

(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: **KEMA 04ATEX2159**

(4) Equipment or protective system: **Solenoid valves Series L, C, D, E, F, G and H**

(5) Manufacturer: **NADI S.r.L.**

(6) Address: **via Risorgimento 10, I-20017 Mazzo di Rho (MI), Italy**

(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) KEMA Quality B.V., notified body number 0344 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. 2074446.

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

**EN 50014 : 1997 +A1 +A2 EN 50018 : 2000 +A1
EN 50281-1-1 : 1998 +A1 EN 13463-1 : 2001 EN 13463-5 : 2003**

(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, examination and tests of the specified equipment or protective system according 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:



**II 1/2 GD EEx dc IIC T6 or T5 or T4
IP67 T85 °C or T100 °C or T135 °C**

Arnhem, 13 July 2004
KEMA Quality B.V.



T. Pijpker
Certification Manager

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(13)

SCHEDULE

(14)

to EC-Type Examination Certificate KEMA 04ATEX2159

(15)

Description

The solenoid valves series L, C, D, E, F, G and H are used to control the flow of flammable and/or inert gases or liquids in a potential 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	Rated power	
	≤11 W	≤26 W
-20 °C ... +40 °C	T6 and T85°C	T5 and T100 °C
-20 °C ... +55 °C	T5 and T100 °C	T4 and T135 °C

Electrical data

Rated voltage max. 400 V, 50 / 60 Hz
 Rated power max. 11 W or max. 26 W

Installation instructions

The cable entry device shall be certified in type of explosion protection flameproof enclosure "d", providing a degree of ingress protection of at least IP67, suitable for the conditions of use and correctly installed.

For valves with a rated power up to 11 W, cables and cable glands suitable for at least 80 °C shall be used. For valves with temperature class T5 with a rated power more than 11 W, cables and cable glands suitable for at least 100 °C shall be used. For valves with temperature class T4 with a rated power more than 11 W, cables and cable glands suitable for at least 115 °C shall be used.

Routine tests

Each brazed joint shall be submitted to a routine test according to Clause 16 of EN 50018 using a test pressure of 8,5 bar for at least 10 seconds.

(16)

Report

KEMA No. 2074446.

(17)

Special conditions for safe use

None.

(18)

Essential Health and Safety Requirements

Covered by the standards listed at (9).

(13)

SCHEDULE

(14)

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(19) **Test documentation**

1. EC-Type Examination Certificate CESI 02ATEX130

dated

2. Type breakdown, Tabella cod. 3760

01.09.2003

3. Product specifications

Solenoid valves series "L" (groups "03", "08")	10.02.2004
Solenoid valves series "L" (groups "64", "69")	10.02.2004
Solenoid valves series "L" (group "40")	10.02.2004
Solenoid valves series "L" (groups "65", "68")	10.02.2004
Solenoid valves series "L" (group "20")	10.02.2004
Solenoid valves series "C" (groups "03", "08", "13")	10.02.2004
Solenoid valves series "C" (groups "28", "38")	10.02.2004
Solenoid valves series "D"	10.02.2004
Solenoid valves series "E" (groups "40", "41")	10.02.2004
Solenoid valves series "E"	10.02.2004
Solenoid valves series "F"	10.02.2004
Solenoid valves series "G"	10.02.2004
Solenoid valves series "H"	10.02.2004

4. Drawing 3770 (including annex, 1 page)

01.09.2003

3770 A

01.09.2003

3757, rev. 1

06.04.2004