

Page 1 of 4

Issue No: 2

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

EX COMPONENT CERTIFICATE

Certificate No.: IECEx KEM 08.0005U

Status: Current

Date of Issue: 2021-10-12

Applicant: Fluidwell B.V.

Voltaweg 23 5466 AZ Veghel **Netherlands**

Ex Component: Intrinsically safe non-rechargeable battery Types FW-LiBAT-001, FW-LiBAT-021 and FW-LiBAT-031

This component is NOT intended to be used alone and requires additional consideration when incorporated into other equipment or systems for use in explosive atmospheres (refer to IEC 60079-0).

R. Schuller

2021-10-12

Certification Manager

Type of Protection: Ex ia

Marking: Ex ia IIC Ga

Approved for issue on behalf of the IECEx Certification Body:

Position:

Date:

Signature:

(for printed version)

- 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.
- The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate history: Issue 1 (2011-06-16)

Issue 0 (2008-07-10)

Certificate issued by:

DEKRA Certification B.V. Meander 1051 6825 MJ Arnhem Netherlands





Certificate No.: IECEx KEM 08.0005U Page 2 of 4

Date of issue: 2021-10-12 Issue No: 2

Manufacturer: Fluidwell B.V.

Voltaweg 23 5466 AZ Veghel **Netherlands**

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 60079-11:2011 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:

NL/KEM/ExTR08.0005/02

Quality Assessment Report:

NL/DEK/QAR12.0019/06



Certificate No.: IECEx KEM 08.0005U Page 3 of 4

Date of issue: 2021-10-12 Issue No: 2

Ex Component(s) covered by this certificate is described below:

Intrinsically safe non-rechargeable Battery Type FW-LiBAT-... for the supply of intrinsically safe apparatus. The battery is intended to be used inside the hazardous area.

The cells used are inorganic lithium cells of one of the following types:

- type SL-2770 manufactured by Sonnenschein Lithium;
- type SL-2770 or type TL-5920 manufactured by Tadiran Batteries.
- type SL-360 or type SL-860 manufactured by Tadiran Batteries.

The battery shall be located completely inside the equipment enclosure.

Ambient temperature range -40 ° to +70 °C.

Electrical data

Output circuit (connector):

in type of protection intrinsic safety Ex ia IIC, with the following maximum values: $U_o=3.9~V;~I_o=35~mA;~P_o=35~mW;~C_o=100~\mu F;~L_o=25~mH$

SCHEDULE OF LIMITATIONS:

- 1. The battery must be installed so, that charging of the battery is prevented.
- 2. The maximum temperature of the cell when short circuited is 112 °C at 70 °C ambient temperature.
- 3. When used under the specified maximum ambient and electrical conditions, the temperature class of the battery is T4. For other conditions, the temperature class may be determined during the certification of the apparatus in which the battery is used.



Certificate No.: IECEx KEM 08.0005U Page 4 of 4

Date of issue: 2021-10-12 Issue No: 2

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Update to latest edition of the standards. Removal IEC 60079-26.