



1. **EC-TYPE EXAMINATION CERTIFICATE**

2. **Component or Protective System Intended for use in Potentially Explosive Atmospheres Directive 94/9/EC**

3. **Type Examination Certificate Number: ITS13ATEX17782X ISSUE 2**

4. **Component or Protective System: CT Breather/Drain**

5. **Manufacturer: Ex Innovations Ltd Trading as Raxton**

6. **Address: Kingsway South  
Westgate  
Aldridge  
West Midlands  
WS9 8FS**

7. This component or protective system and any acceptable variation thereto are 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 component or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of component 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 Ref. G101077972 dated August 2013.

9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN 60079-0:2012 and EN 60079-1:2007, EN 60079-7:2007 and EN 60079-31:2009 except in respect of those requirements referred to at item 18 of the Schedule.

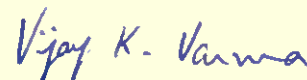
10. If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is special conditions for safe use specified in the schedule to this certificate

11. This EC-Type examination certificate relates only to the design of the specified component or protective system. Further requirements of this Directive apply to the manufacture and supply of this component or protection system.

12. The marking of the component or protective system shall include the following:-

 II 2 GD / I M2

Ex d I/IIC Mb/Gb  
Ex e I/IIC Mb/Gb  
Ex tb IIIC Db IP6X

  
V K Varma  
Certification Officer  
20<sup>th</sup> October 2014

**Intertek Testing & Certification Limited**  
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**Registered No: 3272281 Registered office: Academy Place, 1-9 Brook Street, Brentwood, Essex, CM14 5NQ**

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**13 SCHEDULE**

**14 EC-TYPE EXAMINATION CERTIFICATE NUMBER ITS13ATEX17782X ISSUE 2**

**15. DESCRIPTION OF COMPONENT OR PROTECTIVE SYSTEM**

The CT Breather/Drains are for venting / draining of Ex d or e enclosures up to 190ltrs in volume. They are identical to the previously certified BD-U Breather / Drains, which were for use with enclosure up to 2.5ltrs in volume. See GB/SIR/ExTR12.0130/01.

The CT Breather / Drains are designed to allow moisture emission from either Flameproof Type 'Ex d' enclosures or an Increased Safety Type 'Ex e' enclosures. Each device comprises either a brass or a stainless steel body with an M20, M25, 1/2" NPT or 3/4" NPT entry thread. The body is machined such that a dust/moisture seal, manufactured from sintered copper/bronze alloy which can be optionally nickel plated.

'O' ring seal materials fitted into the Breather/Drain are provided in nitrile, viton, EPDM, neoprene, silicone or fluorsilicone to suit the application.

**16. REPORT NUMBER**

Intertek Reports Ref: G101077972, dated August 2013.

**17. CONDITIONS OF CERTIFICATION**

- I. The interfaces between the Breather/Drains and associated enclosures cannot be defined. Therefore it is the user's responsibility to ensure that the appropriate ingress protection level is maintained at these interfaces.
- II. At their point of mounting, these devices are approved for use at the following temperatures dependant on the type of o-ring:

O-ring Material	Limiting temperature
Nitrile	-20°C to +80°C
EPDM	-30°C to +125°C
Neoprene	-20°C to +100°C
Viton	-5°C to +150°C
Silicone	-30°C to +150°C
Fluorosilicone	-50°C to +150°C

- III. The reference pressure is limited to 4000 kPa (40 Bar) maximum
- IV. These devices shall not be used with enclosures with a volume greater than 190ltrs.
- V. For flameproof applications a temperature rise of 26.8K was measured on the surface of the element up to and including the reference pressure volume of 190 litres. For use in Acetylene atmospheres further testing is required to confirm the value. This value is to be taken into account when determining the Temperature Class of the equipment to which the breather is fitted
- VI. The breather drains do not dissipate any energy other than the expulsion of heated gas in the event of an internal explosion (see above). For Ex e applications the temperature class will be dependant on the enclosure into which it is installed.

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**18. ESSENTIAL HEALTH AND SAFETY REQUIREMENTS (ESHR'S)**

The relevant EHSR's that have not been addressed by the standards listed in this certificate have been assessed in the Intertek Report No. G101077972 dated August 2013.

**19. DRAWINGS**

Title:	Drawing No.:	Rev. Level:	Date:
Type CT Series	836A	2	17/07/2013
Ex d Breather Sinter	99-D-12	1	07/10/2008
Technical Datasheet – Breather/Drain Plug – Type CT	D/606	4	Oct 2014

ISSUE 1: ITS13ATEX17782X replaces ITS13ATEX17782U which was created for the CT breathers as components  
 ISSUE 2: Intertek Project G101806462 dated November 2014 – To remove the restriction on the breathers mounting position.

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