

CERTIFICATE



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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

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 03 ATEX 085

[4] Equipment: Sealing fittings series EYS - EZS - EYD - EZD.

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

[6] Address: Via Aquileia 12, Villesse (Gorizia - 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-A3/014727.

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

EN 50014: 1997 + A1..A2 EN 50018: 2000+A1 EN 50281-1-1:1998+A1

[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:



II 2 GD EEx d IIC IP 66



II 2 G EEx d IIC

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

Date August 20th, 2003 translation issued on August 20th, 2003

Prepared
Mezzetti Sergio

Verified
Mirko Balaz

Approved
Ulisse Colombo

(PRESPERITRIBUNALI E SPERIMENTALI DEL ITALIANO)
Organico del Certificazione

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

[13]

Schedule

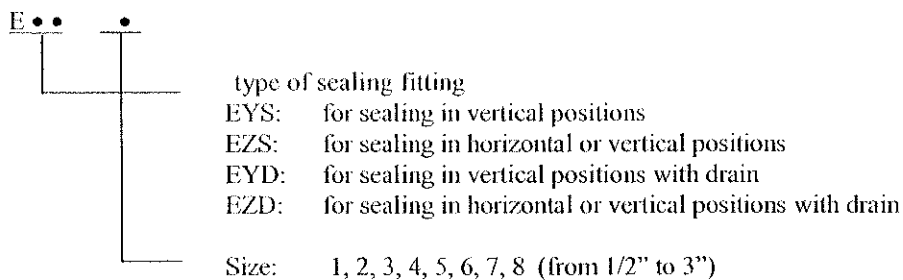
[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 03 ATEX 085**

[15] **Description of equipment**

The sealing fittings series EYS, EZS, EYD and EZD are the stooing boxes with compound filling and are suitable to be mounted on cable conduit or on flameproof enclosures.

The sealing fittings series EYS and EZS are also protected against the risk of explosion for the presence of combustibile dusts according to the standard EN 50281-1-1.

The various types of sealing fittings are identified by a code as follows:



The constructional characteristics and the identification of the different types of sealing fittings are reported in the documents annexed to this certificate.

The fittings can be made in aluminium alloy, brass, steel (AISI) or in stainless steel.

Threads normally used are GAS UNI ISO 7/1. Other equivalent cylindrical or tapered threads can be used in alternative.

Operating temperature range of sealing fittings (related to sealing compound used): - 20 ÷ + 80 °C

The sealing fittings series EYS and EZS, when coupled with the enclosures or with cable conduit as indicated in the documents annexed to this certificate, are in conformity with the specifications of the standard EN 60529 (1991) for the degree of protection IP 66.

The sealing fittings are approved to be used with setting compound provided by manufacturer and may be applied by the installer or user of electrical apparatus following the manufacturer's instructions.

The sealing fittings shall be coupled with the enclosures or with cable conduit 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 sealing fittings are mounted.

The marking of the sealing fittings series EYS and EZS, shall include the following:

II 2 GD EEx d IIC IP 66

The marking of the sealing fittings with drain series EYD and EZD shall include the following:

II 2 G EEx d IIC

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[13]

Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 03 ATEX 085**

[16] **Report n. EX-A3/014727**

Routine tests

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

Descriptive documents (prot. EX-A3/014731)

| | | |
|--|-------|------------|
| - n° A4-893 Rev. 0 (12 p.) | dated | 25.05.2003 |
| - n° A3-313 Rev. 0 | dated | 15.06.2003 |
| - n° A3-314 Rev. 0 | dated | 15.06.2003 |
| - n° A3-315 Rev. 0 | dated | 15.06.2003 |
| - n° A3-316 Rev. 0 | dated | 15.06.2003 |
| - n° A3-317 Rev. 0 | dated | 15.06.2003 |
| - n° A3-318 Rev. 0 | dated | 15.06.2003 |
| - n° A3-319 Rev. 0 | dated | 26.01.2003 |
| - n° A4-894 Rev. 0 | dated | 27.01.2003 |
| - n° A3-320 Rev. 0 | dated | 24.05.2003 |
| - n° A3-321 Rev. 0 | dated | 24.05.2003 |
| - n° A3-332 Rev. 0 | dated | 14.06.2003 |
| - n° A3-333 Rev. 0 | dated | 14.06.2003 |
| - n° A3-334 Rev. 0 | dated | 14.06.2003 |
| - n° A3-335 Rev. 0 | dated | 14.06.2003 |
| - n° A3-336 Rev. 0 | dated | 14.06.2003 |
| - n° A3-337 Rev. 0 | dated | 14.06.2003 |
| - n° A3-338 Rev. 0 | dated | 14.06.2003 |
| - n° A3-339 Rev. 0 | dated | 14.06.2003 |
| - n° A4-976 Rev. 0 | dated | 15.06.2003 |
| - n° A4-977 Rev. 0 | dated | 15.06.2003 |
| - n° A4-978 Rev. 0 | dated | 15.06.2003 |
| - n° A4-979 Rev. 0 | dated | 15.06.2003 |
| - n° A4-980 Rev. 0 | dated | 14.06.2003 |
| - n° A4-981 Rev. 0 | dated | 14.06.2003 |
| - n° A4-982 Rev. 0 | dated | 14.06.2003 |
| - n° A4-983 Rev. 0 | dated | 14.06.2003 |
| - n° A4-984 Rev. 0 | dated | 31.07.2003 |
| - n° A4-985 Rev. 0 | dated | 31.07.2003 |
| - n° A4-986 Rev. 0 | dated | 31.07.2003 |
| - n° A4-987 Rev. 0 | dated | 12.08.2003 |
| - n° A4-988 Rev. 0 | dated | 12.08.2003 |
| - n° A4-989 Rev. 0 | dated | 12.08.2003 |
| - n° A4-990 Rev. 0 | dated | 12.08.2003 |
| - n° A4-991 Rev. 0 | dated | 12.08.2003 |
| - n° A4-992 Rev. 0 | dated | 12.08.2003 |
| - n° A4-993 Rev. 0 | dated | 12.08.2003 |
| - n° A4-994 Rev. 0 | dated | 12.08.2003 |
| - n° A4-996 Rev. 0 | dated | 12.08.2003 |
| - Mounting instructions Annexe A5 Rev. 0 (10 p.) | dated | 16.06.2003 |
| - EC declaration of conformity n° CE/001 | dated | 24.05.2002 |

One copy of the above mentioned documents is kept in CESI files.

[13]

Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 03 ATEX 085**

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

None.

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

Covered by standards.

EXTENSION n. 01/07



to EC-Type Examination Certificate CESI 03ATEX 085

Equipment: Sealing fittings series EYS, EZS, EYD, EZD

Manufacturer: EL.FIT S.p.A.


Address: Via Aquileia 12, Villesse (GO)

Admitted variation

- Upgrade to EN 60079-0 (2006), EN 60079-1 (2004), EN 61241-0 (2006), EN 61241-1 (2004) Standards
- Upgrade of nameplate

Equipment identification

The sealing fittings series EYS and EZS shall include the following markings:

 II 2GD Ex d IIC, Ex tD A21 IP66

The sealing fittings series EYD and EZD shall include the following markings:

 II 2G Ex d IIC

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 03ATEX085.

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date 18/05/2007 - translation issued the 18/05/2007

prepared Sergio Mezzetti

verified Mirko Balaz

approved Fiorenzo Bregani

CESI
Centro Elettrotecnico Sperimentale Italiano
Giacinto Motta SpA

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EXTENSION n. 01/07

to EC-Type Examination Certificate CESI 03ATEX 085

Report n. EX-A7013785

Routine tests

The manufacturer shall carry out the routine tests prescribed at par. 27 of the EN 60079-0 (2006) and at par. 24 of the EN 61241-0 (2006) Standards.

Descriptive documents (prot. EX-A7013786)

| | | | |
|----------------------------------|---------|-------|------------|
| - Technical Note A4-1132 (5 pg.) | Rev. 01 | dated | 06/04/2007 |
| - Drawing n°. A3-320 | Rev. 01 | dated | 13/03/2007 |
| - Drawing n°. A4-1130 | Rev. 00 | dated | 06/04/2007 |
| - Drawing n°. A4-1131 | Rev. 00 | dated | 06/04/2007 |
| - EC Declaration of Conformity | | dated | 13/03/2007 |
| - Safety Instruction A5 (10 pg.) | Rev. 02 | dated | 13/03/2007 |

One copy of all documents is kept in CESI files.

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 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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EXTENSION n. 02/15

to EC-Type Examination Certificate CESI 03 ATEX 085X

Component: Sealing fittings series EYS.. , EZS.. , EYD.. , EZD..

Manufacturer: EL.FIT S.p.A.

Address: Via Aquileia, 12 – 34070 Villesse (GO) – Italy.

Admitted variation

- Update to new edition of EN 60079-0: 2012, EN 60079-1: 2007, EN 60079-31: 2009.
- Use of new type of resin.
- New maximum service temperature of +100°C.
- Special conditions for safe use (X) added.

Conformity to new edition of the harmonized European standard


The equipment subject of the certificate CESI 03 ATEX 085X and annexed extension are conform to the standards:

EN 60079-0: 2012 EN 60079-1: 2007 EN 60079-31: 2009

The equipment shall be marked as follows:

 II2G Ex d IIC Gb *(for EYD and EZD series only)*

or

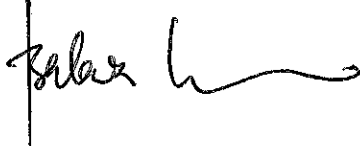
 II2GD Ex d IIC Gb *(for EYS and EZS series only)*
 Ex tb IIC Db
 IP66

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 03 ATEX 085X.

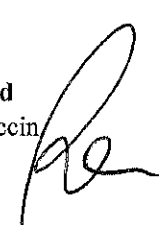
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Date 20th April 2015 - translation issued the 20th April 2015

Prepared
Mirko Balaz



Approved
Roberto Piccin


CESI S.p.A.
 Testing & Certification Division Page 1/3



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

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 P.I. IT00793580150
 N. R.E.A. 429222

EXTENSION n. 02/15

to EC-Type Examination Certificate CESI 03 ATEX 085X

Description of equipment and admitted constructional modifications

The sealing fittings series **EYS.**, **EZS.**, **EYD.** and **EZD.** consist in stopping boxes with female threaded joints and can be used for the passage of cables between conduits and/or flameproof enclosures. The sealing fittings series **EYS.** and **EZS.** are also protected against the risk of explosion for the presence of combustible dusts, in this case they have an IP 66 degree of protection.

The sealing fittings types are identified as follows:

- **EYS.** for sealing in vertical position;
- **EZS.** for sealing in horizontal and/or vertical position;
- **EYD.** for sealing in vertical position complete with drain valve;
- **EZD.** for sealing in horizontal and/or vertical position complete with drain valve.

For sealing fittings series **EYS.**, **EZS.**, **EYD.** and **EZD.** the standard threads are tapered NPT ANSI ASME B1.20.1 from 1/2" up to 3" or cylindrical ISO Metric 965/1 and ISO 965/3 from M20x1.5 up to M90x1.5. Alternatively other threads can be supplied.

To guarantee the IP 66 degree of protection of **EYS.** and **EZS.** sealing fittings it is applied a sealant put at least on two complete threads engaged of the threaded coupling.

The ambient temperature range of the sealing fittings is:

- from -20°C up to +60°C for series **EYD.** and **EZD.** with drain valve;
- from -20°C up to +100°C for series **EYS.** and **EZS.** .

All sealing fitting types are suitable for the service temperature range from -20°C up to +100°C.

Electrical characteristics

Unchanged.

Report n. EX- B5008525

Descriptive documents (prot. EX- B5008563)

| | | | |
|--|-------|-------|------------|
| - Technical note A4-1138 (pg. 3) | rev.0 | dated | 2013.09.12 |
| - Mounting Instruction A5 (pg. 12) | rev.2 | dated | 2013.09.12 |
| - Declaration of Conformity no. 0142 (pg. 1) | | dated | 2013.09.12 |
| - Drawing A3-320 (pg. 1) | rev.2 | dated | 2013.09.12 |
| - Drawing A4-4952 (pg. 1) | rev.2 | dated | 2013.01.29 |
| - Drawing A4-5404 (pg. 1) | rev.1 | dated | 2013.01.29 |
| - Annex datasheet of materials (pg. 23) | rev.0 | dated | 2013.09.12 |

One copy of all documents is kept in CESI files.

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EXTENSION n. 02/15

to EC-Type Examination Certificate CESI 03 ATEX 085X

Special conditions for safe use (X)

With the updating to the new standards the following special condition for safe use are added; moreover the X suffix is added to the certificate number and beginning from this extension it becomes CESI 03 ATEX 085X.

- The total cross-sectional area of the cables, including insulation, shall be not more than 40% of the cross sectional area of the fitting according to EN 60079-14.
- The minimum length of the compound shall be $\geq 20\text{mm}$ and at least 20% of that cross-sectional area shall be filled with compound.
- The sealing fittings shall be coupled with the enclosure or with cable conduit as indicated by the manufacturer's documents in order to not jeopardise the type of protection of the electrical apparatus on which the sealing fittings are mounted.
- The sealing fittings are approved to be used with setting compound provided by manufacturer and may be applied by installer or user of electrical apparatus following the manufacturer's instructions.
- The service temperature range of the sealing fittings is from -20°C up to $+100^{\circ}\text{C}$.
- The ambient temperature range of the sealing fittings is:
 - from -20°C up to $+60^{\circ}\text{C}$ for series EYD.. and EZD.. with drain valve and;
 - from -20°C up to $+100^{\circ}\text{C}$ for series EYS.. and EZS..

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 – Part 0: Equipment - General requirements;
EN 60079-1: 2007 Explosive atmospheres – Part 1: Equipment protection by flameproof enclosure “d”;
EN 60079-31: 2009 Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure “t”.