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 BAS 20.0080X**	Page 1 of 4	Certificate history:
Status:	**Current**	Issue No: 4	Issue 3 (2022-06-20) Issue 2 (2021-10-14) Issue 1 (2021-06-15) Issue 0 (2021-05-14)
Date of Issue:	2022-08-12		
Applicant:	**Fortress Interlocks Ltd** 2 Inverclyde Drive Wolverhampton WV4 6FB **United Kingdom**		
Equipment:	**Fortress' EXP Ex Rated Interlock Products**		
Optional accessory:			
Type of Protection:	**Flameproof, Protection by enclosure, non-electrical**		
Marking:	**Ex db h IIC T6 Gb** **Ex h tb IIIC T85°C Db IP67** **T_{amb} -20°C to +60°C**		

Approved for issue on behalf of the IECEx Certification Body: **Mr R S Sinclair**

Position: **Technical Manager**

Signature: (for printed version)

Date: (for printed version) 15/8/2022

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:

SGS Baseefa Limited
Rockhead Business Park
Staden Lane
Buxton, Derbyshire, SK17 9RZ
United Kingdom

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Manufacturer: **Fortress Interlocks Ltd**
2 Inverclyde Drive
Wolverhampton WV4 6FB
United Kingdom

Manufacturing locations: **Fortress Interlocks Ltd**
2 Inverclyde Drive
Wolverhampton WV4 6FB
United Kingdom

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 Edition:7.0	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-1:2014-06 Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-31:2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
ISO 80079-36:2016 Edition:1.0	Explosive atmospheres - Part 36: Non-electrical equipment for explosive atmospheres - Basic methods and requirements

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/BAS/ExTR20.0199/00
GB/BAS/ExTR20.0199/01
GB/BAS/ExTR21.0166/00
GB/BAS/ExTR22.0043/00
GB/BAS/ExTR22.0141/00

Quality Assessment Report:

GB/BAS/QAR21.0006/01

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

Fortress' EXP Ex rated interlock products are a range of electromechanical Solenoid Controlled Guard Locking Devices and Interlocking Devices that can be used to add electronic locking control and monitoring to a variety of machine guarding and key interlocking applications for use in hazardous areas. All products will have the part number prefix 'EXP' and can be defined using the following part number structure;

Ex Rated Solenoid Controlled Guard Locking or Key Interlocking Devices;
- Part Number; EXP z XL y x

Ex Rated Interlocking Switch Devices;
- Part Number; EXP z XT w x

Where;
z = Mechanical modules from Fortress' Alfred product range or Frotress' amGardpro product range.
y = Switching and Solenoid information for Fortress Alfred Ex Rated Solenoid Module.
x = Optional mounting plate assembly.
w = Switching information for Fortress Alfred Ex Rated Safety Switch Module.

All product types listed above are rated at 24V DC and 350mA and contain either an Ex Rated Solenoid Module or Ex Rated Safety Switch Module housed within a stainless steel flameproof 'db' type enclosure.

The Fortress Ex Rated Solenoid Module comprises of a stainless steel enclosure and lid assembly. Internally the Solenoid Modules are fitted with a PCB, solenoid sub assembly, switchbank sub assembly and an actuator sub assembly which contains a plunger which forms a cylindrical joint with the enclosure body. The plunger interfaces with the head housing where keys or actuator assemblies are manually operated by the end user.

The Solenoid Modules may also be fitted with an optional Auxiliary release/override which forms a cylindrical joint with the enclosure lid, which is manually operated.

The Ex Rated Solenoid Module is available in one of the following variants;
- XL411 – Power-to-Unlock, Safety-On-Guard-Locking
- XL416 – Power-to-Unlock, Safety-On-Guard
- XL471 – Power-to-Lock, Safety-On-Guard-Locking
- XL461 – Power-to-Lock, Safety-On-Guard

The Fortress Ex Rated Safety Switch is also comprised of a stainless steel enclosure and lid. Internally the Safety Switch Module is fitted with a PCB, switchbank sub assembly and an actuator sub assembly which contains a plunger which forms a cylindrical joint with the enclosure body.

The Ex Rated Safety Switch Module is available in the following variant;
- XT401 – 2NC, 1NO Safety Switch

The lids for both the Ex Rated Solenoid and Safety Switch Modules are secured to the enclosure bodies using ten stainless steel button head Torx screws of grade A2-70.

An M20 cable entry hole is provided in the end of each enclosure body opposite to the plunger as specified on the certification drawings for the accommodation of suitable IECEx/ATEX/UKEX equipment certified cable entry device.

SPECIFIC CONDITIONS OF USE: YES as shown below:
1. It is the responsibility of the installation engineer to ensure that a suitable IECEx equipment certified cable gland is installed in accordance with IEC 60079-14, which meets the IP rating of IP67, to ensure that this is maintained on the enclosure.

2. Flameproof joints are not intended to be repaired.

3. Replacement fasteners must be identical to those as detailed by the manufacturer. The specification of these are M8 x 14mm, property class A2-70 with a minimum yield strength of 700 MPa to ISO 3506, ISO 262, ISO 965-1 and ISO 965-3.

4. When used for a Group III application, the adhesive labels and non-metallic coatings may store electrostatic charge and become a source of ignition. Guidance on the protection against the risk of ignition due to electrostatic discharge can be found in IEC TS 60079-32-1. Cleaning of the adhesive labels and non-metallic coatings should only be done with a damp cloth.

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Variation 4.1

Addition of a tension pin to assist the screw in retention within the plunger sub assembly not affecting certification.

ExTR: **GB/BAS/ExTR22.0141/00**	File Reference: **22/0426**