



EC - TYPE EXAMINATION CERTIFICATE

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

- 3 EC - Type Examination Certificate Number: **Baseefa06ATEX0328X**
- 4 Equipment or Protective System: **9331-TI-xx 8-Channel Temperature Input Multiplexer**
- 5 This certificate is held by: **Measurement Technology Limited**
- 6 Address: **Luton, Bedfordshire, LU1 3JJ, UK**
- 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. 06(C)0860
- 9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 60079-0: 2004 EN 50020: 2002
- 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 1G EEx ia IIC T4 (-50°C ≤ Ta ≤ +60°C)

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

Baseefa Customer Reference No. 0703

Project File No. 06/0860

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

Rockhead Business Park, Staden Lane,
Buxton, Derbyshire SK17 9RZ
Telephone +44 (0) 1298 766600 Fax +44 (0) 1298 766601
e-mail info@baseefa.com web site www.baseefa.com
Baseefa is a trading name of Baseefa (2001) Ltd
Registered in England No. 4305578 at the above address

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



13

Schedule

14

Certificate Number Baseefa06ATEX0328X

15 Description of Equipment or Protective System

The 9331-TI-EN or 9331-TI-FI 8-Channel Temperature Input Multiplexer is designed to convert temperature signals into electrical signal.

The apparatus comprises a sensor board containing the connections for supply input, signal; output and sensor input, a Fieldbus output board containing the communications circuits (9331-TI-EN), and an optional FISCO transient protection board (9331-TI-FI), all housed in a plastic enclosure. External connections are made via an integral terminal block.

Input/Output Parameters

Terminal BUS, pins 1, 2 without FISCO option:

$$\begin{aligned}U_i &= 30V \\I_i &= 0.3A \\P_i &= 1.3W\end{aligned}$$

The above parameters must be derived from a linear supply (resistive output)

$$\begin{aligned}C_i &= 0 \\L_i &= 0\end{aligned}$$

Terminal BUS, pins 1, 2 with FISCO option:

$$\begin{aligned}U_i &= 17.5V \\I_i &= 0.38A \\P_i &= 5.32W \\C_i &= 0 \\L_i &= 0\end{aligned}$$

Terminal pairs INPUT 1/2, INPUT 3/4, INPUT 5/6 & INPUT 7/8 each:

$$\begin{aligned}U_o &= 12.5V \\I_o &= 66mA \\P_o &= 41mW \\C_i &= 0 \\L_i &= 0\end{aligned}$$

With corresponding Terminal pair Load Parameters:

GROUP	CAPACITANCE	INDUCTANCE	OR	L/R RATIO
IIC	1.19 μ F	8.5mH		168 μ H/ Ω
IIB	7.6 μ F	32mH		684 μ H/ Ω
IIA	27.9 μ F	68mH		1368 μ H/ Ω

16 Report Number

06(C)0860



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 1Gohm, light alloy or zirconium enclosures must be protected from impact and friction when installed.
2. The apparatus will not meet the 500Vrms isolation test required by clause 6.4.12 of EN 50020: 1994 when the optional transient protection (FISCO) board is fitted and this must be taken into account when installing the apparatus.

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	Sheet	Issue	Date	Description
EC Type Examination Certificate No. Baseefa02ATEX0010X CI9331-1	1 of 1	1	11.06	9331-TI Approval label – Baseefa – EEx ia Version



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 Examination Certificate Number: **Baseefa06ATEX0328X/1**

4 Equipment or Protective System: **9331-TI-xx 8-Channel Temperature Input Multiplexer**

5 This certificate is held by: **Measurement Technology Limited**

6 Address: **Luton, Bedfordshire, LU1 3JJ, UK**

7 This supplementary certificate extends EC – Type Examination Certificate No. Baseefa06ATEX0328X 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 Customer Reference No. **0703**

Project File No. **07/0108**

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

Rockhead Business Park, Staden Lane,
Buxton, Derbyshire SK17 9RZ
Telephone +44 (0) 1298 766600 Fax +44 (0) 1298 766601
e-mail info@baseefa.com web site www.baseefa.com
Baseefa is a trading name of Baseefa (2001) Ltd
Registered in England No. 4305578 at the above address



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



13

Schedule

14

Certificate Number Baseefa06ATEX0328X/1

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

Variation 1.1

To permit minor mechanical changes that do not affect the original intrinsic safety assessment.

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
CI9331-5	1 of 1	1	2.07	9331-TI Approval Label - Baseefa