



- (2) Equipment and protective systems intended for use in potentially explosive atmospheres  
Directive 94/9/EC

(1) **EC-TYPE EXAMINATION CERTIFICATE**

- (3) Number of the EC type examination certificate: **INERIS 06ATEX0014X**

- (4) Equipment or protective system:

CABLE GLAND TYPE R... or B...

- (5) Manufacturer: **RCN s.a.s**  
(6) Address: **Via Crevacuore  
I - 13011 Borgosesia (VC)**

- (7) This equipment or protective system and any other acceptable alternative of this one are described in the annex of this certificate and the descriptive documents quoted in this annex.

- (8) INERIS, notified body and identified under number 0080, in accordance with article 9 of Council Directive 94/9/EC of the 23<sup>rd</sup> March 1994, certifies that this equipment or protective system fulfils the Essential of Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, described in annex II of the Directive.

The examinations and the tests are consigned in confidential report No P67480/06.


- (9) The respect of the Essential Health and Safety Requirements is ensured by:

- conformity with:

EN 60079-0	of	March	2004
EN 60079-1	of	March	2004
EN 60079-7	of	August	2004
EN 61241-0	of	October	2006
EN 61241-1	of	June	2004

- specific solutions adopted by the manufacturer to meet the Essential Health and Safety Requirements described in the descriptive documents.

- (10) Sign X, when it is placed following the Number of the EC type examination certificate, indicates that this equipment and protective system is subjected to the special conditions for safe use, mentioned in the annex of 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 the protective system will have to contain:

 II 2 GD/I M2

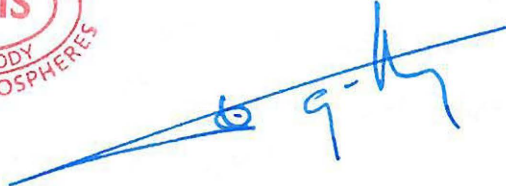
Ex d IIC/Ex e II Ex d I/Ex e I  
Ex tD A21 IP66 or IP66/68

Verneuil-en-Halatte, 2007 01 03



  
C. PETITFRERE

Project Manager at the ATEX  
Equipment Certification Laboratory



Director of the Certifying Body,  
By delegation  
B. PIQUETTE  
Deputy Manager of Certification

(13)

## A N N E X

(14)

EC TYPE EXAMINATION CERTIFICATE N° INERIS 06ATEX0014X

(15)

### DESCRIPTION OF THE EQUIPMENT OR THE PROTECTIVE SYSTEM

This serial of cable glands R... or B... is protected by flameproof enclosure and by increased safety. These cable glands are foreseen, in accordance with the type, for armoured cables or non armoured cables.

In accordance to the type, the cable gland can be realised with a simple sealing ring or double sealing ring.

The cable glands type B.. are provided with a sealed bushing.

This serial of cable glands gets the protection degrees IP66 or IP66/68 according to the European standard EN 60 529; the verification of the protection degree IPX8 corresponds to an immersion under 30 meters of water during 7 days.

### PARAMETERS RELATING TO THE SAFETY

These cable glands can be used with diameter cables 3 mm up to 78 mm.

### MARKING

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

A - Cable gland without sealing bushing :

RCN s.a.s

I - 13011 Borgosesia (VC)

R...(\*)

INERIS 06ATEX0014X

(Year of construction)

 II 2 GD/IM2

Ex d IIC/Ex e II

Ex d I/Ex e I

Ex tD A21

IP (\*\*)

On the sealing ring :

Indication of the minimum and maximum diameters.

On the small cable glands the marking can be reduced at :

RCN

R...(\*)

INERIS 06ATEX0014X

 II 2 GD/IM2

Ex e/d/tD

On the sealing ring :

Indication of the minimum and maximum diameters

(\*) Type is completed by letters and numbers corresponding to the size and the manufacturing variation. Different types are defined in the descriptives documents.

(\*\*) IP66 or IP66/68

**B - Cable gland with sealing bushing :**

RCN s.a.s

I - 13011 Borgosesia (VC)

B...(\*)

INERIS 06ATEX0014X

(Year of construction)

 II 2 GD IM2

EEx d IIC/EEx e II

Ex d I/Ex e I

Ex tD A21

IP (\*\*)

On the sealing ring :

Indication of the minimum and maximum diameters

On the small cable glands the marking can be reduced at :

RCN

B...(\*)

INERIS 06ATEX0014X

 II 2 GD/IM2

Ex e/d/tD

On the sealing ring :

Indication of the minimum and maximum diameters

(\*) Type is completed by letters and numbers corresponding to the size and the manufacturing variation. Different types are defined in the descriptives documents

(\*\*) IP66 or IP66/68

Marking may be carried out in the language of the country of use.

The protective system or equipment has also to carry the marking normally stipulated by its construction standards.

### ROUTINE EXAMINATIONS AND TESTS

None.

**(16) DESCRIPTIVE DOCUMENTS**

The descriptive documents quoted hereafter constitute the technical documentation of the equipment, subject of this certificate.

- Technical file n° TF RCN05000RO (32 pages) of 2005.05.20
- Instruction for cable gland serie R... n° IR RCN05000RO (1 page)
- Instruction for cable gland serie B...n° IB RCN05000RO (1 page)

These documents were signed on 2006.12.30.

**(17) SPECIAL CONDITIONS FOR SAFE USE**

The temperature of the enclosure, at the connection point of the cable gland must not exceed the following values :

**For the type R... :**

- . 100°C with sealing ring in EPDM
- . 220°C with sealing ring in SILICONE

**For the type B... :**

- . 100°C with sealing ring in EPDM
- . 155°C with sealing ring in SILICONE (\*)
- . 180°C with sealing ring in SILICONE (\*)
- . 220°C with sealing ring in SILICONE (\*)

(\*) The maximum temperature is in accordance with the type of resine used for the sealed bushing. The minimum temperature for use is -40°C for sealing ring in EPDM and -70°C for sealing ring in silicone.

The clamping of the cables, for the cable glands size 63, 75, 90a and 90b must be realized outside of the enclosure, nearby to the enclosure on which the cable glands are installed.

The other conditions are stipulated on the instructions.

**(18) ESSENTIAL SAFETY AND HEALTH REQUIREMENTS**

The respect of the Essential Health and Safety Requirements is ensured by:

- Conformity to the European standards EN 60079-0, EN 60079-1, EN 60079-7, EN 61241-0 and EN 61241-1.
- All provisions adopted by the manufacturer and defined in the descriptive documents.

## ADDITION

(3) INERIS 06ATEX0014X/01

(4) CABLE GLAND TYPE R... or B...

(5) Made by RCN

(15) **PURPOSE OF THE ADDITION**

Modification of the extremity of the cable gland on a part of the serie.

**PARAMETERS RELATING TO THE SAFETY**

The parameters relating to the safety are unchanged.

**MARKING**

The marking is unchanged.

**ROUTINE EXAMINATIONS AND TESTS**

The routine examinations and tests are unchanged.

(16) **DESCRIPTIVE DOCUMENTS**

The descriptive document quoted hereafter constitute the technical documentation describing the modification of the equipment, subject of this present addition.

- Technical file ref. TF RCN07000RO (7 pages)

signed on 2007.11.05

(17) **SPECIAL CONDITIONS FOR SAFE USE**


The special condition are unchanged.

(18) ESSENTIAL SAFETY AND HEALTH REQUIREMENTS

The respect of the Essential Health and Safety Requirements is unchanged.

Verneuil-en-Halatte, 2007 11 19



  
S. MAUGER

Project Manager at the ATEX  
Equipment Evaluation Laboratory



Director of the Certifying Body,  
By delegation  
T. HOUEIX  
Certification Officer  
Certification Division

## ADDITION

(3) INERIS 06ATEX0014X/02

(4) CABLE GLAND TYPE R... or B...

(5) Made by RCN

(15) **PURPOSE OF THE ADDITION**

Use of specific conical threading UNI6125 and ISO 7R.

**PARAMETERS RELATING TO THE SAFETY**

The parameters relating to the safety are unchanged.

**MARKING**

For this application the marking is modified as follows :

**A - Cable gland without sealing bushing :**

RCN  
I - 13011 Borgosesia (VC)  
R...(\*)  
INERIS 06ATEX0014X  
(Year of construction)  
⊕ II 2 GD IIC / I M2  
IP (\*\*)

**On the sealing ring :**

Indication of the minimum and maximum diameters.

**On the small cable glands the marking can be reduced at :**

RCN  
R...(\*)  
INERIS 06ATEX0014X  
⊕ II 2 GD IIC / I M2




**On the sealing ring :**

Indication of the minimum and maximum diameters

- (\*) Type is completed by letters and numbers corresponding to the size and the manufacturing variation. Different types are defined in the descriptives documents.
- (\*\*) IP66 or IP66/68


**B - Cable gland with sealing bushing :**

RCN  
I - 13011 Borgosesia (VC)  
B...(\*)  
INERIS 06ATEX0014X  
(Year of construction)  
 II 2 GD IIC / I M2  
IP(\*\*)

**On the sealing ring :**

Indication of the minimum and maximum diameters

**On the small cable glands the marking can be reduced at :**

RCN  
B...(\*)  
INERIS 06ATEX0014X  
 II 2 GD IIC / I M2

**On the sealing ring :**

Indication of the minimum and maximum diameters

- (\*) Type is completed by letters and numbers corresponding to the size and the manufacturing variation. Different types are defined in the descriptives documents
- (\*\*) IP66 or IP66/68

**ROUTINE EXAMINATIONS AND TESTS**

The routine examinations and tests are unchanged.

**(16) DESCRIPTIVE DOCUMENTS**

The descriptive document quoted hereafter constitute the technical documentation describing the modification of the equipment, subject of this present addition.

- Technical file ref. TC RCN05000R2 and Assembly instruction (8 pages) signed on 2008.03.21

(17) SPECIAL CONDITIONS FOR SAFE USE

The special conditions are modified as follows:

The use of these specific cable glands with enclosures protected by a type of protection defined in the standard EN/IEC 60079-0 shall comply to the applicable rules for electrical installation in hazardous area.

(18) ESSENTIAL SAFETY AND HEALTH REQUIREMENTS

The respect of the Essential Health and Safety Requirements is completed as follows :

- Conformity to the standard EN 1127-1.
- All provisions adopted by the manufacturer and defined in the descriptive documents.

Verneuil-en-Halatte, 2008 04 21



X. LEFEBVRE

Project Manager at the ATEX  
Equipment Evaluation Laboratory



Director of the Certifying Body,  
By delegation  
T. HOUEIX  
Certification Officer  
Certification Division

## ADDITION

(3) INERIS 06ATEX0014X/03

(4) CABLE GLAND TYPE R... or B...

(5) Made by RCN

(15) PURPOSE OF THE ADDITION


- Application of standards:
  - EN 60079-0 : 2009 IEC 60079-0 : 2011
  - EN 60079-1 : 2007 IEC 60079-1 : 2007
  - EN 60079-7 : 2007 IEC 60079-7 : 2006
  - EN 60079-31 : 2009 IEC 60079-31 : 2008
- Modification of the ambient, temperature from -70°C to -65°C.
- Addition of a throat on a base of the cable gland for installation of an O-Ring.
- Add a new type of resin for cable gland type B....
- Modification of the body for size 20.

PARAMETERS RELATING TO THE SAFETY

The parameters relating to the safety are unchanged.

MARKING

The marking is modified as follow :

RCN  
I- 13011 Borgosesia (VC)  
R... or B... (\*)  
INERIS 06ATEX0014X  
(Year of construction)  
Ex d IIC Gb Ex d I Mb  
 II 2 GD/IM2  
Ex e IIC Gb Ex e I Mb  
Ex tb IIIC Db  
IP(\*\*)

On the sealing ring :

Indication of the minimum and maximum diameters.

**On the small cable glands the marking can be reduced at :**

RCN  
R...or B...(\*)  
INERIS 06ATEX0014X  
Ex d/e/tb

(\*) Type is completed by letters and numbers corresponding to the size and the manufacturing variation. Different types are defined in the descriptives documents.

(\*\*) IP66 or IP66/68

**ROUTINE EXAMINATIONS AND TESTS**

The routine examinations and tests are unchanged.

**(16) DESCRIPTIVE DOCUMENTS**

The descriptive documents quoted hereafter constitute the technical documentation describing the modification of the equipment, subject of this present addition.

Certification file TF RCN12000R0 rev.0 dated and signed of 2012.12.13.

**(17) SPECIAL CONDITIONS FOR SAFE USE**

The special conditions for safe use are replaced by:

The temperature of the enclosure, at the connection point of the cable entry must not exceed the following values:

**For the type R...:**

- 100° C with sealing ring in EPDM.
- 220° C with sealing ring in SILICONE

**For the type B...:**

- 100° C with sealing ring in EPDM.
- 155° C with sealing ring in SILICONE (\*).
- 180° C with sealing ring in SILICONE (\*).
- 220° C with sealing ring in SILICONE (\*).

(\*) The maximum temperature is in accordance with the type of resine used for the sealed bushing.

The minimum temperature for use is -40° C for sealing ring in EPDM and -65° C for sealing ring in silicone.

The user shall use cables with thermal stability in accordance with the temperature of the sealing ring.

The clamping of the cables, for the cable entries size 63, 75, 90a and 90b must be realized outside of the enclosure, nearby to the enclosure on which the cable glands are installed.

In order to maintained the IPX8 the cable entry shall be fitted on enclosure witch satisfies an immersion test under 30 meters of water during 7 days.

(18) **ESSENTIAL SAFETY AND HEALTH REQUIREMENTS**

The respect of the Essential Health and Safety Requirements is modified as follow:

- Conformity to the standards quoted on page 1, clause (15).
- All provisions adopted by the manufacturer and defined in the descriptive documents.

Verneuil-en-Halatte, 2013.01.24



The Chief Executive Officer of INERIS  
By delegation  
T.HOUEIX  
Ex Certification Officer

## ADDITION

(3) INERIS 06ATEX0014X/04

(4) CABLE GLAND TYPE R... and B...

(5) Made by RCN S.r.l

(15) PURPOSE OF THE ADDITION

- Application of EN 60079-0:2012 / A11: 2013 standard.
- Update of the technical documentation.

PARAMETERS RELATING TO THE SAFETY

The parameters relating to the safety are unchanged.

MARKING

The marking is unchanged.

ROUTINE EXAMINATIONS AND TESTS

The routine examinations and tests are unchanged.

(16) DESCRIPTIVE DOCUMENTS

The descriptive documents quoted hereafter constitute the technical documentation describing the modification of the equipment, subject of this present addition.

- Technical File N° TF RCN12000R0 Rev.1 (46 pages ) signed on 2015.06.22
- Safety Instructions N° IR RCN12000R1 (6 pages ) signed on 2015.06.15
- Safety Instructions N° IB RCN12000R1 (6 pages ) signed on 2015.06.15

(17) SPECIAL CONDITIONS FOR SAFE USE

The special conditions for safe use are unchanged.

**(18) ESSENTIAL SAFETY AND HEALTH REQUIREMENTS**

The respect of the Essential Health and Safety Requirements is modified as follows:

- Conformity to the standards:
  - EN 60079-0 : 2012 / A11: 2013
  - EN 60079-1 : 2007
  - EN 60079-7 : 2007
  - EN 60079-31 : 2009
- All provisions adopted by the manufacturer and defined in the descriptive documents.

Verneuil-en-Halatte, 2015.10.28

**Dominique Charpentier**  
**Certification Division**  
**Manager**



The Chief Executive Officer of INERIS  
By delegation

