



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: **Baseefa03ATEX0034**
- 4 Equipment or Protective System: **MTL3052 Digital Isolator**
- 5 Manufacturer: **MTL INSTRUMENTS PVT LIMITED**
- 6 Address: **Sholinganallur, Chennai (Madras) - 600 119, India**
- 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)0458**
- 9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 50014:1997 + Amendments 1 & 2 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 (1) G [EEx ia] IIC (-20°C ≤ Ta ≤ 60°C)

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

Baseefa (2001) Ltd. Customer Reference No. 2372

Project File No. 02/0458

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.

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

Baseefa (2001) Ltd.

Health and Safety Laboratory Site, Harpur Hill,
Buxton, Derbyshire SK17 9JN
Telephone +44 (0) 1298 28255 Fax +44 (0) 1298 28216
e-mail info@baseefa2001.biz web site www.baseefa2001.biz
Registered in England No. 4305578 at 13 Dovedale Crescent, Buxton,
Derbyshire, SK17 9BJ

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



13

Schedule

14

Certificate Number Baseefa03ATEX0034

15 Description of Equipment or Protective System

The MTL3052 Digital Isolator is designed to restrict the transfer of energy from a non-intrinsically safe power source to an intrinsically safe circuit by the limitation of voltage and current.

The apparatus comprises a printed circuit board (PCB) on which all the electronic components are mounted with the exception of the power supply fuse. The PCB and fuse are mounted inside a plastic enclosure which gives a degree of protection of not less than IP20.

Terminals 2 and 3:

$U_m = 250V \text{ rms}$

Terminals 5 and 6:

$U_o = 15V$

$I_o = 150mA$

$P_o = 0.563W$

Terminals 7 and 8:

$U_o = 15V$

$I_o = 83.3mA$

$P_o = 0.32W$

Load parameters:

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

Terminals 5 and 6:

Group	Capacitance (μF)	Inductance (mH)	OR	L/R Ratio ($\mu H/\Omega$)
IIC	0.58	1.65		65
IIB	3.55	4.95		195
IIA	14	13.2		520

Terminals 7 and 8:

Group	Capacitance (μF)	Inductance (mH)	OR	L/R Ratio ($\mu H/\Omega$)
IIC	0.58	5.2		109
IIB	3.55	15.6		327
IIA	14	41.6		872

16 Report Number

02(C)0458

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
CI3052-1	1/6	2	01.03	Contents Sheet
CI3052-1	2/6	2	01.03	Parts List
CI3052-1	3/6	2	01.03	Circuit Diagram
CI3052-1	4/6	2	01.03	PCB Layout
CI3052-1	5/6	2	01.03	General Assembly and Label
CI3052-1	6/6	2	01.03	Terminal Assembly and Fuse Holder



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: **Baseefa03ATEX0034/1**
- 4** Equipment or Protective System: **MTL3052 Digital Isolator**
- 5** Manufacturer: **MTL Instruments PVT Limited**
- 6** Address: **No 3 Old Mahabalipuram Road, Sholinganallur, Chennai, 600 119, India**
- 7** This supplementary certificate extends EC – Type Examination Certificate No. Baseefa03ATEX0034 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. **2372**

Project File No. **10/0969**

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.

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.

A handwritten signature in black ink, appearing to read "R S Sinclair". Below the signature, the name "R S SINCLAIR" is printed in a bold, sans-serif font.

R S SINCLAIR

DIRECTOR
On behalf of
Baseefa



13

Schedule

14

Certificate Number Baseefa03ATEX0034/1

15 Description of the variation to the Equipment or Protective System

Variation 1.1

To permit minor electrical changes that do not affect the original assessment.

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
CI3052-1	1 of 6	3	11.10	Contents Sheet
CI3052-1	2 of 6	3	11.10	Parts List



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: **Baseefa03ATEX0034/2**
- 4 Equipment or Protective System: **MTL3052 Digital Isolator**
- 5 Manufacturer: **MTL Instruments PVT Limited**
- 6 Address: **No 3 Old Mahabalipuram Road, Sholinganallur, Chennai, 600 119, India**
- 7 This supplementary certificate extends EC – Type Examination Certificate No. Baseefa03ATEX0034 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. **2372**

Project File No. **10/0969**

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.

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.

DT Brearley
PP DBREARLEY

R S SINCLAIR
DIRECTOR
On behalf of
Baseefa



13

Schedule

14

Certificate Number Baseefa03ATEX0034/2

15

Description of the variation to the Equipment or Protective System

Variation 2.1

To confirm that the equipment covered by this certificate has been reviewed against the requirements of EN 60079-0:2006, and EN 60079-11:2007 in respect of the differences from EN 50014:1997 + Amds 1 & 2 and EN 50020:2002 and that none of these differences affect this equipment. The marking complies with EN 60079-0:2009.

The equipment is now marked

⊕ II (1)G [Ex ia Ga] IIC

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
CI3052-1	1 of 6	4	02.11	Contents Sheet
CI3052-1	5 of 6	3	02.11	General Assembly And Label