



(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 number **LOM 04ATEX2056**

(4) Equipment or Protection System Dispensers/Metering pumps
Type EURO ...

(5) Applicant: PETROTEC - Assistência Técnica ao Ramo Petrolífero, S.A.

(6) Address: Parque Industrial, Pav C2
S. João de Ponte
4800-493 GUMARÃES
PORTUGAL

(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 03.210 MP**

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

- Standard **EN 13617-1:2004**

(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 applies 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:

 II 2 G Ta:-20 / +55 °C

Carlos Fernández Ramón
DIRECTOR OF THE LABORATORY



Madrid, 4 May 2004

Angel Vega Remesal
Head of ATEX area

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LABORATORIO OFICIAL J. M. MADARIAGA

(A1) **SCHEDULE**

(A2) EC-Type Examination Certificate: **LOM 04ATEX2056**

(A3) Description of equipment or protective system

The EURO series of liquid fuels metering pumps and dispensers consist basically of a metallic frame that is clad with aluminium panels comprising a lower body where the hydraulic systems are located, a hose module and a display/control unit. Depending on the model, the hose module either is integrated simply by the hoses, nozzles and their boots or constitutes a hose cassette with pulley rolling systems.

The hydraulic housing contains up to four hydraulic circuits comprising the electrically driven pumping units, electrical flow control valves, metering units with electronic pulse generators, junction boxes and pipe and coupling assemblies. The vapour recovery pumps are optionally fitted in this housing and are actuated either by a belt coupled to the hydraulic pumps, or by an independent motor.

The outlet pipes from the hydraulic housing are connected to hoses suitable for petroleum dispensing. The hoses are fitted with nozzles and, optionally, sight glasses. The nozzles are inserted in suitable boots in rest position. The nozzle boots incorporate magnetically actuated proximity switches.

The interior of the display/control units is safe area, complying with the distances and IP degrees defined in the standard EN 13617-1:2004 for type 1 vapour barriers. The barrier layout is different depending on the model.

The pumping units are optionally equipped with integrated pay terminal, synthesizer voice module and vapour recovery systems.

Characteristics	EURO 1000	EURO 1500	EURO 2000	EURO 4000	EURO 4000B	EURO 5000 III y VI
Electronic rated voltage (Vac)	230/380		115/230			
Electronic circuits consumption (VA)	50					
Minimum volume resolution (l)	0.01					
Hoses type	*(1) o *(2)			*(3)	*(4)	*(5)
Aerial arms	no	optional		no	yes	no
Number of products	1	1 to 2		1 to 4		
Number of hoses	1	1 to 2		1 to 8		
Flow rate (l/min)	40/80/120					
Maximum operational pressure (kPa)	300					
Operational temperature (°C)	-20 a 55					

*(1) Lateral hose outlet and lateral nozzle boot

*(2) Aerial arms and lateral nozzle boot

*(3) Hanging hose and frontal nozzle boot

*(4) Aerial arms and frontal nozzle boot

*(5) Hose cassette



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LABORATORIO OFICIAL J. M. MADARIAGA

(A1) **SCHEDULE**

(A2) EC-Type Examination Certificate: **LOM 04ATEX2056**

(A3) Description of equipment or protective system (continue)

Type	Motor-pump characteristics			
	Monophase		Triphase	
Flow rate (l/min)	40 a 80	120	40 a 80	120
Speed (rpm)	1400	2850	1400	2850
Power (kW)	11	18	75	22
Rated voltage (Vac)	230		230(D)/400(Y)	

(A4) Tets report nr. **LOM 03.210 MP**

(A5) Special conditions for a safe use

None

(A6) Individual tests

Each manufactured unit must be submitted to the dielectric and hydraulic tests according to paragraph 6.2 of the standard EN 13617-1:2004

(A7) Essential Health and Safety Requirements

Explosion safe requirements are covered by application of the standards indicated in page 1/4 of this certificate.

(A8) Descriptive documents

	Rev.	Date
- Descriptions nr.: 154.02.A.0	-	2003-04-08
DQN/MP - Ed. A	0	2003-09-08
154.04.A.0	0	2003-05-07
- Drawings nr.: S-B07-0066a	a	2003-03-03
S-B07-0067a	a	2003-03-03
S-B07-0068b	b	2003-03-24
S-B07-0069b	b	2003-03-24
S-B08-0093a	a	2003-03-13
S-B07-0092a	a	2003-03-13
B08-0068c	c	2003-01-16
B08-0102a	a	2003-01-16
B08-0087b	b	2003-01-16
B08-0106	-	2003-01-16
B08-0088b	b	2003-01-16
S-B07-0080	-	2003-04-29
S-B07-0079	-	2003-04-29
S-B07-0078	-	2003-04-29
S-B07-0077	-	2003-04-29



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LABORATORIO OFICIAL J. M. MADARIAGA

(A1) **SCHEDULE**

(A2) EC-Type Examination Certificate: **LOM 04ATEX2056**

(A8) Descriptive documents (continue)

		<u>Rev.</u>	<u>Date</u>
- Drawings nr.:	S-B07-0076	-	2003-04-29
	S-B07-0075	-	2003-04-29
	Prototipo	-	2003-04-30
	B04-0757b	b	2003-10-20
	B04-0472a	a	2003-09-17
	B04-0779c	c	2003-10-23
	B04-0241b	b	2003-10-13
	B04-0068d	d	2000-09-19
	B18-0212a	a	2003-11-25
	B04-1177	-	2003-11-25



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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. **1** to EC-Type Examination Certificate number: **LOM 04ATEX2056**

(4) Equipment or Protection System Metering pumps/Dispensers
Type EURO 1000 DGF y EURO 1500 DGF

(5) Applicant PETROTEC -Assistência Técnica ao Ramo Petrolífero, S.A.

(6) Address Parque Industrial, Pav C2
S. João de Ponte
4800-493 GUIMARÃES
PORTUGAL

(7) Test report nr. **LOM 04.490 SP**

(8) Variations included in this certificate

To increase the scope of certificate LOM 04ATEX2056 to the models EURO 1000 DGF and EURO 1500 DGF that incorporate a new electronic system in the control unit allowing the management of fleets.

(9) Descriptive documents

	<u>Rev.</u>	<u>Date</u>
- Description nr.: DQN-07/04	-	2004-07-02
- Drawing nr.: B07-0087	-	2004-09-20
B07-0088	-	2004-09-20
DQN-XXX Euro 1000 DGF	-	2004-09-20
DQN-XXX Euro 1500 DGF	-	2004-09-20
2333.90.102.00	-	2003-07-01



Carlos Fernández Ramón
DIRECTOR OF THE LABORATORY

Madrid, 29 September 2004



Angel Vega Remesal
Head of ATEX area

This supplement must be an inseparable part together base certificate **LOM 04ATEX2056**
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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** to EC-Type Examination Certificate number: **LOM 04ATEX2056**

(4) Equipment or Protection System Metering pumps/Dispensers
Type EURO 1000 VI, EURO 1500 VI, EURO 2000 VI and EURO 4000 VI

(5) Applicant PETROTEC -Assistência Técnica ao Ramo Petrolífero, S.A.

(6) Address Parque Industrial, Pav C2
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PORTUGAL

(7) Report nr. **LOM 04.572WP**

(8) Variations included in this certificate

To increase the scope of certificate to include the models EURO 1000 VI, EURO 1500 VI, EURO 2000 VI and EURO 4000 VI, with changes in dimensions and outward appearance, remaining identical the hydraulic and electrical characteristics.

(9) Descriptive documents

	<u>Rev.</u>	<u>Fecha</u>
- Description nr.: AP/003/04/DQN	-	2004-07-09
Matriz de configuraciones	-	2004-10-29
- Drawing nr.: B07-0082a	-	2004-09-17
B07-0083	-	2004-06-04
B07-0084	-	2004-06-07
B07-0085	-	2004-06-07
B07-0086	-	2004-06-07
B01-0063	-	2004-04-21
B01-0066	-	2004-04-22
B01-0068	-	2004-04-21
B01-0069	-	2004-04-21
B01-0072	-	2004-04-21

Carlos Fernández Ramón
DIRECTOR OF THE LABORATORY



Madrid, 29 December 2004

Angel Vega Remesal
Head of ATEX area

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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** to EC-Type Examination Certificate number: **LOM 04ATEX2056**

(4) Equipment or Protection System Metering pumps/Dispensers
Type EURO 1000 VI DGF y EURO 1500 VI DGF

(5) Applicant PETROTEC -Assistência Técnica ao Ramo Petrolífero, S.A.

(6) Address Parque Industrial, Pav C2
S. João de Ponte
4800-493 GUIMARÃES
PORTUGAL

(7) Test Report nr. **LOM 05.141TP**

(8) Variations included in this certificate

To increase the scope of certificate LOM 04ATEX2056 to the models EURO 1000 VI DGF and EURO 1500 VI DGF that incorporate a new electronic system in the control unit allowing the management of fleets.

(9) Descriptive documents

	<u>Rev.</u>	<u>Date</u>
-Description nr.: DQN-01/05	-	2005-02-25
-Drawing nr.: B01-0078	-	2005-02-25
B01-0079	-	2005-02-25
B07-0093	-	2005-04-20
B07-0094	-	2005-04-20



Carlos Fernández Ramón
DIRECTOR OF THE LABORATORY

Madrid, 19 May 2005



Angel Vega Remesal
Head of ATEX area

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

(2) Supplement nr. **4** to EC-Type Examination Certificate number: **LOM 04ATEX2056**

(4) Equipment or Protection System Metering pumps/Dispensers
Type EURO 1000 VI with calculator CEM 03

(5) Applicant PETROTEC -Assistência Técnica ao Ramo Petrolífero, S.A.

(6) Address Parque Industrial, Pav C2
S. João de Ponte
4800-493 GUIMARÃES
PORTUGAL

(7) Report nr.: **LOM 05. 555 RP**

(8) Variations included in this certificate.

To extend the scope of certificate LOM 04ATEX2056 to the model EURO 1000 VI incorporating the calculator type CEM 03, which allows the totalization of litres and cost for public selling.

(9) Descriptive documents

	<u>Rev.</u>	<u>Date</u>
- Description nr.: CEM 03	-	2005-11-09
- Part list: CEM 03	2	2002-03-11
- Drawing nr.: Def. zonas Euro 1000 VI R	-	2005-11-09
B07-0098	-	2005-11-09

Madrid, 21st Decembre 2005



Carlos Fernández Ramón
DIRECTOR OF THE LABORATORY



Angel Vega Remesal
Head of ATEX area

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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. **5** to EC-Type Examination Certificate number **LOM 04ATEX2056**

(4) Equipment or Protection System Metering pumps/Dispensers
Type EURO 4000C VI T

(5) Applicant PETROTEC -Assistência Técnica ao Ramo Petrolífero, S.A.

(6) Address Parque Industrial, Pav C2
S. João de Ponte
4800-493 GUIMARÃES
PORTUGAL

(7) Report nr. **LOM 06. 119JP**

(8) Variations included in this certificate

To extend the scope of certificate LOM 04ATEX2056 to the model EURO 4000C VI T. This model is a variation of the model EURO 4000C VI that was certified by supplement 2. The display head is located over the hydraulic module, mounted on a fabricated steel cable duct which is fitted to a lateral frame. The cables leaving the hydraulic housing are passed through a piece rated IP 23 and are led up to the display unit; the cables pass into the display unit through suitable cable entries, and the display unit is rated IP 54. This configuration corresponds to a type 2 vapour barrier.

(9) Descriptive documents

		<u>Rev.</u>	<u>Date</u>
- Description nr.:	Certificado IP54 cabezal (IEP)	-	2006-03-10
- Drawing nr.:	Zone definition Euro 4000C VI T	2	2006-03-03
	B07-016	-	2005-12-19
	B04-1678	-	2006-02-22
	B03-0229	-	2006-02-22
	Porme (IP 23 piece design)	-	2006-03-01



Carlos Fernández Ramón
DIRECTOR OF THE LABORATORY

Madrid, 15 March 2006



Angel Vega Remesal
Head of ATEX area

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