IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEx EXV 19.0031X** Page 1 of 4 Certificate history:

Status: **Current** Issue No: 0

Date of Issue: 2019-07-12

Applicant: **Pyropress Ltd**
Bell Close
Plympton
Plymouth
Devon
PL7 4JH
United Kingdom

Equipment: **Titan Ex db Switch**

Optional accessory:

Type of Protection: **Flameproof Ex 'db'**

Marking: Ex db IIB + H_2 T6.....T2 Gb Tamb -60ºC to +40ºC.....+90ºC

Approved for issue on behalf of the IECEx Certification Body: **S Clarke CEng MSc MIET**

Position: **Certification Manager**

Signature:
(for printed version)

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 www.iecex.com or use of this QR Code.

Certificate issued by:

ExVeritas Limited
Units 16-18 Abenbury Way
Wrexham Ind. Est.
Wrexham LL 139UZ
United Kingdom

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Certificate No.: **IECEx EXV 19.0031X**

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Manufacturer: **Pyropress Ltd**
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PL7 4JH
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Additional manufacturing locations:

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 equipment 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 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-1:2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

This Certificate **does not** indicate compliance with 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/EXV/ExTR19.0035/00

Quality Assessment Report:

GB/ITS/QAR11.0004/05

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EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

The Titan switch is intended to sense changes in temperature, pressure, level or flow via the use of mechanical actuators. The generic two-chamber enclosure is utilised for all applications and is constructed from aluminium LM25TF or material of greater tensile strength. One chamber contains the means (where necessary) of adjusting the set-point(s) whilst the other houses either a single or dual microswitch assembly. The Titan switch possesses five flamepaths. The respective switch outer case-top cover and switch outer case-electrical entry interfaces are of the flange type. The guide-operating rod interface is of the cylindrical type. And the respective switch outer case-guide and electrical entry-adaptor interfaces are of the threaded type with the latter always utilising a suitably certified adaptor. The maximum internal free volume of the flameproof chamber is 99cc. The limits on the ambient and process temperatures and the internal power dissipation shown in the table below ensure that the equipment does not exceed the maximum surface temperature of any given T Class:

T Class	Ambient Temperature Range (°C)	Permitted Process Temperature (°C)	Power Rating (W)
T6	-60 to +75	-60 to +65	2.5
T6	-60 to +70	-60 to +65	5
T6	-60 to +60	-60 to +65	10
T6	-60 to +50	-60 to +65	15
T6	-60 to +40	-60 to +55	20
T5	-60 to +90	-60 to +80	2.5
T5	-60 to +75	-60 to +80	10
T5	-60 to +70	-60 to +75	12.5
T5	-60 to +60	-60 to +70	17.5
T5	-60 to +50	-60 to +65	22.5
T5	-60 to +40	-60 to +60	27.5
T4	-60 to +90	-60 to +130	2.5
T4	-60 to +75	-60 to +130	10
T4	-60 to +70	-60 to +130	12.5
T4	-60 to +60	-60 to +130	17.5
T4	-60 to +50	-60 to +130	22.5
T4	-60 to +40	-60 to +130	27.5
T3	-60 to +90	-60 to +195	2.5
T3	-60 to +75	-60 to +195	10
T3	-60 to +70	-60 to +195	12.5
T3	-60 to +60	-60 to +195	17.5
T3	-60 to +50	-60 to +195	22.5
T3	-60 to +40	-60 to +195	27.5
T2	-60 to +90	-60 to +280	2.5
T2	-60 to +75	-60 to +280	10
T2	-60 to +70	-60 to +280	12.5
T2	-60 to +60	-60 to +280	17.5
T2	-60 to +50	-60 to +280	22.5
T2	-60 to +40	-60 to +280	27.5

SPECIFIC CONDITIONS OF USE: YES as shown below:
Special Conditions for Safe Use

- Flameproof joints not intended for repair

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- Suitably rated cable must be selected if the equipment is subject to service temperatures of 70°C or greater
- Fasteners associated with the flange flamepaths possess a minimum yield strength of 240 N/mm^2

Annex:

IECExEXV19.0031X Certificate Annex.pdf