

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 **Baseefa11ATEX0203X – 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: **Range of Sentry Pressure Switches**

5 Manufacturer: **Delta Mobrey Ltd**

6 Address: **Hudson House, Albany Park, Camberley, Surrey, GU16 7PL, UK**

7 This re-issued certificate extends EC Type Examination Certificate No. Baseefa11ATEX0203X 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 1G Ex ia IIC T5 Ga (-60°C ≤ Ta ≤ 80°C) Ex ia IIC T6 Ga (-60°C ≤ Ta ≤ 65°C)**

 **II 2D Ex ia IIIC T85°C Db (-60°C ≤ Ta ≤ 65°C) Ex ia IIIC T100°C Db (-60°C ≤ Ta ≤ 80°C)**

SGS Fimko Oy Customer Reference No. **0279**


Project File No. **22/0274**

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Schedule

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Certificate Number Baseefa11ATEX0203X – Issue 3

15 Description of Product

The Range of Sentry Pressure Switches are designed to operate one or two microswitches mounted within an enclosure and connected to intrinsically safe circuits. The microswitches are operated by a mechanical plunger assembly which passes through the enclosure wall and is actuated by an external diaphragm assembly. The external diaphragm assembly may be used to sense pressure, differential pressure or temperature by the use of various different mechanical sensor arrangements.

The equipment comprises an epoxy painted aluminium alloy or stainless-steel enclosure with a mechanical plunger assembly containing a piston and diaphragm assembly which is connected externally to various process connections. The piston passes through a bushing arrangement into the main enclosure to actuate one or two microswitches. External electrical connections to the microswitches enter the enclosure via cable glands and are connected to the internal terminals. Although not required for the circuits, an internal earth terminal is provided which is connected to the metallic enclosure.

Each of the microswitches may be single or double pole, double throw switches and all the electrical connections must form part of the same intrinsically safe circuit. Where two microswitches are fitted then all the electrical connections must form part of the same intrinsically safe circuit. The electrical circuits are capable of withstanding a 500V test to earth.

The Range of Sentry Pressure Switches have various different mechanical sensor arrangements which are not controlled by the certification.

The terminal parameters associated with the equipment are:

$U_i = 30 \text{ V}$; $I_i = 100 \text{ mA}$; $P_i = 0.6 \text{ W}$; $C_i = 0$; $L_i = 0$.

16 Report Number

See certificate history.

17 Specific Conditions of Use

1. The Sentry Pressure, Differential Pressure and Temperature Switches must not be installed in a location where moving dust flow can generate an electrostatic charge on the equipment.
2. The Sentry range of pressure switches may be provided with an aluminium alloy or stainless steel enclosure. For models that have an aluminium enclosure, identified in the model number by 5XXX XXXXXXXXXXXX where “X” describes other parameters of the equipment, the enclosure must be installed in such a manner that it is protected from sources of impact and friction when installed in its end-use application

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	Protection against other hazards (LVD type requirements, etc.)
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
71097-SE-005	1 – 16	B	11/05/2023	Technical Specification
71097-SE-007	1 of 1	A	09/12/2022	Typical Sub Assy for Exi and LVD Assessment SPDT (BZ MICROSWITCH)
71097-SE-008	1 of 1	A	09/12/2022	TYPICAL SUB ASSY FOR Exi AND LVD ASSESMENT DPDT (BZ MICROSWITCH)
71097-SE-009	1 of 1	A	14/12/2022	Ex ia SENTRY WARNING MARKING
71097-SE-010	1 of 1	A	15/12/2022	SENTRY Exi ASSEMBLY DPDT
71097-SE-011	1 of 1	A	09/12/2022	SENTRY EXD TERMINAL BLOCK ASSY CODE H3/H6 DPDT
71097-SE-012	1 of 1	A	12/12/2022	SENTRY EXD TERMINAL BLOCK ASSY CODE H2 SPDT
71097-SE-013	1 of 1	A	12/12/2022	TYPICAL SUB ASSY FOR DPDT (SE MICROSWITCH)
71097-SE-014	1 of 1	A	12/12/2022	TYPICAL SUB ASSY FOR SPDT (SE MICROSWITCH)
71097-SE-015	1 of 1	A	12/12/2022	TYPICAL SUB ASSY FOR Exi AND LVD ASSESMENT SPDT (BS MICROSWITCH)
71097-SE-016	1 of 1	A	14/12/2022	SENTRY ASSEMBLY GUIDE DRAWING (ia)
71097-SE-017	1 of 1	A	08/12/2022	SENTRY ASSEMBLY (Ex ia) SPDT
71097-SE-018	1 of 1	A	14/12/2022	SENTRY INTRINSIC SAFETY NAMEPLATE
71097-ZZ-001	1 – 5	A	24/04/2022	Technical Specification for sealing, grease and bonding materials used on switches

Current drawings which remain unaffected by this issue:

None.

Existing drawings have been superseded by those listed above.

20 Certificate History

Certificate No.	Date	Comments
Baseefa11ATEX0203	26 September 2011	The release of the prime certificate. The associated test and assessment against the requirements of EN 60079-0:2009, EN 60079-11:2007 and EN 61241-11:2006 is documented in Test Report GB/BAS/ExTR11.0198/00, Project Number 11/0487
Baseefa11ATEX0203 /1X	10 June 2014	To confirm that the Range of Sentry Pressure Switches has been extended to include Pressure, Differential Pressure and Temperature Switches and that all models comply with the requirements of EN60079-0:2012 and EN60079 11:2012. The associated test and assessment is documented in Test Report GB/BAS/ExTR14.0172/00, Project Number 13/0631

Certificate No.	Date	Comments
Baseefa11ATEX0203X Issue 2	19 November 2019	<p>This issue of the certificate incorporates previously issued primary & supplementary certificates into one certificate and permits the alternative use of an aluminium alloy enclosure that does not adversely impact the intrinsic safety assessment conducted previously.</p> <p>The associated test and assessment is documented in Test Report GB/BAS/ExTR19.0283/00, Project Number 19/0564</p>
Baseefa11ATEX0203X Issue 3	25 May 2023	<p>This issue of the certificate permits the introduction of an alternative enclosure and to confirm and that all models comply with the requirements of IEC 60079-0:2017. Additionally, the minimum ambient temperature has been standardised at -60°C across the range and, together with a change from EPL Da to EPL Db, the maximum input current has been reduced to 100mA (from 250mA) which permits the replacement of the T135°C code with T100°C and T85°C in ambients of +80°C & +65°C respectively.</p> <p>The associated test and assessment is documented in Test Report GB/BAS/ExTR23.0062/00, Project Number 22/0274</p>
For drawings applicable to each issue, see original of that issue.		