



1 **TYPE EXAMINATION CERTIFICATE**

2 **Intrinsically Safe System Intended for use in Potentially Explosive Atmospheres**

3 Type Examination Certificate **Baseefa07Y0027**
Number:

4 System: **Easidew I.S. Dewpoint Transmitter System**

5 Certificate Holder: **Michell Instruments Limited**

6 Address: **Nuffield Close, Cambridge, CB4 1SS.**

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

8 Baseefa (2001) Ltd. certifies that this system has been found to comply with the following standards
EN 60079-25: 2004

9 The examination and test results are recorded in confidential Report No. **06(C)0372**

10 If the sign "X" is placed after the certificate number, it indicates that the system is subject to special conditions of safe use specified in the schedule to this certificate.

11 This TYPE EXAMINATION CERTIFICATE relates only to the design of the specified intrinsically safe system and not to specific items of equipment therein. It is the responsibility of the system certificate holder to supply the relevant documentation to the installer of the intrinsically safe electrical system referred to in this certificate.

The installer has the responsibility to ensure that the system conforms to the specification laid down in the Schedule to this certificate and has satisfied routine verifications and tests specified therein.

12 The marking of the system shall include the following :

Ex ia IIC T4 (-20°C ≤ T_a ≤ +60°C)

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


Baseefa Customer Reference No. **4014**

Project File No. **06/0372**

This certificate is granted subject to the general terms and conditions of Baseefa (2001) Ltd. It does not necessarily indicate that the system 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.



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Schedule

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Certificate Number Baseefa07Y0027

15 System Description

The Easidew I.S. Dewpoint Transmitter System comprises:

1. Apparatus that may be installed in a Non Hazardous Area (Safe Area.)

- 1.1 An isolated barrier of one of the following types:-
Pepperl & Fuchs type KFD2-CR-Ex1.20200 to certificate BAS00ATEX7164
Pepperl & Fuchs type KFD2-CR-Ex1.30200 to certificate BAS00ATEX7164
Pepperl & Fuchs type KFD2-CR-Ex1.50P to certificate BAS98ATEX7343
Measurement Technology Limited type MTL5041 to certificate BAS01ATEX7155
Measurement Technology Limited type MTL5040 to certificate BAS98ATEX2227

- 1.2 The above apparatus is to be supplied from apparatus situated in the safe area which is unspecified except that it must not be supplied from nor contain in normal or abnormal conditions a source of potential with respect to earth in excess of 253 Volts r.m.s. or 253 Volts d.c.

2. Apparatus that may be installed in a Hazardous Area

- 2.1 Easidew I.S. Dewpoint Transmitter to certificate numbers Baseefa06ATEX0330X and IECEx BAS06.0090X

3. Permissible Interconnecting Cables

- 3.1 The capacitance and either the inductance or the inductance to resistance ratio (L/R) of the hazardous area cables must not exceed the following values:-

GROUP	C μF	L mH	OR	L/R Ratio μH/Ω
IIC	46nF	4.2mH		54μH/Ω
IIB	613nF	12.6mH		217μH/Ω
IIA	2.11μF	33mH		435μH/Ω

16 Report

06(C)0372

17 Special Conditions for Safe Use

None.

18 Drawings and Documents

Number	Issue	Date	Description
Ex90352 sheet 1	01	26/01/07	Easidew I.S. Dewpoint Transmitter System Drawing



1 **SUPPLEMENTARY TYPE EXAMINATION CERTIFICATE**

2 **Intrinsically safe System Intended for use in Potentially Explosive Atmospheres**

3 Supplementary Type Examination Certificate Number: **Baseefa07Y0027/1**

4 Equipment: **Easidew LS. Dewpoint Transmitter System**

5 Manufacturer: **Michell Instruments Limited**

6 Address: **Ely, Cambridgeshire, CB6 3NW
(formerly Cambridge, CB4 1SS.)**

7 This supplementary certificate extends Type Examination Certificate No. Baseefa07Y0027 to apply only to the design of the specified intrinsically safe system, and not to specific items of equipment therein, 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.

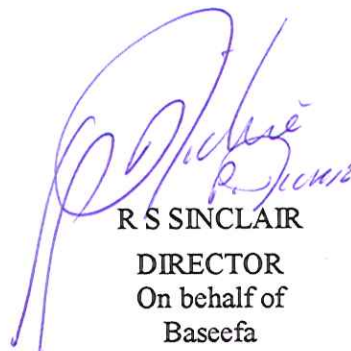
Baseefa Customer Reference No. **4014**

Project File No. **08/0350**

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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 Ltd
Registered in England No. 4305578. Registered address as above.



R S SINCLAIR
DIRECTOR
On behalf of
Baseefa



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Schedule

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Certificate Number Baseefa07ATEX0027/1

15 Description of the variation to the Equipment

Variation 1.1

To permit the use of additional Pepperl + Fuchs safety isolator types KFD0-CS-Ex2.50P and KFD2-STC4-Ex1.H.
For completeness, the below list shows all isolators now covered by this certificate:-

Type	Certificate No.	Isolation Interface
Isolated Repeater	BAS98ATEX7343	KFD0-CS-Ex1.50P *
Dual Isolated Repeater	BAS98ATEX7343	KFD0-CS-Ex2.50P *
Transmitter Supply Isolator	BAS00ATEX7164	KFD2-CR-Ex1.20200 *
Transmitter Supply Isolator	BAS00ATEX7164	KFD2-CR-Ex1.30200 *
Smart Transmitter Power Supply	BAS99ATEX7060	KFD2-STC4-Ex1.H
Repeater Power Supply	BAS01ATEX7155	MTL5041 *
Dual Loop Isolator	BAS98ATEX2227	MTL5040 *

* These isolators were present in the original certificate.

When using a Pepperl & Fuchs type KFD2-STC4-Ex1.H the capacitance and either the inductance or the inductance to resistance ratio (L/R) of the hazardous area cables must not exceed the following values:-

GROUP	C μF	L mH	OR	L/R Ratio μH/Ω
IIC	40nF	4.2mH		54μH/Ω
IIB	613nF	12.6mH		217μH/Ω
IIA	2.11μF	33mH		435μH/Ω

When using any of the other isolators listed above the capacitance and either the inductance or the inductance to resistance ratio (L/R) of the hazardous area cables must not exceed the following values:-

GROUP	C μF	L mH	OR	L/R Ratio μH/Ω
IIC	46nF	4.2mH		54μH/Ω
IIB	613nF	12.6mH		217μH/Ω
IIA	2.11μF	33mH		435μH/Ω

16 Report Number

None.

17 Special Conditions for Safe Use

None.



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
Ex90352	1	02	27/05/08	Easidew I.S. Dewpoint Transmitter System Drawing



1 **SUPPLEMENTARY TYPE EXAMINATION CERTIFICATE**

2 **Intrinsically safe System Intended for use in Potentially Explosive Atmospheres**

3 Supplementary Type Examination Certificate Number: **Baseefa07Y0027/2**

4 Equipment: **Easidew I.S. Dewpoint Transmitter System**

5 Manufacturer: **Michell Instruments Limited**

6 Address: **Ely, Cambridgeshire, CB6 3NW**
(formerly Nuffield Close, Cambridge, CB4 1SS)

7 This supplementary certificate extends Type Examination Certificate No. Baseefa07Y0027 to apply only to the design of the specified intrinsically safe system, and not to specific items of equipment therein, 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.

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Baseefa Customer Reference No. 4014

Project File No. 09/0005

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Baseefa

Rockhead Business Park, Staden Lane,
Buxton, Derbyshire SK17 9RZ
Telephone +44 (0) 1298 766600 Fax +44 (0) 1298 766601
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R S SINCLAIR
DIRECTOR
On behalf of
Baseefa



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Schedule

14

Certificate Number Baseefa07ATEX0027/2

15 Description of the variation to the Equipment

Variation 2.1

To permit the addition of a variant named the Easidew Pro I.S.

The terminal parameters for the Easidew Pro I.S. remain unchanged and are listed in full on the prime of this certificate.

The terminal numbers of the Easidew I.S. Pro are different from those of the existing variant. For clarity the user terminal numbers for both variants are listed below:-

- Easidew I.S. Dewpoint Transmitter:-

The 4-20mA user terminals are terminals 1 & 3.

The earth terminal is marked with an earth symbol.

- Easidew Pro I.S. Dewpoint Transmitter:-

The 4-20mA user terminals are terminals 2 & 4.

The earth terminal is terminal 3.

16 Report Number

None.

17 Special Conditions for Safe Use

None.

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
Ex90352	1	03	16/02/09	Easidew I.S. and Easidew Pro I.S. Dewpoint Transmitter System Drawing



1 **SUPPLEMENTARY TYPE EXAMINATION CERTIFICATE**

2 **Intrinsically safe System Intended for use in Potentially Explosive Atmospheres**

3 Supplementary Type Examination Certificate Number: **Baseefa07Y0027/3**

4 Equipment: **Easidew I.S. Dewpoint Transmitter System**

5 Manufacturer: **Michell Instruments Limited**

6 Address: **Ely, Cambridgeshire, CB6 3NW**

7 This supplementary certificate extends Type Examination Certificate No. Baseefa07Y0027 to apply only to the design of the specified intrinsically safe system, and not to specific items of equipment therein, 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.

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Baseefa Customer Reference No. **4014**

Project File No. **11/0521**

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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
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Registered in England No. 4305578. Registered address as above.

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

R.S SINCLAIR
DIRECTOR
On behalf of
Baseefa



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Schedule

14

Certificate Number Baseefa07ATEX0027/3

15 Description of the variation to the Equipment

Variation 2.1

To permit the addition of an alternative isolator.

The load parameters for both Easidew I.S. and Easidew Pro I.S. systems remain unchanged and are as listed on variation 1 of this certificate.

16 Report Number

None.

17 Special Conditions for Safe Use

None.

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
Ex90352	1	04	10/08/11	Easidew I.S. and Easidew Pro I.S. Dewpoint Transmitter System Drawing