



# 1. 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: ITS11ATEX17421X
- 4. Equipment or Protective System: GD210/GD217 Gas Detector
- 5. Manufacturer: Groveley Precision Engineering Ltd
- 6. Address: Groveley Road, Christchurch, BH23 3HB, UK
- 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. Intertek Testing and Certification Limited, notified body number 0359 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 Intertek Report 11054750A1, dated April 2012.

- Compliance with the Essential Health and Safety Requirements has been assured by compliance with standards EN 60079-0:2009 and EN 60079-1:2007 except in respect of those requirements referred to 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 in accordance to the directive 94/9/EC. 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:-

 $\langle Ex \rangle$  II 2 G Ex d IIB+H<sub>2</sub> T6/3\* Gb

Tamb -20°C to +40°C/+120°C\*

\*dependant on version - see schedule for details

P Rawlinson Certification Officer 27 April 2012

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- 13. SCHEDULE
- 14 EC-TYPE EXAMINATION CERTIFICATE NUMBER ITS11ATEX17421X
- 15. Description of Equipment or Protective System

The GD210/GD217 Gas Detector is constructed from either Grade HE 30 aluminium or Grade 316 stainless steel. The difference between the GD210 and GD217 is the size of the outer body, the GD210 having a diameter of 36mm and length of 37mm and the GD217 having a diameter of 44mm and length of 44mm. A sintered element allows diffusion of gas into the flameproof enclosure and into contact with two pellistors (one for reference). The pellistors are connected to a PCB. The cable from the PCB leaves the enclosure through a hole which is then filled with epoxy resin, making the assembly non-user serviceable. Two types of epoxy may be utilised, one low temperature (Stycast 2850FT/Catalyst 9) and the other high temperature (Stycast 2850FT/Catalyst 11) with the following T-Class/Ambient combinations:

Low Temperature version – T6 T<sub>amb</sub> -20°C to +40°C High Temperature version – T3 T<sub>amb</sub> -20°C to +120°C

Report Number:

Intertek Report 11054750A1, dated April 2012.

- 17. CONDITIONS OF CERTIFICATION:
  - (a). Special Conditions for safe use

The cable end of the GD210/GD217 must be fitted to another enclosure prior to use to ensure the cable is mechanically protected and the epoxy is not exposed to light.

When installed, the GD210/GD217 must be bonded to a suitable electrical earth.

Temperature at the branching point could be greater than 80°C, suitable rated cable must be utilized.

(b). Conditions For Use (Routine Tests)

None.

18. Essential Health and Safety Requirements (EHSR's)

The relevant EHSR's have been identified and assessed in Intertek Report 11054750A1, dated April 2012.

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- 13. SCHEDULE
- 14 EC-TYPE EXAMINATION CERTIFICATE NUMBER ITS11ATEX17421X
- Drawings and Documents

Number	Title	Issue	Date
210/02/001	GD210 Certification Assembly	01	23/04/12
210/02/002	GD217 Certification Assembly	01	23/04/12
210/02/003	GD 210 Detector Outer Body	01	23/04/12
210/02/004	GD 210 Detector Top Body	01	23/04/12
210/02/005	GD 210 Detector Outer Body	01	23/04/12
210/02/006	GD 217 Detector Top Body	01	23/04/12
210/02/007	Sinter	01	23/04/12
210/02/008	Standard Temperature Certification Label	01	23/04/12
210/02/009	High Temperature Certification Label	01	23/04/12

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## 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: ITS11ATEX17421X/1
- 4. Equipment or Protective System: GD210/GD217 Gas Detector
- 5. Manufacturer: Groveley Precision Engineering Ltd
- 6. Address: Groveley Road, Christchurch, BH23 3HB, UK
- 7. This supplementary certificate extends EC-Type Examination Certificate Number ITS11ATEX17421X 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 variations specified in the Schedule attached to this certificate and the documents therein referred to.

Intertek Report 100995748MAN-001, dated December 2012.

This Supplementary Certificate shall be held with the original Certificate

ITS11ATEX17421X, dated 27 April 2012

R J Smith Certification Officer 19 December 2012

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## Schedule

### SUPPLEMENTARY EC-TYPE EXAMINATION CERTIFICATE NUMBER: ITS11ATEX17421X/1

#### **VARIATION ONE**

Description of the Variation to the Equipment or Protective System

To permit the following change:

Reduction of lower ambient temperature from -20°C to -40°C.

Coding is now as follows:

Standard temp version – II 2 G Ex d IIB+ $H_2$  T6 Gb  $T_{amb}$  -40°C to +40°C High temp version – II 2 G Ex d IIB+ $H_2$  T3 Gb  $T_{amb}$  -40°C to +120°C

### Report No.

Intertek Report Ref: 100995748MAN-001, dated December 2012.

#### CONDITIONS OF CERTIFICATION

(a) Special Conditions for Safe Use:As per original certificate.

(b) Conditions for Use (Routine Tests): None.

## **Essential Health and Safety Requirements**

See original certificate.

## **DRAWINGS**

Number	Issue	Date	Description
210/02/008	02	22/11/12	Standard Temperature Certification Label
210/02/009	02	22/11/12	High Temperature Certification Label

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