(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 03ATEX0210**

(4) Protective system or equipment :

ENCLOSURE TYPE CCF...or CCV...
(The points are replaced by numbers and letters corresponding to the manufacturing variation)

(5) Manufacturer: **COELBO**

(6) Address: Via S.Margherita, 83
I - 20047 Brugherio (MI)

(7) This protective system or equipment 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) The INERIS, notified body and identified under number 0080, in accordance with article 9 of Council Directive 94/9/EC of the 23rd March 1994, certifies that this protective system or equipment 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 appendix II of the Directive.

The examinations and the tests are consigned in official report N°P52326/03.

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

- conformity with:

EN 50 014	of June	1997 + A1 and A2
EN 50 018	of November	2000 + A1
EN 50 020	of June	2002
EN 50 281-1-1	of September	1998 + A1

- 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.

Parc Technologique Alata BP 2 F-60550 Verneuil-en-Halatte
tél + 33(0)3 44 55 66 77 fax + 33(0)3 44 55 66 99 internet www.ineris.fr
Institut national de l'environnement industriel et des risques
Etablissement public à caractère industriel et commercial - RCS Senlis B 381 984 921 - Siret 381 984 921 00019 - APE 743B

(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	**EEx d IIB T6 or T5 or T4 or T3 or EEx d [ia] IIB T6 IP65 or IP 66 T85°C or T100°C or T135°C or T200°C**

Verneuil-en-Halatte, 2003 12 28

X.LEFEBVRE

Engineer at the Laboratory of Certification of ATEX Equipment

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

ATMOSPHERES EXPLOSIVES ORGANISME NOTIFIE INERIS NOTIFIED BODY EXPLOSIVE ATMOSPHERES

(13) # ANNEX

(14) **EC TYPE EXAMINATION CERTIFICATE N°INERIS 03ATEX0210**

(15) **DESCRIPTION OF THE EQUIPMENT OR THE PROTECTIVE SYSTEM**

These enclosures, made in light alloy, are provided in different sizes, and are intended to contain only **"NIS"** elements or **"NIS"** elements and **"IS"** elements. The intrinsic safety element are covered by an EC type examination certificate.

These enclosures can be fitted with bulkead, breathe valve, command and signaling units.

The cover can be fitted with circular or rectangular window, except for class T3 or T200°C.

These enclosures fitted with different accessory present a degree of protection IP65 without O-Ring or IP66 with O-Ring insered on the cover, according to European standard EN 60 529.

PARAMETERS RELATING TO THE SAFETY

Maximum supply voltage "NSI"	:	750 V (AC) or 660 V (DC)
Maximum supply voltage "SI"	:	250 V
Frequency	:	50 / 60 Hz

For the signaling units :

Maximum power of the lamp : 3,5 W

Maximum dissipated powers:

The maximum dissipated powers are defined in the descriptive documents according to the type of the enclosure, the class of temperature and the ambient temperature.

MARKING

Marking must be readable and indelible ; it must comprise the following indications:

A - Enclosure version EEx d :

COELBO
I - 20047 Brugherio

CCF... or CCV... **(*)**
INERIS 03ATEX0210
(Serial number)
(year of construction)
Ex **II 2 GD**
EEx d IIB T **(**)**
IP**(***)** T **(****)**
T.Cable **(*****)**
T.amb **(******)**
Screws quality : A2-70

DO NOT OPEN WHEN ENERGIZED

AFTER DE-ENERGIZED WAIT 15 MINUTES BEFORE OPENING

When the enclosure is fitted with a disconnector the folloxwing mention :

DO NOT OPERATE UNDER LOAD

(*) The point are replaced by a codification according to the manufacturing variations. The differents types are indicated on the descriptives documents.

(***) 65 or 66. When the cover is fitted with o-ring the enclosure present the degrees of protection IP66.

Ambient temperature range (******)	Temperature class		Cable temperature (*****)
	Gas (**)	Dust (****)	
-20°C / 40°C	T6	T85°C	NC
	T5	T100°C	NC
	T4	T135°C	94°C
	T3	T200°C	155°C
-20°C / 50°C	T6	T85°C	NC
	T5	T100°C	75°C
	T4	T135°C	97°C
	T3	T200°C	155°C
-20°C / 60°C	T6	T85°C	NC
	T5	T100°C	85°C
	T4	T135°C	105°C
	T3	T200°C	160°C

B - Enclosure version EEx d [ia] :

COELBO
I - 20047 Brugherio

CCF... or CCV... **(*)**
INERIS 03ATEX0210
(Serial number)
(year of construction)
Ex **II 2 GD**
EEx d [ia] IIB T6
IP**(***)** T85°C
Screws quality : A2-70

DO NOT OPEN WHEN ENERGIZED

AFTER DE-ENERGIZED WAIT 15 MINUTES BEFORE OPENING

When the enclosure is fitted with a disconnector the folloxwing mention :

DO NOT OPERATE UNDER LOAD

(*) The point are replaced by a codification according to the manufacturing variations. The differents types are indicated on the descriptives documents.

(***) 65 or 66. When the cover is fitted with o-ring the enclosure present the degrees of protection IP66.

The whole marking can be carried out in the language of the country of use.

The protective apparatus or system must also carry the marking normally envisaged by the standards of construction which relate to it.

ROUTINE EXAMINATIONS AND TESTS

According to 16.1 of standard EN 50 018, each sample of the flameproof enclosure defined above must have successfully passed before delivery an overpressure test, of a period comprised between 10 and 60 seconds, under 11.9 bar.

(16) DESCRIPTIVE DOCUMENTS

The technical report is composed of the document quoted hereafter, constituting the descriptive file of the apparatus, object of this certificate.

Certification file ref.COELBO 3 rev.2 dated on 2003.12.15

This file, signed on 2003.12.16, included 156 headings.

(17) SPECIAL CONDITIONS FOR SAFE USE

See instructions note.

(18) ESSENTIAL REQUIREMENTS OF SAFETY AND HEALTH

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

- conformity to the European standards EN 50 014, EN 50 018, EN 50 020 and EN 50 281-1-1.
- the whole of the provisions adopted by the manufacturer and described in the descriptive documents.

This equipment is not evaluated in accordance with annex II §1.5 of 94/9/EC Directive.

ADDITION

(3) **INERIS 03ATEX0210/01**

(4) **ENCLOSURE TYPE CCF... or CCV...**

(5) **Made by COELBO**

(15) **PURPOSE OF THE ADDITION**

- Possibility to use enclosures CCF size 5A, 6A, 7A, 8A, 10A, 10B, 11A, 11B, 12A and 12B at an ambient temperature of -40°C.
- Possibility to use the enclosure CCF size 10 at an ambient temperature of -50°C.
- Increase of the maximum supply voltage up to 1000 volts.
- Assembly of a rectangular window of size T48.
- Incorporation of a new enclosure CCF size 1A.
- Modification of the diagram of drilling for the body enclosures CCF size 12, 12A and 12B.
- Modification of the diagram of drilling for the lid enclosures CCF size 16, 16A and 16B.

PARAMETERS RELATING TO THE SAFETY

The parameters relating to the safety mentionned in the basic certificate are modified as follows :

Maximum supply voltage "NSI" : 1000 V
The maximum powers dissipated for the enclosures CCF size 1A are the ones of the enclosure CCF size 1.

MARKING

The marking defined in the basic certificate is unchanged.
The enclosure CCF size 1A must comprise the marking stipulated on the basic certificate.

ROUTINE EXAMINATIONS AND TESTS

The routine examinations and tests stipulated by the basic certificate are modified as follows :

- Each enclosure CCF size 5A, 6A, 7A, 8A, 10A, 10B, 11A, 11B, 12A and 12B has to have successfully passed, before delivery, in accordance with clause 16.1 of the EN 50 018 standard, an overpressure test of a period comprised between 10 and 60 seconds under 15 bar.
- Each enclosure CCF size 10 has to have successfully passed, before delivery, in accordance with clause 16.1 of the EN 50 018 standard, an overpressure test of a period comprised between 10 and 60 seconds under 15.6 bar.

(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 n° COELBO 13 rev. 0 dated and signed on 2006.09.21 (4 parts)

(17) SPECIAL CONDITIONS FOR SAFE USE

None.

(18) ESSENTIAL SAFETY AND HEALTH REQUIREMENTS

The respect of the Essential Health and Safety Requirements defined in the basic certificate is unchanged.

Verneuil-en-Halatte, 2007 03 05

ATMOSPHERES EXPLOSIVES ORGANISME NOTIFIE INERIS NOTIFIED BODY EXPLOSIVE ATMOSPHERES

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 03ATEX0210/02

(4) ENCLOSURE TYPE CCF... or CCV...

(5) Made by COELBO

(15) PURPOSE OF THE ADDITION

- Application of new standards EN 60079-0: 2006, EN 60079-1: 2004, EN 60079-11: 2007 EN 61241-0: 2006, EN 61241-1: 2004 and EN 61241-11: 2006,
- Introduction of group IIB + H2 except for enclosures types CCF16G, CCF16AG and CCF16BG,
- Possibility to use a new type of resin for the window cementing,
- Possibility to install inside enclosure whatever sort of electric device guaranting respect of all maximum foreseen values of electric ratings (voltage, current and heated power),
- Introduction of a new serie of devices type RS... or RX...,
- Modification of the drilling diagram for the cover and the lateral walls of the enclosures,
- Modification of the number of windows on the cover.

PARAMETERS RELATING TO THE SAFETY

The parameters relating to the safety are unchanged.

MARKING

The marking is modified as follows:

A - Enclosure without intrinsic safety element (except enclosures types CCF16G, CCF16AG and CCF16BG):

COELBO
I - 20047 Brugherio (MI)
CCF... or CCV... (*)
INERIS 03ATEX0210
(Serial number)
(Year of construction)
Ⓔx II 2 GD
Ex d IIB + H2 T(**)
Ex tD A21 IP (***) T (**)
T.amb (**)
T. cable : (**)

WARNINGS

DO NOT OPEN WHEN ENERGIZED
AFTER DE-ENERGIZED WAIT 15 MINUTES BEFORE OPENING
USE SCREWS WITH MINIMUM QUALITY: A2-70

When the enclosure is fitted with a disconnector the following mention has to be applied:

DO NOT OPERATE UNDER LOAD

When the enclosure is fitted with battery the following mention has to be applied:

DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT.

(*) The points are replaced by a codification according to the manufacturing variations. The differents types are indicated on the descriptives documents.

(**) See table below.

(***) **65 or 66.** When the cover is fitted with O-ring, the enclosure presents the degrees of protection IP66.

B - <u>Enclosure types CCF16G, CCF16AG and CCF16BG without intrinsic safety element</u>:

COELBO
I - 20047 Brugherio (MI)
CCF... or CCV... (*)
INERIS 03ATEX0210
(Serial number)
(Year of construction)
Ⓔx II 2 GD
Ex d IIB T(**)
Ex tD A21 IP (***) T (**)
T.amb (**)
T. cable : (**)

WARNINGS

DO NOT OPEN WHEN ENERGIZED
AFTER DE-ENERGIZED WAIT 15 MINUTES BEFORE OPENING
USE SCREWS WITH MINIMUM QUALITY: A2-70

When the enclosure is fitted with a disconnector the following mention has to be applied:

DO NOT OPERATE UNDER LOAD

When the enclosure is fitted with battery the following mention has to be applied:

DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT.

(*) The points are replaced by a codification according to the manufacturing variations. The differents types are indicated on the descriptives documents.

(**) See table below.

(***) **65 or 66.** When the cover is fitted with O-ring, the enclosure presents the degrees of protection IP66.

Ambient temperature range	Temperature class		Cable temperature
	Gas	Dust	
-20°C / 40°C	T6	T85°C	NC
	T5	T100°C	NC
	T4	T135°C	94°C
	T3	T200°C	155°C
-20°C / 50°C	T6	T85°C	NC
	T5	T100°C	75°C
	T4	T135°C	97°C
	T3	T200°C	155°C
-20°C / 60°C	T6	T85°C	NC
	T5	T100°C	85°C
	T4	T135°C	105°C
	T3	T200°C	160°C

The temperature class and the ambient temperature are in accordance with the maximum powers dissipated and the size of the enclosure and are stipulated on the descriptive documents.

C - Enclosure with intrinsic safety elements (except enclosures types CCF16G, CCF16AG and CCF16BG):

COELBO
I - 20047 Brugherio (MI)
CCF... or CCV... (*)
INERIS 03ATEX0210
(Serial number)
(Year of construction)
Ex II 2 (1) GD
Ex d [ia] IIB + H2 T6
Ex tD [iaD] A21 IP (**) T85°C

WARNINGS

DO NOT OPEN WHEN ENERGIZED
AFTER DE-ENERGIZED WAIT 15 MINUTE BEFORE OPENING
USE SCREWS WITH MINIMUM QUALITY: A2-70

When the enclosure is fitted with a disconnector the following mention has to be applied:

DO NOT OPERATE UNDER LOAD

When the enclosure is fitted with battery the following mention has to be applied:

DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT.

(*) The points are replaced by a codification according to the manufacturing variations. The differents types are indicated on the descriptives documents.

(**) **65 or 66.** When the cover is fitted with O-ring, the enclosure presents the degrees of protection IP66.

D - Enclosures types CCF16G, CCF16AG and CCF16BG with intrinsic safety elements:

COELBO
I - 20047 Brugherio (MI)
CCF... or CCV... (*)
INERIS 03ATEX0210
(Serial number)
(Year of construction)
Ⓔx II 2 (1) GD
Ex d [ia] IIB T6
Ex tD [iaD] A21 IP (**) T85°C

WARNINGS

DO NOT OPEN WHEN ENERGIZED
AFTER DE-ENERGIZED WAIT 15 MINUTE BEFORE OPENING
USE SCREWS WITH MINIMUM QUALITY: A2-70

When the enclosure is fitted with a disconnector the following mention has to be applied:

DO NOT OPERATE UNDER LOAD

When the enclosure is fitted with battery the following mention has to be applied:

DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT.

(*) The points are replaced by a codification according to the manufacturing variations. The differents types are indicated on the descriptives documents.

(**) **65 or 66.** When the cover is fitted with O-ring, the enclosure presents the degrees of protection IP66.

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

The routine examinations and tests are modified as follows :

In accordance with clause 16.1 of the EN 60079-1 standard each apparatus defined above has to have successfully passed before delivery an overpressure test of a period comprised between 10 and 60 seconds under 11.9 bar.

(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 n°COELBO 20 rev.0 of 2008.06.16 (7 rubrics) signed on 2008.06.17

(17) SPECIAL CONDITIONS FOR SAFE USE

None.

(18) ESSENTIAL SAFETY AND HEALTH REQUIREMENTS

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

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

Verneuil-en-Halatte, 2008 07 02

ATMOSPHERES EXPLOSIVES
ORGANISME NOTIFIE
INERIS
NOTIFIED BODY
EXPLOSIVE ATMOSPHERES

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