



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

Certificate No.: **IECEX ITS 13.0015X** issue No.: **0** Certificate history:

Status: **Current**

Date of Issue: **2013-08-26** Page 1 of 3

Applicant: **Pyroban Ltd**
Endeavour Works
Dolphin Road
Shoreham-by-Sea
West Sussex
BN43 6QG
United Kingdom

Electrical Apparatus: **FPS75 & FPS80 Starter Motors**
Optional accessory:

Type of Protection: **Ex d Flameproof**

Marking: **Ex d IIA T4 Gb -20°C to +45°C**

Approved for issue on behalf of the IECEx Certification Body: **V K Varma**

Position: **Certification Officer**

Signature:
(for printed version)

Vijay K. Varma
2013-08-26

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:

Intertek Testing & Certification Limited
ITS House, Cleeve Road,
Leatherhead,
Surrey, KT22 7SB
United Kingdom



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Manufacturer: **Pyroban Ltd**
Endeavour Works
Dolphin Road
Shoreham-by-Sea
West Sussex
BN43 6QG
United Kingdom

Additional Manufacturing location
(s):

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 : 2011 Explosive atmospheres - Part 0: General requirements
Edition: 6.0

IEC 60079-1 : 2007-04 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition: 6

*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

Test Report:
GB/ITS/ExTR13.0021/00

Quality Assessment Report:

GB/SIR/QAR06.0001/06



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

C7 Starter Motor (FPS75 Pyroban PN: 300825183):

The C7 starter motor is suitable for use on the CAT C7 engine (SAE1 flywheel housing) in hazardous areas where explosive gases occur. The unit is supplied in a mild steel flameproof enclosure and includes 3m of supply cable wired through Ex d glands and an Ex d blanking plug is used to blank out any unused entry points. The equipment has double pole wiring which is insulated from the chassis.

C9 Starter Motor (FPS80 Pyroban PN: 300825334): The C9 starter motor is suitable for use on the CAT C9 engine in hazardous areas where explosive gases occur. The unit is supplied in a mild steel flameproof enclosure and includes 3m of supply cable wired through Ex d glands and an Ex d blanking plug is used to blank out any unused entry points.

CONDITIONS OF CERTIFICATION: YES as shown below:

There are three types of special fastener upon which the flameproof protection concept depends, their property class/ yield stresses are:

M10 x 1.5 (or 5/8-11 UNC) shoulder bolt (3 off): Grade 12.9, 1220 N/mm² min

M8 cap screws (6 off): min tensile strength: 1034 N/mm²

M6 cap screws (9 off for FPS 75 and 10 off for FPS 80): min tensile strength (grade 12.9) 1220 N/mm²

The starter motor must not be turned on for more than 30 seconds at any one time. No more than 6 start attempts every 30 minutes