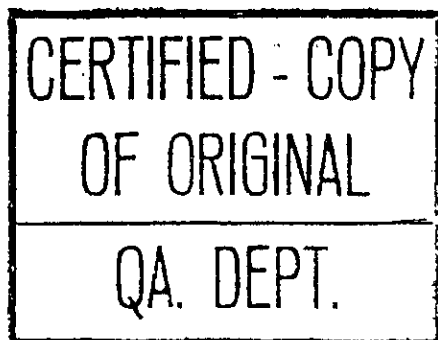
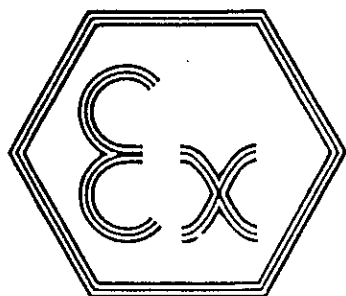


**INERIS**INSTITUT NATIONAL DE L'ENVIRONNEMENT
INDUSTRIEL ET DES RISQUESParc Technologique ALATA
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(2) **Equipment and protection systems intended for use in potentially explosive atmospheres**
Directive 94/9/EC

(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. Pagaro, 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

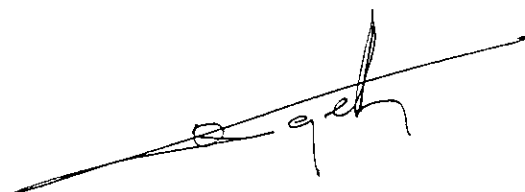
EEx d IIC T6 to T2 IP66 T80°C to T290°C

Verneuil-en-Halatte, 2001 12 12



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 combustible 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.