



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: **Baseefa08ATEX0083**

4 Equipment or Protective System: **MTL4526 Two Channel Switch-Operated Relay Output**

5 Manufacturer: **Measurement Technology Limited**

6 Address: **Power Court, Luton, Bedfordshire. LU1 3JJ**

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, 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. GB/BAS/ExTR08.0064/00

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

EN 60079-0: 2006 EN 60079-11: 2007 EN 61241-11: 2006

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 :

Ex II (I) GD [Ex ia] IIC $-20^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$
[Ex iaD]

Ex I (M1) [Ex ia] I

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

Baseefa Customer Reference No. 0703

Project File No. 07/0843

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

R S SINCLAIR
DIRECTOR
On behalf of
Baseefa

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

Re-issued 23 September 2008 to replace original



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Schedule

14

Certificate Number Baseefa08ATEX0083

15 Description of Equipment or Protective System

The MTL4526 Two Channel Switch-operated Relay Output is designed to enable two separate intrinsically safe circuits to be switched via relay contacts by on/off switches or logic signals from unspecified apparatus in the non-hazardous area. Configuration switches on the apparatus allow the two relay output channels to be alternatively controlled by one input. Each non-hazardous area input can also be loop powered. Two relays provide galvanic isolation between the hazardous and non-hazardous area circuitry.

Each channel of the apparatus comprises a relay, a zener diode and a fuse to provide voltage and current limitation to the relay. The above, together with other electronic components are mounted on a printed circuit board and housed in a moulded plastic enclosure. Polarised plugs and sockets are provided for hazardous and non-hazardous area connections. LED indication is provided for status of each output channel and power-on.

Input / Output Parameters

Non-Hazardous Area Terminals 8, 9, 10, 11, 13 & 14

$U_m = 253V$ r.m.s.

The circuit connected to non-hazardous area terminals 8, 9, 10, 11, 13 & 14 are designed to operate from a d.c. supply voltage up to 35V.

Hazardous Area Terminals 1 to 3 (Channel 1) or Hazardous Area Terminals 4 to 6 (Channel 2)

$U_i = 30V$	$U_o = 0$
$C_i = 0$	$I_o = 0$
$L_i = 0$	

16 Report Number

GB/BAS/ExTR08.0064/00

17 Special Conditions for Safe Use

None

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
CI4526-1	1 of 5	1	4.08	Parts List for MTL4526
CI4526-1	2 of 5	1	3.08	MTL4526 Final Assembly
CI4526-1	3 of 5	1	4.08	MTL4526 Track Layout
CI4526-1	4 of 5	1	4.08	MTL4526 Component Layout
CI4526-1	5 of 5	1	4.08	MTL4526 Certification Label Details – Baseefa
CI4500-100	1 of 1	1	8.06	MTL 4500 Case

The above drawings are associated and held with IECEx Certificate No. IECEx BAS 08.0029



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: **Baseefa08ATEX0083/1**
- 4 Equipment or Protective System: **MTL4526 Two Channel Switch-operated Relay Output**
- 5 Manufacturer: **Measurement Technology Limited**
- 6 Address: **Great Marlings, Butterfield, Luton, Bedfordshire. LU2 8DL
(formerly Power Court, Luton, Bedfordshire, LU1 3JJ)**

- 7 This supplementary certificate extends EC – Type Examination Certificate No. Baseefa08ATEX0083 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. **10/0721**

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

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Baseefa is a trading name of Baseefa Ltd
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 Baseefa08ATEX0083/1

15 Description of the variation to the Equipment or Protective System

Variation 1.1

To permit the fitting of alternative relays on the equipment. The relays once fitted on the PCB can be partially or fully encapsulated. The fitting of these devices does not affect the assessment and parameters listed.

Variation 1.2

To permit the alternative fitting of 1SMB3EZ** zener diodes in place of 1SMB59**BT3 components currently fitted on all models of the equipment. The fitting of these components does not affect the original assessment.

Variation 1.3

To permit an alternative method of applying the conformal coating to the PCB's fitted in all models of the equipment. This change does not affect the original assessment.

Variation 1.4

To confirm the current design of MTL4526 Two Channel Switch-operated Relay Output has been reviewed against the requirements of EN 60079-0: 2009 in respect of the differences from EN 60079-0: 2006 and, with exception of the marking, none of the differences affect this equipment.

The equipment markings have been revised as follows in accordance with the requirements of EN 60079-0: 2009 to include the Equipment Protection Level (EPL) markings:

⊕ II (1)GD [Ex ia Ga] IIC (-20°C ≤ T_a ≤ +60°C)
[Ex ia Da] IIIC (-20°C ≤ T_a ≤ +60°C)

⊕ I (M1) [Ex ia Ma] I (-20°C T_a ≤ +60°C)

16 Report Number

GB/BAS/ExTR11.0001/00

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
CI4500-3	1 of 1	1	12.10	MTL4500 and MTL5500 – Alternative Zener Diodes (Panjit)
CI4500-4	1 of 1	1	11.10	MTL4500 & 5500 – Label Update to EPL – Baseefa
CI4500-6	1 of 1	1	20.12.10	MTL4500 & MTL5500 – Conformal Coating

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Number	Sheet	Issue	Date	Description
CI4500-7	1 of 1	2	1.11	MTL4500 Relay Encapsulant

The above drawings are associated and held with IECEx Certificate No. IECEx BAS 08.0029 Iss 2

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: **Baseefa08ATEX0083/2**

4 Equipment or Protective System: **MTL4526 Two Channel Switch-operated Relay Output**

5 Manufacturer: **Measurement Technology Limited**

6 Address: **Great Marlings, Butterfield, Luton, Bedfordshire, LU2 8DL**

7 This supplementary certificate extends EC – Type Examination Certificate No. Baseefa08ATEX0083 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.

8 Item 9 of the original Certificate is replaced by “Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0: 2012 EN 60079-11: 2012

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

9 The marking of the equipment has changed from the original Certificate and shall include the following:

⊕ II (1) GD [Ex ia Ga] IIC (-20°C ≤ T_a ≤ +60°C)
[Ex ia Da] IIC (-20°C ≤ T_a ≤ +60°C)

⊕ I (M1) [Ex ia Ma] I (-20°C ≤ T_a ≤ +60°C)

This certificate shall be held with the original certificate.

Baseefa Customer Reference No. **0703**

Project File No. **13/0105**

This document is issued by the Company subject to its General Conditions for Certification Services accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and the Supplementary Terms and Conditions accessible at <http://www.baseefa.com/terms-and-conditions.asp>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. It does not necessarily indicate that the equipment may be used in particular industries or circumstances. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, schedule included, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

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R S SINCLAIR

GENERAL MANAGER

On behalf of SGS Baseefa Limited

13 **Schedule**

14 **Certificate Number Baseefa08ATEX0083/2**

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

Variation 2.1

To permit minor component and drawing changes not affecting the original assessment.

Variation 2.2

To confirm the current design of the MTL4526 Two Channel Switch-operated Relay Output has been reviewed against the requirements of EN 60079-0: 2012 and EN 60079-11: 2012 in respect of the differences from EN 60079-0: 2009, EN 60079-11: 2007 & EN 61241-11: 2006 and none of the differences affect the equipment.

16 **Report Number**

GB/BAS/ExTR14.0065/00

17 **Specific Conditions of 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
CI4500-100	1 of 1	2	1.13	MTL 4500 Case
CI4526-1	4 of 5	2	1.13	MTL4526 Component Layout

The above drawings are associated and held with IECEx Certificate No. IECEx BAS 08.0029 Iss. 3