



# IECEX Certificate of Conformity

**INTERNATIONAL ELECTROTECHNICAL COMMISSION**  
**IEC Certification Scheme for Explosive Atmospheres**  
for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.: **IECEX BAS 05.0055** issue No.: **2**

Status: **Current**

Certificate history:  
Issue No. 2 (2009-5-6)  
Issue No. 1 (2008-11-5)  
Issue No. 0 (2005-8-11)

Date of Issue: **2009-05-06** Page 1 of 4


Applicant: **Measurement Technology Limited**  
Great Marlings  
Butterfield  
Luton  
Bedfordshire  
LU2 8DL  
United Kingdom

Electrical Apparatus: **MTL5043 Repeater Power Supply, Dual Output, 4/20mA for 2-Wire 'Smart' Transmitters**  
Optional accessory:

Type of Protection: **Intrinsic Safety**

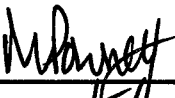

Marking: **IECEX BAS 05.0055**  
**[Ex ia] IIC**  
**-20°C ≤ Ta ≤ +60°C**

Approved for issue on behalf of the IECEx  
Certification Body:

 P S Sinclair

Position: **Managing Director**

Signature:  
(for printed version)

  
  
**6/5/09**

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

**Baseefa**  
**Rockhead Business Park**  
**Staden Lane**  
**Buxton**  
**Derbyshire**  
**SK17 9RZ**  
**United Kingdom**





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Manufacturer: **Measurement Technology Limited**  
Great Marlings  
Butterfield  
Luton  
Bedfordshire  
LU2 8DL  
United Kingdom

Manufacturing location(s):  
**MTL Instruments PVT  
Limited**  
No. 3 Old Mahabalipuram  
Road  
Sholinganallur  
Chennai  
India

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

#### STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

**IEC 60079-0 : 2000** Electrical apparatus for explosive gas atmospheres - Part 0: General requirements  
Edition: 3.1  
**IEC 60079-11 : 1999** Electrical apparatus for explosive gas atmospheres - Part 11: Intrinsic safety 'I'  
Edition: 4

*This Certificate does not indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

#### TEST & ASSESSMENT REPORTS:

*A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in*

IECEX ATR:  
**UK/BAS/05/0450**  
**GB/BAS/ExTR08.0213/00**

File Reference:  
**05/0450**  
**08/0743**



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## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

The MTL5043 Repeater Power Supply, Dual Output, 4/20mA for 2-Wire 'Smart' Transmitters is designed to provide a fully floating d.c. supply for energising a conventional 2-wire 4/20mA 'Smart' transmitter which is located in the hazardous area. The apparatus repeats the current in two floating circuits to drive two independent safe area loads. The 'Smart' data transfer is repeated through Channel 1 only, for bi-directional communication.

The MTL5043 restricts the transfer of energy from unspecified safe-area apparatus to an intrinsically safe circuit by limitation of voltage and current. An LED indicator provides indication of the status of the transmitter.

The MTL5043 apparatus comprises four isolating transformers which provide galvanic isolation between the hazardous and non-hazardous area circuitry and a detection circuit with zener diode / resistance combination to provide voltage and current limitation. 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 the hazardous and non-hazardous area connections.

See Annex for electrical parameters

**CONDITIONS OF CERTIFICATION: NO**



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## DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

### Variation 2.1

This document permits existing information (for example on Schedule Drawings) to be replaced by the revised certificate holders address. No other changes may be made to the certified design.