



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: **Baseefa03ATEX0030X**

4 Equipment or Protective System: **Model 248 Temperature Transmitter**

5 Manufacturer: **ROSEMOUNT INC.**

6 Address: **12001 Technology Drive, Eden Prairie, Minnesota, 55344-2695, USA**

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 Baseefa (2001) Ltd. Notified body number 1180, 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. **02(C)0533**

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

EN 50014:1997 + Amendments 1 & 2 EN 50020:2002 EN 50284:1999

except in respect of those requirements listed at item 18 of the Schedule.

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 and construction of the specified equipment or protective system. 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 1 G EEx ia IIC T5 (-60°C ≤ Ta ≤ +80°C)

⊕ II 1 G EEx ia IIC T6 (-60°C ≤ Ta ≤ +60°C)

This certificate may only be reproduced in its entirety, without any change, schedule included.

Baseefa (2001) Ltd. Customer Reference No. **0914**

Project File No. **02/0533**

This certificate is granted subject to the general terms and conditions of Baseefa (2001) Ltd. It does not necessarily indicate that the equipment may be used in particular industries or circumstances.

Baseefa (2001) Ltd.

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Derbyshire, SK17 9BJ

R S SINCLAIR

DIRECTOR

On behalf of

Baseefa (2001) Ltd.



13

Schedule

14

Certificate Number Baseefa03ATEX0030X

15 Description of Equipment or Protective System

The Model 248 Temperature Transmitter is designed to convert a process temperature measurement into a 4 to 20mA signal. The apparatus comprises an electronic circuit mounted on a single PCB and encapsulated inside a plastic DIN B size housing. Six terminals are provided on the apparatus housing for electrical connection to temperature sensors and other devices.

Input/Output Parameters

HART loop terminals, + and -:

$$\begin{array}{ll} U_i = 30V & C_i = 3.6nF \\ I_i = 130mA & L_i = 0 \\ P_i = 1W \end{array}$$

The above supply must be derived from a linear supply.

Sensor terminals 1 to 4:

$$\begin{array}{ll} U_o = 45V & C_i = 2.1nF \\ I_o = 26mA & L_i = 0 \\ P_o = 290mW \end{array}$$

Load Parameters

The capacitance and either the inductance or the inductance to resistance (L/R) ratio of the load connected to the sensor terminals 1 to 4 must not exceed the following values:

GROUP	CAPACITANCE nF	INDUCTANCE mH	OR L/R RATIO $\mu H/\Omega$
IIC	23.8	23.8	53.1
IIB	237.9	87.4	200.2
IIA	727.9	184.5	383.6

16 Report Number

02(C)0533

17 Special Conditions for Safe Use

1. The apparatus must be installed in an enclosure which affords it a degree of protection of at least IP20. Non-metallic enclosures must have a surface resistance of less than $1G\Omega$; light alloy or zirconium enclosures must be protected from impact and friction when installed.

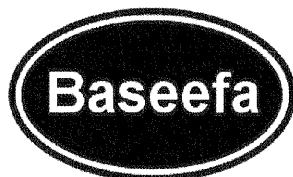
18 Essential Health and Safety Requirements

All relevant Essential Health and Safety Requirements are covered by the standards listed at item 9.



19 Drawings and Documents

Number	Sheets	Issue	Date	Description
00248-0201	1	AA	12/03/02	Bridge, circuit
00248-1011		AA	11/27/02	Approval drawing. Baseefa I.S. & Type n
00248-1100	3	AB	02/06/03	Schematic, 248 electronics board, headmount
00248-1101	3	AA	12/13/02	PWB, 248 board
00248-1102		AB	02/06/03	CCA, 248 board
00248-1201	1	AB	07/23/02	Terminal plug combination
00248-1401	2	AB	11/27/02	248 housing assembly
00248-1501	2	AA	11/03/02	248 nameplate label
00248-1511	2	AB	01/22/03	CENELEC (Baseefa) Approval Labels, 248
00248-1531	2	AB	11/19/02	Terminal label, 248
00248-2201	1	AB	10/23/02	248 electronics module, cap
00248-2202		AB	10/23/02	248 electronics module, cup
00248-1101	3	AA	12/13/02	PWB, 248 board. A1 paper.



1 **SUPPLEMENTARY EC - TYPE EXAMINATION CERTIFICATE**

2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 94/9/EC**

3 Supplementary EC - Type **Baseefa03ATEX0030X/1**
Examination Certificate Number:

4 Equipment or Protective System: **Model 248 Temperature Transmitter**

5 Manufacturer: **Rosemount Inc.**

6 Address: **12001 Technology Drive, Eden Prairie, Minnesota, 55344-3695, USA**

7 This supplementary certificate extends EC – Type Examination Certificate No. Baseefa03ATEX0030X to apply to equipment or protective systems designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

This supplementary certificate shall be held with the original certificate.

This certificate may only be reproduced in its entirety, without any change, schedule included.

Baseefa (2001) Ltd. Customer Reference No. **0914**

Project File No. **04/0011**

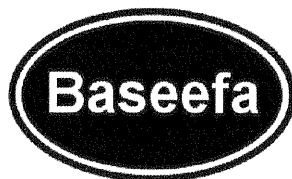
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A handwritten signature in black ink, appearing to read "R S Sinclair".

R S SINCLAIR
DIRECTOR
On behalf of
Baseefa (2001) Ltd.



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Schedule

14

Certificate Number Baseefa03ATEX0030X/1

15 **Description of the variation to the Equipment or Protective System**

Variation 1.1

To permit the use of an alternative transformer and other minor changes.

16 **Report Number**

None

17 **Special Conditions for Safe Use**

None additional to those listed previously

18 **Essential Health and Safety Requirements**

Compliance with the Essential Health and Safety Requirements is not affected by this variation.

19 **Drawings and Documents**

Number	Sheet	Issue	Date	Description
00248-1011	1	AB	11.24.03	Approval drawing IS & Type N
00248-1102	1	AC	08.01.03	CCA, 248 board
00248-1201	1	AE	05.08.03	Terminal plug combination
00248-1401	2	AG	11.17.03	248 housing assembly
00248-1502*	3	AB	11.10.03	248 nameplate label
00248-1531	3	AD	11.10.03	Terminal label, 248
00248-2201	1	AC	06.30.03	248 electronics module cap

These drawings are common to Baseefa03ATEX0032U/2.

* This drawing replaces 00248-1501 which is now obsolete.