

### INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.: IECEx INE 12.0025X

Issue No: 0

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Certificate history:

Status: Current

Issue No. 4 (2017-07-21)

Date of Issue: 2012-10-19

Issue No. 3 (2014-10-03) Issue No. 2 (2014-02-28)

10-19

Issue No. 1 (2013-02-20) Issue No. 0 (2012-10-19)

36-40 rue des Fontenils

F - 41600 Nouan le Fuzelier

COOPER CAPRI S.A.S.

France

Equipment:

Applicant:

Cable gland type ADE...

Optional accessory:

Type of Protection: d, e, n and tb

Marking:

Ex db IIC Ex eb IIC Ex nRc IIC Ex tb III C IP66

Additional marking for ADE-4F

Ex db I Ex eb I

Approved for issue on behalf of the IECEx

Certification Body:

Thierry HOUEIX

Position:

Ex Certification Officer

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:

**INERIS** 

Institut National de l'Environnement Industriel
et des Risques
BP n2
Parc Technologique ALATA
F-60550 Verneuil-En-Halatte

**France** 





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Date of Issue: 2012-10-19

Manufacturer: COOPER CAPRI S.A.S.

36-40 rue des Fontenils F - 41600 Nouan le Fuzelier

France

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 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: 2007-04 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

Edition:6

IEC 60079-15 : 2010 Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

Edition:4

IEC 60079-31 : 2008 Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'

Edition:1

IEC 60079-7: 2006-07 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

Edition:4

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

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

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

Test Report:

FR/INE/ExTR12.0022/00

**Quality Assessment Report:** 

FR/LCI/QAR07.0002/03



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Schedule

#### **EQUIPMENT:**

Equipment and systems covered by this certificate are as follows:

ADE cable glands are made in stainless steel, nickel plated brass, bronze or aluminium alloy (group I excluded), providing a protection degrees IP66 according to IEC 60529 for conical threaded joint and without additional sealing washer (gasket) for cylindrical threaded joint. When fixed with locknut throught a blank hole, the degree of protection IP66 depends on the roughness of the contact surface on the

They are protected by flameproof enclosure, increased safety and dust protection. Furthermore, they also may be fitted on 'Ex i', 'Ex m', 'Ex n', 'Ex o', 'Ex p' and 'Ex q' equipment.

#### SPECIFIC CONDITIONS OF USE: YES as shown below:

- These cable glands are intended in the following service temperature:

For type ADE-1F<sub>2</sub> and 4F: from -30°C to 80°C for sealing ring in Neoprene.

from -60°C to 140°C for sealing ring in silicone.

#### For type ADE-6F:

from -30°C to 80°C for sealing ring in silicone.

- For ADE-1F<sub>2</sub> version, the user shall provide additional clamping of the cable nearby to the enclosure on which the cable gland is installed. A Cooper Capri ancorage module can be used.
- For ADE-6F version, used with braided cable, the user shall provide additional clamping of the cable nearby to the enclosure on which the cable gland is installed. A Cooper Capri ancorage module can be used.

#### Annex:

IECEx INE 12.0025X\_Annex.pdf



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#### PARAMETERS RELATING TO THE SAFETY

#### These cable glands are intended with the following sizes and threaded joints:

- ADE-1F<sub>2</sub> cable glands series with single sealing ring for unarmoured cable.
  - n°3 to n°13 for cable external diameter from 2.75 to 65 mm.
  - Cylindrical thread from M10 to M75 inclusive, according to ISO 965-1 & 965-3
  - Conical thread from NPT 1/8" to NPT 3" inclusive, according to ANSI/ASME B1.20.1.
- ADE-4F cable glands series with double sealing ring for armoured or braided cable.
  - n°4 to n°17 for cable external diameter from 4.5 to 104 mm.
  - Cylindrical thread from M10 to M110 inclusive, according to ISO 965-1 & 965-3
  - Conical thread from NPT 1/8" to NPT 4" inclusive, according to ANSI/ASME B1.20.1.
- ADE-6F cable glands series with double sealing ring for armoured or braided cable.
  - n°5 to n°11 for cable external diameter from 6 to 48 mm.
  - Cylindrical thread from M16 to M63 inclusive, according to ISO 965-1 & 965-3.
  - Conical thread from NPT 3/8" to NPT 2" inclusive, according to ANSI/ASME B1.20.1.

#### **MARKING**

Marking has to be readable and indelible; it has to include the following indications:

- CCH-CAPRI
- ADE...(1)
- IECEx INE 12.0025X
- Ex db/eb IIC
- Ex db I / Ex eb I(\*)
- Ex tb IIIC IP66
- Ex nRc IIC
- (Type and size of thread)
- (1) Type is completed by letters and numbers corresponding to the manufacturer variations.
- (\*) Additional marking only for ADE-4F made in nickel plated brass, bronze and stainless steel.

On the sealing ring: size numer to indicate the minimum and maximum cable diameters.

The sealing ring is identified allowing the user to determine if the ring is appropriate for the cable gland.



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### On the small cable glands the marking can be recduced at:

- CCH-CAPRI
- ADE...(1)
- IECEx INE 12.0025X
- (1) Type is completed by letters and numbers corresponding to the manufacturer variations.

On the sealing ring: size numer to indicate the minimum and maximum cable diameters.

The sealing ring is identified allowing the user to determine if the ring is appropriate for the cable gland.

#### **ROUTINE EXAMINATIONS AND TESTS**

None.	
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