

# UK-TYPE EXAMINATION CERTIFICATE

Product or Protective Systems Intended for Use in Potentially Explosive Atmospheres

UKSI 2016:1107 (as amended) – Schedule 3A, Part 1

1. **UK-Type Examination Certificate Number:** ITS21UKEX0217X **Issue 0**
2. **Product:** PCS2 Control Enclosure
3. **Manufacturer:** Pyroban Ltd
4. **Address:** Endeavour Works, Dolphin Road, Shoreham-by-Sea, west Sussex, BN43 6QG, United Kingdom
5. This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
6. Intertek Testing and Certification Limited, Approved Body number 0359, in accordance with Regulation 42 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016:1107 (as amended), certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Schedule 1 of the Regulations.  
  
The examination and test results are recorded in the confidential reports G101063387 dated August 2013 and 104118311CHE-010 Dated 7<sup>th</sup> March 2022.
7. Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN IEC 60079-0:2018, EN 60079-1:2014, EN 60079-11:2012 and EN 60079-18:2015+A1:2017 except in respect of those requirements referred to within item 14 of the Schedule.
8. If the sign “X” is placed after the certificate number, it indicates that the product is subject to the special conditions of use specified in the Schedule to this certificate.
9. This UK-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Regulations apply to the manufacturing process and supply of this product. These are not covered by this certificate.
10. The marking of the product shall include the following:

II 2(2) G Ex db [ib] mb IIB T4 Gb

-20°C ≤ Ta ≤ +60°C

**Certification Officer:**   
Mark Newman **Date:** 23 March 2022

## SCHEDULE:

UK-Type Examination Certificate Number: ITS21UKEX0217X Issue 0

### 11. Description of Product or Protective System

This certificate covers the combined use of two previously certified pieces of equipment: the Flameproof Enclosure and the Control Boards. Also incorporated into the system are pre-certified lamps, pushbuttons and a switch.

#### Flameproof Enclosure:

The PCS2 Aluminium Flameproof Enclosure is primarily intended to house control equipment for vehicles or engines installed in hazardous areas where potentially explosive gasses occur.

It has both internal (M6) and external (M8) earth connections (tapped boss), M25 threaded entries (11 off) and M20 threaded entries (12 off) for the connection of suitable certified lamps, pushbuttons and cable glands (cable glands not supplied with the enclosure). All unused entries are to be fitted with suitably certified blanking plugs. A nitrile O-ring is provided with the enclosure.

#### Control Boards:

The Control Boards of the PCS2 are intended to enable a diesel engine to be located in an explosive atmosphere by protecting it against over speed and over temperature during operation via control of the air and fuel inlet valves. The Control Boards also provide an emergency stop facility for the diesel engine. The Control Boards comprise of a main control board with 10 intrinsically safe switch inputs and a single intrinsically safe speed sensor input, a single relay board with 8 volt-free relay connections, two LED boards each with 12 intrinsically safe outputs and a single auxiliary board with 15 intrinsically safe switch inputs. Also provided are intrinsically safe outputs to allow for the external connection of speed and temperature sensors as well as LED indicators and switch inputs. The PCS2 system is intended to be powered directly from the diesel engine battery supply via connections on the main control board.

### 12. Report Number

Intertek Reports G101063387 dated August 2013 and 104118311CHE-010 Dated 7<sup>th</sup> March 2022.

### 13. Special Conditions of Certification

#### (a). Special Conditions of Use

- The fasteners of the door of the enclosure shall be a minimum strength grade 70 and are to be tightened to 18.4Nm.
- If the lens of the indicator lamp becomes damaged or detached, then the indicator Lamp should be replaced.
- Flameproof joints are not intended to be repaired.

#### (b). Conditions of Manufacture - Routine Tests

- None.

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Intertek Testing & Certification Limited, Cleeve Road, Leatherhead, Surrey, KT22 7SA  
Registered No 3272281 Registered Office: Academy Place, 1-9 Brook Street, Brentwood, Essex, CM14 5NQ.

## SCHEDULE:

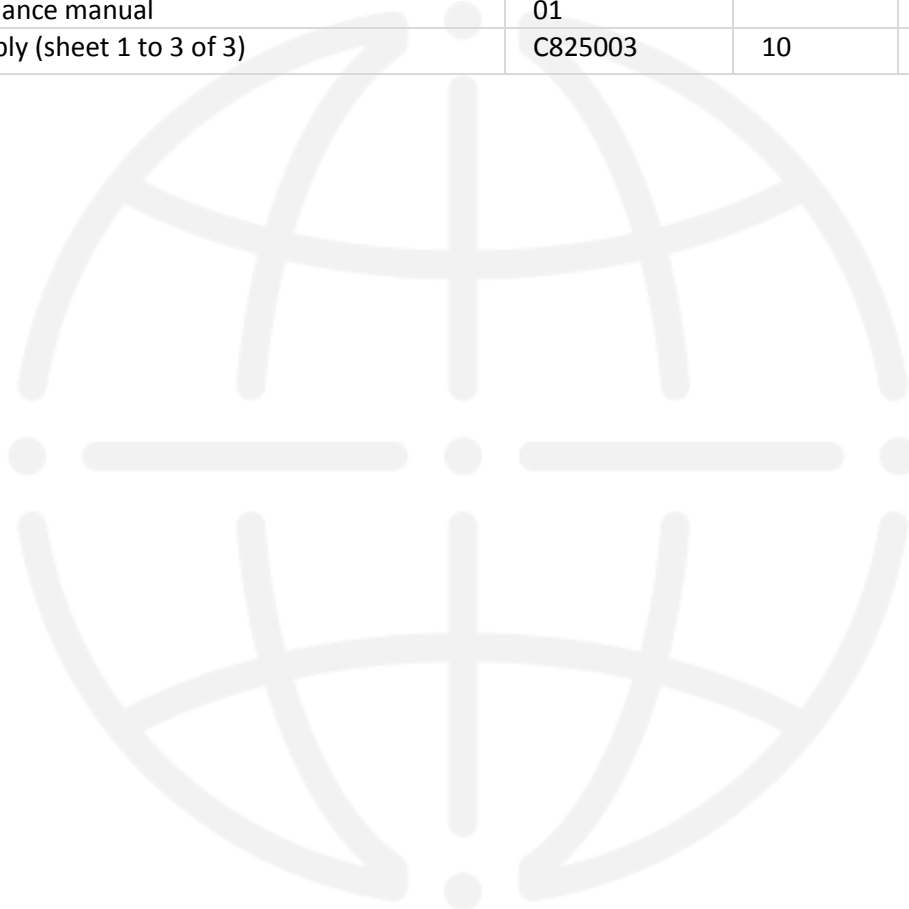
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### 14. Essential Health and Safety Requirements (EHSRs)

The relevant Essential Health and Safety Requirements (EHSRs) have been identified and assessed in Intertek Reports 104118311CHE-010 Dated 7<sup>th</sup> March 2022.

### 15. Drawings and Documents

Title:	Drawing No.:	Rev. Level:	Date:
PCS2™ Compact control unit Installation, Operation and Maintenance manual	MAN-GDP0009-01	12	25/05/2021
PCS2 Assembly (sheet 1 to 3 of 3)	C825003	10	16/11/2021



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