In accordance with EC NOTICE TO STAKEHOLDERS WITHDRAWAL OF THE UNITED KINGDOM AND EU RULES IN THE FIELD OF INDUSTRIAL PRODUCTS dated 13 March 2020.

This issued certificate - Certificate No: ITS00ATEX2002X

and supporting Technical Construction File underwent a legal transfer of new ownership by signed agreement between the named applicant on this certificate and the 3rd party bodies involved in the transfer from NB0359 to NB2575 on 31 December 2020

Name: Fabrizio Massei
Position: ATEX Certification Officer
Signature:
Date: 31 December 2020

EU-TYPE EXAMINATION
CERTIFICATE

Equipment or Protective System Intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

1. **EU-Type Examination Certificate Number:** ITS00ATEX2002X **Issue 2**
2. **Product:** MSM400 Control Unit
3. **Manufacturer:** Delta Mobrey Limited.
4. **Address:** Riverside Business Park
   Dogflud Way
   Farnham
   Surrey, GU9 7SS, UK
5. This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
6. Intertek Testing and Certification Limited, Notified Body number 0359 in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council dated 26 February 2014, certifies that the 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 of the Directive.
7. Compliance with the Essential Health and Safety Requirements has been assured by compliance with BS EN IEC 60079-0:2018 & BS EN 60079-11:2012 except in respect of those requirements referred to within item 14 of the Schedule.
8. If the sign “X” is placed after the certificate number, it indicates that the product is subject to the special conditions of use specified in the Schedule to this certificate.
9. 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.
10. The marking of the product shall include the following:

II (1) G [Ex ia Ga] IIC

-40°C ≤ Ta ≤ +55°C

Certification Officer: V K Varma **Date:** 20-Nov-2019

SCHEDULE:

EU-Type Examination Certificate Number: ITS00ATEX2002X Issue 2

11. Description of Equipment or Protective System

The MSM400 Control Unit is a microprocessor based electronic control unit designed to limit an intrinsically safe level the power and signal connections to MSM Sensors situated in the hazardous area and provide galvanic isolation between the two units.

The MSM400 Control Unit contains an unspecified circuit, intrinsically safe (IS) interface circuit and terminal blocks for hazardous area connections to sensors and non-hazardous area connections to unspecified apparatus. The IS circuit contains two channels, RX and TX. Each channel comprises an IS transformer, fuses, Zener diodes, resistors and suppression capacitors and inductors.

The fuse in each channel in series with the primary winding of IS transformer is a high breaking capacity (HBC) rated at 250 V, 4000 A.

The Control Unit has the following Output parameters:

Channel RX	**Channel TX**
U_O = 1.2 V	U_O = 4.6 V
I_O = 42.1 mA	I_O = 162 mA
P_O = 13 mW	P_O =0.2 W

The equivalent parameters for both RX and TX are:

C_i = 0.4 nF
L_i = 40 µH
C_O = 99.9 µF
L_O = 0.7 mH
L_O/R_O = 98 µH/Ω

U_m = 250 V

12. Report Number

Intertek Report: 05016209 Issue: 1 Dated: October 2000.

Intertek Report: 05018664 Issue: 1 Dated: February 2003.

Intertek Report: G101243282 Issue: 1 Dated: October 2013.

Intertek Report: 104038037LHD-001 Issue: 1 Dated: October 2019.

SCHEDULE:

EU-Type Examination Certificate Number: ITS00ATEX2002X Issue 2

13. Special Conditions of Certification

(a). Special Conditions of Use

The Degree of protection (IP20) for Control Unit shall be maintained with use of suitable Cable glands for cables and blanking plugs for unused openings.

(b). Conditions of Manufacture

The dielectric strength test shall be conducted on the infallible transformer with the following test voltages for 60s.

1. 2500Vr.m.s between the input and output windings
2. 1000Vr.m.s between all the windings and the core

Alternatively, the test shall be carried for at least 1s at 1.2 times the above test voltages.

14. Essential Health and Safety Requirements (EHSRs)

The relevant Essential Health and Safety Requirements (EHSRs) have been identified and assessed in Intertek Report: 104038037LHD-001 Issue: 1 Dated: October 2019.

15. Drawings and Documents

Title:	Drawing No.:	Rev. Level:	Date:
I.S MSM400 CIRCUIT CONTROL UNIT	71097/970	3	02/10/00
APPR DRG I.S 3440/MSM400 CONTROL UNIT ASSY	71097/968	6	08/10/13
*APPR. DRG. MSM CONTROLLER CERT LABEL	71097/1318	C	29/10/19
APPR DRG I.S 3440/MSM400 PSU P.C.B	71097/969	7	08/10/13

*Note: An * is included before the title of documents that are new or revised.*

16. Details of Certificate changes ITS00ATEX2002/1 Intertek Project No. 05016209

To permit the following changes:

- Minor modification to the printed circuit board artwork due to an addition of a digital communication module in the non-IS circuit.
- Introduction of a new model code.
- Addition of a note relating to the clearance between the IS and non-IS components.

The following drawings have changed as part of this variation:

Title:	Drawing No.:	Rev. Level:	Date:
General Assembly	71097/968	4	13/01/05
PCB Artwork	71097/969	4	13/01/05

SCHEDULE:

EU-Type Examination Certificate Number: ITS00ATEX2002X Issue 2

17. Details of Certificate changes ITS00ATEX2002/2 Intertek Project No. 05018664

To permit the following changes:

- Minor modifications to the printed circuit board artwork.

The following drawings have changed as part of this variation:

Title:	Drawing No.:	Rev. Level:	Date:
PCB Artwork	71097/969	5	30/11/05

18. Details of Certificate changes ITS00ATEX2002/3 Intertek Project No. G101243282

To permit the following changes:

- Re-assessment of the MSM400 Control Unit to the requirements of the latest standards EN 60079-0:2012, EN 60079-11:2012 and EN 60079-26:2007.
- Changes to the appropriate documents to reflect the above changes.

The following drawings have changed as part of this variation:

Title:	Drawing No.:	Rev. Level:	Date:
I.S MSM400 CIRCUIT CONTROL UNIT	71097/970	3	02/10/00
APPR DRG I.S 3440/MSM400 CONTROL UNIT ASSY	71097/968	6	08/10/13
APPR. DRG MSM CONTROLLER CERT LABEL	71097/1318	2	07/10/13
APPR DRG I.S 3440/MSM400 PSU P.C.B	71097/969	7	08/10/13

19. Details of Certificate changes ITS00ATEX2002X Issue 2 Intertek Project No. G104038037

To permit the following changes:

- Update to BS EN IEC 60079-0, from 2012 to 2018.
- Company name change, from Mobrey Measurement to Delta Mobrey Limited
- Revision to marking label to accept company name change and QAR provider.
- Added X condition to certificate number in line with Special Conditions of Use.

The following drawings have changed as part of this variation:

Title:	Drawing No.:	Rev. Level:	Date:
APPR. DRG. MSM CONTROLLER CERT LABEL	71097/1318	C	29/10/19