





# LABORATORIO OFICIAL J. M. MADARIAGA

(A1) **SCHEDULE**

(A2) EC-Type Examination Certificate: **LOM 02ATEX2013 X**

(A3) Description of equipment or protective system

Cilindric luminaires for tubular fluorescent lamps.

The transparent part is made of glass. It has two different thickness: type S, 7 mm, and type K, 5 mm .

Characteristics

Type	Length (mm)	Number of tubes	Power (W)	Class I		Class II		
				Grupe	Temperature class		Surface temperature	
					Ta (°C) -20 /+40	Ta (°C) -20 /+55	Ta (°C) -20 /+40	Ta (°C) -20 /+55
AB12 120*	707	1	18/20	IIB	T5	T5	T 78 °C	T 93 °C
AB12 140*	1320	1	36/40	IIB				
AB12 16*	1620	1	58/65	IIB				
AB12 220*	707	2	18/20	IIB				
AB12 240*	1320	2	36/40	IIB				
AB12 265*	1620	2	58/65	IIB				
AB12 108C	460	1	8	IIC	T6	T5	T 58 °C	T 73 °C
AB12 111PL	460	1	11	IIC				
AB12 218PL	460	2	18	IIC				
AB12 124PL	460	1	24	IIC	T5	T5	T 76 °C	T 91 °C
AB12 155PL	707	1	55	IIB				
AB12 236PL	707	2	36	IIB				

\* = C Electromagnetic ballast and starter  
Rated voltage: 220 -230 V 50/60 Hz

\* = E Electronic ballast  
Rated voltage : 198 -254 V 50/60 Hz  
175-280 Vdc

(A4) Test report: **LOM 00.421 FP**

(A5) Special conditions for safe use

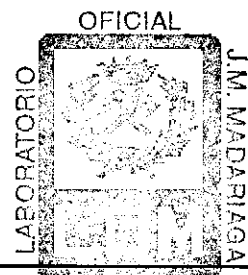
Luminaires can be use only in places with low impact danger of mechanical danger except types AB12\*40C and AB12 \* 65C having type S glass.

(A6) Essential Health and Safety Requirements

Each manufactured unit must be submitted to a static pressure test, according to paragraph 15.3.1 of EN 50018:2000, to:

- 650 kPa for types AB12 120C, AB12 220C, AB12 155PL y AB12 236PL
- 1100 kPa for the rest of the types

Explosion safe requirements are covered by application of the standards indicated in page 1/3 of this certificate.



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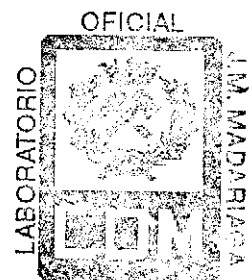
# LABORATORIO OFICIAL J. M. MADARIAGA

(A1) SCHEDULE

(A2) EC-Type Examination Certificate: **LOM 02ATEX2013 X**

(A7) Descriptive documents:

		<u>Rev.</u>	<u>Date</u>
Description nr.	AB12.doc (7 pp)	2	2002-04-12
Part list		1	2001-10-22
Drawings nr:	N601114D0037	E	2002-04-16
	N506112-0022	-	2000-05-10
	N506112-0025	-	2000-11-20
	N506112-0026	-	2000-11-20
	N506112A0033	A	2000-11-20
	N506112A0034	A	2000-11-20
	N506112A0035	A	2000-11-20
	N506112A0036	A	2000-11-20
	N506112A0037	A	2000-11-20
	N506112A0033	A	2000-11-20
Schemas nr.:	N506114A0023	A	2000-11-20
	N506114A0024	A	2000-11-20
	N506114A0025	A	2000-11-20
	N506114A0026	A	2000-11-20
	N506114A0027	A	2000-11-20
	N506114A0028	A	2000-11-20
	N506114A0030	A	2000-11-20
	N506114A0031	A	2000-11-20
	N506114A0032	A	2000-11-20
	N506114A0033	A	2000-11-20
	N506114A0034	A	2000-11-20
	N506114A0035	A	2000-11-20
	N506114-0042	-	2000-11-20
	N506114-0043	-	2000-11-20
	N506114-0044	-	2000-11-20
	N506114-0045	-	2000-11-16
	N506114-0046	-	2000-11-16
	N506114-0047	-	2000-11-16
	N506114-0048	-	2000-05-24
	N506114-0049	-	2000-05-24
	N506114-0050	-	2000-05-24
	N506114-0051	-	2000-05-24
	N506114-0052	-	2000-11-27
	N506114-0053	-	2000-11-27
	N506114-0054	-	2000-11-27
	N506114-0055	-	2000-11-27
	N506114-0056	-	2000-11-28
	N506114-0059	-	2002-04-16



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

(2) Equipment or protective system intended for use in potentially explosive atmospheres.  
Directive 94/9/EC

(3) Supplement nr. **2** of EC-Type Examination Certificate: **LOM 02ATEX2013 X**

(4) Equipment or protective system: **Luminaries**  
**Type AB12...**

(5) Applicant: **Cooper Crouse-Hinds, S.A.**

(6) Address: **Avda. Santa Eulalia, 290**  
**08223 TARRASA (BARCELONA)**  
**SPAIN**

(7) Test report: **LOM 05.411 DP**

(8) Variations included in this certificate

To include a variant type AB12 NAV 70 that use a H.P. sodium lamp of 70 W plus electric equipment -ballast-

To increase the use for an ambient temperature Ta: -50 °C /+55 °C valid only for IIB group.

This variant uses the 460 mm enclosure.

Class temperature for this variant is T3 for an ambient temperature Ta: -50 /+40 °C or Ta: -50 /+55 °C

(8) Marking changes

Those that affect to electrical and thermal characteristics and type.

(9) Change in individual tests

None

(10) Descriptive documents

	<u>Rev.</u>	<u>Date</u>
- Description nr. AB12 NAV 70.doc	0	2005-09-08

Madrid, 19th September 2005

Carlos Fernández Ramón  
DIRECTOR OF THE LABORATORY



Angel Vega Remesal  
Head of ATEX area

This supplement must be an inseparable part together with the base certificate **LOM 02ATEX2013X**  
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(1) **EC-TYPE EXAMINATION CERTIFICATE SUPPLEMENT**

(2) Equipment or protective system intended for use in potentially explosive atmospheres.  
Directive 94/9/EC

(3) Supplement nr. **3** of EC-Type Examination Certificate: **LOM 02ATEX2013 X**

(4) Equipment or protective system  
Luminaries  
Type AB12...

(5) Applicant  
COOPER Crouse-Hinds

(6) Address  
Avda. Santa Eulalia, 290  
08223-TERRASSA (BARCELONA)  
SPAIN

(7) Test report nr.: **LOM 08.312 SP**

(8) Variations included in this certificate

- 1 Update to the standards EN 60079-0:2006, EN 60079-1:2007, EN 61241-0:2006 y EN 61241-1:2004
- 2 Update of the manufacturer/applicant name
- 3 Update of type codification for the application of 8W:  
AB12 108 C with electromagnetic ballast  
AB12 108 EVG with electronic ballast
- 4 To extend the use of the variant AB12 NAV70 for 220-240 V 60 Hz

(9) Changes in marking



II 2 GD Ex d IIB T5..T6 / Ex d IIC T5..T6  
Ex tD A21 IP67 T...°C

Temperature classes, surface temperatures and ambient temperature ranges are indicated in the base certificate and previous supplements.

(10) Descriptive documents

	Rev.	Date
- Description nr.	AB12_E3	- 2008-05-20
- Drawings nr.:	N506112B0036	B 2008-05-14
	CCH-0805001	0 2008-05-16

Madrid, 2<sup>nd</sup> March, 2009

Carlos Fernández Ramón  
DIRECTOR OF THE LABORATORY

Angel Vega Remesal  
Head of ATEX area

This supplement must be an inseparable part together with the base certificate **LOM 02ATEX2013 X**

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

(2) Equipment or protective system intended for use in potentially explosive atmospheres.  
Directive 94/9/EC

(3) Supplement nr. **4** of EC-Type Examination Certificate: **LOM 02ATEX2013 X**

(4) Equipment or protective system  
Luminaires  
Type AB12...

(5) Manufacturer  
COOPER Crouse-Hinds

(6) Address  
Avda. Santa Eulalia, 290  
08223-TERRASSA (BARCELONA)  
SPAIN

(7) Test report nr.: **LOM 10.406 GP**

(8) Variations included in this certificate

- Update to the standards EN 60079-0:2009, EN 60079-1:2007 y EN 60079-31:2009
- To permit the use in combustible dust by application of the protection by enclosures "Ex t" type of protection on all variants of this luminaire
- To include new electronic ballasts to be used with T8 fluorescent tubes from 14 to 58 W having a universal supply of 120/277 V 60Hz and 110/260 V 0..60Hz
- To include T8 LED tubes with direct mains supply up to 277 V and consumed power up to 50 W per tube.

The thermal class of the 460 mm luminaire with T8/14 W florescent tube is T6 /85°C when Ta ≤ +40 °C.

All the variants with LED tube are marked with "LED" suffix, instead "C" or "E" that corresponds to electromagnetic or electronic ballast respectively. The temperature class of LED variants is T6 /T85 °C

(9) Changes in the special conditions for a safe use

None

(10) Changes in individual tests

None



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(3) Supplement nr. 4 of EC-Type Examination Certificate **LOM 02ATEX2013 X**

(11) Changes in marking



II 2 GD

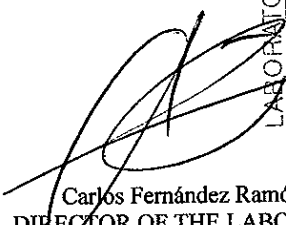
Ex d IIB T5..T6 Gb / Ex d IIC T5..T6 Gb  
Ex t IIC T... °C Db  
-20 °C ≤ Ta ≤ +55 °C

And those that correspond to the name of type

Temperature class, surface temperature and ambient temperature ranges are indicated on the base certificate and previous supplements.

(12) Descriptive documents

		<u>Rev.</u>	<u>Date</u>
- Description nr.:	AB12 _ Extensión nr.5	2	2011.05.17
	AB12 _ Extensión nr.6	1	2011.04.28
- Drawings nr.:	CCH20111011	-	2011-10-11
	N506114A0064	-	2011-07-28
	N601114-0056	-	2000-11-28

OFICIAL  
LABORATORIO OFICIAL J. M. MADARIAGA  
  
Carlos Fernández Ramón  
DIRECTOR OF THE LABORATORY

Getafe, 2011-10-11



Angel Vega Remesal  
Head of ATEX area