

CERTIFICATE

(1) EU-Type Examination

(2) **Component intended for use on/in equipment or protective systems intended for use in potentially explosive atmospheres - Directive 2014/34/EU**

(3) EU-Type Examination Certificate Number: **KEMA 03ATEX1071 U** Issue Number: **4**

(4) Product: **Intrinsically safe non-rechargeable Battery Types FW-LIBAT-001, FW-LIBAT-021 and FW-LIBAT-031**

(5) Manufacturer: **Fluidwell B.V.**

(6) Address: **Voltaweg 23, 5466 AZ Veghel, The Netherlands**

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

(8) DEKRA Certification B.V., Notified Body number 0344 in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this 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 to the Directive.

The examination and test results are recorded in confidential test report number NL/KEM/ExTR08.0005/02.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0 : 2018

EN 60079-11 : 2012

except in respect of those requirements listed at item 18 of the Schedule.

(10) The sign "U" is placed after the certificate number. It indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system.

(11) 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.

(12) The marking of the product shall include the following:



II 1 G Ex ia IIC Ga

Date of certification: 12 October 2021

DEKRA Certification B.V.

R. Schuller
Certification Manager



(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate KEMA 03ATEX1071 U**

Issue No. 4

(15) **Description**

Intrinsically safe non-rechargeable Battery Types FW-LiBAT-001, FW-LiBAT-021 and FW-LiBAT-031 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 °C to +70 °C.

Electrical data

Output circuit (connector):

in type of protection intrinsic safety Ex ia IIC, with the following maximum values:

$U_o = 3,9 \text{ V}$; $I_o = 35 \text{ mA}$; $P_o = 35 \text{ mW}$; $C_o = 100 \text{ }\mu\text{F}$; $L_o = 25 \text{ mH}$

Installation instructions

The instructions provided with the product shall be followed in detail to assure safe operation.

(16) **Report Number**

No. NL/KEM/ExTR08.0005/02.

(17) **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.

(18) **Essential Health and Safety Requirements**

Covered by the standards listed at item (9).

(19) **Test documentation**

As listed in Report No. NL/KEM/ExTR08.0005/02.

(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate KEMA 03ATEX1071 U**

Issue No. **4**

(20) **Certificate history**

Issue 1 - 202852800	initial certificate.
Issue 2 - 209204900	constructional changes / assessed to newer editions of the standards.
Issue 3 - 214075000	update to IEC 60079-0: 2007, addition of battery cell types.
Issue 4 - 225918500	update to latest edition of the standards, removal IEC 60079-26.