



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 INE 12.0026X issue No.:0 Certificate history:.....

Status: **Current**

Date of Issue: **2012-07-25** Page 1 of 3

Applicant: **LEF INDUSTRIES**
ZI de Lannugat
F-29100 DOUARNENEZ
France

Electrical Apparatus: **Flameproof box type LEF 560-....-**
Optional accessory:

Type of Protection: **d and tb**

Marking: Ex d IIC T6 or T5 or T4 Gb
Ex tb IIIC T85°C or T100°C or T135°C Db IP66

*Approved for issue on behalf of the IECEx
Certification Body:*

Thierry HOUEIX

Position:

Ex Certification Officer

*Signature:
(for printed version)*

Date:

2012-07-25

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:

INERIS
Institut National de l'Environnement Industriel
et des Risques
BP n2
Parc Technologique ALATA
F-60550 Verneuil-En-Halatte
France



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Manufacturer: **LEF INDUSTRIES**
ZI de Lannugat
F-29100 DOUARNENEZ
France

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 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 60079-31 : 2008 Edition: 1	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:
[FR/INE/ExTR12.0023/00](#)

Quality Assessment Report:
[FR/INE/QAR12.0004/00](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The flameproof box consists of a circular body and a lid made in AS12 aluminum.
It is used for copy of the valves position through command axis by delivering an electrical signal (contact, transmitter, etc.).
In the absence of command axis, it will be used as junction box.
The connection to external circuits is provided by one to three cable entries IECEx certified. The unused entry will be closed with a blanking element IECEx certified.

CONDITIONS OF CERTIFICATION: YES as shown below:

For an use at +60°C, cables and cable entries must be compatible with a temperature of 72°C.
For an use at +70°C, cables and cable entries must be compatible with a temperature of 82°C.
For an use at +85°C, cables and cable entries must be compatible with a temperature of 97°C.
The length of the flameproof joint of the command axis must not be less than 13.5 mm.
The other conditions are stipulated in the instructions.



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Annexe: IECEx INE 12.0026X_Annex.pdf

PARAMETERS RELATING TO THE SAFETY

Maximal voltage : 250 V
Maximal dissipated power : 10 W

MARKING

Marking has to be readable and indelible; it has to include the following indications:

LEF INDUSTRIES
F-29100 DOUARNENEZ
(Serial number)
IECEx INE 12.0026X
Ex d IIC T* Gb
Ex tb IIIC T**°C Db IP66
-60°C or -40°C or -20°C ≤ T amb ≤ ***°C
Pmax=10W Umax=250V
Type of thread
WARNING : DO NOT OPEN WHEN ENERGIZED

* Tclass for gas	**Tclass for dust	*** Max Ambient Temperature
T6	T85°C	+60°C
T5	T100°C	+70°C
T4	T135°C	+85°C

Marking may be carried out in the language of the country of use.

The protective system or equipment has also to carry the marking normally stipulated by its construction standards.

ROUTINE EXAMINATIONS AND TESTS

In accordance with clause 16.2 of the EN60079-1 standard, the equipment defined above is exempted of routine test due to the fact it has undergone a static type test at 4 times the reference pressure under 51.5 bar of a period minimum of 10 seconds.