



PE145/16

EU DECLARATION OF CONFORMITY

Manufacturer: Pyropress Limited

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

The Manufacturer hereby declares that the flameproof products: -

Perseus Type:	PF6, PR6	Pressure Switch
	VF6, VR6.	Vacuum Switch
	DPF6, DPR6.	Differential Pressure Switch
	TF6, TR6.	Temperature Switch
	LF6, RF6, LR6.	Level Switch
	FF6, FR6.	Flow Switch

Comply with the requirements of:

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

II 2G Ex db IIC T6...T5 Gb. Certified: T6 (-50°C to +75°C), T5 (-50°C to +90°C),

II 2D Ex tb IIIC T85°C...T100°C Db: T85°C (-50°C to +75°C), T100°C (-50°C to +90°C)

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

EU Type Examination Certificate Number: ExVeritas 17ATEX0304X

IECEX Type Examination Certificate Number: IECEX EXV 17.0031X

Harmonised standards applied: EN60079-0:2018, EN60079-1:2014 and EN60079-31:2014.

Standards applied: IEC 60079-0:2017, IEC60079-1:2014-06 and IEC 60079-31:2013.

Other Directives applied: Pressure Equipment 2014/68/EU, Sound Engineering Practice (SEP), Chapter 1, Article 4 (3).

Other Standards applied: Ingress Protection, BS EN 60529:1992+A2:2013, IEC 60529:1989+A1:1999+A2:2013; IP66/IP67 rated.

Notified Body responsible for Quality Assurance:

Intertek Italia Spa, Via Guido Miglioli, 2/A, 20063 Cernusco sul Naviglio (MI), Italy.
Notified body No 2575.

Notified Body responsible for EU Type Examination Certificate:

ExVeritas ApS, Severinsmindevej 6, 4420 Regstrup, Denmark.
Notified body No 2804

Notified Body responsible for IECEX Type Examination Certificates:

ExVeritas, 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 1040

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....30th October 2020.

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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 17ATEX0304X Issue: 2

4 Equipment: Perseus Ex db tb Switch

5 Manufacturer: Pyropress Ltd

6 Address: Bell Close
Plympton
Plymouth
Devon, PL7 4JH, UK.

7 This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

8 ExVeritas, Notified Body number 2804 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

EN60079-31:2014

10 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.

11 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.

12 The marking of the equipment shall include the following:

 II 2G Ex db IIC T6...T5 Gb	Tamb	-50°C to +75°C T6 -50°C to +90°C T5
II 2D Ex tb IIIC T85°C...T100°C Db		-50°C to +75°C T85°C -50°C to +90°C T100°C



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 info@exveritas.com.

ExVeritas ApS, Severinsmindevej 6, 4420 Regstrup, Denmark.

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

Schedule

13 Description of Equipment or Protective System

The Perseus switch is used to sense changes in temperature, pressure, level and flow via mechanical actuators. The generic two chamber enclosure is utilised for all applications and is constructed from aluminium LM25TF or material of greater tensile strength. The terminal chamber has access via an M52 threaded cover with up to two M20 cable entries (optional 1/2" NPT) which can be positioned around the terminal chamber and contains the terminals and PCB with microswitch fitted. An operating rod interfaces to the second chamber using a cylindrical path fitted within a threaded bushing. The Perseus housing maintains a rating of IP6X at a minimum. The maximum internal free volume is 99cc.

Max Rating: 250V 5A AC 30V 5A DC

13.1 Detail of changes

Issue 1

- Introduction of protection by Enclosure 'tb' for dust environments to EN 60079-31
- Update to latest general Requirements EN 60079-0

Issue 2

- Transfer of certificate to Danish NB – no drawing changes

14 Descriptive Documents

14.1 Associated Report and Certificate History:

Report Number	Cert Issue Date	Issue	Comment
R1330/A/1	13 th Feb 2018	0	Initial issue of the Prime Certificate
R1727/A/1	19 Mar 2020	1	Issue of Variation 1
N/A – ExV3035	31 Oct 2020	2	Transfer of the certificate from ExVeritas UK, Notified Body number 2585 to ExVeritas Denmark, Notified Body number 2804. Certificate number remains unchanged.

14.2 Compliance Drawings:

Issue 1

Title:	Drawing No.:	Sheets	Rev. Level	Date:
Certification Drawing, Perseus Ex db Switch	1218/A1	1 of 1	5	28.01.20
Certification Drawing, Labels, Perseus Ex db Switch	1219/A3	1 of 1	5	28.01.20

15 Conditions of Certification

15.1 Special Conditions for Safe Use

- Under rated conditions, the cable temperature can reach 9K above ambient temperature, ensure selection of correctly rated cable for the application.
- Flameproof joints not intended for repair

15.2 Conditions for Use

None

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 17 ATEX0304X Issue 2

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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 17.0031X** Page 1 of 4 [Certificate history:](#)
Issue 0 (2018-04-20)

Status: **Current** Issue No: 1

Date of Issue: 2020-05-13

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

Equipment: **Perseus Ex db tb Switch**

Optional accessory:

Type of Protection: **Flameproof Ex 'db', Enclosure 'tb'**

Marking: Ex db IIC T6...T5 Gb Tamb -50°C to +75°C T6
-50°C to +90°C T5
Ex tb IIIC T85°C...T100°C Db Tamb -50°C to +75°C T85°C
-50°C to +90°C T100°C

Approved for issue on behalf of the IECEx
Certification Body:

Sean 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





IECEx Certificate of Conformity

Certificate No.: **IECEX EXV 17.0031X**

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Date of issue: 2020-05-13

Issue No: 1

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

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

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

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 Reports:

[GB/EXV/EXTR17.0030/00](#)

[GB/EXV/EXTR20.0010/00](#)

Quality Assessment Report:

[GB/ITS/QAR11.0004/06](#)



IECEX Certificate of Conformity

Certificate No.: **IECEX EXV 17.0031X**

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Date of issue: 2020-05-13

Issue No: 1

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The Perseus switch is used to sense changes in temperature, pressure, level and flow via mechanical actuators. The generic two chamber enclosure is utilised for all applications and is constructed from aluminium LM25TF or material of greater tensile strength. The terminal chamber has access via an M52 threaded cover with up to two M20 cable entries (Optional 1/2" NPT) which can be positioned around the terminal chamber and contains the terminals and PCB with microswitch fitted. An operating rod interfaces to the second chamber using a cylindrical path fitted within a threaded bushing. The Perseus housing maintains a rating of IP6X at a minimum.

The maximum internal free volume is 99cc.

Max Rating: 250V 5A AC 30V 5A DC

Title:	Drawing No.	Sheets	Rev. Level	Date:
Certification Drawing Perseus, Ex db Switch	1218/A1	1 of 1	5	28.01.20
Certification Drawing, Labels, Perseus Ex db Switch	1219/A3	1 of 1	5	28.01.20

SPECIFIC CONDITIONS OF USE: YES as shown below:

- Under rated conditions, the cable temperature can reach 9K above the ambient temperature, ensure selection of correctly rated cable for the application
- Flameproof joints not intended for repair



IECEx Certificate of Conformity

Certificate No.: **IECEX EXV 17.0031X**

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Date of issue: 2020-05-13

Issue No: 1

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

- Upgrade to the latest IEC 60079-0
- Additon of Dust atmosphere assessment to IEC60079-31 'tb' Db