



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 FMG 14.0018X Issue No: 2 Certificate history:
Status: **Current** Page 1 of 5 Issue No. 2 (2016-12-05)
Date of Issue: **2016-12-05** Issue No. 1 (2016-10-17)
Applicant: **Magnetrol International Inc.** Issue No. 0 (2015-04-06)
705 Enterprise Street
Aurora, IL 60504
United States of America

Equipment: **Guided Wave Radar Transmitter Eclipse 706**
Optional accessory:

Type of Protection: **Type "i", Type "n", Type "d" and Type "t"**

Marking:

- Ex ia IIC T4 Ga Ta = -40°C to +70°C
- Ex d/ia [ia IIC Ga] IIB + H2 T6...T1 Gb/Ga Ta = -40°C to +70°C
- Ex nA [ia Ga] IIC T4 Gc Ta = -15°C to +70°C
- Ex ia tb [ia Da] III C T85°C...T450°C Db Ta = -15°C to +70°C
- Ex ia III C T85°C...T450°C Da Ta = -15°C to +70°C
- IP67

Approved for issue on behalf of the IECEx
Certification Body:

J. E. Marquedant

Position:

Manager, Electrical Systems

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](http://www.iecex.com).

Certificate issued by:

FM Approvals LLC
1151 Boston-Providence Turnpike
Norwood, MA 02062
United States of America





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

Additional Manufacturing location(s):

Magentrol International NV-Protection types Ex i, Ex db and Ex tb only Heikensstraat 6 9240 Zele Belgium	Orion Instruments Inc. 2105 Oak Villa Boulevard Baton Rouge, Louisiana 70815 United States of America
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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 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 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2007-04 Edition:6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-11 : 2011 Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-15 : 2010 Edition:4	Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
IEC 60079-26 : 2006 Edition:2	Explosive atmospheres - Part 26: Equipment with equipment protection level (EPL) Ga
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

*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

Test Report:

[US/FMG/ExTR14.0017/00](#) [US/FMG/ExTR14.0017/01](#) [US/FMG/ExTR14.0017/02](#)

Quality Assessment Report:

[CA/CSA/QAR06.0004/09](#) [NL/DEK/QAR11.0031/03](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Refer to attachment

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The enclosure contains aluminum and is considered to present a potential risk of ignition by impact or friction. Care must be taken during installation.
2. To maintain the T1...T6 temperature code, care shall be taken to ensure the "Enclosure Temperature" does not exceed 75 °C.
3. The risk of electrostatic discharge shall be minimized at installation, following the directions given in the instructions.
4. Contact the original manufacturer for information in the dimensions of the flameproof joints
5. For installation with ambient temperature of 70 °C, refer to the manufacturer's instruction for guidance on proper selection of conductors.
6. Provisions shall be made to provide transient overvoltage protection to a level not to exceed 199 Vdc.
7. Temperature codes for the ratings Ex d/ia [ia IIC] IIB + H₂ and Ex ia/tb [ia] III C are defined by the following Table:

Process temperature(PT)	Temperature Code-TCG (GAS)	Temperature Code-TCD (Dust)
Up to 75°C	T6	TCD= PT+10K=85°C
From 75°C to 90°C	T5	TCD= PT+10K=100°C
From 90°C to 120°C	T4	TCD= PT+15K=135°C
From 125°C to 185°C	T3	TCD= PT+15K=200°C
From 185°C to 285°C	T2	TCD= PT+15K=300°C
From 285°C to 435°C	T1	TCD= PT+15K=450°C



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

Added sheet to Fieldbus Wiring board drawing, change components on Digital, Wiring and Fieldbus Digital board drawings.



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Additional information:

Annex:

[Annex-to-IECEX-FMG 14-0018X_2.docx](#)