

# **IECEx Certificate** of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION **IEC Certification Scheme for Explosive Atmospheres**

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:

IECEx BKI 04.0001

Issue No.: 1

Status:

Current

Date of Issue:

2004-03-10

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Applicant:

NIVELCO Ipari Elektronika Rt

H-1043 Budapest, Dugonics u. 11.

Hungary Hungary

Electrical Apparatus: Magnetic float level switch Type: NIVOMAG MK \_-2\_ \_- Ex

Optional accessory:

Type of Protection:

General requirements, Flameproof enclosures, Increased safety, Encapsulation

Marking:

Ex d m e IIC T6...T2

Tamb. see point "Equipment: 4."

Approved for issue on behalf of the IECEx

Certification Body:

János HANKÓ

Position:

Director

Signature:

(for printed version)

Date:

1. This certificate and schedule may only be reproduced in full.

2. This certificate is not transferable and remains the property of the issuing body.

3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

# **Testing Station for Explosion Proof Equipment**

H 1037 BUDAPEST MIKOVINY S.u. 2-4 Hungary





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Manufacturer:

NIVELCO Ipari Elektronika Rt

H-1043 Budapest, Dugonics u. 11.

Hungary **Hungary** 

Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacture'rs quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

#### STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0: 2000

Electrical apparatus for explosive gas atmospheres - Part 0: General requirements

Edition: 3.1

IEC 60079-1 : 2001

Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosures 'd'

Edition: 4

IEC 60079-18: 1992

Edition: 1

Electrical apparatus for explosive gas atmospheres - Part 18: Encapsulation 'm'

IEC 60079-7: 2001

Electrical apparatus for explosive gas atmospheres - Part 7: Increased safety 'e'

Edition: 3

This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.

### **TEST & ASSESSMENT REPORTS:**

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

IECEx ATR:

File Reference:

HU/BKI/04/P-001-04/1, HU/BKI/04/P-001-04/2

P-001-04

HU/BKI/04/P-001-04/3, HU/BKI/04/P-001-04/4



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## **Schedule**

#### **EQUIPMENT:**

Equipment and systems covered by this certificate are as follows:

#### 1. Description

The switch of NIVOMAG MK level switch type made covers products of the protection type flameproof enclosure "d", and encapsulation "m" – the enclosure has increased safety "e" with direct cable entry. The magnet, moving off as the result of level change, operates the microswitches.

The connecting cable enters the connecting area in the head part through a cable entry sealed by means of a rubber ring. The wires can be connected onto the terminals of microswitch, embedded into the insulator body, by screwed fixing.

The head part is closed by a threaded cover.

2. Type assortment

NIVOMAG MK \_ -2 \_ \_ - \_ Ex

Legend of the signs from left to right

- 1. Length of the float arm (5-9)
- 2. \_ Flange size (0...9, A...Z)
- 3. Connection indication (1...9)
- 4. \_ Structural parts inside the tank (A...Z)

3. General parameters

Switching power:

250 V AC12 2,5 A

Applicable cable:

4×2,5 mm<sup>2</sup>

**Electrical safety:** 

I class of electrical safety (MSZ EN 61010-1:1994)

Mounting position:

vertical or horizontal

### 4. Ambient and medium temperature

| Temperature class | Ambient temperature range | Medium temperature range |
|-------------------|---------------------------|--------------------------|
| Т6                | -20 °C +60 °C             | -20 °C +80 °C            |
| T5                | -20 °C +70 °C             | -20 °C +95 °C            |
| T4                | -20 °C +80 °C             | -20 °C +130 °C           |
|                   |                           |                          |

| Т3 | -20 °C +80 °C | -20 °C +200 °C |
|----|---------------|----------------|
| T2 | -20 °C +80 °C | -20 °C +250 °C |

5. Ingress protection: IP 68 by IEC 60529

CONDITIONS OF CERTIFICATION: NO

**DRAWINGS** 

MKA-210-9M-000-00 2002. 12. 11

MKA-210-9M-100-00 2002. 12. 17.

MKA-210-9M-110-00 2002. 04. 25.

MKA-210-9M-110-01 2002. 12. 17.

MKA-210-9M-050-01 2002. 12. 17.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Annexe: