



EC-TYPE EXAMINATION CERTIFICATE

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

EC-Type Examination Certificate Number : **BAS01ATEX7180**

Equipment or Protective System: **MTL4215 LS. OUTPUT SWITCH OPERATED RELAY**

Manufacturer: **MEASUREMENT TECHNOLOGY LIMITED**

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

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

The Electrical Equipment Certification Service, notified body number 600 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 N°

01(C)0221 dated 17 May 2001 (held on EECS 0703/02/300)

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

EN 50014: 1997 + Amds 1 & 2

EN 50020: 1994

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

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.

This EC-TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified equipment or protective system. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment or protective system.

The marking of the equipment or protective system shall include the following:-

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

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

File No: EECS 0703/02/318

This certificate is granted subject to the general conditions of the Electrical Equipment Certification Service. It does not necessarily indicate that the apparatus may be used in particular industries or circumstances.



Electrical Equipment Certification Service
Health and Safety Executive
Harpur Hill, Buxton, Derbyshire, SK17 9JN, United Kingdom
Tel: +44(0)1298 28000 Fax: +44(0)1298 28244
internet: www.baseefa.com e-mail: baseefa.info.eecs@hsl.gov.uk

I M CLEARE
DIRECTOR
13 December 2001



13 Schedule

14 **EC-TYPE EXAMINATION CERTIFICATE N° BAS01ATEX7180**

15 **Description of Equipment or Protective System**

The **MTL4215 I.S. Output Switch Operated Relay** is designed to enable one or two separate intrinsically safe circuits to be switched via relay contacts by a single on/off switch or logic signal in the safe area.

The apparatus consists of two Non-I.S. to I.S. relays which provide galvanic isolation. The relays and associated circuitry are contained on a PCB and housed in a moulded plastic enclosure. Polarised plugs and sockets are provided for the hazardous and non-hazardous area connections.

Each channel may be considered as a separate intrinsically safe circuit.

CON2 pins 7 to 14

$U_m = 250V$

The circuit connected to the safe area terminals CON2 is designed to operate from a d.c. supply voltage of up to 35V.

Channel 1 CON1 pins 1, 2 and 3

Channel 2 CON1 pins 4, 5 and 6

$U_i = 30V$

$U_o = 0$ $C_i = 0$

$I_o = 0$ $L_i = 0$

Equipment referred to in this certificate having the same type number as items in BASEEFA Certificate No Ex 94C2015 may be used as a direct substitute in a system provided that the cable parameters used are within the limits shown on this certificate.

VARIATION 0.1

To permit circuit and printed circuit board (PCB) modification thereby forming a second switching channel to operate the two output switches independently. The two output circuits may be separate I.S. circuits each having voltages up to 30V. With these changes the Two Channel Intrinsically Safe Output Switch Relay is known as a Type MTL4216.

The parameters for CON1 and CON2 are the same as for the Type MTL4215.

16 **Report No**

01(C)0221

17 **Special Conditions For Safe Use**

None.



13 Schedule

14 EC-TYPE EXAMINATION CERTIFICATE N° BAS01ATEX7180

18 Essential Health and Safety Requirements

ESSENTIAL HEALTH & SAFETY REQUIREMENTS not covered by standards listed in Section 9		
Clause	Subject	Compliance
1.1.3	Changes in characteristics of materials and combinations thereof	Report No 01(C)0221 Clause 5.1.1.3
1.2.2	Components for incorporation or replacement	Report No 01(C)0221 Clause 5.1.2.2
1.2.5	Additional means of protection	Report No 01(C)0221 Clause 5.1.2.5
1.2.7	Protection against other hazards	Report No 01(C)0221 Clause 5.1.2.7
1.4.2	Withstanding attack by aggressive substances	Report No 01(C)0221 Clause 5.1.4.2

19 DRAWINGS

Number	Sheet	Issue	Date	Description
CI4215-1	2	4	09.01	MTL4215 Parts List
CI4215-1	3	3	03.96	MTL4215 Circuit Diagram
CI4215-1	4	2	10.94	MTL4215 Component Layout
CI4215-1	5	1	10.93	MTL4215 General Assembly
CI4215-1	6	1	10.93	MTL4215 Internal Construction
CI4215-1	7	3	03.96	MTL4215 PCB Track Layout
CI4215-1	9	1	10.01	MTL4215 Certification Label

DRAWINGS ASSOCIATED WITH VARIATION 0.1

Number	Sheet	Issue	Date	Description
CI4216-1	2	3	09.01	MTL4216 Parts List
CI4216-1	3	2	03.96	MTL4216 Circuit Diagram
CI4216-1	4	3	05.01	MTL4216 Component Layout
CI4216-1	5	1	05.94	MTL4216 General Assembly
CI4216-1	6	1	05.94	MTL4216 Internal Construction
CI4216-1	7	2	03.96	MTL4216 PCB Track Layout
CI4216-1	9	1	10.01	MTL4216 Certification Label

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

BASEEFA List Keywords
2ISOLBAR