

1 **EU - TYPE EXAMINATION CERTIFICATE**

2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 2014/34/EU**

3 EU - Type Examination Certificate Number: **SGS20ATEX0171X – Issue 4**

4 Product: **Fortress' EXP Ex Rated Interlock Products**

5 Manufacturer: **Fortress Interlocks Ltd**

6 Address: **2 Inverclyde Drive, Wolverhampton, WV4 6FB, United Kingdom**

7 This re-issued certificate extends EU Type Examination Certificate No. **SGS20ATEX0171X** to apply to product designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

8 SGS Fimko Oy, Notified Body number 0598, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, 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 Annex II to the Directive.

The examination and test results are recorded in confidential Report No. **See Certificate History**

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

EN IEC 60079-0:2018 EN 60079-1:2014 EN 60079-31:2014 EN ISO 80079-36:2016

except in respect of those requirements listed at item 18 of the Schedule.

10 If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

11 This EU - TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

12 The marking of the product shall include the following :

**⊕ II 2 GD Ex db h IIC T6 Gb T_{amb} -20°C to +60°C
Ex h tb IIIC T85°C Db IP67**

SGS Fimko Oy Customer Reference No. **8029**

Project File No. **22/0426**

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Schedule

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Certificate Number SGS20ATEX0171X – Issue 4

15 Description of Product

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 Fortress' am Gardpro 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 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 ATEX equipment certified cable entry device.

16 Report Number

See Certificate History.

17 Specific Conditions of Use

1. It is the responsibility of the installation engineer to ensure that a suitable UKEX equipment certified cable gland is installed in accordance with EN 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 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 Group III application, the adhesive labels and non-metallic coatings may store electrostatic charge and become a source of ignition. Guidance on protection against risk of ignition due to electrostatic discharge can be found in CLC/TR 60079-32-1. Cleaning of the adhesive labels and non-metallic coatings should only be done with a damp cloth.

18 Essential Health and Safety Requirements

In addition to the Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9, the following are considered relevant to this product, and conformity is demonstrated in the report:

Clause	Subject
1.2.7	LVD type requirements
1.2.8	Overloading of equipment (protection relays, etc.)
1.4.1	External effects
1.4.2	Aggressive substances, etc.

19 Drawings and Documents

New drawings submitted for this issue of certificate:

Number	Sheet	Issue	Date	Description
AD-00068	1-6	0-G	19-07-2022	Alfred Ex Rated Solenoid Module Assembly Drawing
AD-00075	1-2	0-G	19-07-2022	Alfred Ex Rated Switch Module Assembly Drawing

Current drawings which remain unaffected by this issue:

Number	Sheet	Issue	Date	Description
AD-00071	1-8	1-A	29-10-21	EXP/Alfred Flameproof Enclosure 'db' Cert Drawing
AD-00079	1	0-B	23-03-21	Alfred Solenoid Controlled Guard Lock Products
AD-00080	1 - 5	0-A	14-04-21	Alfred Mechanical Interfaces With Elec. Products
AD-00081	1	0-A	23-03-21	Alfred Safety Switch Products
AD-00082	1	0-A	23-03-21	Alfred Safety Switch With Escape Release
AD-00083	1 - 2	0-B	08-04-21	Alfred Bolt Interlocks With Monitoring Switch
AD-00084	1 - 2	0-B	08-04-21	Mech. Key Release With Monitoring Sol. Control
AD-00087	1	0	11-03-21	Electrical Modules of Alfred Product Range
AD-00089	1	0-A	14-04-21	Ex Rated Sol Control Guard Lock With Pro Modules
AD-00090	1	0-A	14-04-21	Ex Rated Safety Switch With AMGARDPRO Modules
AD-00091	1	0-A	14-04-21	Ex Rated Safety Switch With Pro Modules & E. Release
AD-00092	1	0-A	14-04-21	Ex Rated Safety Switch With Pro Handle E. Release

Number	Sheet	Issue	Date	Description
FECD00037	1 - 4	V1.7	20-05-21	Product Marking for all Alfred Electromechanical Products
FECD00039	1 - 10	V1.1	20-03-21	Spring Energy Calculations for Alfred Non-Electrical ATEX and IECEx Assessment

These drawings are common to IECEx BAS 20.0080X and BAS21UKEX0009X and are held with IECEx BAS 20.0080X

20 Certificate History

Certificate No.	Date	Comments
SGS20ATEX0171X	14 May 2021	The release of the prime certificate. The associated test and assessment against the requirements of EN 60079-0:2018, EN 60079-1:2014, EN 60079-31:2014 and EN ISO 80079-36:2016 is documented in Test Report No. GB/BAS/ExTR20.0199/00.
SGS20ATEX0171X Issue 1	10 June 2021	To update drawing FECD00037 to allow the products to be optionally marked with only IECEx, ATEX and UKEX certificate numbers and remove reference to North American certificate numbers. Minor correction to general product description. Baseefa Certification Report GB/BAS/ExTR20.0199/01 refers.
SGS20ATEX0171X Issue 2	14 October 2021	To allow for minor drawing changes not affecting certification. SGS Baseefa certification report GB/BAS/ExTR21.0166/00 refers.
SGS20ATEX0171X Issue 3	17 June 2022	To allow for minor drawing changes not affecting certification. SGS Baseefa certification report GB/BAS/ExTR22.0043/00 refers.
SGS20ATEX0171X Issue 4	12 August 2022	To allow a minor change to the internals of the equipment, addition of an additional tension pin to the plunger assembly not affecting certification. SGS Baseefa certification report: GB/BASExTR22.0141/00
For drawings applicable to each issue, see original of that issue.		