



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.: issue No.: Certificate history:

Status:

Date of Issue: **2013-03-18** Page 1 of 3

Applicant: **MINCO SAS**
Zone industrielle
09310 ASTON
France

Electrical Apparatus: **Temperature sensor ; Type : B212716**
Optional accessory:

Type of Protection: **Ex e**

Marking: **MINCO**
Address : ...
Type : B212716
Serial Number : ...
Year of construction :
Ex e IIC Gb
IECEx LCIE 13.0019 U
I_{max} ≤ ... : P_{max} ≤...


Approved for issue on behalf of the IECEx
Certification Body:

Julien GAUTHIER

Position:

Certification Officer

Signature:
(for printed version)



2013-03-18

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:

Laboratoire Central des Industries Electriques (LCIE)
33 Avenue du General Leclerc
FR-92260 Fontenay-aux-Roses
France

Documents relative to LCIE certification activities (Certificates,
QARs, ExTRs) can be registered under the references "LCI" or
"LCIE".



L C I E



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Manufacturer: **MINCO Products**
7300 Commerce Lane
Minneapolis, MN 55462-3177
United States of America

Additional 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:

FR/LCIE/ExTR13.0018/00

Quality Assessment Report:

FR/LCIE/QAR12.0001/00

NL/DEK/QAR12.0028/01



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Temperature sensor intended to be built into the stator slots of rotating electrical machine.

Specific parameters of the concerned protection mode :

$I_{max} \leq 10 \text{ mA}$

$P_{max} \leq 1,5 \text{ W}$

Schedule of limitation :

Operating temperature : $-50^{\circ}\text{C} \leq T_{amb} \leq +185^{\circ}\text{C}$

The component shall be installed in an enclosure conform to requirements of standard IEC 60079-7.

Routine test :

Each component shall be submitted to a dielectric strength test according to clause 7.1 of standard IEC 60079-7.

CONDITIONS OF CERTIFICATION: NO