

INERIS

INSTITUT NATIONAL DE L'ENVIRONNEMENT
INDUSTRIEL ET DES RISQUES

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(2) **Equipment and protection 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 01ATEX0054 X**

(4) Protection apparatus or system:

LIGHTING FIXTURE TYPE EVAC...and SUPPLY BOX TYPE PRC

(5) Manufacturer: **FEAM**

(6) Address: **Via M. Pagano, 3
20090 TREZZANO SUL NAVIGLIO (MI)
ITALY**

(7) This protection 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/CE 23th March 1994, certifies that this protection system or equipment fulfills the Essential of Health and Safety Requirements relating to the design and construction of equipments and protection 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°16091/01.

(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 August 1994
EN 50281-1-1 of September 1998

- 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 protection 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.
- (11) The marking of the equipment or the protection system will have to contain:

 II 2 G D

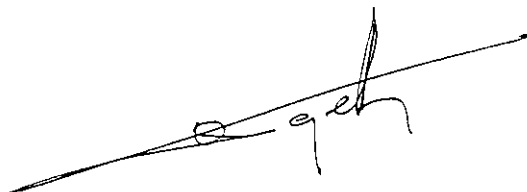
EEx d IIC T6 to T2 IP66 T80°C to T290°C

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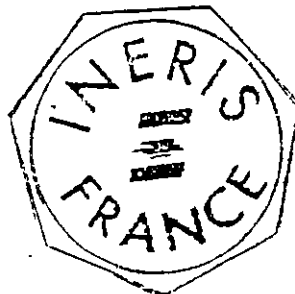


X. LEFEBVRE

Engineer at the Laboratory of Certification of
Materials ATEX



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



(13)

ANNEX

(14)

EC TYPE EXAMINATION CERTIFICATE N° INERIS 01ATEX0054 X

(15)

DESCRIPTION OF THE EQUIPMENT OR THE PROTECTION SYSTEM

The lighting fixture contains a lamp compartment eventually connected to a supply compartment type PRC; these two flameproof compartments made in stainless steel are connected by the way of bushing wires .

PARAMETERS RELATING TO THE SAFETY

Maximum Supply voltage : 230 V

Authorized maximum powers and characteristics of the lamps :

EVAC 100 ou 101

	LAMP TYPE					
	Incandescent	Halogen	Metal halide	Mercury Vapour	Sodium Vapour (H.P.)	Fluorescent
Power -	100 W or 25 W(AC) / 21W(DC)	100 W	100 W	80 W	70 W	15 W

EVAC 200 or 201

	LAMP TYPE					
	Incandescent	Halogen	Xenon flash	Mercury Vapour	Blended light	Fluorescent
Power	200 W	150 W	25W	125 W	160 W	23 W

EVAC 300 or 301

	LAMP TYPE					
	Incandescent	Halogen	Metal halide	Mercury Vapour	Sodium Vapour (H.P.)	Blended light
Power	300 W/25 W*	250W	250W	250W	250W	250W

with rotating reflector on motor


EVAC 500 or 501

	LAMP TYPE					
	Incandescent	Halogen	Metal halide	Mercury Vapour	Sodium Vapour (H.P.)	Blended light
Power	500 W	Non	400 W	400 W	400 W	500W

MARKING

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

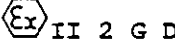
On the lighting fixture type EVAC:

- FEAM
Via M. Pagano, 3
20090 TREZZANO SUL NAVIGLIO (MI)
ITALY
- EVAC... (1)
- INERIS 01ATEX0054X
- (Serial number)
- (year of construction)
-  II 2 G D
- EEx d IIC T(*)
- IP66 T(**)
- T.Amb : (*)
- T.cable : (*)
- DO NOT OPEN WHEN ENERGIZED
- AFTER DE-ENERGIZING , DELAY (***) MINUTES BEFORE OPENING

(1) type is completed by numbers corresponding to manufacturing variation

- (*) See table above.
- (**) Obligatory mention for use in the presence of combustible dust, see table above.
- (***) See table above.

On the supply box type PRC when is connected

- FEAM
Via M. Pagano, 3
20090 TREZZANO SUL NAVIGLIO (MI)
ITALY
- PRC
- INERIS 01ATEX0054X
- (Serial number)
- (year of construction)
-  II 2 G D
- EEx d IIC T(*)
- IP66 T(**)
- T.Amb : (*)
- T.cable : (*)
- DO NOT OPEN WHEN ENERGIZED
- AFTER DE-ENERGIZING , DELAY (***) MINUTES BEFORE OPENING

(*) See table above.

(**) Obligatory mention for use in the presence of combustibile dust, see table above.

(***) See table above.

For type EVAC 100 or 101

Type and power lamp	Ambient temperature range (*)	concerned explosive atmosphere		Delay waiting in mn(***) Compartment		Cable temperature (*)
		GAS(*)	DUSTS (**)	Lamp	Supply	
100W INCANDESCENT	-20°C/+40°C	T4	T 130°C	7	N.A.	N.C.
	-20°C/+52°C	T4			N.A.	81°C
100W HALOGEN	-20°C/+40°C	T4	T 130°C	5	N.A.	N.C.
	-20°C/+52°C	T4			N.A.	N.C.
100W METAL HALIDE	-20°C/+40°C	T4	T 130°C	13	4	N.C.
	-20°C/+52°C	T4			8	N.C.
80W MERCURY VAPOUR	-20°C/+40°C	T4	T 130°C	9	1	N.C.
	-20°C/+52°C	T4			3	N.C.
70W SODIUM VAPOUR	-20°C/+40°C	T4	T 130°C	2	NONE	N.C.
	-20°C/+52°C	T4			5	N.C.
15W FLUORESCENT	-20°C/+40°C	T6	T 80°C	4	N.A.	N.C.
	-20°C/+52°C	T6			N.A.	N.C.
25W AC INCANDESCENT 21W DC	-20°C/+40°C	T5	T 95°C	12	N.A.	N.C.
	-20°C/+52°C	T4	T 130°C	11	N.A.	N.C.

- N.A. Non Associated
- N.C. Non Concerned

For type EVAC 200 or 201

Type and power lamp	Ambient temperature range (*)	concerned explosive atmosphere		Delay waiting in mn(***) Compartment		Cable temperature (*)
		GAS(*)	DUSTS (**)	Lamp	Supply	
200W INCANDESCENT	-20°C/+40°C	T4	T 130°C	9	N.A.	83°C
	-20°C/+52°C	T3	T 195°C	NONE	N.A.	95°C
160W BLENDED LIGHT	-20°C/+40°C	T3	T 195°C	2	N.A.	87°C
	-20°C/+52°C	T3			N.A.	99°C
150W HALOGEN	-20°C/+40°C	T4	T 130°C	13	N.A.	N.C.
	-20°C/+52°C	T4			N.A.	82°C
125W MERCURY VAPOUR	-20°C/+40°C	T3	T 195°C	2	NONE	N.C.
	-20°C/+52°C	T3			NONE	N.C.
25W XENON FLASH	-20°C/+40°C	T6	T 80°C	NONE	N.A.	N.C.
	-20°C/+52°C	T6			N.A.	N.C.
23W FLUORESCENT	-20°C/+40°C	T6	T 80°C	4	N.A.	N.C.
	-20°C/+52°C	T6			N.A.	N.C.

- N.A. Not Associated
- N.C. Non Concerned

For type EVAC 300 or 301

Type and power lamp	Ambient temperature range (*)	Concerned explosive atmosphere		Delay waiting in mn(***) Compartment		Cable temperature (*)
		GAS(*)	DUSTS (**)	Lamp	Supply	
300W INCANDESCENT	-20°C/+40°C	T4	T 130°C	12	N.A.	82°C
	-20°C/+52°C	T3	T 195°C	NONE	N.A.	94°C
250W HALOGEN	-20°C/+40°C	T4	T 130°C	14	N.A.	81°C
	-20°C/+52°C	T3	T 195°C	7	N.A.	93°C
250W MERCURY VAPOUR	-20°C/+40°C	T3	T 195°C	4	NONE	N.C.
	-20°C/+52°C	T3			NONE	N.C.
250W SODIUM VAPOUR	-20°C/+40°C	T3	T 195°C	3	NONE	N.C.
	-20°C/+52°C	T2	T 290°C	NONE	NONE	N.C.
250W METAL HALIDE	-20°C/+40°C	T3	T 195°C	3	5	N.C.
	-20°C/+52°C	T3			NONE	N.C.
250W BLENDED LIGHT	-20°C/+40°C	T3	T 195°C	3	N.A.	89°C
	-20°C/+52°C	T3			N.A.	101°C
150W METAL HALIDE	-20°C/+40°C	T4	T 130°C	9	7	N.C.
	-20°C/+52°C	T3	T 195°C	4	NONE	N.C.
150W SODIUM VAPOUR	-20°C/+40°C	T4	T 130°C	8	4	N.C.
	-20°C/+52°C	T4			10	N.C.
25W ROTALLARM	-20°C/+40°C	T6	T 80°C	24	N.A.	N.C.
	-20°C/+52°C	T6			N.A.	N.C.

- N.A. Not Associated
- N.C. Non Concerned

For type EVAC 500 or 501

Type and power lamp	Ambient temperature range (*)	Concerned explosive atmosphere		Delay waiting in mn(***) Compartment		Cable temperature (*)
		GAS(*)	DUSTS (**)	Lamp	Supply	
500W INCANDESCENT	-20°C/+40°C	T3	T 195°C	8	N.A.	108°C
	-20°C/+52°C	T3			N.A.	120°C
500W BLENDED LIGHT	-20°C/+40°C	T2	T 290°C	2	N.A.	123°C
	-20°C/+52°C	T2			N.A.	135°C
400W MERCURY VAPOUR	-20°C/+40°C	T3	T 195°C	9	1	N.C.
	-20°C/+52°C	T3			3	81°C
400W SODIUM VAPOUR	-20°C/+40°C	T3	T 195°C	5	NONE	N.C.
	-20°C/+52°C	T3			NONE	N.C.
400W METAL HALIDE	-20°C/+40°C	T3	T 195°C	4	NONE	N.C.
	-20°C/+52°C	T3			NONE	N.C.

- N.A. Not Associated
- N.C. Non Concerned

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

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

ROUTINE EXAMINATIONS AND TESTS

Each example of the equipment hardware defined above must have successfully passed before delivery an overpressure test in accordance with section 16.1 of standard EN 50 018, of a period comprised between 10 and 60 secondes under

- under 13,1 bar performed for lamp compartment
- under 12.6 bar performed for supply compartment type PRC.

(16) DESCRIPTIVE DOCUMENTS

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

- Technical Note N.NT-004/ATEX rev.0 (6 pages) signed on 2001.11.27
- Plan n° AC004/ATEX FOLIOS 1 to 6 dated and signed on 2001.11.27
- Instructions IU004/ATEX rev.0 (2 sheets) dated and signed on 2001.11.27

(17) SPECIAL CONDITIONS FOR SAFE USE

For the resistance to impact, the lighting fixture can insure a low protection, the user shall insure an supplementary protection in case of heavy mechanical risk.

(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 and EN 50 281-1-1
- the whole of the provisions adopted by the manufacturer and described in the descriptive documents.

ADDITION

(3) INERIS 01ATEX0054X/01

(4) LIGHTING FIXTURE TYPE EVAC...and SUPPLY BOX TYPE PRC

(5) Made by FEAM

(15) **PURPOSE OF THE ADDITION**

- Incorporation of new fluorescent lamps for type EVAC 300/301 and for type EVAC 500/501.
- Modification of the material for the bushing and modification of the number and type of conductors.
- Possibility to use the 250 watt mercury vapour lamp on the type EVAC500/501 with class T4.
- Modification of marking relating to the delay before opening and for the cable temperature.

PARAMETERS RELATING TO THE SAFETY

The parameters relating to the safety mentioned in the basic certificate are completed as follows:

Lighting fixture type EVAC300/301

Type of lamp : 3 x 18 W fluorescent.

Lighting fixture type EVAC500/501

Types of lamp : 3 x 36 W fluorescent.
1 x 250 W mercury vapour.

MARKING

The marking defined in the basic certificate is modified as follows:


On the lighting fixture type EVAC :

FEAM

Via M. Pagano
I - 20090 Trezzano Sul Naviglio

EVAC... (1)

INERIS 01ATEX0054X
(Serial number)
(Year of construction)

 II 2 G D

EEx d IIC T.. (*)
IP66 T.. (**)
T.Amb : (*)
T.cable : (*)

DO NOT OPEN WHEN ENERGIZED

AFTER DE-ENERGIZING DELAY 30 MINUTES BEFORE OPENING

- (1) Type is completed by numbers corresponding to manufacturing variation.
- (*) See table below.
- (**) Obligatory mention for use in the presence of combustible dust, see table below.


On the supply box type PRC when is connected

FEAM

Via M. Pagano
I - 20090 Trezzano Sul Naviglio

PRC

INERIS 01ATEX0054X
(Serial number)
(year of construction)

 II 2 G D

EEx d IIC T.. (*)
IP66 T.. (**)
T.Amb : (*)
T.cable : (*)

DO NOT OPEN WHEN ENERGIZED

AFTER DE-ENERGIZING, DELAY (***) MINUTES BEFORE OPENING

- (*) See table below.
- (**) Obligatory mention for use in the presence of combustible dust, see table below.
- (***) See table below.

The whole of 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.

Type EVAC 100 or 101

Type and power of lamp	Ambient temperature range (*)	Concerned explosive atmosphere		Waiting delay in mn(***) PRC compartment	Cable temperature (*)
		Gas (*)	Dusts (**)		
100 W Incandescent	-20°C/+40°C	T4	T130°C	N.A.	N.C.
	-20°C/+52°C				85°C
100 W Halogen	-20°C/+40°C	T4	T130°C	N.A.	N.C.
	-20°C/+52°C				N.C.
100 W Metal halide	-20°C/+40°C	T4	T130°C	30	N.C.
	-20°C/+52°C				N.C.
80 W Mercury vapour	-20°C/+40°C	T4	T130°C	30	N.C.
	-20°C/+52°C				N.C.
70 W Sodium vapour	-20°C/+40°C	T4	T130°C	30	N.C.
	-20°C/+52°C				N.C.
15 W Fluorescent	-20°C/+40°C	T6	T80°C	N.A.	N.C.
	-20°C/+52°C				N.C.
25 W AC Incandescent 21 W DC	-20°C/+40°C	T5	T95°C	N.A.	N.C.
	-20°C/+52°C	T4	T130°C		N.C.

• N.C. : Non Concerned N.A. : Not Associated

Type EVAC 200 or 201

Type and power of lamp	Ambient temperature range (*)	Concerned explosive atmosphere		Waiting delay in mn(***) PRC compartment	Cable temperature (*)
		Gas (*)	Dust (**)		
200 W Incandescent	-20°C/+40°C	T4	T130°C	N.A.	85°C
	-20°C/+52°C	T3	T195°C		95°C
160 W Blended light	-20°C/+40°C	T3	T195°C	N.A.	95°C
	-20°C/+52°C				100°C
150 W Halogen	-20°C/+40°C	T4	T130°C	N.A.	N.C.
	-20°C/+52°C				85°C
125 W Mercury vapour	-20°C/+40°C	T3	T195°C	30	N.C.
	-20°C/+52°C				N.C.
25 W Xenon flash	-20°C/+40°C	T6	T80°C	N.A.	N.C.
	-20°C/+52°C				N.C.
23 W Fluorescent	-20°C/+40°C	T6	T80°C	N.A.	N.C.
	-20°C/+52°C				N.C.

• N.C. : Non Concerned N.A. : Not Associated

Type EVAC 300 or 301

Type and power of lamp	Ambient temperature range (*)	Concerned explosive atmosphere		Waiting delay in mn(***) PRC Compartment	Cable temperature (*)
		Gas(*)	Dusts (**)		
300 W Incandescent	-20°C/+40°C	T4	T130°C	N.A	95°C
	-20°C/+52°C	T3	T195°C		
250 W Halogen	-20°C/+40°C	T4	T130°C	N.A	95°C
	-20°C/+52°C	T3	T195°C		
250 W Mercury vapour	-20°C/+40°C	T3	T195°C	30	N.C.
	-20°C/+52°C				
250 W Sodium vapour	-20°C/+40°C	T3	T195°C	30	N.C.
	-20°C/+52°C	T2	T290°C		
250 W Metal halide	-20°C/+40°C	T3	T195°C	30	N.C.
	-20°C/+52°C				
250 W Blended light	-20°C/+40°C	T3	T 195°C	N.A	105°C
	-20°C/+52°C				
150 W Metal halide	-20°C/+40°C	T4	T130°C	30	N.C.
	-20°C/+52°C	T3	T195°C		
150 W Sodium vapour	-20°C/+40°C	T4	T130°C	30	N.C.
	-20°C/+52°C	T4			
25 W Rotallarm	-20°C/+40°C	T6	T80°C	N.A	N.C.
	-20°C/+52°C				
3 x 18W Fluorescent	-20°C/+40°C	T6	T80°C	30	N.C
	-20°C/+52°C				

- N.C. : Non Concerned N.A. : Not Associated

Type EVAC 500 or 501

Type and power of lamp	Ambient temperature range (*)	Concerned explosive atmosphere		Waiting delay in mn(***) PRC Compartment	Cable temperature (*)
		Gas(*)	Dusts (**)		
500 W Incandescent	-20°C/+40°C	T3	T 195°C	N.A	135°C
	-20°C/+52°C				
500 W Blended light	-20°C/+40°C	T2	T 290°C	N.A	135°C
	-20°C/+52°C				
400 W Mercury vapour	-20°C/+40°C	T3	T 195°C	30	85°C
	-20°C/+52°C				
400 W Sodium vapour	-20°C/+40°C	T3	T195°C	30	N.C
	-20°C/+52°C				
400 W Metal halide	-20°C/+40°C	T4	T130°C	30	N.C
	-20°C/+52°C				
250 W Mercury vapour	-20°C/+40°C	T4	T130°C	30	N.C
	-20°C/+52°C	T3	T142°C		
3 x 36W Fluorescent	-20°C/+40°C	T6	T80°C	30	N.C
	-20°C/+52°C				

• N.C. : Non Concerned N.A. : Not Associated

ROUTINE EXAMINATIONS AND TESTS

The routine examinations and tests stipulated by the basic certificate 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 n° PC004 rev.0 (8 items) signed on 2006.05.09.

(17) SPECIAL CONDITIONS FOR SAFE USE

The special conditions defined in the basic certificate are completed as follows:

In order to guarantee the T4 class, the lighting fixture type EVAC500 or EVAC501, fitted with the 250 watt mercury vapour lamp, must be installed in vertical position keeping glass globe downward.

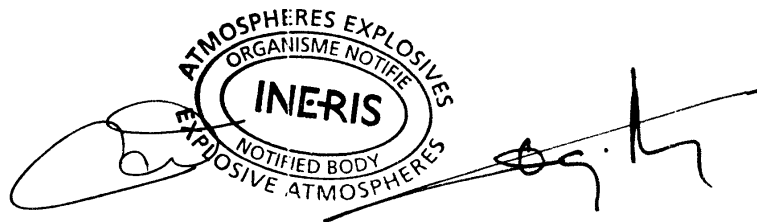
The other conditions are stipulated on the instructions.

(18) ESSENTIAL SAFETY AND HEALTH REQUIREMENTS

The respect of the Essential Health and Safety Requirements defined in the basic certificate is modified as follow :

- Conformity with European standards EN 50 014 from june 1997 + A1 and A2 ; EN 50 018 from November 2000 + A1.

Verneuil-en-Halatte, 2006 06 06



C. PETITFRERE

Project Manager at the ATEX
Equipment Certification Laboratory

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

ADDITION

- (3) INERIS 01ATEX0054X/02
- (4) LIGHTING FIXTURE TYPE EVAC... and SUPPLY BOX TYPE PRC
- (5) Made by FEAM

(15) PURPOSE OF THE ADDITION

- Application of the standards:

EN 60079-0	:	2009	IEC 60079-0	:	2007
EN 60079-0	:	2012	IEC 60079-0	:	2011
EN 60079-1	:	2007	IEC 60079-1	:	2007
EN 60079-31	:	2009	IEC 60079-31	:	2008
- Substitution of the supply box PRC by supply box PRC covered by INERIS 08ATEX0018X.
- Modification of the range of ambient temperatures.
- Introduction of new types of lamps and new type EVAC 200 LED.

PARAMETERS RELATING TO THE SAFETY

The parameters relating to the safety are modified as follows:


Maximum supply voltage for ballasts or electronic modules: 230 V, 240 V or 277 V in accordance with the type of ballast or electronic module and the lamp.

For the different types and powers of lamps see table below.

These Lighting fixtures can be use in the following range ambient temperatures from -20°C or -60°C to +40°C or +60°C.

MARKING

The marking is modified as follows:

FEAM
I - 20090 Trezzano sul Naviglio (MI)
EVAC... (*)
INERIS 01ATEX0054X
(Serial number)
(Year of construction)
 II 2 GD
Ex d IIC T(*) Gb
Ex tb IIIC T(*) Db IP66
(*) < Tamb < (*)
Cable gland : (Type and size)

WARNINGS : DO NOT OPEN WHEN ENERGIZED
 DOT NOT OPEN IF AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT

(*) See table below.

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.

Type EVAC100... or EVAC101...

Type and power of lamp	Ambient temperature range	Concerned explosive atmosphere		Cable temperature
		Gas	Dusts	
100 W Incandescent	-20°C or -60°C / +40°C	T4	T135°C	N.C
	-20°C or -60°C / +60°C			95°C
100 W Halogen	-20°C or -60°C / +40°C	T4	T135°C	N.C
	-20°C or -60°C / +60°C			95°C
12 W LED	-20°C or -60°C / +40°C	T6	T85°C	N.C
	-20°C or -60°C / +60°C			N.C
100 W Metal halide	-20°C or -60°C / +40°C	T3	T140°C	NC
	-20°C or -60°C / +60°C		T160°C	N.C
80 W Mercury vapor	-20°C or -60°C / +40°C	T4	T135°C	N.C
	-20°C or -60°C / +60°C	T3	T160°C	N.C
70 W Sodium vapor	-20°C or -60°C / +40°C	T4	T135°C	N.C
	-20°C or -60°C / +60°C			N.C
15 W Fluorescent	-20°C or -60°C / +40°C	T6	T85°C	N.C
	-20°C or -60°C / +60°C			N.C
25 W AC Incandescent 21 W DC	-20°C or -60°C / +40°C	T6	T85°C	N.C
	-20°C or -60°C / +60°C	T5	T95°C	N.C

N.C : Not Concerned

Type EVAC200... or EVAC201...

Type and power of lamp	Ambient temperature range	Concerned explosive atmosphere		Cable temperature
		Gas	Dust	
200 W Incandescent	-20°C or -60°C / +40°C	T4	T135°C	95°
	-20°C or -60°C / +60°C	T3	T160°C	120°C
160 W Blended light	-20°C or -60°C / +40°C	T3	T140°C	95°C
	-20°C or -60°C / +60°C		T160°C	120°C
150 W Halogen	-20°C or -60°C / +40°C	T4	T135°C	N.C
	-20°C or -60°C / +60°C	T3	T160°C	95°C
125 W Mercury vapor	-20°C or -60°C / +40°C	T3	T140°C	N.C
	-20°C or -60°C / +60°C		T160°C	N.C
100 W Sodium vapor	-20°C or -60°C / +40°C	T3	T140°C	N.C
	-20°C or -60°C / +60°C		T160°C	N.C
25 W Xenon flash	-20°C or -60°C / +40°C	T6	T85°C	N.C
	-20°C or -60°C / +60°C			N.C
23 W Fluorescent	-20°C or -60°C / +40°C	T6	T85°C	N.C
	-20°C or -60°C / +60°C			N.C

N.C. : Not Concerned

Type EVAC 200 LED or EVAC 201 LED

Type and power of lamp	Ambient temperature range	Concerned explosive atmosphere		Cable temperature
		Gas	Dust	
95 W LED	-20°C or -60°C / +40°C	T5	T85°C	N.C
	-20°C or -60°C / +60°C	T4	T105°C	90°C

N.C. : Not Concerned

Type EVAC 300 or 301

Type and power of lamp	Ambient temperature range	Concerned explosive atmosphere		Cable temperature
		Gas	Dusts	
300 W Incandescent	-20°C or -60°C / +40°C	T4	T135°C	95°C
	-20°C or -60°C / +60°C	T3	T160°C	120°C
250 W Halogen	-20°C or -60°C / +40°C	T4	T135°C	95°C
	-20°C or -60°C / +60°C	T3	T160°C	120°C
250 W Sodium vapor	-20°C or -60°C / +40°C	T3	T160°C	N.C
	-20°C or -60°C / +60°C		T190°C	
250 W Metal halide	-20°C or -60°C / +40°C	T3	T140°C	N.C
	-20°C or -60°C / +60°C		T160°C	
250 W Blended light	-20°C or -60°C / +40°C	T3	T160°C	95°C
	-20°C or -60°C / +60°C		T190°C	120°C
150 W Metal halide	-20°C or -60°C / +40°C	T4	T135°C	N.C
	-20°C or -60°C / +60°C	T3	T160°C	
150 W Sodium vapor	-20°C or -60°C / +40°C	T4	T135°C	N.C
	-20°C or -60°C / +60°C			
25 W Rotallarm	-20°C or -60°C / +40°C	T6	T85°C	N.C
	-20°C or -60°C / +60°C			
3 x 18W Fluorescent	-20°C or -60°C / +40°C	T6	T85°C	N.C
	-20°C or -60°C / +60°C			

N.C. : Not Concerned

Type EVAC 500 or 501

Type and power of lamp	Ambient temperature range	Concerned explosive atmosphere		Cable temperature
		Gas	Dusts	
500 W Incandescent	-20°C or -60°C / +40°C	T3	T160°C	120°C
	-20°C or -60°C / +60°C		T190°C	140°C
500 W Blended light	-20°C or -60°C / +40°C	T2	T205°C	140°C
	-20°C or -60°C / +60°C		T225°C	160°C
400 W Mercury vapor	-20°C or -60°C / +40°C	T3	T190°C	95°C
	-20°C or -60°C / +60°C	N.A	N.A	N.A
400 W Sodium vapor	-20°C or -60°C / +40°C	T3	T190°C	85°C
	-20°C or -60°C / +60°C	N.A	N.A	N.A
400 W Metal halide	-20°C or -60°C / +40°C	T3	T160°C	N.C
	-20°C or -60°C / +60°C		T190°C	85°C
250 W Mercury vapor	-20°C or -60°C / +40°C	T3	T160°C	N.C
	-20°C or -60°C / +60°C		T190°C	85°C
3 x 36W Fluorescent	-20°C or -60°C / +40°C	T6	T85°C	N.C
	-20°C or -60°C / +60°C	T5		
60 W Fixed or flashing LED	-20°C or -60°C / +40°C	T6	T85°C	NC
	-20°C or -60°C / +60°C	T5		

N.C : Not Concerned
 N.A : Not authorized

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/IEC 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:

- 12.9 bar for using at ambient temperature down to -20°C.
- 14.2 bar for using at ambient temperature down to -60°C.

(16) DESCRIPTIVE DOCUMENTS

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

Certification file n° 13-202 rev.0 (12 rubrics)

signed on 2013.07.29

(17) SPECIAL CONDITIONS FOR SAFE USE

The special conditions for safe use are modified as follows:

The depth engagement of the threaded joints is superior to the value specified in the tables of EN/IEC 60079-1 standard

The other conditions are stipulated in the instructions.

(18) ESSENTIAL SAFETY AND HEALTH REQUIREMENTS

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

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

Verneuil-en-Halatte, 2014.01.30



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

ADDITION

(3) INERIS 01ATEX0054X/03

(4) LIGHTING FIXTURE TYPE EVAC... and SUPPLY BOX TYPE PRC

(5) Made by FEAM

(15) PURPOSE OF THE ADDITION

- Application of the following standards:
EN 60079-0 : 2012/A11 : 2013 IEC 60079-0 : 2011
EN 60079-31 : 2014 IEC 60079-31 : 2013.
- Introduction of new types EVAC 500 LED and EVAC 501 LED.
- Addition of ambient temperature -40°C for type EVAC 500 LED and EVAC 501 LED.
- Possibility to install, in the type EVAC 500, the following lamps:
 - 250 watts sodium vapour and 250 watts metal halide.
- Possibility to install, in the EVAC 200 or EVAC 201 the following lamps:
Xenon 2J, Maxixenon 2J and Maxixenon 6J.

PARAMETERS RELATING TO THE SAFETY

The parameters relating to the safety are modified as follow :

Maximum supply voltage for ballasts or electronic modules: 230V, 240V or 277 V in accordance with the type of ballast or electronic module and the lamp.

For the different types and powers of lamps see table below.

The Lighting fixture type EVAC 500 LED and EVAC 501 LED can be use in the following range ambient temperatures:

- From -20°C to 40°C or 60°C or from -40°C to +40°C or +60°C.


The other Lighting fixture can be use in the following range ambient temperatures:

- From -20°C to 40°C or 60°C or from -60°C to +40°C or +60°C.

MARKING

The marking is modified as follow :

FEAM
I - 20090 Trezzano sul Naviglio (MI)
EVAC... (*)
INERIS 01ATEX0054X
(Serial number)
(Year of construction)

 II 2 GD

Ex d IIC T6...T2 Gb
 Ex tb IIIC T85°C...T225°C Db IP66
 (*) < Tamb < (*)
 Cable gland : (Type and size)

WARNINGS : DO NOT OPEN WHEN ENERGIZED
 DOT NOT OPEN IF AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT

(*) See table below.

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.

Type EVAC100... or EVAC101...

Type and power of lamp	Ambient temperature range	Concerned explosive atmosphere		Cable temperature
		Gas	Dusts	
100 W Incandescent	-20°C or -60°C / +40°C	T4	T135°C	N.C
	-20°C or -60°C / +60°C			95°C
100 W Halogen	-20°C or -60°C / +40°C	T4	T135°C	N.C
	-20°C or -60°C / +60°C			95°C
12 W LED	-20°C or -60°C / +40°C	T6	T85°C	N.C
	-20°C or -60°C / +60°C			
100 W Metal halide	-20°C or -60°C / +40°C	T3	T140°C	N.C
	-20°C or -60°C / +60°C		T160°C	
80 W Mercury vapor	-20°C or -60°C / +40°C	T4	T135°C	N.C
	-20°C or -60°C / +60°C	T3	T160°C	
70 W Sodium vapor	-20°C or -60°C / +40°C	T4	T135°C	N.C
	-20°C or -60°C / +60°C			
15 W Fluorescent	-20°C or -60°C / +40°C	T6	T85°C	N.C
	-20°C or -60°C / +60°C			
25 W AC Incandescent 21 W DC	-20°C or -60°C / +40°C	T6	T85°C	N.C
	-20°C or -60°C / +60°C	T5	T95°C	

N.C : Not Concerned

Type EVAC200... or EVAC201...

Type and power of lamp	Ambient temperature range	Concerned explosive atmosphere		Cable temperature
		Gas	Dust	
200 W Incandescent	-20°C or -60°C / +40°C	T4	T135°C	95°
	-20°C or -60°C / +60°C	T3	T160°C	120°C
160 W Blended light	-20°C or -60°C / +40°C	T3	T140°C	95°C
	-20°C or -60°C / +60°C		T160°C	120°C
150 W Halogen	-20°C or -60°C / +40°C	T4	T135°C	N.C
	-20°C or -60°C / +60°C	T3	T160°C	95°C
125 W Mercury vapor	-20°C or -60°C / +40°C	T3	T140°C	N.C
	-20°C or -60°C / +60°C		T160°C	
100 W Sodium vapor	-20°C or -60°C / +40°C	T3	T140°C	N.C
	-20°C or -60°C / +60°C		T160°C	
25 W Xenon flash	-20°C or -60°C / +40°C	T6	T85°C	N.C
	-20°C or -60°C / +60°C			
23 W Fluorescent	-20°C or -60°C / +40°C	T6	T85°C	N.C
	-20°C or -60°C / +60°C			
Xenon 2J	-20°C or -60°C / +40°C	T6	T85°C	N.C
	-20°C or -60°C / +60°C			
Maxixenon 2J	-20°C or -60°C / +40°C	T6	T85°C	N.C
	-20°C or -60°C / +60°C			
Maxixenon 6J	-20°C or -60°C / +40°C	T6	T85°C	N.C
	-20°C or -60°C / +60°C			

N.C. : Not Concerned

Type EVAC 200 LED or EVAC 201 LED

Type and power of lamp	Ambient temperature range	Concerned explosive atmosphere		Cable temperature
		Gas	Dust	
95 W LED	-20°C or -60°C / +40°C	T5	T85°C	N.C
	-20°C or -60°C / +60°C	T4	T105°C	90°C

N.C. : Not Concerned

Type EVAC 300 or 301

Type and power of lamp	Ambient temperature range	Concerned explosive atmosphere		Cable temperature
		Gas	Dusts	
300 W Incandescent	-20°C or -60°C / +40°C	T4	T135°C	95°C
	-20°C or -60°C / +60°C	T3	T160°C	120°C
250 W Halogen	-20°C or -60°C / +40°C	T4	T135°C	95°C
	-20°C or -60°C / +60°C	T3	T160°C	120°C
250 W Sodium vapor	-20°C or -60°C / +40°C	T3	T160°C	N.C
	-20°C or -60°C / +60°C		T190°C	
250 W Metal halide	-20°C or -60°C / +40°C	T3	T140°C	N.C
	-20°C or -60°C / +60°C		T160°C	
250 W Blended light	-20°C or -60°C / +40°C	T3	T160°C	95°C
	-20°C or -60°C / +60°C		T190°C	120°C
150 W Metal halide	-20°C or -60°C / +40°C	T4	T135°C	N.C
	-20°C or -60°C / +60°C	T3	T160°C	
150 W Sodium vapor	-20°C or -60°C / +40°C	T4	T135°C	N.C
	-20°C or -60°C / +60°C			
25 W Rotallarm	-20°C or -60°C / +40°C	T6	T85°C	N.C
	-20°C or -60°C / +60°C			
3 x 18W Fluorescent	-20°C or -60°C / +40°C	T6	T85°C	N.C
	-20°C or -60°C / +60°C			

N.C. : Not Concerned

Type EVAC 500 or 501

Type and power of lamp	Ambient temperature range	Concerned explosive atmosphere		Cable temperature
		Gas	Dusts	
500 W Incandescent	-20°C or -60°C / +40°C	T3	T160°C	120°C
	-20°C or -60°C / +60°C		T190°C	140°C
500 W Blended light	-20°C or -60°C / +40°C	T2	T205°C	140°C
	-20°C or -60°C / +60°C		T225°C	160°C
400 W Mercury vapor	-20°C or -60°C / +40°C	T3	T190°C	95°C
	-20°C or -60°C / +60°C	N.A	N.A	N.A
400 W Sodium vapor	-20°C or -60°C / +40°C	T3	T190°C	85°C
	-20°C or -60°C / +60°C	N.A	N.A	N.A
400 W Metal halide	-20°C or -60°C / +40°C	T3	T160°C	N.C
	-20°C or -60°C / +60°C		T190°C	85°C
250 W Mercury vapor	-20°C or -60°C / +40°C	T3	T160°C	N.C
	-20°C or -60°C / +60°C		T190°C	85°C
3 x 36W Fluorescent	-20°C or -60°C / +40°C	T6	T85°C	N.C
	-20°C or -60°C / +60°C	T5		
60 W Fixed or flashing LED	-20°C or -60°C / +40°C	T6	T85°C	N.C
	-20°C or -60°C / +60°C	T5		
250 W Sodium vapor	-20°C or -60°C / +40°C	T3	T160°C	95°C
	-20°C or -60°C / +60°C			
250 W Metal halide	-20°C or -60°C / +40°C	T4	T135°C	95°C
	-20°C or -60°C / +60°C	T3		

N.C : Not Concerned
N.A : Not authorized

Type EVAC 500 LED or 501 LED

Type and power of lamp	Ambient temperature range	Concerned explosive atmosphere		Cable temperature
		Gas	Dusts	
48 W LED	-20°C or -40°C / +40°C	T6	T95°C	N.C.
	-20°C or -40°C / +60°C	T5		
96 W LED	-20°C or -40°C / +40°C	T6	T95°C	NC
	-20°C or -40°C / +60°C	T5		

N.C : Not Concerned

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 follow :

In accordance with clause 16.1 of the EN/IEC 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:

- 12.3 bar for ambient temperature down to -20°C for types EVAC 500 LED or EVAC 501 LED.
- 17.9 bar for ambient temperature down to -40°C for types EVAC 500 LED or EVAC 501 LED.
- 12.9 bar for ambient temperature down to -20°C for all other types.
- 14.2 bar for ambient temperature down to -60°C for all other types.

(16) DESCRIPTIVE DOCUMENTS

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

- (17) Certification file n° 13-202 rev.1 of 2015.02.15 (13 rubrics) signed on 2015.02.15

(18) SPECIAL CONDITIONS FOR SAFE USE

The special conditions for safe use are modified as follow:

- The depth engagement of the threaded joints is superior to the value specified in the tables of EN/IEC 60079-1 standard.
- During the installation, the user will take into consideration that the window of EVAC 500 LED or EVAC 501 LED underwent only a shock corresponding to an energy of a low risk at 2J.

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

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

- Conformity to the following standards :
 - EN 60079-0 : 2012/A11 : 2013 IEC 60079-0 : 2011
 - EN 60079-1 : 2007 IEC 60079-1 : 2007
 - EN 60079-31 : 2014 IEC 60079-31 : 2013
- All provisions adopted by the manufacturer and defined in the descriptive documents.

Verneuil-en-Halatte, 2015 07 21



PO Olivier COTTIN

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



- 2 Appareil ou système de protection destiné à être utilisé en atmosphères explosibles
Equipment and protective systems intended for use in potentially explosive atmospheres

Directive 2014/34/UE
Directive 2014/34/EU

1 **ATTESTATION D'EXAMEN UE DE TYPE**
EU-TYPE EXAMINATION CERTIFICATE

- 3 Numéro de l'attestation d'examen UE de type / *Number of the EU-Type Examination Certificate*

INERIS 01ATEX0054X

INDICE / *ISSUE* : 04

- 4 Appareil ou système de protection / *Equipment or protective system:*

APPAREIL D'ECLAIRAGE TYPE EVAC...
LIGHTING FIXTURE TYPE EVAC...

- 5 Fabricant / *Manufacturer:*

FEAM

- 6 Adresse / *Address :*

Via Mario Pagano, 3
I - 20090 Trezzano sul Naviglio (MI)
ITALY

- 7 Cet appareil ou système de protection et toute autre variante acceptable de celui-ci sont décrits dans l'annexe de la présente attestation et dans les documents descriptifs cités dans cette annexe.

This equipment or protective system and any acceptable variation thereto is specified in the Annex of this certificate and the descriptive documents therein referred to.

- 8 L'INERIS, organisme notifié et identifié sous le numéro 0080, conformément aux articles 17 and 21 de la directive 2014/34/UE du Parlement Européen et du Conseil, datée du 26 février 2014, et accrédité par le COFRAC sous le n° 5-0045 dans le cadre de l'activité de certification de produits et services (portée disponible sur www.cofrac.fr) certifie que cet appareil ou système de protection répond aux Exigences Essentielles de Sécurité et de Santé en ce qui concerne la conception et la construction des appareils et des systèmes de protection destinés à être utilisés en atmosphères explosibles, décrites en annexe II de la Directive.

INERIS, notified body and identified under number 0080, in accordance with Articles 17 and 21 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, and accredited by COFRAC under number 5-0045 for certification of products and services (scope of accreditation available on the website www.cofrac.fr), certifies that this equipment or protective system fulfils 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.

Les procédures de certification sont disponibles sur www.ineris.fr.

The rules of certification are available on INERIS website on: www.ineris.fr.

Les examens et les essais sont consignés dans le rapport :

The examinations and the tests are recorded in report:

N° 032564

9 Le respect des Exigences Essentielles de Sécurité et de Santé est assuré par :

The respect of the Essential Health and Safety Requirements has been assured by:

- la conformité à / *Conformity with:*

EN 60079-0	:	2012 / A11: 2013
EN 60079-1	:	2014
EN 60079-28	:	2015
EN 60079-31	:	2014

- les solutions spécifiques adoptées par le fabricant pour satisfaire aux Exigences Essentielles de Sécurité et de Santé décrites dans les documents descriptifs /

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

10 Si le signe X est placé à la suite du numéro de l'attestation d'examen UE de type, il indique que cet appareil ou système de protection est soumis à des conditions spéciales d'utilisation, mentionnées dans l'annexe de la présente attestation.


If the sign X is placed after the Number of the EU type examination certificate, it indicates that this equipment and protective system is subject to the Specific Conditions of Use, mentioned in the annex of this certificate.

11 Cette attestation d'examen UE de type se rapporte uniquement à la conception, aux examens et essais de l'appareil ou système de protection spécifié conformément à la directive 2014/34/UE. D'autres exigences de cette Directive s'appliquent à la fabrication et à la fourniture de cet appareil ou système de protection, celles-ci ne sont pas couvertes par cette attestation.

This EU-Type Examination Certificate relates only to the design, examinations and tests of the specified equipment or protective system in accordance to the Directive 2014/34/EU. 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 Le marquage de l'appareil ou du système de protection doit contenir :

The marking of the equipment or the protective system shall include the following:

 II 2 G D

Verneuil-en-Halatte, 2018 10 24



Le Directeur Général de l'INERIS
Par déléation
*The Chief Executive Officer of INERIS
By delegation*

Olivier COTTIN
Responsable de l'Unité EQEN
Head of Equipment
and Corporate Services Unit

13

ANNEXE**15 DESCRIPTION DE L'APPAREIL OU DU SYSTEME DE PROTECTION :**

Les luminaires EVAC... réalisés en alliage d'aluminium sont destinés à recevoir différents types de lampes.

En fonction du modèle, le ballast/driver peut être installé soit directement dans le compartiment d'éclairage soit dans une enveloppe séparée. Dans le cas d'une enveloppe séparée, les deux compartiments sont séparés par une traversée scellée. Comme spécifié dans les documents descriptifs du fabricant, cette enveloppe ballast peut être :

- Le coffret PRC couvert par le certificat INERIS 08ATEX0018X ou,
- L'enveloppe ballast spécifique au modèle EVAC 201 L et EVAC 501 L ou,
- Une autre enveloppe couverte par un certificat ATEX dédiée à cette application.

Ces enveloppes présentent les degrés de protection IP66 en accord avec la norme EN 60529.

PARAMETRES RELATIFS A LA SECURITE :

Tension maximale des ballasts ou des modules électroniques : 230V, 240V ou 277 V en fonction du type de ballast ou module électronique et de la lampe.

Paramètres électriques du fusible de protection pour le mode de protection « op is » : Voir les instructions du fabricant.

Les différents types et puissances de lampes, les classes de température en fonction de la température ambiante maximale sont détaillés dans les tableaux à la fin du certificat.

Les luminaires type EVAC 50*LED et EVAC 501 L* peuvent être utilisés dans la gamme de température ambiante de -40°C à +60°C. Les autres luminaires type EVAC (conventionnel ou version LED) peuvent être utilisés dans la gamme de température ambiante de -60°C à +60°C.

MARQUAGE :

Le marquage doit être lisible et indélébile ; il doit comporter les indications suivantes :

1. Sur modèles conventionnels (tous les types exceptés les versions LED) :

FEAM


I - 20090 Trezzano sul Naviglio (MI)

EVAC ⁽¹⁾

INERIS 01ATEX0054X

(Numéro de série)

(Année de construction)

 II 2 GDEx db IIC T⁽²⁾ GbEx tb IIIC T⁽²⁾ Db IP66...°C < Tamb < ...C ⁽³⁾T.câble= ... ⁽⁴⁾

Entrées de câbles : (Type et dimension)

AVERTISSEMENTS :

NE PAS OUVRIR SOUS TENSION

NE PAS OUVRIR SI UNE ATMOSPHERE EXPLOSIVE

PEUT ETRE PRESENTE

13

ANNEX**15 DESCRIPTION OF THE EQUIPMENT OR THE PROTECTIVE SYSTEM :**

These lighting fixtures EVAC... made in aluminum alloy are intended to receive different type of lamps.

Depending on the model, the ballast/driver could be installed either directly inside light housing or in a separated ballast housing. When using a separated ballast housing, the two compartments are separated by a sealed bushing. As specified in the descriptive documents of the manufacturer, the separated ballast housing could be :

- *the unit PRC covered by the certificate INERIS 08ATEX0018X or*
- *the specific ballast housings model EVAC 201 L and EVAC 501L or*
- *other enclosure covered by an ATEX certificate for this application.*

This equipment gets the degrees of protection IP66 in accordance with EN 60529 standard.

PARAMETERS RELATING TO THE SAFETY :

Maximum supply voltage for ballasts or electronic modules: 230V, 240V or 277 V in accordance with the type of ballast or electronic module and the lamp.

Electrical characteristic of the fuse protection for "op is" protection mode: See instructions of the manufacturer

The different types and powers of lamps, the temperature classes following the maximum ambient temperature are detailed in the tables at the end of the certificate.

The lighting fixtures type EVAC 50 LED and EVAC 501 L* can be used in the range ambient temperatures from -40°C to 60°C. The other lighting fixtures type EVAC (conventional or LED version) can be used in the following range ambient temperatures from -60°C to +60°C.*

MARKING :

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

1. On the conventional model (all types of lamps excepted LED version) :

FEAM


I - 20090 Trezzano sul Naviglio (MI)

EVAC ⁽¹⁾

INERIS 01ATEX0054X

(Serial Number)

(Year of Construction)

 II 2 GDEx db IIC T⁽²⁾ GbEx tb IIIC T⁽²⁾ Db IP66...°C < Tamb < ...C ⁽³⁾T.cable= ... ⁽⁴⁾

Cable gland: (Type and size)

WARNINGS:

DO NOT OPEN WHEN ENERGIZED

DOT NOT OPEN IF AN EXPLOSIVE ATMOSPHERE MAY

BE PRESENT

- (1) Le type est complété par une lettre et des chiffres correspondant aux variantes d'exécution.
- (2) T6...T2 ou T85°C...T225°C : en fonction des versions comme définis dans les tableaux à la fin.
- (3) Gamme de températures ambiantes si différentes de -20°C à +40°C
- (4) T.câble en fonction des versions comme définis dans les tableaux à la fin.

2. Sur modèles LED :

FEAM


I - 20090 Trezzano sul Naviglio (MI)

EVAC ⁽¹⁾

INERIS 01ATEX0054X

(Numéro de série)

(Année de construction)

 II 2 GD

Ex db op is IIC T⁽²⁾ Gb

Ex op is tb IIIC T⁽²⁾ Db IP66

...°C < Tamb < ...C ⁽³⁾

T.câble= ... ⁽⁴⁾

Entrées de câbles : (Type et dimension)

AVERTISSEMENTS :

NE PAS OUVRIR SOUS TENSION

NE PAS OUVRIR SI UNE ATMOSPHERE EXPLOSIVE

PEUT ETRE PRESENTE

- (1) Le type est complété par une lettre et des chiffres correspondant aux variantes d'exécution.
- (2) T6 ou T5 ou T4 ou T85°C ou T100°C ou T135°C : en fonction des versions comme définis dans les tableaux à la fin.
- (3) Gamme de températures ambiantes si différentes de -20°C à +40°C
- (4) T.câble en fonction des versions comme définis dans les tableaux à la fin.

L'ensemble du marquage peut être réalisé dans la langue du pays d'utilisation.

L'appareil ou le système de protection doit aussi porter le marquage normalement prévu par les normes de construction qui le concernent.

EXAMENS ET ESSAIS INDIVIDUELS :

Conformément au § 16.1 de la norme EN 60079-1, chaque exemplaire du matériel défini ci-dessous doit avoir subi avec succès, avant livraison, une épreuve de surpression statique d'une durée comprise entre 10 et 60 secondes sous :

Type / Type	Température ambiante minimale : / Minimum ambient temperature :		
	-20°C	-40°C	-60°C
Modèle conventionnel EVAC** / Conventional model EVAC ***			
Modèle LED EVAC 20° LED / LED model EVAC 20° LED	12.9 bar	N/A	14.2 bar
Modèle LED EVAC 201L (coffret éclairage) / LED model EVAC 201 L (light housing)			
Modèle LED EVAC 50° LED / LED model EVAC 50° LED	12.3 bar	17.9 bar	N/A
Modèle LED EVAC 501L (coffret éclairage) / LED model EVAC 501 L (light housing)			
Modèle LED EVAC 201L (coffret ballast) / LED model EVAC 201 L (ballast housing)	N/A	16.5 bar	17.5 bar
Modèle LED EVAC 501L (coffret ballast) / LED model EVAC 501 L (ballast housing)	N/A	16.5 bar	N/A

- (1) The type is completed by numbers and letters corresponding to the manufacturing variations.
- (2) T6...T2 or T85°C...T225°C : according to the versions as defined in tables at the end.
- (3) Range of ambient temperatures if different from -20°C to +40°C.
- (4) T.cable according to the versions as defined in tables at the end.

2. On the LED versions :

FEAM


I - 20090 Trezzano sul Naviglio (MI)

EVAC ⁽¹⁾

INERIS 01ATEX0054X

(Serial Number)

(Year of Construction)

 II 2 GD

Ex db op is IIC T⁽²⁾ Gb

Ex op is tb IIIC T⁽²⁾ Db IP66

...°C < Tamb < ...C ⁽³⁾

T.cable= ... ⁽⁴⁾

Cable gland: (Type and size)

WARNINGS:

DO NOT OPEN WHEN ENERGIZED

DO NOT OPEN IF AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT

- (1) The type is completed by numbers and letters corresponding to the manufacturing variations.
- (2) T6 or T5 or T4 or T85°C or T100°C or T135°C : according to the versions as defined in tables at the end.
- (3) Range of ambient temperatures if different from -20°C to +40°C.
- (4) T.cable according to the versions as defined in tables at the end.

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 :

In accordance with clause 16.1 of the EN 60079-1 standard each piece of equipment defined below has to have successfully passed, before delivery, an overpressure test of a period comprised between 10 and 60 seconds under:

16 DOCUMENTS DESCRIPTIFS :

Les documents descriptifs cités ci-après, constituent la documentation technique de l'appareil, objet de la présente attestation.

16 DESCRIPTIVE DOCUMENTS :

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

Titre / Title	Réf. / Ref.	Rév. / Rev.	Date / Date
Certification file (1 page / 18 Rubriques/Rubrics)	13-202	2B	2018.10.10

17 CONDITIONS SPÉCIALES D'UTILISATION :

- Les longueurs des joints sont supérieures aux valeurs spécifiées dans les tableaux de la norme EN 60079-1. Pour toute réparation, contacter le fabricant.
- Lors de l'installation l'utilisateur devra tenir compte du fait que la fenêtre du luminaire type EVAC 50° LED ou EVAC 501 L matériel n'a subi qu'un choc mécanique faible à 2J.

Les autres conditions d'utilisation sont définies dans la notice d'instructions.

17 SPECIFIC CONDITIONS OF USE :

- *The lengths of the flameproof joints are greater than those specified in tables of EN 60079-1 standard. For any repair, contact the manufacturer.*
- *During the installation, the user will take into consideration that the window of the lighting fixture type EVAC 50° LED or EVAC 501 L underwent only a shock corresponding to an energy of a low risk at 2J.*

The other conditions of use are stipulated in the instructions.

18 EXIGENCES ESSENTIELLES DE SECURITE ET DE SANTE :

Le respect des Exigences Essentielles de Sécurité et de Santé est assuré par :

- La conformité aux normes listées au paragraphe (9).
- L'ensemble des dispositions adoptées par le constructeur et décrites dans les documents descriptifs.

18 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS :

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

- *Conformity to the standards quoted in clause (9).*
- *All provisions adopted by the manufacturer and defined in the descriptive documents.*

19 REMARQUES :

Les indices 00 à 03 font référence à l'attestation d'examen CE de type n° INERIS 01ATEX0054X et ses compléments émis précédemment conformément à la directive 94/9/CE.

Les modifications de l'indice 04 concernent :

- Nouvelles versions EVAC 201 L et EVAC 501 L incluant de nouvelles enveloppes de ballast. LED avec PCB
- Application de la norme EN 60079-28 :2015 pour les versions LED des EVAC.
- Application de la norme EN 60079-1 :2014
- Application de la nouvelle directive 2014/34/UE

19 REMARKS :

The issues 00 to 03 refer to the EC-type examination certificate N° INERIS 01ATEX0054X and its additions issued previously according to the Directive 94/9/EC.

The changes of the issue 04 are regarding:

- *New versions EVAC 201 L and EVAC 501 L including new ballast housing*
- *Application of the standard EN 60079-28:2015 for LED versions of EVAC*
- *Application of the standard EN 60079-1:2014*
- *Application of the Directive 2014/34/EU*

TABLEAUX / TABLES

Tableau 1: Type EVAC100... ou EVAC101...
 Table 1: Type EVAC100... or EVAC101...

Type et puissance maximale des lampes / Type and maximum power of lamp	Température ambiante maximale / Ambient temperature range	Atmosphère explosive concernée / Concerned explosive atmosphere		Température de câble / Cable temperature
		Gaz / Gas	Poussières/ Dusts	
100 W Incandescent	-20°C ou/or-60°C/+40°C	T4	T135°C	N.C
	-20°C ou/or-60°C /+60°C			95°C
100 W Halogen	-20°C ou/or-60°C/+40°C	T4	T135°C	N.C
	-20°C ou/or-60°C /+60°C			95°C
12 W LED	-20°C ou/or-60°C/+40°C	T6	T85°C	N.C
	-20°C ou/or-60°C /+60°C			N.C
100 W Metal halide	-20°C ou/or-60°C/+40°C	T3	T140°C	NC
	-20°C ou/or-60°C /+60°C		T160°C	N.C
80 W Mercury vapour	-20°C ou/or-60°C/+40°C	T4	T135°C	N.C
	-20°C ou/or-60°C /+60°C	T3	T160°C	N.C
70 W Sodium vapour	-20°C ou/or-60°C/+40°C	T4	T135°C	N.C
	-20°C ou/or-60°C /+60°C			N.C
15 W Fluorescent	-20°C ou/or-60°C/+40°C	T6	T85°C	N.C
	-20°C ou/or-60°C /+60°C			N.C
25 W AC Incandescent 21 W DC	-20°C ou/or-60°C/+40°C	T6	T85°C	N.C
	-20°C ou/or-60°C /+60°C	T5	T95°C	N.C

N.C : Non Concerné / Not Concerned

Tableau 2: Type EVAC200... ou EVAC201...
Table 2: Type EVAC200... or EVAC201...

Type et puissance maximale des lampes / Type and maximum power of lamp	Température ambiante maximale / Ambient temperature range	Atmosphère explosive concernée / Concerned explosive atmosphere		Température de câble / Cable temperature
		Gaz / Gas	Poussières/ Dusts	
200 W Incandescent	-20°C ou/or-60°C/+40°C	T4	T135°C	95°C
	-20°C ou/or-60°C /+60°C	T3	T160°C	120°C
160 W Blended light	-20°C ou/or-60°C/+40°C	T3	T140°C	95°C
	-20°C ou/or-60°C /+60°C		T160°C	120°C
150 W Halogen	-20°C ou/or-60°C/+40°C	T4	T135°C	N.C
	-20°C ou/or-60°C /+60°C	T3	T160°C	95°C
125 W Mercury vapour	-20°C ou/or-60°C/+40°C	T3	T140°C	N.C
	-20°C ou/or-60°C /+60°C		T160°C	
100 W Sodium vapour	-20°C ou/or-60°C/+40°C	T3	T140°C	N.C
	-20°C ou/or-60°C /+60°C		T160°C	
25 W Xenon flash	-20°C ou/or-60°C/+40°C	T6	T85°C	N.C
	-20°C ou/or-60°C /+60°C			
23 W Fluorescent	-20°C ou/or-60°C/+40°C	T6	T85°C	N.C
	-20°C ou/or-60°C /+60°C			
Xenon 2J	-20°C ou/or-60°C/+40°C	T6	T85°C	N.C
	-20°C ou/or-60°C /+60°C			
Maxixenon 2J	-20°C ou/or-60°C/+40°C	T6	T85°C	N.C
	-20°C ou/or-60°C /+60°C			
Maxixenon 6J	-20°C ou/or-60°C/+40°C	T6	T85°C	N.C
	-20°C ou/or-60°C /+60°C			

N.C: Non Concerné / Not Concerned

Tableau 3: Type EVAC 200...LED ou EVAC 201...LED ou EVAC 201L...
Table 3: Type EVAC 200...LED or EVAC 201...LED or EVAC 201L...

Type et puissance des lampes / Type and maximum power of lamp	Température ambiante maximale / Ambient temperature range	Atmosphère explosive concernée / Concerned explosive atmosphere		Température de câble / Cable temperature
		Gaz / Gas	Poussières/ Dusts	
48W LED	-20°C ou/or-60°C/+40°C	T5	T85°C	N.C
	-20°C ou/or-60°C /+60°C	T4	T105°C	90°C

N.C: Non Concerné / Not Concerned

Tableau 4: Type EVAC 300... ou 301...
 Table 4: Type EVAC 300... or 301...

Type et puissance maximale des lampes / Type and maximum power of lamp	Température ambiante maximale / Ambient temperature range	Atmosphère explosive concernée / Concerned explosive atmosphere		Température de câble / Cable temperature
		Gaz / Gas	Poussières/ Dusts	
300 W Incandescent	-20°C ou/or-60°C/+40°C	T4	T135°C	95°C
	-20°C ou/or-60°C /+60°C	T3	T160°C	120°C
250 W Halogen	-20°C ou/or-60°C/+40°C	T4	T135°C	95°C
	-20°C ou/or-60°C /+60°C	T3	T160°C	120°C
250 W Sodium vapour	-20°C ou/or-60°C/+40°C	T3	T160°C	N.C
	-20°C ou/or-60°C /+60°C		T190°C	
250 W Metal halide	-20°C ou/or-60°C/+40°C	T3	T140°C	N.C
	-20°C ou/or-60°C /+60°C		T160°C	
250 W Blended light	-20°C ou/or-60°C/+40°C	T3	T160°C	95°C
	-20°C ou/or-60°C /+60°C		T190°C	120°C
150 W Metal halide	-20°C ou/or-60°C/+40°C	T4	T135°C	N.C
	-20°C ou/or-60°C /+60°C	T3	T160°C	
150 W Sodium vapour	-20°C ou/or-60°C/+40°C	T4	T135°C	N.C
	-20°C ou/or-60°C /+60°C			
25 W Rotallarm	-20°C ou/or-60°C/+40°C	T6	T85°C	N.C
	-20°C ou/or-60°C /+60°C			
3 x 18W Fluorescent	-20°C ou/or-60°C/+40°C	T6	T85°C	N.C
	-20°C ou/or-60°C /+60°C			

N.C: Non Concerné / Not Concerned

Tableau 5: Type EVAC 500... ou 501...
Table 5: Type EVAC 500... or 501...

Type et puissance maximale des lampes / Type and maximum power of lamp	Température ambiante maximale / Ambient temperature range	Atmosphère explosive concernée / Concerned explosive atmosphere		Température de câble / Cable temperature
		Gaz / Gas	Poussières/ Dusts	
500 W Incandescent	-20°C ou/or-60°C/+40°C	T3	T160°C	120°C
	-20°C ou/or-60°C /+60°C		T190°C	140°C
500 W Blended light	-20°C ou/or-60°C/+40°C	T2	T205°C	140°C
	-20°C ou/or-60°C /+60°C		T225°C	160°C
400 W Mercury vapour	-20°C ou/or-60°C/+40°C	T3	T190°C	95°C
	-20°C ou/or-60°C /+60°C	N.A	N.A	N.A
400 W Sodium vapour	-20°C ou/or-60°C/+40°C	T3	T190°C	85°C
	-20°C ou/or-60°C /+60°C	N.A	N.A	N.A
400 W Metal halide	-20°C ou/or-60°C/+40°C	T3	T160°C	N.C
	-20°C ou/or-60°C /+60°C		T190°C	85°C
250 W Mercury vapour	-20°C ou/or-60°C/+40°C	T3	T160°C	N.C
	-20°C ou/or-60°C /+60°C		T190°C	85°C
3 x 36W Fluorescent	-20°C ou/or-60°C/+40°C	T6	T85°C	N.C
	-20°C ou/or-60°C /+60°C	T5		
60 W Fixed ou/or flashing LED	-20°C ou/or-60°C/+40°C	T6	T85°C	NC
	-20°C ou/or-60°C /+60°C	T5		
250 W Sodium vapour	-20°C ou/or-60°C/+40°C	T3	T160°C	95°C
	-20°C ou/or-60°C /+60°C			
250 W Metal halide	-20°C ou/or-60°C/+40°C	T4	T135°C	95°C
	-20°C ou/or-60°C /+60°C	T3		

N.C : Non Concerné / Not Concerned - N.A : Non Autorisé / Not authorized

Tableau 6: Type EVAC 500...LED ou EVAC 501...LED ou EVAC 501 L...
Table 6: Type EVAC 500...LED or EVAC 501...LED or EVAC 501 L...

Type et puissance des lampes / Type and maximum power of lamp	Température ambiante maximale / Ambient temperature range	Atmosphère explosive concernée / Concerned explosive atmosphere		Température de câble / Cable temperature
		Gaz / Gas	Poussières/ Dusts	
48 W LED	-20°C ou/or-40°C/+40°C	T6	T95°C	N.C
	-20°C ou/or-40°C /+60°C	T5		
96 W LED	-20°C ou/or-40°C/+40°C	T4	T135°C	N.C
	-20°C ou/or-40°C /+60°C			

N.C : Non Concerné / Not Concerned