the same of the equipment on which the valves is assembled, having the same temperature class assigned to the equipment itself.
- The max. operating temperature admitted for valves of type ECD-2.. is function of the o-ring gaskets type used:
 - Tmax. = + 80 °C with NBR gaskets
 - Tmax. = + 110 °C with EDPM gaskets
 - Tmax. = + 180 °C with silicon SI/50 gaskets
- For maintaining the equipment degree of protection IP, during the normal use, the pin of valve must be completely screwed and the o-ring gasket correctly positioned on its seat.

Essential Health and Safety Requirements

The Health and Safety Requirements are assured by compliance with the following Standards:

- EN 60079-0 : 2006: Electrical apparatus for explosive gas atmospheres.
General requirements
- EN 60079-1 : 2004 Flamoproof enclosures "d".
- EN 60079-7 : 2003 Increased safety "e"
- EN 61241-0 : 2006 Electrical apparatus for use in the presence of combustible dust
General requirements
- EN 61241-1 : 2004 Protection by enclosures "tD".

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