

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: **Baseefa19ATEX0020 – Issue 1**

4 Product: **Minox-i**

5 Manufacturer: **Ntron Limited**

6 Address: **Mullaghboy Industrial Estate, Navan, County Meath, Ireland**

7 This re-issued certificate extends EU Type Examination Certificate No. Baseefa19ATEX0020 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 60079-11: 2012**

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 1GD Ex ia IIC T4 Ga (-20°C ≤ Ta ≤ +55°C)  
Ex ia IIIC T<sub>200</sub>135°C Da (-20°C ≤ Ta ≤ +55°C)**

SGS Fimko Oy Customer Reference No. **2144**


Project File No. **21/0675**

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13

## Schedule

14

### Certificate Number Baseefa19ATEX0020 – Issue 1

#### 15 Description of Product

The Minox-i is a 4-20mA loop powered sensor designed to measure oxygen concentration.

The Minox-i comprises of a replaceable oxygen sensor mounted in a stainless-steel sensor housing with several printed circuit boards mounted in a stainless-steel PCB chamber. The 4-pin connector mounted in the PCB chamber wall is for the user connections.

The 4-pin connector provides the electrical connections for the 4-20mA interface.

$U_i = 28V$

$I_i = 93mA$

$P_i = 0.65W$

$C_i = 12nF$

$L_i = 705\mu H$

#### 16 Report Number

See Certificate History

#### 17 Specific Conditions of Use

None

#### 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                                     |
|--------|--------|-------|------------|---|
| E553   | 1 of 1 | 3     | 11-04-2022 | MINOX-I SCHEMATIC                               |
| E554   | 1 of 1 | 2     | 11-04-2022 | MINOX-I PCB LAYERS                              |
| E555   | 1 of 1 | 3     | 11-04-2022 | MINOX-I ELECTRONIC COMPONENTS BILL OF MATERIALS |
| E556   | 1 of 1 | 6     | 11-04-2022 | MINOX-I MARKING PLATE DETAILS                   |

These drawings are common to BAS22UKEX0052 and IECEx BAS 19.0013.

Current drawings which remain unaffected by this issue:

| Number | Sheet  | Issue | Date       | Description                 |
|--------|--------|-------|------------|-----------------------------|
| E557   | 1 of 1 | 2     | 12-12-2019 | MINOX-I GENERAL ARRANGEMENT |

20 Certificate History

| Certificate No.  | Date           | Comments  |
|--|----------------|---|
| Baseefa19ATEX0020  | 2 January 2020 | The release of the prime certificate. The associated test and assessment is documented in Test Report GB/BAS/ExTR19.0037/00. Project Number 18/0578.  |
| Baseefa19ATEX0020<br>Issue 1                                       | 11 April 2022  | <p>To permit minor electrical and drawing changes. As a result of these changes, the equipment now has revised parameters of:</p> <p> <math>U_i = 28V</math><br/> <math>I_i = 93mA</math><br/> <math>P_i = 0.65W</math><br/> <math>C_i = 12nF</math><br/> <math>L_i = 705\mu H</math> </p> <p>The equipment is now marked as shown below:</p> <p> <math>\text{Ex II 1GD Ex ia IIC T4 Ga } (-20^{\circ}C \leq T_a \leq +55^{\circ}C)</math><br/> <math>\text{Ex ia IIIC T}_{200}135^{\circ}C \text{ Da } (-20^{\circ}C \leq T_a \leq +55^{\circ}C)</math> </p> <p>The associated test and assessment is documented in Test Report GB/BAS/ExTR22.0057/00. Project Number 21/0675.</p> |
| For drawings applicable to each issue, see original of that issue. |                |   |