



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 11.0104X	Page 1 of 4	<u>Certificate history:</u>
Status:	Current	Issue No: 5	Issue 4 (2019-11-19)
Date of Issue:	2023-05-31		Issue 3 (2019-07-23)
Applicant:	Delta Mobrey Limited Hudson House Albany Park Surrey Camberley GU16 7PL United Kingdom		Issue 2 (2014-10-15)
Equipment:	Range of Sentry Pressure Switches		Issue 1 (2014-06-10)
Optional accessory:			Issue 0 (2011-09-26)
Type of Protection:	Intrinsic Safety		
Marking:	Ex ia IIC T5 / T6 Ga (-60°C ≤ Ta ≤ +65°C / +80°C)		
	Ex ia IIIC T85°C / T100°C Db (-60°C ≤ Ta ≤ +65°C / +80°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)

31/5/2023

1. This certificate and schedule may only be reproduced in full.
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Certificate issued by:

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





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Manufacturer: **Delta Mobrey Limited**
Hudson House
Albany Park
Surrey
Camberley GU16 7PL
United Kingdom

Manufacturing locations: **Delta Mobrey Limited**
Hudson House
Albany Park
Surrey
Camberley GU16 7PL
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](#) Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

[IEC 60079-11:2011](#) Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

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/ExTR11.0198/00](#)
[GB/BAS/ExTR23.0062/00](#)

[GB/BAS/ExTR14.0172/00](#)

[GB/BAS/ExTR19.0283/00](#)

Quality Assessment Report:

[GB/BAS/QAR06.0033/11](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

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 apparatus 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:

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

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The Sentry Pressure, Differential Pressure and Temperature Switches must not be installed in a location where moving dust flow can generate and 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 XXXX XXXX05XXX 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.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Variation 5.1

To permit 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.

ExTR: **GB/BAS/ExTR23.0062/00**

File Reference: **22/0274**