

# IECEx Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Cer	tificate	No.:

IECEx CES 15.0012U

issue No.:0

Certificate history:

Status:

Current

Date of Issue:

2015-06-10

Page 1 of 3

Applicant:

CORTEM S.p.A. Via Aquileia 10

I - 34070 Villesse (GO)

Italy

Electrical Apparatus:

Optional accessory:

Pulling boxes by insertion and empty boxes, series S.1-.., S-.., GUA-.., EAH-..

Type of Protection:

Flameproof enclosures 'd'; Dust ignition protection 't'

Marking:

Ex d IIC Gb Ex tb IIIC Db IP66/67

Approved for issue on behalf of the IECEx

Certification Body:

Mirko Balaz

Position:

Head of IECEx CB

Signature:

(for printed version)

Date:

1. This certificate and schedule may only be reproduced in full.

2. This certificate is not transferable and remains the property of the issuing body.

3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

CESI
Centro Elettrotecnico
Sperimentale Italiano S.p.A.
Via Rubattino 54
20134 Milano
Italy

CESI S.D.A.

Testing & Certification Division
Business Area Certification

Il Responsabile

(Rdp¢rto Piccin)





# IECEx Certificate of Conformity

Certificate No.:

IECEx CES 15.0012U

Date of Issue:

2015-06-10

Issue No.: 0

Page 2 of 3

Manufacturer:

CORTEM S.p.A. Via Aquileia 10 I - 34070 Villesse (GO)

Italy

Additional Manufacturing location (s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

#### STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0: 2011

Explosive atmospheres - Part 0: General requirements

Edition: 6.0

IEC 60079-1: 2014-06

Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

Edition: 7.0

IEC 60079-31: 2013

Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

Edition: 2

This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.

#### **TEST & ASSESSMENT REPORTS:**

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

IT/CES/ExTR15.0012/00

Quality Assessment Report:

IT/CES/QAR06.0002/09



## **IECEx Certificate** of Conformity

Certificate No.:

IECEx CES 15,0012U

Date of Issue:

2015-06-10

Issue No.: 0

Page 3 of 3

#### Schedule

#### **EQUIPMENT:**

Equipment and systems covered by this certificate are as follows:

The boxes S-.., S.1-.., GUA-.., EAH-.. series are used as pulling boxes for insertion or as empty boxes. The boxes are made up of a circular body with possibility of placing the sockets in more than one position, as well as a front cover with a cylindrical thread for a threaded coupling. The boxes in object are subdivided in 4 families:

- type S....1 manufactured in die casting;
- type S... manufactured in mold casting;
- type GUA... manufactured in die casting;
   type GUFX..., EAHT..., EAHW... manufactured in die casting.

The boxes series S-.., S.1-.., GUA-.., EAH-.. characteristics and a Schedule of Limitations are further described in the Annexe of this certificate.

CONDITIONS OF CERTIFICATION: NO						
- Trans. The trans. The trans. The trans. The trans.	THE STATE STREET, THE STATE OF	n e alakira a a Manda a a a a a a a a a a a a a a a a a a			 	, -,,-
		1				



### IECEx Certificate of Conformity



Annex to certificate:

Electrical Apparatus:

Applicant:

Prot: B5012440

IECEx CES 15.0012U Issue No.:0 of 2015-06-10

CORTEM S.p.A.,

Via Aquileia 10, I - 34070 Villesse (GO), Italy Pulling boxes by insertion and empty boxes.

series S.1-..., S-..., GUA-.., EAH-...

#### General product information:

The boxes S-..., S.1-..., GUA-..., EAH-... series are used as pulling boxes for insertion or as empty boxes. The boxes series S.1-..., S-..., GUA-..., EAH-... are basically manufactured in aluminium alloy. They can also be manufactured in stainless steel AISI 303-304-316 or in cast iron GJS.

The boxes in aluminium alloy or in stainless steel are suitable for the service temperature of -40  $\pm$  +160 °C, while the boxes manufactured in cast iron are suitable for the service temperature of -20  $\pm$  +160 °C.

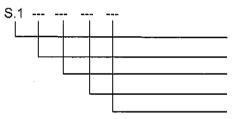
The standard O-Ring, placed in between the body and the cover of boxes, in order to obtain an IP hold, is made of Silicon material. The maximum temperature of the gasket shall not exceed 160 °C in service.

The inner and outer ground screws and the clamping screws for covers, are manufactured in stainless steel. Entry into the equipment is made by threaded holes located on the enclosure body. In particular, the standardised cable entries are threaded according to NPT ANSI ASME B1.20.1, but are also foreseen the cylindrical threads and other alternative threads.

#### Model identification:

Each series of boxes can have up to a maximum of four different sizes with a maximum of six different diameters of threaded hubs for cable entry, disposed in a maximum of nine different combinations.

The Equipments are identified by the following code:

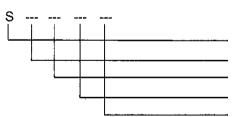


Type of enclosure (manufactured in die-casting)

Number and position of hubs: T, C, L, X, A, W, D, M, B

Hub diameter code: 1, 2, 3, 4, 5, 6 Size of enclosure code: 4, 6, 7, 9

Type of thread code: N, I, I2, C, P, NC, blank

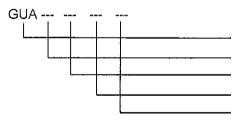


Type of enclosure (manufactured with mould-casting)

Number and position of hubs: T, C, L, X, W, D, M, B

Hub diameter code: 1, 2, 3, 4, 5, 6 Size of enclosure code: 4, 6, 7, 9

Type of thread code: N, I, I2, C, P, NC, blank



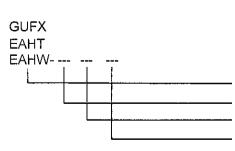
Type of enclosure (manufactured in die-casting)

Number and position of hubs: T, C, L, X, W, D, M, B

Hub diameter code: 1, 2, 3, 4, 5, 6

size of enclosure code: 6, 9

Type of thread code: N, I, I2, C, P, NC, blank



Type of enclosure (manufactured in die-casting)

Hub diameter code: 2, 3,

Size of enclosure code: 6

Type of thread code: N, I, I2, C, P, NC, blank



#### Prot: B5012440

### **IECEx Certificate of Conformity**

Annex to certificate: Applicant:

IECEx CES 15.0012U Issue No.:0 of 2015-06-10

CORTEM S.p.A.,

**Electrical Apparatus:** 

Via Aquileia 10, I - 34070 Villesse (GO), Italy Pulling boxes by insertion and empty boxes.

series S.1-..., S-..., GUA-.., EAH-...

#### Model identification (follows):

#### Number and position of hubs:

A: 1 cable entry one socket box;

B: 2 cable entries one at the bottom of the box parallel to the wall and one straight;

C: 2 cable entries 2 coaxial sockets box:

L: 2 cable entries

2 90°sockets box;

T: 3 cable entries

two coaxial and a 90° one;

X: 4 cable entries

4 sockets box placed in a cross-like manner:

D: 3 cable entries

two coaxial and one central at the bottom of the box:

M: 3 cable entries W: 4 cable entries two 90° and one central positioned at the bottom of the box; two coaxial, one 90° and a central one positioned at bottom of the box.

#### Hub diameter and size of enclosures codes:

First digit	Hub diameter (Inches)
1	1/2"
2	3/4"
3	1"
4	1 1/4"
5	1 ½"
6	2"

Second digit	Size of enclosure (Ø mm)
4	54
6	80
7	95
9	130

Identification letter	Type of thread
N	NPT ANSI ASME B1.20.1
ı	ISO metric pitch 1,5 mm
12	ISO metric pitch 2 mm
Р	Pg DIN 40430
С	Gas UNI ISO 228/1
NC	NPSM ANSI ASME B1.20.1
Blank	Gk CEI EN 60079-1

#### Technical characteristics:

- Degree of protection of enclosures:

IP 66 or IP 67

- Rated service temperature range is from -40 °C up to +160 °C for the Aluminium alloy or stainless steel boxes and from -20 °C up to +160 °C for the cast iron boxes.

#### Schedule of Limitations:

- Rated service temperature range of the boxes:
  - made by aluminium alloy or by stainless steel from -40°C up to +160°C;
  - limitation of minimum temperature to -20°C for the boxes made by cast iron.
- The maximum service temperature of the boxes shall not exceed 160 °C.
- The accessories used for cable entries and for closing unused openings shall be certified according to IEC 60079-0, IEC 60079-1 and IEC 60079-31. A minimum degree of protection IP66 or IP 67 shall be guaranteed according to IEC 60529 standard.
- According to IEC 60079-1 annex D, the content of the Ex component enclosure equipment may be placed in any arrangement, provided that an area of at least 40% of each cross-sectional area remains free.
- The safety instruction provided by Manufacturer shall be strictly respected.