



# IECEx Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.: **IECEx BKI 13.0006** Page 1 of 4 [Certificate history:](#)  
Issue 0 (2013-11-25)

Status: **Current** Issue No: 1

Date of Issue: 2019-11-06

Applicant: **Magnetrol International Inc.**  
705 Enterprise Street, Aurora, IL 60504  
**United States of America**

Equipment: **Mechanical level switch Tuffy T3\*\_\*\*\*\*\_\*\*\***

Optional accessory:

Type of Protection: **General requirements, Equipment protection by flameproof enclosures "d", Equipment with equipment protection level (EPL) Ga**

Marking: Ex db IIC T6 Ga/Gb  
T<sub>a</sub> = -40°C ... +70°C

Approved for issue on behalf of the IECEx  
Certification Body:

**Edit Molnár**

Position:

**Head of the Certification Body**

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 [www.iecex.com](http://www.iecex.com) or use of this QR Code.



Certificate issued by:

**Testing Station for Explosion Proof Equipment**  
**H 1037 BUDAPEST**  
**MIKOVINY S.u. 2-4**  
**Hungary**





# IECEx Certificate of Conformity

Certificate No.: **IECEx BKI 13.0006**

Page 2 of 4

Date of issue: 2019-11-06

Issue No: 1

Manufacturer: **Magnetrol International Inc.**  
705 Enterprise Street, Aurora, IL 60504  
**United States of America**

Additional manufacturing locations: **Magnetrol International N. V.**  
Heikensstraat 6  
B-9240 Zele  
**Belgium**

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 manufacturer's 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 equipment 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 60079-0:2011** Explosive atmospheres - Part 0: General requirements  
Edition:6.0

**IEC 60079-1:2007-04** Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"  
Edition:6

**IEC 60079-26:2006** Explosive atmospheres - Part 26: Equipment with equipment protection level (EPL) Ga  
Edition:2

This Certificate **does not** indicate compliance with 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:

Test Reports:

[HU/BKI/ExTR13.0007/00](#)

[HU/BKI/ExTR13.0007/01](#)

Quality Assessment Reports:

[CA/CSA/QAR06.0004/11](#)

[NL/DEK/QAR11.0031/05](#)



# IECEx Certificate of Conformity

Certificate No.: **IECEx BKI 13.0006**

Page 3 of 4

Date of issue: 2019-11-06

Issue No: 1

**EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

The versions of Tuffy T3 liquid level switches are float actuated devices designed for horizontal mounting in a tank or vessel through threaded or flanged pipe connections.

See details in addendum to IECEx Certificate of Conformity IECEx BKI 13.0006 Issue 1.

**SPECIFIC CONDITIONS OF USE: NO**



# IECEx Certificate of Conformity

Certificate No.: **IECEx BKI 13.0006**

Page 4 of 4

Date of issue: 2019-11-06

Issue No: 1

## **DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)**

### Issue 1:

Add a new switch type for mechanical liquid level switch Tuffy T3.

This has no effect on the flameproof properties of the housing only a new value added to the model code, the new switch get the 9<sup>th</sup> digit = 7.

### **Annex:**

[Addendum to IECEx Certificate of Conformity IECEx BKI13.0006 Issue 1.pdf](#)



**1. Description**

The versions of Tuffy T3 liquid level switches are float actuated devices designed for horizontal mounting in a tank/vessel through threaded or flanged pipe connections. The equipment achieves electrical switching action through the use of a magnetic switch mechanism and a magnet attached to the float assembly. Separating the two magnets is a non-magnetic flameproof separation wall ( pressure barrier ) . The Ex d protected housing of the equipment made of aluminium alloy or cast iron. The material of the float can be stainless steel or Hastelloy C. 1 or 2 switch are installed in the flameproof housing. For the electrical connection, the housings shall be equipped with certified Ex d IIC protected cable gland NPT 3/4" or M20x1,5.

**2. Type assortment**

	T3	X	-	X	X	X	X	-	X	X	X
<i>Technology</i> electric Tuffy liquid level switch											
<i>Float type:</i> ( 1, 2, 3, 4, 5, B, C, D, F, E, G )											
<i>Float and Stem design</i> Narrow differential unit ( 0 ) Stem extension length ( 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E, F, G, H, J, K, L, M, N, P, R, S, T, U, V, W, Z ) vagy / or Lower fluid specific gravity ( A, B, C, D, E, F, G, H, J, K, L, M, N, P, R, S, T, U, V, W )											
<i>Offset design</i> (0, 7, 8, 9, A, B, C, D, E, F, G, H, J, K, L, M, N, P)											
<i>Process connection size</i> ( 2, 3, 4, 5, 6, A, B, C, D )											
<i>Process connection type</i> ( N, A, B, C, D, E, 1, 2, 3, 4, 5, 6, 7 )											
<i>Process connection material and Design code</i> ( 1, 2, 3, 4, 5, 6, 7, 8, A, B, C, D, E, F, G, H, J, K, L, M, N, P, R, T, Y, Z, V, W )											
<i>Switch type:</i> ( 0, 1, 2, 3, 4, 6, 7 )											
<i>Housing material</i> 1 ( aluminum alloy, 3/4" NPT cable entry ) 2 (cast iron, 3/4" NPT / cable entry ) 3 (aluminum alloy, M20x1,5 cable entry ) 4 (cast iron, M20x1,5 cable entry )											

**3 Electrical data**

Switchable voltage and current: 240 V AC; 10 A  
 24 V DC; 6 A

**4 Electrical shock protection:**

FELV ( functional extra low voltage/ IEC 60364-4-41 )  
 I. e.s.p. class ( earthing )

**5 Ingress protection:**

IP 66 (informative)

**6. Warning:**

To prevent ignition of hazardous atmospheres, disconnect device from supply circuit minimum 5 minutes before opening.



**7 Drawings**

Title:	Doc. / Drawing No.:	Rev. :	Date:
*Tuffy liquid level switch	099-6506 / sheet 1/10	D	2019.05.17
*Tuffy standard level with narrow differential	099-6506 / sheet 2/10	D	2019.05.17
*Tuffy standard level with narrow differential	099-6506 / sheet 3/10	D	2019.05.17
*Tuffy interface level	099-6506 / sheet 4/10	D	2019.05.17
*Tuffy adjustable differential level	099-6506 / sheet 5/10	D	2019.05.17
*Tuffy straight stem wide differential	099-6506 / sheet 6/10	D	2019.05.17
*Tuffy offset level	099-6506 / sheet 7/10	D	2019.05.17
*Tuffy NPT & flanged versions	099-6506 / sheet 8/10	D	2019.05.17
*Tuffy Housing base, cover, float holder	099-6506 / sheet 9/10	D	2019.05.17
*Tuffy nameplates, switch assemblies	099-6506 / sheet 10/10	D	2019.05.17
*Nameplates ATEX/IECEx mechanical units	005-8060-010	T2	2019.11.05
Technical description	99-6509 annex 1		06. 08. 2013
Tuffy T3 assembly drawings	99-6509 sheets 1/2 , 2/2	rev. E	06. 08. 2013
*Installation and operating manual	BE 44-607.15		2019. October
Data sheets of aluminium alloy A356-T6			
Data sheets of cast iron ASTM A48CL.30A			
Routine test instruction	99-3857	rev. A	01. 08. 2011

*Note: An \* is included before the title of documents that are new or revised*