PE146/9 **EU/UK DECLARATION OF CONFORMITY**

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

The Manufacturer hereby declares that the Intrinsically Safe product: - Argus Type:

PI510, PI520	Pressure Switch	TI510, TI520	Temperature Switch
PI530, PI540	High Pressure Switch	TI570	Capillary Temperature Switch
PI560	Low Pressure Switch	LI510	Horizontal Level Switch Mechanical
VI560	Vacuum Switch	LI520	Mechanical and Reed Vertical Level Switch
DI560	Differential Pressure Switch	FI510	Flow Switch

Comply with the requirements of:

Product Intended for Use in Potentially Explosive Atmospheres
EU Directive 2014/34/EU and UKSI 2016:1107 (as amended by UKSI 2019:696) – Schedule 3A, Part 1.
II 1G Ex ia IIC T6…T2 Ga (-50°C ≤ Ta ≤ +78°C…+93°C)

When used within the limitations & conditions of the product specifications, working instructions &
EC Type Examination Certificate Number: ExVeritas 21ATEX0806X
IECEx Type Examination Certificate Number: IECEx EXV 21.0020X
UKEX Type Examination Certificate Number: ExVeritas 21UKEX0807X

Harmonised standards applied:
EN IEC 60079-0:2018, EN 60079-11:2012

Other standards applied:
IEC 60079-0:2017, IEC 60079-11:2011,
Ingress Protection, EN60529:1992+A2:2013 & IEC 60529:1989+A1:1999+A2:2013, IP66/IP67 rated.

Notified Body responsible for EU Type Examination Certificate:
ExVeritas ApS, Severinsmindevej 6, 4420 Regstrup, Denmark.
Notified body No 2804.
Notified Body responsible for IECEx and UKEX Type Examination Certificates:
Ex Veritas Ltd, Units 16-18, Abenbury Way, Wrexham Industrial Estate, Wrexham, LL13 9UZ, UK.
Notified body No 2585.
Notified Body responsible for Quality Assurance:
Intertek Italia Spa, Via Guido Miglioli, 2/A, 20063 Cernusco sul Naviglio (MI), Italy.
Notified body No 2575.
Intertek Testing & Certification Ltd, Intertek House, Cleeve Road, Leatherhead, Surrey, England KT22 7SB.
Notified body No: 0359.

Equipment Specification: Product specifications are listed in the Technical file TCF 1020.

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...20th May 2021.

1 EU - Type Examination Certificate

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

3 Certificate Number: Ex Veritas 21ATEX0806X Issue: 0

4 Equipment: Argus Ex ia Switch

5 Manufacturer: Pyropress Limited

6 Address: Bell Close, Plympton, Plymouth, PL7 4JH United Kingdom

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 IEC 60079-0: 2018 EN 60079-11:2012

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 1G Ex ia IIC T6 … T2 Ga
Tamb -50°C TO +78°C … +93°C

DANAK
PROD Reg.No. 7044
Member of EA MLA

On behalf of ExVeritas

Peter Lauritzen
Managing Director

Schedule

13 Description of Equipment or Protective System

The Argus range of switches include one or two micro switches which are mounted inside an enclosure and which are operated by means of mechanical actuator reacting to a particular external phenomenon. The Argus reed level switch includes one or two reed switches acting on the movement of the magnets indicating level of medium.

There are two alternative materials for enclosure housing the terminals, used for external connections and micro switches. The enclosures are made from stainless steel or Polyphenylene Sulphide (PPS). The enclosures provide degree of protection of IP66/IP67.

Various switch actuation mechanism options are provided including pressure, differential pressure, level, flow or temperature switches covering different temperature ranges.

The relationship between maximum ambient temperature, process temperature range and assigned temperature class is shown below:

Ambient temperature range	Permitted process temperature	Temperature class
-50°C to +78°C	-50°C to +78°C	T6
	-50°C to +95°C	T5
-50°C to +93°C	-50°C to +93°C	T5
	-50°C to +130°C	T4
	-50°C to +195°C	T3
	-50°C to +260°C	T2

The equipment shall be supplied from intrinsically safe barriers or galvanic isolators.
The maximum input parameters are: Ui = 28 V, Ii = 93 mA, Pi = 0.65 W, Ci = 0 F, Li = 0 H

14 Descriptive Documents

14.1 Associated Report and Certificate History:

Report Number	**Cert Issue Date**	**Issue**	**Comment**
R3133/A/1	04/03/2021	0	Initial issue of the Prime Certificate

14.2 Compliance Drawings:

Issue 0

Title:	Drawing No.:	Rev. Level:	Date:
Argus User Guide	UG004 Argus user guide	10	24/05/2021
Certification Drawing PCB for Microswitch, Argus Ex ia	1001A3	2	14/10/2015
Certification Drawing PCB for Reed Switch, Argus Ex ia	1832A3	1	11/01/2016
Certification Drawing Reed Switch Assembly, Argus Ex ia	1833A3	1	11/01/2016
Certification Drawing Microswitch Assembly, Argus Ex ia	A4M9991	2	13/10/2015
Certification Drawing Argus Ex ia Switch	1271A1	3	15/10/2020

Schedule continued overleaf.

Schedule

15 Conditions of Certification

15.1 Special Conditions for Safe Use

1. During live maintenance, adjustments, or servicing of the equipment the aluminium parts may be exposed. Care shall be taken to avoid the risk of ignition from incendiary, impact, or abrasive sparks.

2. The DIN plug and socket is made of non-conductive material. Care shall be taken to avoid electrostatic discharge during maintenance, adjustments, or servicing. Clean only with a damp cloth.

15.2 Conditions for Use (Routine tests)

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.

1 **UNITED KINGDOM CONFORMITY ASSESSMENT**

UK TYPE EXAMINATION CERTIFICATE

2 **Product Intended for use in Potentially Explosive Atmospheres**
UKSI 2016:1107 (as amended by UKSI 2019:696) – Schedule 3A, Part 1

3	Type Examination Certificate Number:	ExVeritas 21UKEX0807X	Issue: **0**
4	Product:	Argus Ex ia Switch	
5	Manufacturer:	Pyropress Limited	
6	Address:	Bell Close, Plympton, Plymouth, PL7 4JH United Kingdom	

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

8 ExVeritas Limited Approved Body number 2585, 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 by UKSI 2019:696), 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.

9 Compliance with the applicable Essential Health and Safety Requirements has been assured by compliance with:

BS EN IEC 60079-0: 2018 BS EN 60079-11:2012

Except in respect of those requirements listed at section 16 of the schedule to this certificate.

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 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.

12 The marking of the equipment shall include the following:

II 1G Ex ia IIC T6 … T2 Ga
Tamb -50°C TO +78°C … +93°C

UKAS PRODUCT CERTIFICATION
No. 8613

On behalf of ExVeritas

S Clarke CEng MSc FIET
Managing Director

13 Description of Product

The Argus range of switches include one or two micro switches which are mounted inside an enclosure and which are operated by means of mechanical actuator reacting to a particular external phenomenon. The Argus reed level switch includes one or two reed switches acting on the movement of the magnets indicating level of medium.

There are two alternative materials for enclosure housing the terminals, used for external connections and micro switches. The enclosures are made from stainless steel or Polyphenylene Sulphide (PPS). The enclosures provide degree of protection of IP66/IP67.

Various switch actuation mechanism options are provided including pressure, differential pressure, level, flow or temperature switches covering different temperature ranges.

The relationship between maximum ambient temperature, process temperature range and assigned temperature class is shown below:

Ambient temperature range	Permitted process temperature	Temperature class
-50°C to +78°C	-50°C to +78°C	T6
	-50°C to +95°C	T5
-50°C to +93°C	-50°C to +93°C	T5
	-50°C to +130°C	T4
	-50°C to +195°C	T3
	-50°C to +260°C	T2

The equipment shall be supplied from intrinsically safe barriers or galvanic isolators.
The maximum input parameters are: Ui = 28 V, Ii = 93 mA, Pi = 0.65 W, Ci = 0 F, Li = 0 H

14 Descriptive Documents

14.1 Associated Report and Certificate History:

Report Number	Cert Issue Date	Issue	Comment
R3133/A/1	04/03/2021	0	Initial issue of the Prime Certificate

14.2 Compliance Drawings:

Issue 0

Title:	Drawing No.:	Rev. Level:	Date:
Argus User Guide	UG004 Argus user guide	10	24/05/2021
Certification Drawing PCB for Microswitch, Argus Ex ia	1001A3	2	14/10/2015
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Certification Drawing Argus Ex ia Switch	1271A1	3	15/10/2020

Schedule continued overleaf.

15 Conditions of Certification

15.1 Special Conditions for Safe Use

1. During live maintenance, adjustments, or servicing of the equipment the aluminium parts may be exposed. Care shall be taken to avoid the risk of ignition from incendiary, impact, or abrasive sparks.

2. The DIN plug and socket is made of non-conductive material. Care shall be taken to avoid electrostatic discharge during maintenance, adjustments, or servicing. Clean only with a damp cloth.

15.2 Routine tests

None.

16 Essential Health and Safety Requirements (Regulations Schedule 1)

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 ExVeritas of any modifications to the design of the product described by this schedule.

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 21.0020X**

Certificate history:

Status: **Current**

Issue No: 0

Date of Issue: 2021-05-19

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

Equipment: **Argus Ex ia Switch**

Optional accessory:

Type of Protection: **Equipment protection by intrinsic safety "i"**

Marking: Ex ia IIC T6 ... T2 Ga
Tamb -50°C TO +78°C … +93°C

Approved for issue on behalf of the IECEx Certification Body: **Sean Clarke CEng MSc FIET**

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 21.0020X**

Date of issue: 2021-05-19 Issue No: 0

Manufacturer: **Pyropress Limited**
Bell Close
Plympton
Plymouth 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 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

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/ExTR21.0028/00

Quality Assessment Report:

GB/ITS/QAR11.0004/07

IECEx Certificate of Conformity

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

Argus Ex ia Switch

SPECIFIC CONDITIONS OF USE: YES as shown below:

- During live maintenance, adjustments or servicing of the equipment the aluminium parts may be exposed. Care shall be taken to avoid the risk of ignition from incendiary, impact or abrasion sparks.
- The DIN plug and socket is made of non-conductive material. Care shall be taken to avoid electrostatic discharge during maintenance, adjustments or servicing. Clean only with a damp cloth.

Annex:

IECEx Certificate Annex.pdf

Description Continued:

The Argus range of switches include one or two micro switches which are mounted inside an enclosure and which are operated by means of mechanical actuator reacting to a particular external phenomenon. The Argus reed level switch includes one or two reed switches acting on the movement of the magnets indicating level of medium.

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Compliance drawings

Issue 0

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Certification Drawing PCB for Reed Switch, Argus Ex ia	1832A3	1	11/01/2016
Certification Drawing Reed Switch Assembly, Argus Ex ia	1833A3	1	11/01/2016
Certification Drawing Microswitch Assembly, Argus Ex ia	A4M9991	2	13/10/2015
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ExVeritas, Units 16-18, Abenbury Way, Wrexham Industrial Estate, Wrexham, United Kingdom LL13 9UZ.