# CESI Centro Elettrotecnico Sperimentale Italiano Glacinto Motta SpA

Via R. Rubattino 54 20134 Milano - Italia Telefono +39 022125 Fax +39 0221255440 www.cesi.it

Capitale sociale 8 550 000 € interamente versato Codice fiscale e numero Iscrizione CCIAA 00793580150

Registro Imprese di Milano Sezione Ordinaria N. R.E.A. 429222 P.I. IT00793580150



Il CESI è stato autorizzato dal governo italiano ad operare quale organismo di certificazione di apparecchi e sistemi destinati a essere utilizzati in atmosfera potenzialmente esplosiva con D.M. 1/3/1983, D.M. 19/6/1990, D.M. 20/7/1998 e D.M. 27/9/2000

# CERTIFICATE



### EC-TYPE EXAMINATION CERTIFICATE

Equipment or Protective System intended for use [2] in potentially explosive atmospheres Directive 94/9/EC

EC-Type Examination Certificate number: [3]

#### **CESI 02 ATEX 131**

[4] Equipment:

Solenoids type 3050 for valves

[5] Manufacturer: NADI S.r.l.

[6] Address:

[1]

Via Risorgimento 10

I-20017 Mazzo di Rho (MI) - ITALY

- This equipment or protective system and any acceptable variation thereto is specified in the [7] schedule to this certificate and the documents therein referred to.
- [8] CESI, notified body no. 0722 in accordance with Article 9 of the Council Directive 94/9/EC 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 no. EX-A2/037750.

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

### EN 50014: 1997 + A1..A2 EN 50018: 2000 EN 50281-1-1: 1998

- 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.
- 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.
- [12] The marking of the equipment or protective system shall include the following:

⟨Ex⟩ II 2 GD EEx d IIB T6 or T5 IP67 T85 °C or T100 °C

This certificate may only be reproduced in its entirety and without any change, schedule included.

Date 28 November 2002 - Translation issued the 28 November 2002

**Prepared** Francesco A. Esposito

Verified Mirko Balaž a long

Approved Ulisse Colombo

CENTRO ELETTROTECNICO SPERIMENTALE ITALIANO

Business Unit Certificazione Muladell

Page 1/3

[13] Schedule

#### [14] EC-TYPE EXAMINATION CERTIFICATE no. CESI 02 ATEX 131

#### [15] Description of equipment

The solenoids type 3050 for valves are made in light metals, with degree of protection IP 67.

The solenoids type 3050 for valves are not suitable to intercept inflammable gas.

The accessories used for cable entries shall be certified in accordance with EN 50014, EN 50018 and EN 50281-1-1 Standards, shall guarantee a degree of protection IP 67 at least and shall be suitable for the operating temperature of the solenoids.

#### **Electrical characteristics**

- Rated voltage:

12, 24, 48, 110, 220 [V<sub>d.c.</sub>]

12, 24, 48, 110, 220 [V<sub>a.c.</sub>]

- Rated frequency:

50 or 60 Hz

- Duty:

continuos

- Maximum dissipable power:

11 W or 11 VA

- Degree of protection:

IP 67

- Ambient temperature:

-20  $\div$  +40 °C for temperature class T6 (2G) and T85°C (2D)

-20  $\div$  +55 °C for temperature class T5 (2G) and T100°C (2D)

#### Warning label

Use cables suitable for operating temperature ≥80 °C.

# [16] Report no. EX-A2/037750

#### Routine tests

The Manufacturer must carry out the routine tests specified in paragraph 24 of EN 50014 Standard and at paragraph 16 of EN 50018 Standard.

The routine overpressure test shall be carried out, on the brazing joint of the core, at 8,5 [bar] with the static method (par. 15.1.3.1 of EN 50018 Standard).

This certificate may only be reproduced in its entirety and without any change, schedule included.



[13] Schedule

# [14] EC-TYPE EXAMINATION CERTIFICATE no. CESI 02 ATEX 131

The manufacturer is exempted from the routine overpressure test on the solenoid valve, since the apparatus have passed the type overpressure test carried out with the static method at 22,5 [bar], that is at 4 times the reference pressure.

# Descriptive documents (prot. EX-A2/037772)

- no. "valutazione dei rischi"	rev. 0	pag. 1	dated	20.11.2002
- no. 3065	rev. 3	pag. 1	dated	07.01.2002
- no. 3050A	rev. 0	pag. 1	dated	07.01.2002
- no. 3057	rev. 3	pag. 1	dated	07.01.2002
- no. 3050	rev. 4	pag. 1	- dated	22.11.2002
- no. instruction	rev. 0	pag. 1	dated	22.11.2002
- no. declaration of conformity	rev. 0	pag. 1	dated	22.11.2002

One copy of all documents is kept in CESI files.

# [17] Special conditions for safe use

None.

# [18] Essential Health and Safety Requirements

Assured by compliance with Standards.

