

DNV - MODULO UNO

[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:

DNV-MUNO 08 ATEX 3662

This is a copy in English language of the original Certificate written in Italian Language

[4] Equipment:

SOLENOID VALVES AND ELECTROMAGNETIC EQUIPMENT NADI

[5] Manufacturer:

NADI S.r.l.

[6] Address:

Via Risorgimento,10 - 20017 Mazzo di Rho - MI

[7] This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] DNV-MODULO UNO S.c.a r.l. notified body number 0496 in accordance with Article 9 of the Council Directive 94/9/CE of 23 March 1994, certifies that these equipment have been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report n. CDM.08.REL.01/AX.07_034

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

**EN 60079-0:2006; EN 60079-1:2004; CEI EN 61241-0:2007; CEI EN 61241-1:2006; EN 1127-1: 2007;
EN 13463-1:2001 ; EN 13463-5:2003**

[10] If the sign "X" is placed after the certificate number, it indicates that the equipment 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 the specified equipment.

Further requirements of this Directive apply to the manufacture and supply of this equipment.

[12] The marking of the equipment shall include the following:



II 1/2 GD c

Ex d IIB

Ex tDA--/21 IP67

TX

- __°C ≤ T_{amb} ≤ + __°C

T X°C

Agrate Brianza, 23 June 2008

On behalf of the Notified Body

Giuseppe Elia
Giuseppe Elia

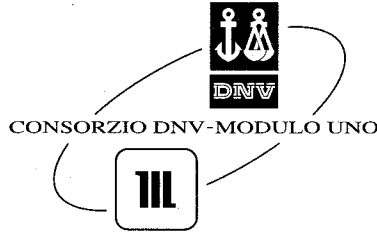
The Technical Coordinator



0496

Dionisio Bucchieri

Directive responsible



DNV - MODULO UNO

[13] **ANNEX**
 [14] **EC-TYPE EXAMINATION CERTIFICATE N° DNV-MUNO 08 ATEX 3662**

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[15] **Description of Equipment**

The solenoid valves and electromagnetic equipment covered by this EC-type Examination Certificate are seven models:

Series L, C, D, E, F, G, H

They can be used with flow gases or liquids and can be installed in a gas or dust potentially explosive atmosphere.

The temperature class and maximum surface temperature are dependent upon the ambient temperature and the power rating in accordance with following table:

Ambient temperature range [°C]	Rated power [W]	
	P _{nom} ≤ 11	P _{nom} ≤ 26
(-20 ÷ +40)	T6 and T85°C	T5 and T100°C
(-20 ÷ +60)	T5 and T100°C	T4 and T135°C

Table 1


Electrical Data

Rated Voltage.....max. 400V, 50/60Hz
 Rated Power.....max. 11W or max. 26W

Marking notes

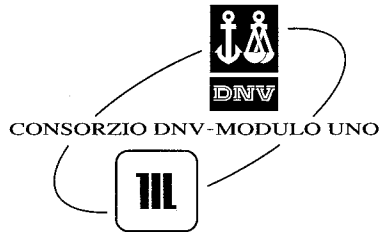
Ambient temperature range : T_{amb} between -60°C and +60°C.
Maximum surface temperature:

- gases: temperature class T6 or T5 or T4 (tab. 1);
- flammable dust: T85°C or T100°C or T135°C (tab. 1).


Giuseppe Elia
 The Technical Coordinator

Pagina 2 di 5
 Rev. 0 – 23 June 2008

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DNV - MODULO UNO

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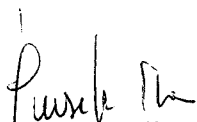
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[16] **Report n° CDM.08.REL.01/AX.07_034 rev. 0**

EC-type examination certificate emitted in consequence of the positive evaluation of the conformity assessment to the 94/9/CE Directive and harmonised standards EN 60079-0:2006; EN 60079-1:2004; EN 1127-1:2007; EN 13463-1:2001; EN 13463-5:2003 and standard reference CEI EN 61241-0:2007; CEI EN 61241-1:2006, performed by DNV-MODULO UNO S.c.a r.l. notified body, and reported onto the previous report.

Routine verifications and tests

No routine verifications and tests have to be performed in accordance with standards listed above.

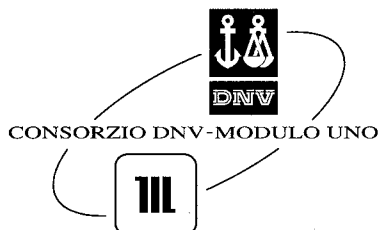

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Pagina 3 di 5

Rev. 0 – 23 June 2008

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DNV - MODULO UNO

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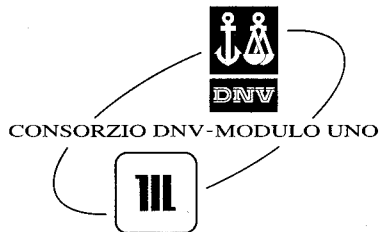
Technical documentation

Document	Name	Date, revision or reference	Scheduled drawing
Analisi dei rischi di natura elettrica.	XXX	XXX	
Analisi dei rischi di natura non elettrica.	XXX	XXX	
Rapporto di prova: Prova di tenuta alla pressione - determinazione della pressione di riferimento.	M1.07.EXET.573/29999-0	04/12/2007	
Rapporto di prova: Test di sovrappressione - primo metodo statico.	M1.07.EXET.574/29999-0	04/12/2007	
Istruzioni uso e manutenzione	3860-R0	XXX	
Attestato di Esame CE del Tipo (KEMA) e prove di temperatura.	KEMA 04ATEX2159	13/07/2004	
Attestato di Esame CE del Tipo (CESI) e relative prove.	CESI 02 ATEX 130	28/11/2002	
Drawings related to technical documentation			
Disegno custodia.	3870	Rev. 0 del 21/05/2007	X
Tabella tolleranze giunti.	3870A	Rev. 0	X
Dettaglio presa di terra interna.	3870B	Rev. 0 del 09/01/2003	
Targhetta identificativa	3880	Rev. 0 del 01/07/2007	X


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Pagina 4 di 5
 Rev. 0 - 23 June 2008

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Following type tests have been performed:

- *Determination of explosion pressure – reference pressure* (EN 60079-1 - § 15.1);
- *Overpressure test* (EN 60079-1 - § 15.1.3.1).

Type tests results are reported in the following test reports:

- n° M1.08.EXET.573/29999-0;
- n° M1.08.EXET.574/29999-0.

- [17] **Special conditions for safe use**

Nothing.

- [18] **Essential Health and Safety Requirements**

Requirement 1.2.7: satisfied by means of the conformity to the 2006/95/CE Low Voltage requirements;

Requirement 1.5: not applied because are not present protective system ATEX.

- [19] **Certificate history**

This Certificate is at its first issue.

- [20] **Terms and conditions**

The product liability rests with the manufacturer, his representative or, in the absence of a representative, with the importer, in accordance with the General Product Safety Directive 2001/95/EC.

The following conditions may render this certificate invalid:

- Changes in the design or construction of the product;
- Changes or amendments to the Directive;
- Changes or amendments in the standards which form the basis for documenting compliance with the essential requirements of the 94/9/EC directive.


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Pagina 5 di 5

Rev. 0 – 23 June 2008

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