

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 **Baseefa14ATEX0112X – Issue 3**
Number:

3.1 In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Supplementary Certificates to such EC-Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20 April 2016.

4 Product: **937X-FB2-**-** Fieldbus Barrier System**

5 Manufacturer: **Eaton Electric Limited**

6 Address: **Great Marlings, Butterfield, Luton, Bedfordshire, LU2 8DL United Kingdom**

7 This re-issued certificate extends EC Type Examination Certificate No. Baseefa14ATEX0112X 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.

8.1 The original certificate was issued by SGS Baseefa Ltd (UK Notified Body 1180). It, and any supplements previously issued by SGS Baseefa Ltd have been transferred to the supervision of SGS Fimko Oy (EU Notified Body 0598). The original certificate number is retained.

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 IEC 60079-7:2015+A1:2018 EN 60079-11:2012
EN 60079-18:2015+A1:2017 EN 60079-31:2014**

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(1)GD Ex db eb ib mb [ia Ga] IIC T4 Gb (-40°C ≤ T_a ≤ +65°C) Ex tb IIIC T80°C Db (GRP models)
II 2(1)GD Ex db eb ib mb [ia Ga] IIC T4 Gb (-40°C ≤ T_a ≤ +70°C) Ex tb IIIC T80°C Db (S/S models)**

SGS Fimko Oy Customer Reference No. **0703**

Project File No. 23/0332

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SGS Fimko Oy

13 **Schedule**

14 **Certificate Number Baseefa14ATEX0112X – Issue 3**

15 **Description of Product**

The 937X-FB2-**-** Fieldbus Barrier System comprises a 937X-FB2-**-** Fieldbus Barrier Module mounted inside a GRP or stainless steel enclosure.

The 937X-FB2-**-** Fieldbus Barrier System is designed to be supplied from a power supply conforming to IEC 61158 and produce 6, 12 or 18 Spur outputs that are each compliant with the FISCO Power Supply requirements. The Spur outputs are isolated from the input supply but are not isolated from each other. Electrical connections are made via screw or spring terminals.

Terminal Parameters - SPUR+ve Output Terminal and Shield Terminal w.r.t Spur-ve (each channel)

| | |
|------------------|-----------|
| U_o | = 16.4V |
| I_o peak | = 249.5mA |
| I_o continuous | = 109mA |
| P_o | = 898mW |
| U_i | = 16.4V |
| C_i | = 0 |
| L_i | = 0 |

The capacitance and either the inductance or inductance to resistance ratio (L/R) of the load connected to hazardous area terminals TB1 must not exceed the following values:

| GROUP | CAPACITANCE | INDUCTANCE | OR | L/R RATIO |
|-------|-------------|------------|----|----------------|
| | (μ F) | (mH) | | (μ H/ohm) |
| IIC | 0.424 | 0.57 | | 34.7 |
| IIB | 2.51 | 2.28 | | 138 |
| IIA | 10.0 | 4.56 | | 277 |

The above load parameters apply where:

1. The external circuit contains no combined lumped inductance L_i and capacitance C_i greater than 1% of the above values.
- or 2. The inductance and capacitance are distributed as in a cable.
- or 3. The external circuit contains either only lumped inductance or lumped capacitance in combination with a cable.

In all other situations e.g. the external circuit contains combined lumped inductance and lumped capacitance, up to 50% of each of the L and C values is allowed.

16 **Report Number**

See certificate history.

17 **Specific Conditions of Use**

1. The equipment shall only be powered from supplies conforming to IEC 61158.
2. When a Trunk Surge Module is fitted, the power input circuit will not withstand a 500V a.c. isolation test to earth. This must be taken into account during installation.
3. When one or more Spur Surge Modules are fitted, the spur outputs will not withstand a 500V a.c. isolation test to earth. This must be taken into account during installation.
4. Potential electrostatic hazard. The equipment should be cleaned only with a damp cloth.

5. When the S/S enclosure is a model with a hinged lid fitted, it shall only be mounted in a vertical orientation on a flat surface, and care is required in the installation process and when opening the hinged lid to ensure the enclosure does not distort.
6. When the S/S enclosure is fitted with a fully bolted lid the enclosure may be mounted in any orientation but it shall be on a flat surface and care is required in the installation process to ensure that the enclosure does not distort.

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 |
|--------|-----------------------------|
| 1.4.1 | 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 |
|-------------|-------|-------|------|---|
| CI9373FB2-1 | 1 & 2 | 2 | 7.23 | 3GFB "FB2" Stainless Steel Encl Final Assy |
| CI9373FB2-3 | 1 & 2 | 3 | 7.23 | 937X-FB2 Encl Cert Label |
| CI9373FB2-5 | 1 & 2 | 2 | 7.23 | 3GFB "FB2" 3-Module SS Enclosure Final Assembly |

Current drawings which remain unaffected by this issue:

| Number | Sheet | Issue | Date | Description |
|-------------|-------|-------|------|--------------------------------|
| CI9373FB2-2 | 1 & 2 | 2 | 8.16 | 3GFB "FB2" GRP Encl Final Assy |

All drawings are held with IECEx BAS 14.0058X.

20 Certificate History

| Certificate No. | Date | Comments |
|-------------------------------|------------------|---|
| Baseefa14ATEX0112X | 27 August 2014 | The release of the prime certificate. The associated test and assessment against the requirements of EN 60079-0:2012 EN 60079-1:2007 EN 60079-7:2007 EN 60079-11:2012 EN 60079-18:2009 and IEC 60079-31:2013 is documented in GB/BAS/ExTR14.0063/00 for project 14/0063. |
| Baseefa14ATEX0112X Issue 1 | 1 September 2016 | This issue of the certificate incorporates previously issued primary & supplementary certificates into one certificate, permits the introduction of a new carrier board, permits drawing changes associated with the delisting of component parts on this certificate, and permits the use of a stainless steel enclosure. The associated test and assessment is documented in GB/BAS/ExTR14.0063/00 for project 14/0063. |
| Baseefa14ATEX0112X Issue 2 | 2 July 2020 | This issue of the certificate permits the introduction of a new 18-way model and confirms compliance with EN 60079-18:2015. The associated test and assessment is documented in GB/BAS/ExTR20.0091/00 for project 20/0278. |

| Certificate No. | Date | Comments |
|--|---------------|---|
| Baseefa14ATEX0112X Issue 3 | 17 April 2024 | This issue of the certificate permits the addition of new enclosure options, a standards update to EN IEC 60079-0:2018, EN IEC 60079-7:2015+A1:2018 and EN 60079-18:2015+A1:2017 and the use of a different live-demateable component certificate. See GB/SGS/ExTR24.0020/00 for project 16/0371 |
| For drawings applicable to each issue, see original of that issue. | | |