



1 **EU-TYPE EXAMINATION CERTIFICATE**

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

3 Certificate Number: **Sira 03ATEX1189X** Issue: **8**

4 Equipment: **Mobrey Flameproof Vertical Level Controls (series B, D & X)**

5 Applicant: **Delta Mobrey Limited**

6 Address: Hudson House
Albany Park
Camberley
Surrey, GU16 7PL
United Kingdom

7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 CSA Group Netherlands B.V., notified body number 2813 in accordance with Articles 17 and 21 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN 60079-0:2012/A11:2013 EN 60079-1:2007 EN 60079-26:2015

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

11 This EU-Type Examination Certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.

12 The marking of the equipment shall include the following:



II 1/2 G
Ex d IIC T6....T1 Ga/Gb
Ta = -50°C to +60°C

Signed: Michelle Halliwell

Title: Director of Operations



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SCHEDULE

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13 DESCRIPTION OF EQUIPMENT

The Type Flameproof Vertical Level Controls (Series B, D & X) consist of either a gunmetal, stainless steel, cast iron or aluminium housing having a high or low domed threaded cover. The interface between the housing and cover forms an M160 x 2 threaded flamepath; this is further secured by an M5 x 10 socket-head set screw. The product can contain up to four, 2 pole or up to two, 4 pole switches rated at up to 440 Vac, 2000 VA maximum or 250 Vdc, 50 W maximum and associated terminals.

The enclosure contains a pressure tube, rated up to 102 bar, swaged and welded to a mounting bush which passes through the enclosure base wall by means of a cylindrical joint. The bush is secured in place by a circlip within the enclosure. Magnetically operated switches with associated terminals and optional line monitoring resistors are clamped to the pressure tube and are activated by magnet assemblies contained within the pressure tube, which rise and fall with the liquid level via rod linkages to an associated float.

Design options

- Multiple mounting flanges, these are outside the flameproof envelope and thus do not directly affect the products flameproof characteristics. All options are detailed in the product instruction manual.
- Multiple internal types of switch as detailed in the table below:

Type	AC max values			DC max values			
	VA	volts	Amps	Watts	volts	Res Amps	Ind Amps
D4, D8	2000	440	5	50	250	5	0.5
X4, X8	2000	440	10	50	250	10	0.5
P4, P8	6	250	0.25	3.6	250	0.25	0.1
H4, H8	2000	440	10	50	250	10	0.5

- Multiple float mechanisms, these are outside the flameproof envelope and thus do not directly affect the products flameproof characteristics. All options are detailed in the product instruction manual.
- The product may be fitted with up to 8 line monitoring wirewound resistors with a maximum rating of 2.5 W de-rated to 0.83 W maximum each.

Variation 1 - This variation introduced the following changes:

- Minor machining detail changes were endorsed.
- The drawing text was modified to replace material trademark names with standard designations.
- Following appropriate re-assessment to demonstrate compliance with the requirements of the EN 60079 series of standards, the documents originally listed in section 9, EN 50014:1997 (amendments A1 and A2), PrA1 EN 50018:2000 and EN 50281-1-1:1999, were replaced by those currently listed, the markings were updated accordingly.
- The option to make the partition wall from a metal alloy that is not corrosion resistant was removed, consequently, the special condition for safe use that related to this wall is no longer required.

Variation 2 - This variation introduced the following change:

- The Type Identification/Part Number structure was changed, this was recognised on the associated label drawings which were reviewed and the notes on these drawings were clarified as required e.g. the application of the ATEX marking was more specifically defined. The title of the certificate and the product description were amended to accommodate this change.

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Variation 3 - This variation introduced the following change:

- i. The Applicant's name was changed from Mobrey Limited to Rosemount Measurement Limited, the address is unchanged.

Variation 4 - This variation introduced the following changes:

- i. To permit the removal of gunmetal as a material of manufacture.
- ii. The inclusion of the ratings of the external source of heating or cooling in the Special Conditions for Safe Use in the certificate.
- iii. To permit the introduction of an optional external coating on the enclosure.
- iv. Assessment of minor changes made to drawings 71097/982, 71097/1048 and 71097/1049.
- v. Following appropriate assessment to demonstrate compliance with the latest technical knowledge, EN 60079-0:2006 and EN 60079-26:2007 were replaced by EN 60079-0:2012/A11:2013 and EN 60079-26:2015.

Variation 5 - This variation introduced the following change:

- i. The Applicant's name and address were changed from Rosemount Measurement Limited, 158 Edinburgh Avenue, Slough, Berkshire SL1 4UE, United Kingdom to Delta Mobrey Limited, Riverside Business Park, Dogflud Way, Farnham, Surrey, GU9 7SS, United Kingdom.

Variation 6 - This variation introduced the following change:

- i. To change the address on the certificate:

From: Riverside Business Park Dogflud Way Farnham Surrey, GU9 7SS United Kingdom	To: Hudson House Albany Park Camberley Surrey, GU16 7PL United Kingdom
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14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Reports and Certificate History

Issue	Date	Report number	Comment
0	19 June 2003	R51A9799A	The release of the prime certificate.
1	15 August 2005	N.A.	Re-issued to correct standard reference.

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Issue	Date	Report number	Comment
2	03 April 2009	R51L19294	This Issue covers the following changes: <ul style="list-style-type: none">All previously issued certification was rationalised into a single certificate, Issue 2, Issues 0 and 1 referenced above are only intended to reflect the history of the previous certification and have not been issued as documents in this format.The change of the Applicant's name, first recognised 8 March 2006, was re-confirmed.The introduction of Variation 1.
3	3 June 2013	R30307A/00	The introduction of Variation 2.
4	24 September 2014	R70011346A	The introduction of Variation 3.
5	14 April 2016	R70056004A	The introduction of Variation 4.
6	03 September 2019	R80014446A	This Issue covers the following changes: <ul style="list-style-type: none">EC Type-Examination Certificate in accordance with 94/9/EC updated to EU Type-Examination Certificate in accordance with Directive 2014/34/EU. <i>(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. Variations to such EC Type-Examination Certificates may continue to bear the original certificate number issued prior to 20 April 2016.)</i>The introduction of Variation 5.
7	15 October 2019	1365	Transfer of certificate Sira 03ATEX1189X from Sira Certification Service to CSA Group Netherlands B.V.
8	14 April 2023	R80155596A	The introduction of Variation 6.

15 SPECIFIC CONDITIONS OF USE (denoted by X after the certificate number)

- 15.1 The floats can be made from non-metallic materials as required by the user; therefore, the user shall ensure that the material used is suitable for the application and is not ignition capable (i.e. due to static electricity).
- 15.2 When coated with a non-standard paint the enclosure is non-conducting and may generate an ignition-capable level of electrostatic charges under extreme conditions. The user should ensure that the equipment is not installed in a location where it may be subjected to external conditions which might cause a build-up of electrostatic charges on non-conducting surfaces. Additionally, cleaning of the equipment should be done only with a damp cloth.
- 15.3 The minimum length of the cylindrical non-threaded joint between the pressure tube union and the enclosure is greater than the relevant minimum required by Table 2 of IEC 60079-1:2007; therefore, for information on the dimensions of the flameproof joints the original manufacturer shall be contacted.
- 15.4 The temperature class is defined by the appropriate ambient temperature and process temperature as stated in the table below:

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T Class	Process Temperature
T6	-50°C to +80°C
T5	-50°C to +95°C
T4	-50°C to +130°C
T3	-50°C to +195°C
T2	-50°C to +290°C
T1	-50°C to +400°C

Ambient Air Temperature: -50°C to +60°C.

16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

17 CONDITIONS OF MANUFACTURE

- 17.1 The use of this certificate is subject to the Regulations Applicable to Holders of CSA Group Netherlands B.V. certificates.
- 17.2 Holders of EU-Type Examination Certificates are required to comply with the conformity to type requirements defined in Article 13 of Directive 2014/34/EU.
- 17.3 Each enclosure partition wall (the pressure tube assembly) shall be subjected to a type overpressure test equal to $1.5 \times P_{RATED}$ at 20°C, applied for 60 s without any visible leakage or damage to the enclosure. Where P_{RATED} is the maximum process pressure of the equipment.
- 17.4 When the user/installer has specified that the float and mounting flange surface should be made from non-metallic material, then the manufacturer shall advise them about the possibility of the build up of electrostatic charge on such surfaces, including the precautions that are necessary in order to avoid the occurrence of dangerous electrostatic discharges e.g. Do not rub with a dry cloth.
- 17.5 The product instructions shall ensure that the float mechanism is installed in such a way to prevent any damage due to impact or ignition source due to friction.
- 17.6 The manufacturer shall ensure that the appropriate label including the warning, WARNING ALLOW 4 MINUTES AFTER ISOLATION BEFORE REMOVING COVER, is fitted when the product is fitted with end of line resistors. In addition, the selection of cable must be dealt with in the instructions to ensure the appropriate temperature rated cable is used by the installer.

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Certificate Annexe



Certificate Number: Sira 03ATEX1189X

Equipment: Mobrey Flameproof Vertical Level Controls (series B, D & X)

Applicant: Delta Mobrey Limited

Issues 0 and 1

Number	Sheet	Rev.	Date	Description
71097/982	1 of 1	2	23 Apr 03	Flameproof liquid level controls types B, D & X
71097/1048	1 of 1	2	23 Apr 03	Flameproof level control marking
71097/1049	1 of 1	1	03 Feb 03	Line monitoring resistors in flameproof level controls

Issue 2

Number	Sheet	Rev.	Date (Sira stamp)	Description
71097/982	1 of 1	3	03 Apr 09	Flameproof Liquid Level Controls Type B, D & X
71097/1048	1 of 1	5	03 Apr 09	Flameproof Level Control Marking
71097/1049	1 of 1	2	03 Apr 09	Line Monitoring Resistors In Flameproof Level Controls

Issue 3

Number	Sheet	Rev.	Date (Sira stamp)	Description
71097/1048	1 of 1	6	07 May 13	Flameproof Level Control Marking
71097/1049	1 of 1	4	07 May 13	Line Monitoring Resistors in Flameproof Level Controls

Issue 4

Drawing	Sheets	Rev.	Date (Sira stamp)	Description
71097/1356	1 of 1	01	23 Sep 14	Generic nameplate

Issue 5

Drawing	Sheets	Rev.	Date (Sira stamp)	Description
71097/982	1 of 1	AE	29 Feb 16	Flameproof Liquid Level Controls Type B, D & X.
71907/1048	1 of 1	AH	02 Mar 16	Flameproof Level Control Marking
71907/1049	1 of 1	AF	02 Mar 16	Line Monitoring Resistors In Flameproof Level Controls

Issue 6

Drawing	Sheets	Rev.	Date (Sira stamp)	Description
71097/1406*	1 of 1	AA	22 Aug 19	Generic nameplate

*This drawing replaces the existing generic nameplate drawing 71097/1356, which is now obsolete.

Issue 7. No new drawings were introduced.

Issue 8

Drawing	Sheets	Rev.	Date (Stamp)	Title
71097/1406	1 of 1	C	04 Apr 2023	Generic Label Detail

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