

#### PE157/12 EU DECLARATION OF CONFORMITY

Manufacturer: Pyropress Limited

Address: Bell Close, Plympton, Plymouth, Devon, England, PL7 4JH

#### The Manufacturer hereby declares that the flameproof product:-

**Hermes Type:** PF41 & PF42 Pressure Switch

As being in compliance with the requirements of:

EU Directive 2014/34/EU, for the use in potentially explosive atmospheres: -

II 2G Ex db IIC Gb

T6 (Tamb -50°C to +71°C)

T5 (Tamb -50°C to +86°C)

T4 (Tamb -50°C to +100°C)

International Electrotechnical Commission IEC Certification Scheme for Explosion Atmospheres

Ex db IIC T6...T4 Gb

T6 (Tamb -50°C to +71°C)

T5 (Tamb -50°C to +86°C)

T4 (Tamb -50°C to +100°C)

When used within the limitations & conditions of the product specifications, working instructions &

**EC Type Examination Certificate Number:** ExVeritas 19ATEX0502X **IECEx Type Examination Certificate Number:** IECEx EXV 19.0032X

Harmonised standards applied: EN 60079-0: 2018, EN60079-1: 2014 Standards applied: IEC 60079-0: 2017 and IEC 60079-1: 2014-06

Other Directives applied: Pressure Equipment 97/23/EC, Sound Engineering Practice (SEP) Article 3 (3).

Other Standards applied: Ingress Protection, EN60529:1992; IPX6 & IP67 rated.

#### Notified Body responsible for Quality Assurance:

Intertek Testing & Certification Limited, Intertek House, Cleeve Road, Leatherhead, Surrey England KT22 7SB. Notified body No 0359.

#### Notified Body responsible for EU Type Examination Certificate:

Ex Veritas Limited, Units 16-18, Abenbury Way, Wrexham Industrial Estate, Wrexham, LL13 9UZ, UK. Notified body No 2585.

Equipment Specification: Product specifications are listed in the Technical file TCF 1050

#### This Declaration may only be used in its entirety & without change.

Modification of this equipment / product without prior approval from Pyropress Limited will render this declaration null & void.

Stephen Burns, Managing Director, On Behalf of Pyropress Limited

Signed. Dated...19th September 2019.

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### 1 EU - Type Examination Certificate

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

3 Certificate Number: ExVeritas 19ATEX0502X Issue: 0

4 Equipment: Hermes Ex db Switch

5 Manufacturer: Pyropress Ltd

6 Address: Bell Close, Plympton.

Plymouth,

Devon PL74JH UK

- 7 This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- ExVeritas, Notified Body number 2585 in accordance with Article 17 of the Council Directive 2014/34/EU of 26 February 2014, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to design and construction of equipment and protective systems for use in potentially explosive atmospheres given in Annex II to the Directive
- 9 Compliance with the applicable Essential Health and Safety Requirements has been assured by compliance with the following Standards and section 16 of this certificate:

EN 60079-0: 2018 EN 60079-1: 2014

- If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.
- This EU-Type Examination Certificate relates only to the design, construction, examination and tests of the specified equipment or protective system in accordance to the Directive 2014/34/EU. 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.
- The marking of the equipment shall include the following:

(Ex) II 2 G Ex db IIC T6... T4 Gb T6 Tamb -50°C to +71°C

T6 Tamb -50°C to +71°C T5 Tamb -50°C to +86°C T4 Tamb -50°C to +100°C

On behalf of the Veritas

S Clarke

Certification Manager



No. 8613

This certificate may only be reproduced in its entirety and without any change, schedule included.

The certificate is only valid when it carries an original signature.

For help or assistance relating to this certificate, contact <a href="mailto:info@exveritas.com">info@exveritas.com</a>.

ExVeritas, Units 16-18, Abenbury Way, Wrexham Industrial Estate, Wrexham, United Kingdom LL13 9UZ.

ExVeritas® is a registered trademark, unauthorised use will lead to prosecution.



#### Schedule

#### 13 Description of Equipment or Protective System

The Hermes switch is intended to sense changes in pressure via the use of various mechanical actuators. One or two microswitches are contained within a flameproof chamber that possesses an internal free volume of less than 10cc. This chamber comprises a tubular housing that acts at one end as a gland body for an integral cable gland and which is closed off at the other by a threaded end cap. The cable gland utilises an elastomeric sealing ring and the compression element's interface with the housing forms a flame-path of the threaded type. The housing-end cap interface also forms a threaded flame-path. And the flame-path(s) formed by the end cap-operating rod interface(s) - one or two depending on the number of microswitches fitted - is/are of the cylindrical type. An outer tube constructed of stainless steel or material of greater tensile strength serves to shield the end cap from damage and uphold the type of protection.

Ratings: 250Vac 5A or 30Vdc 3A

#### 14 Descriptive Documents

#### 14.1 Associated Report and Certificate History:

Report Number	Cert Issue Date	Issue	Comment
R2100/A/1	22 Aug 2019	0	Initial issue of the Prime Certificate

#### 14.2 Compliance Drawings:

#### Issue 0

Title:	Drawing No.:	Rev. Level:	Sheets	Date:
Certification Drawing Hermes Ex db Switch	1995/A1	1	1 of 1	28/03/19
Certification Drawing Label, Hermes Ex db Switch	1996/A3	1	1 of 1	28/03/19

#### 15 Conditions of Certification

#### 15.1 Special Conditions for Safe Use

- Flameproof joints not intended for repair.
- External earthing is facilitated by the electrical continuity between the enclosure and the process connection. End users must take this into consideration during installation.
- Microswitches must only be accessed by Pyropress-approved personnel and only when no explosive atmosphere is present.

### 15.2 Conditions for Use – Manufacturer's responsibility

Pyropress must supply the Hermes pre-wired with suitably rated cable.

#### 16 Essential Health and Safety Requirements

Essential Health and Safety Requirements are addressed by the standards listed in section 9 and where required the report listed in section 14.1

The manufacturer shall inform the Notified Body of any modifications to the design of the product described by this schedule.

Certificate: ExVeritas 19ATEX0502X Issue 0

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For help or assistance relating to this certificate, contact <a href="mailto:info@exveritas.com">info@exveritas.com</a>.

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# 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 EXV 19.0032X

Issue No: 0

Certificate history: Issue No. 0 (2019-08-23)

Status:

Current

Page 1 of 3

Date of Issue:

2019-08-23

Applicant:

Pyropress Ltd Bell Close, Plympton,

Plymouth, Devon PL7 4JH United Kingdom

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Equipment:

Hermes Ex db Switch

Optional accessory:

Type of Protection:

Flameproof Ex 'db'

Marking:

Ex db IIC T6...T4 Gb

T6 Tamb -50°C to +71°C

T5 Tamb -50°C to +86°C

T4 Tamb -50°C to +100°C

Approved for issue on behalf of the IECEx

Certification Body:

S Clarke CEng MSc MiET

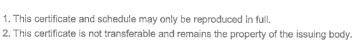
Position:

Signature:

(for printed version)

Date:

Certification Manager



3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

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





# IECEx Certificate of Conformity

Certificate No:

IECEx EXV 19.0032X

Issue No: 0

Date of Issue:

2019-08-23

Page 2 of 3

Manufacturer:

Pyropress Ltd
Bell Close,
Plympton,
Plymouth,
Devon
PL7 4JH
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 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 : 2017

Explosive atmospheres - Part 0: Equipment - General requirements

Edition:7.0

IEC 60079-1: 2014-06

Explosive atmospheres - Part 1: Equipment protection by fiameproof enclosures "d"

Edition:7.0

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/EXV/ExTR19.0036/00

Quality Assessment Report:

GB/ITS/QAR11.0004/05



# IECEx Certificate of Conformity

Certificate No: IECEx EXV 19.0032X Issue No: 0

Date of Issue: 2019-08-23 Page 3 of 3

Schedule

#### **EQUIPMENT:**

Equipment and systems covered by this certificate are as follows:

The Hermes switch is intended to sense changes in pressure via the use of various mechanical actuators. One or two microswitches are contained within a flameproof chamber that possesses an internal free volume of less than 10cc. This chamber comprises a tubular housing that acts at one end as a gland body for an integral cable gland and which is closed off at the other by a threaded end cap. The cable gland utilises an elastomeric sealing ring and the compression element's interface with the housing forms a flame-path of the threaded type. The housing-end cap interface also forms a threaded flame-path. And the flame-path(s) formed by the end cap-operating rod interface(s) - one or two depending on the number of microswitches fitted - is/are of the cylindrical type. An outer tube constructed of stainless steel or material of greater tensile strength serves to shield the end cap from damage and uphold the type of protection.

Ratings: 250Vac 5A or 30Vdc 3A

#### SPECIFIC CONDITIONS OF USE: YES as shown below:

#### Special Conditions of Use

- Flameproof joints not intended for repair.
- External earthing is facilitated by the electrical continuity between the enclosure and the process connection. End users must take this into consideration during installation.
- Microswitches must only be accessed by Pyropress-approved personnel and only when no explosive atmosphere is present.

#### Manufacturer's Responsibility

• Pyropress must supply the Hermes pre-wired with suitably rated cable.

#### Annex:

IECEx ExV19.0032X Annex.pdf



Annex to: IECEx EXV 19.0032X issue 0

Manufacturer's documents:								
Title:	Drawing No.:	Rev	Sheets	Date:				
Certification Drawing Hermes Ex db Switch	1995/A1	1	1 of 1	28/03/19				
Certification Drawing Label, Hermes Ex db Switch	1996/A3	1	1 of 1	28/03/19				

Note: An \* is included before the title of documents that are new or revised.