

# CESI

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iscrizione CCIAA 00793580150

Registro Imprese di Milano  
Sezione Ordinaria  
N. R.E.A. 429222  
P.I. IT00793580150

Schema di certificazione

# CESI-ATEX

Il CESI è stato autorizzato  
dal governo italiano ad  
operare quale organismo di  
certificazione di apparecchi  
e sistemi destinati a essere  
utilizzati in atmosfera  
potenzialmente esplosiva  
con D.M. 1/3/1983, D.M.  
19/6/1990, D.M. 20/7/1998  
e D.M. 27/9/2000

ATEX E U-02

# CERTIFICATE



## [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 03 ATEX 141 U**

[4] **Component:** Open-able elbows and open ended straight fittings series LBH – LBHS - EKC

[5] **Manufacturer:** **ELFIT S.p.A.**

[6] **Address:** Via Aquileia 12, I-34070 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- A3/021087.

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

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

[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 2G EEx d IIB**

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

**Date** 12<sup>th</sup> June 2003

**Translation issued the** 12<sup>th</sup> June 2003

**Prepared**  
Mirko Balaz

**Approved**  
Ulisse Colombo

**CESI**

CENTRO ELETTROTECNICO SPERIMENTALE ITALIANO  
Business Unit Certificazione

*M. Responsabile*

[13]

## Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 03 ATEX 141 U**

[15] **Description of component**

The open-able elbows and open ended straight fittings subject of this certificate are suitable to be mounted on the cable conduits to provide opening in conduit system for pulling or splicing of conductors.

They are identified by a code as follows:

- LBH: open-able elbow
- LBHS: open-able elbow
- EKC: open ended straight fittings

The above mentioned codes are followed by a number which indicates the dimensions of the threaded hole (1; 2; 3; 4; 5; 6; 7; 8; 10). The complete codes of all open-able elbows and open ended straight fittings are reported on the drawings A3-368, A3-369 and A3-379 annexed to this certificate.

The fittings are made in aluminium alloy.

Threads normally used are GAS UNI ISO 7/1 in sizes from ½" to 4". Other equivalent threads can be used in alternative.

Service temperature: - 20 ÷ + 60 °C

[16] **Report n. EX- A3/021087**

### Routine tests

The manufacturer shall carried out the routine tests prescribed at paragraph 24 of EN50014 Standard .

### Descriptive documents (prot. EX- A3/021088)

|                                                 |       |            |
|-------------------------------------------------|-------|------------|
| - Technical Note n° A4-763 Rev. 0 (2 pg.)       | dated | 10.02.2000 |
| - n° A3-368 Rev. 0                              | dated | 07.02.2000 |
| - n° A3-369 Rev. 0                              | dated | 07.02.2000 |
| - n° A3-370 Rev. 0                              | dated | 07.02.2000 |
| - n° A3-371 Rev. 0                              | dated | 07.02.2000 |
| - n° A4-745 Rev. 0                              | dated | 03.12.1998 |
| - n° A4-762 Rev. 0                              | dated | 07.02.2000 |
| - n° A4-1041 Rev. 0                             | dated | 07.02.2000 |
| - n° A4-1042 Rev. 0                             | dated | 07.02.2000 |
| - n° A4-1043 Rev. 0                             | dated | 07.02.2000 |
| - n° A4-1044 Rev. 0                             | dated | 07.02.2000 |
| - n° A4-1045 Rev. 0                             | dated | 07.02.2000 |
| - n° A4-1046 Rev. 0                             | dated | 07.02.2000 |
| - Mounting instructions Annex A9 Rev. 0 (4 pg.) | dated | 07.02.2000 |
| - Attestation of conformity for component       | dated | 07.02.2000 |

One copy of all documents is kept in CESI files.

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

[13]

## Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 03 ATEX 141 U**

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[17] **Schedule of limitations**

- The coupling of the open-able elbows and open ended straight fittings series LBH – LBHS - EKC with the conduit system shall be made as indicated by the manufacturer in the documents annexed to this certificate in order not to jeopardise the type of protection of the electrical apparatus on which the fittings are mounted.
- The threaded part of conduit which will be screwed into holes of elbows shall meet the requirements of EN 50018 Standard, section 5.3 (table 3 and 4) as a minimum.

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

Compliance with the health and safety requirements has been assured by compliance with the following Standards:

EN 50014: 1997 + A1..A2 – General requirements

EN 50018: 2000 + A1 - Flameproof enclosures "d"

Table: CEI UNEL 95112; CEI UNEL 95129 e CEI UNEL 95131

## EXTENSION n. 01/08



to EC-Type Examination Certificate CESI 03ATEX 141U

Component: Open-able elbows and open ended straight fittings series LBH – LBHS - EKC

Manufacturer: EL.FIT S.p.A.

Address: Via Aquileia 12, Villesse (GO)

### Admitted variation

- Updating to EN 60079-0 (2006), EN 60079-1 Standards
- Updating of nameplate

### Component identification

The components shall include the following markings:



II 2G Ex d IIB

### Constructive characteristics

- The threads generally used are of type NPT in sizes ranging from 1/4 " to 4 " (ANSI-ASME B.1.20.1); different threads can be used according to the documents annexed to this extension
- Maximum service temperature + 80 °C, considering an ambient temperature  $T_a - 20\text{ °C} \div + 60\text{ °C}$
- Other characteristics: unchanged

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 03ATEX141U.

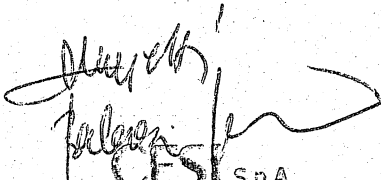
This document may only be reproduced in its entirety and without any change.

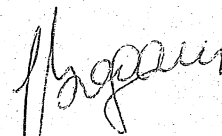
date 17/06/2008 - translation issued the 17/06/2008

prepared Sergio Mezzetti

verified Mirko Balaz

approved Fiorenzo Bregani

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



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## EXTENSION n. 01/08

to EC-Type Examination Certificate CESI 03ATEX 141U

Report n. EX-A8017598

### Routine tests

The manufacturer shall carry out the routine tests prescribed at par. 27 of the EN 60079-0 (2006)

### Descriptive documents (prot. EX-A8017605)

|                                       |         |       |            |
|---------------------------------------|---------|-------|------------|
| - Technical Note A4-763 (3 pg.)       | Rev. 01 | dated | 14/03/2007 |
| - Drawing n°. A4-1130                 | Rev. 00 | dated | 06/04/2007 |
| - Drawing n°. A4-1131                 | Rev. 00 | dated | 06/04/2007 |
| - Attestation of Conformity           |         | dated | 14/03/2007 |
| - Safety Instruction Annex A9 (4 pg.) | Rev. 01 | dated | 14/03/2007 |

One copy of all documents is kept in CESI files.

### Schedule of limitations

- The coupling of the open-able elbows and open ended straight series LBH - LBHS – EKC with the conduit system shall be made as indicated by the manufacturer in the documents annexed to the certificate in order not to jeopardise the type of protection of the electrical apparatus on which the fittings are assembled.
- The threaded part of conduit which will be screwed into holes of elbows shall meet the requirements of EN 60079-1 Standard, par. 5.3 (tables 3 and 4)

### 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".