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 SIR 19.0049X**

Certificate history:

Status: **Current**

Issue No: 0

Date of Issue: 2020-05-26

Applicant: **Dandong Top Electronics Instrument (Group) Co., Ltd.**
No.10 Huanghai Street, Zhenxing District, Dandong City, Liaoning Province, 118000
China

Equipment: **Magnetic Level Gauge, model UHC series**

Optional accessory:

Type of Protection: **Flameproof db and Intrinsically Safe ia**

Marking: Ex db IIC T4…T6 Gb
Ex ia IIC T5/T6 Ga
Ta = -40°C to 60°C for Ex ia
Ta = -40°C to 50℃/60℃/70℃ for Ex db

Approved for issue on behalf of the IECEx Certification Body: **Neil Jones**

Position: **Certification Manager**

Signature: (for printed version)

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.

Certificate issued by:

SIRA Certification Service
CSA Group
Unit 6, Hawarden Industrial Park
Hawarden, Deeside, CH5 3US
United Kingdom

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Manufacturer: **Dandong Top Electronics Instrument (Group) Co., Ltd.**
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Additional manufacturing locations:

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 60079-1:2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
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 Report:

GB/SIR/ExTR20.0097/00

Quality Assessment Report:

DE/TUR/QAR13.0005/02

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EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

The UHC series Magnetic Level Gauge is assembled with a 0.2m to 3.5m probe rod and a transmitter with 8mm thick glass window for cemented joints. It is designed for two types of protection: Flameproof and Intrinsic safety.

There are two independent flame proof chambers separated by a cemented construction and thread joints between transmitter and probe, there is only one cable entry with Spec. M20x1.5 in the transmitter. It should be installed with a M20x1.5 certified cable gland, stopping plug or conduit fitting with suitable IP code.

There are six printed circuit boards in the product: power terminal board, main board, measure module board, power module board, LCD board and sensor board which are designed as intrinsically safe.

The entity parameters for the product are:

Ui = 30Vdc
Ii = 93mA
Pi = 0.66W
Ci = 0μF
Li = 0μH

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. Install only as per installation instruction.

For other conditions refer to the Annexe

Annex:

IECEx SIR 19.0049X Issue 0 Annese.pdf

Specific Conditions of Use

For clarity all the Conditions are repeated.

1. Install only as per installation instruction.
2. Temperature code depends on process temperature as follows:
   For Ex ia:

T-code	Ambient Temperature	Process Temperature
T4	-40 to 60°C	-40 to 120°C
T5	-40 to 60°C	-40 to 90°C

   For Ex db:

T-code	Ambient Temperature	Process Temperature
T6	-40 to 50°C	-40 to 75°C
T5	-40 to 60°C	-40 to 90°C
T4	-40 to 70°C	-40 to 120°C

3. The transmitter enclosure is manufactured from ADC12 aluminium alloy. In rare cases, ignition sources due to impact and friction sparks could occur. This shall be considered during installation
4. The equipment has flameproof joints, which differ from those in IEC/EN 60079-1, when maintaining the flameproof joints, manufacturer shall be contacted for guidance.
5. The end user shall choose suitable cable in the final installation; detailed information refers to equipment instructions.

Conditions of Manufacture

1. All manufactured probe of UHC shall be subjected to overpressure routine test with water/gas pressure of more than 1.1MPa. The testing duration is 12s. The enclosure shall not have any permanent deformation or damage invalidating the type of protection or leakage through the walls of the enclosure.

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