



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

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

(3) EC-Type Examination Certificate nr **LOM 08ATEX2015 X**

(4) Equipment or protection system Temperature sensors
Types TWL... and TTL...

(5) Applicant **KOBOLD MESURA, S.L.U.**

(6) Address Grifé, 655
08918- Badalona (BARCELONA)
ESPAÑA

(7) This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) Laboratorio Oficial J.M. Madariaga (LOM), notified body number 0163 in accordance with Article 9 of the Directive 94/9/EC of the European Parliament of 23 March 1994, certifies that this equipment or protective system has been found to comply with 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.
The examination and test results are recorded in confidential report nr. **LOM 07.165 PP**

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
Standards **EN 60079-0:2006** **EN60079- 11:2007**

(10) If the sign X is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EC-Type Examination Certificate relates only to the design and construction of this specified equipment or protective system in accordance with the Directive 94/9/EC. Further requirements of the Directive apply to the manufacture and supply of this equipment or protective system. These are not covered by this certificate.

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

 Ex ia IIC T4...T6
II 1 GD Ex iaD 20 IP65 T85 °C
-20 °C ≤ Ta ≤ +60 °C

Madrid, 28th March 2008

OFICIAL



J.M. MADARIAGA

Carlos Fernández Ramón
DIRECTOR OF THE LABORATORY

Angel Vega Remesal
Head of the ATEX

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(A1) SCHEDULE

(A2) EC-Type Examination Certificate: **LOM 08ATEX2015 X**

(A3) Description of equipment or protective system

Temperature sensors based on thermocouple (TTL series) o thermoresistor RTD (TWL series) having a head in three formats and a sheath that contains the sensor element. Also is included an ambient thermometer (ST head) that uses a metallic or plastic enclosure.

Sensors can be connected either directly or indirectly by means of intrinsically safe transmitters placed into the head.

Permitted intrinsically safety transmitters are listed in manufactured descriptive documents.

Type codification:

T L

Generic reference(series)

TWL or TTL

Sub-type

Immersion length

Process connection type

Type and number of sensor element

RTD wiring (only TWL series)

Head type

Head types BR, DIN B or L

M, SA and SN have not connection box

St variant is used as ambient thermometer

Transmitter type

0 = without transmitter

EE = with intrinsically safe transmitter

Sheath diameter

Type of protection

E1 = II 1G Ex ia

E2 = II 1D Ex iaD

Option code

Temperature class

TWL series without transmitter:

T4

TWL series without transmitter:

T6

T L series with transmitter:

T4 to T6 temperature class is the same that the used intrinsically safe transmitter modules

Specific parameters of the type of protection

TWL series without transmitter: Pi: 1.2 W

T L series with transmitter:

Input specific parameters are the same that the used intrinsically safe transmitter modules

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(A1) SCHEDULE

(A2) EC-Type Examination Certificate: **LOM 08ATEX2015 X**

(A4) Test report nr **LOM 07.165 PP**

(A5) Special conditions for safe use

It must be taken in account the electrostatic hazard when As and BR3 plastic head boxes are used

- Variants without head box (sub-types M, Sa and SN) must be protected with an enclosure having at least a degree of protection IP20

- The marked temperature class or surface temperature only refers to the equipment operating t ambient temperature. It must be determined the real process temperature in the installation. Head temperature must not be greater than 60 °C.

(A6) Individual tests

None

(A7) Essential Health and Safety Requirements

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

(A8) Descriptive Documents

	Rev.	Date
- Technical description nr.:	DT0315	2008-02-25
- Technical manuals nr.:	CT3225	2008-02-25
	CT3226	2008-02-25
- Drawings nr.:	PM0507R0	0 2007-10-23
	PM0508R0	0 2007-10-23
	PM0509R0	0 2007-10-23
	PM0510R0	0 2007-10-23
	PM0511R0	0 2007-10-23
	PM0512R0	0 2007-10-23
	PM0529R0	0 2007-10-23
	PM0530R0	0 2007-10-23
	PM0531R0	0 2007-10-23
	PM0532R0	0 2007-10-23
	PM0533R0	0 2007-10-23
	PM0534R0	0 2007-10-23
	PM0535R0	0 2007-10-23
	PM0536R0	0 2007-10-23
	PM0537R0	0 2007-10-23
	PM0538R0	0 2007-10-23
	PM0539R0	0 2007-10-23
	PM0540R0	0 2007-10-23
	PM0541R0	0 2007-10-23
	PM0542R0	0 2007-10-23
	DT0340	- 2008-01-02
	DT0342	- 2008-01-02
	DT0316	- 2008-01-02

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RCPCR 07.3/2

**(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. **1** to EC-Type Examination Certificate number **LOM 08ATEX2015 X**

(4) Equipment or protection system
Temperature sensors
Types TWL..., TTL...

(5) Applicant
KOBOLD MESURA, S.L.U.

(6) Address
Guifré, 665
08918 BADALONA (BARCELONA)
SPAIN

(7) Test report nr.: **LOM 09.495 FP**

(8) Variations included in this certificate

To update de type codification:

T L

General code (type)

TWL ó TTL

Sub-type

Immersion length

Process connection

Type and number of elements

Sensor wiring

Head type

Transmitter type

Special option

(9) Changes in marking

Only those that correspond to the new type codification

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This supplement must be an inseparable part together with the base **LOM 08ATEX2015 X**

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RCP CER 07.4/2
Rev. 0

UNIVERSIDAD POLITÉCNICA DE MADRID
ENSAYOS E INVESTIGACIONES DE MATERIALES Y EQUIPOS PARA ATMÓSFERAS EXPLOSIVAS Y MINERÍA
(Real Decreto 334/1992 de 3 de Abril - BOE 1992-04-29)



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LABORATORIO OFICIAL J. M. MADARIAGA

(3) Supplement nr. 1 to EC-Type Examination Certificate number **LOM 08ATEX2015 X**

(10) Descriptive documents

Rev. _____ Date _____
- Description nr.: DT0396 - 2009-07-14

Madrid, 2009-10-21


Carlos Fernández Ramón
DIRECTOR OF THE LABORATORY


Angel Vega Remesal
Head of ATEX area

