

### INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:

IECEx DEK 11.0001X

Issue No: 2

Certificate history:

Status:

Current

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Issue No. 2 (2014-01-27) Issue No. 1 (2012-09-06)

Issue No. 0 (2011-03-01)

Date of Issue:

2014-01-27

Applicant:

**Minco Products, Inc.** 7300 Commerce Lane NE Minneapolis, MN 55432

United States of America

Electrical Apparatus:

Temperature Detectors Type S2  $\dots$  and Type TC2  $\dots$ 

Optional accessory:

Type of Protection:

Ex nA

Marking:

Ex nA IIC T3 ... T6 Gc

Approved for issue on behalf of the IECEx

Certification Body:

R. Schuller

Position:

Certification Manager

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.

Certificate issued by:

DEKRA Certification B.V. Meander 1051, 6825 MJ Amhem The Netherlands







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Manufacturer:

Minco Products, Inc. 7300 Commerce Lane NE Minneapolis, MN 55432 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: 2011

Explosive atmospheres - Part 0: General requirements

Edition:6.0

IEC 60079-15: 2010

Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

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:

NL/DEK/ExTR11.0001/02

Quality Assessment Report:

NL/DEK/QAR12.0028/01



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### Schedule

### **EQUIPMENT:**

Equipment and systems covered by this certificate are as follows:

### Description

Temperature Detectors Type S2 ... and TC2 ... are designed to be installed in babbitt style bearing shoes.

Type S2 ... models are available for 2-, 3- or 4-wire measurement circuits and with single or dual resistance temperature detector (RTD) elements.

Type TC2 ... models are available with single or dual thermocouple elements.

Rated ambient temperature range -50 °C to +200 °C.

The temperature class is determined by the maximum ambient temperature in service.

### Electrical data

Power: max. 0.45 Watt Measuring current: max. 1 mA

### CONDITIONS OF CERTIFICATION: YES as shown below:

The Temperature Detectors shall be installed in a suitable enclosure providing a degree of protection of at least IP54 according to IEC 60529, taking into account the environmental conditions under which the equipment will be used.



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

Update to latest edition of the standards: IEC 60079-0:2011 and IEC 60079-15:2010.