



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

Certificate No.:  issue No.:

Status:

Date of Issue: **2011-02-10** Page 1 of 4

Applicant: **Flexelec S A**  
10, Rue des Frères Lumière  
ZA du Bois Rond  
69720 Saint Bonnet de Mure  
France

Electrical Apparatus: **RSV Motor Anti-Condensation Heaters**  
Optional accessory:

Type of Protection: **Increased Safety**

Marking: **Ex e IIC Gb**

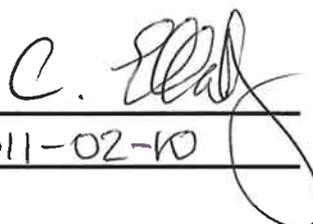
Approved for issue on behalf of the IECEx  
Certification Body:

C Ellaby

Position:

Certification Officer

Signature:  
(for printed version)

  
\_\_\_\_\_

Date:

2011-02-10

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:

**SIRA Certification Service**  
Rake Lane  
Eccleston  
Chester  
CH4 9JN  
United Kingdom

**sira**  
CERTIFICATION



# IECEX Certificate of Conformity

Certificate No.: IECEx SIR 10.0151U

Date of Issue: 2011-02-10

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Manufacturer: **Flexelec S A**  
10, Rue des Frères Lumière  
ZA du Bois Rond  
69720 Saint Bonnet de Mure  
**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 : 2007-10** Explosive atmospheres - Part 0: Equipment - General requirements  
Edition: 5

**IEC 60079-7 : 2006-07** Explosive atmospheres - Part 7: Equipment protection by increased safety "e"  
Edition: 4

*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:

[GB/SIR/ExTR11.0024/00](#)

Quality Assessment Report:

[GB/SIR/QAR11.0002/00](#)



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## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

The RSV Motor Anti-Condensation Heaters are rated at 110/115 V or 230/240 V ac with rated outputs of 25 W to 100 W depending on length. They are designed to be installed on the end windings of electric motors prior to the application of varnish insulation to the wound stator. Each heater comprises a spiral resistance wire wound on a former. Cold tails are connected to the resistance wire and the assembly is covered with insulation and an outer fibreglass braid.

The following information may be used for reference when determining the temperature classification of a machine in which the heaters are installed. The heaters have been tested to determine the maximum surface temperature under anticipated operating conditions and are suitable for use in motors with a temperature classification T3. Two types were tested, which cover the operating characteristics of the range. During testing the stator windings were de-energised before the heaters were energised.

Item	0.3 m, 25 W heater* 58.82 W/m to 83.3 W/m	All other heaters** <58.82 W/m
Local ambient around heater	109.1°C	108°C
Winding surface temperature (at end of heat run)	144.1°C	130°C
Maximum heater surface temperature	173°C	154.3°C

\* 0.3 m, 25 W heater, 83.3 W/m unit tested

\*\* 40 W heater, 58.82 W/m unit tested

### CONDITIONS OF CERTIFICATION: NO



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## EQUIPMENT(continued):

### CONDITION OF MANUFACTURE:

The Manufacturer shall comply with the following:

1. An electric strength test in accordance with IEC 60079-7:2006 Ed 4 clause 7.1 shall be carried out on each heater device. The test shall be carried out at a value of 1500 V r.m.s. minimum.

### SPECIAL POINTS FOR NOTING:

The user/installer shall comply with the following:

1. An electric strength test in accordance with IEC 60079-7:2006 Ed 4 clause 7.1 shall be carried out on each heater after being incorporated into an electric machine. The test shall be carried out at a value of 1500 V r.m.s. minimum.
2. The cold tails shall be terminated in an enclosure that has been certified by a notified body and is suitable for the application.
3. The heater shall only be installed on the end windings of an electric motor prior to the application of varnish insulation to the wound stator.