

(1) **EC-TYPE EXAMINATION CERTIFICATE**

(2) Equipment or protective system intended for use in potentially explosive atmospheres - Directive 94/9/EC

(3) EC-Type Examination Certificate Number: **KEMA 03ATEX2243 X**

(4) Equipment or protective system: **Industrial sensor assembly type XPS3...**

(5) Manufacturer: **Thermo Electric**

(6) Address: **Coenecoop 103 – 105, 2741 PH Waddinxveen**

(7) This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) KEMA Quality B.V., notified body number 0344 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the directive.

The examination and test results are recorded in confidential report no. 2029242.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:


EN 50014 : 1997

EN 50018 : 2000

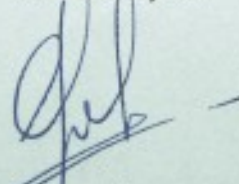
(10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment or protective system according to the Directive 94/9/EC. Further requirements of the directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

(12) The marking of the equipment or protective system shall include the following:

 **II 2 G EEx d IIC T6**

Arnhem, 8 August 2003
KEMA Quality B.V.



C.G. van Es
Certification Manager

* This Certificate may only be reproduced in its entirety and without any change

SCHEDULE

(13)

(14)

to EC-Type Examination Certificate KEMA 03ATEX2243 X**(15) Description**

The industrial sensor assembly XPS3... is used for measuring temperatures using thermocouples or RTD's.

The assembly with connection head consists of a connection head with an insert, a terminal block or transmitter and eventually an adaptor. The sensor assembly with a connection box consists of a connection box with one or more inserts, terminals or transmitters.

Ambient temperature range $-20\text{ }^{\circ}\text{C} \dots +40\text{ }^{\circ}\text{C}$

Electrical data

Thermocouple circuit	5 Vdc, 10 mA
RTD circuit	5 Vdc, 10 mA
Transmitter data	max. 45 Vdc, max 50 mA, max 2,25 W

Installation instructions

The cable or conduit entry devices shall be certified in type of explosion protection flameproof enclosure "d" and shall be suitable for the conditions of use and correctly installed.

Routine tests

Each insert of the sensor assembly XPS3... shall be submitted to a routine test according to clause 16 of EN 50018 with a test pressure of 9,3 bar.

(16) Report

KEMA No. 2029242.

(17) Special conditions for safe use

The temperature class T6 is only valid for a maximum ambient temperature of $40\text{ }^{\circ}\text{C}$. If the temperature sensor is influenced by the temperature of the process medium, it shall be verified that the surface temperature of the flameproof enclosure does not exceed $85\text{ }^{\circ}\text{C}$ for T6.

(18) Essential Health and Safety Requirements

Covered by the standards listed at (9).

(19) Test documentation

1. Certificate of Conformity KEMA No. Ex-97.D.1028 X

dated

2. Drawing No. 26346 rev. 04
521064-1 rev. 08

17.07.2003

17.07.2003

AMENDMENT 1

to EC-Type Examination Certificate KEMA 03ATEX2243 X

Manufacturer: **Thermo electric**

Address: **Coenecoop 103 – 105, 2741 PH Waddinxveen, the Netherlands**

Description

In future the Industrial sensor assembly type XPS3... may also be used in an extended ambient temperature range.

Special conditions for safe use

Ambient temperature range: -40 °C ... +75 °C.

For an ambient temperature exceeding 70 °C, heat resistant cables suitable for at least 80 °C shall be used.

Test documentation

Drawing no. 521064-1 Rev. 9

dated

15.12.2003

Arnhem, 30 January 2004
KEMA Quality B.V.


C.G. van Es
Certification Manager