

EU-TYPE EXAMINATION CERTIFICATE



[1]

[2]

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

[3]

EU-Type Examination Certificate Number: **DEMKO 16 ATEX 1661X Rev. 0**

[4]

Product: **Intrinsically Safe Flashlight, Models DS-19, DS-19 Z1**

[5]

Manufacturer: **Day Sun Technology Ltd.**

[6]

Address: **No. 1, Alley 2, Lane 110, Sec. 4, Hsi-Men Road, North District, Tainan City, 704 Taiwan**

[7]

This product and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

[8]

UL International Demko A/S, notified body number 0539 in accordance with Article 17 of the Council Directive 2014/34/EU of 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive. The examination and test results are recorded in confidential report no. **4787290896**

[9]

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

EN 60079-0:2012+A11:2013

EN 60079-11:2012

EN 50303:2000

[10]

If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

[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 the certificate.

[12]

The marking of the equipment or protective system shall include the following:

Model DS-19 -

 **I M 1 Ex ia I Ma**

 **II 1 G Ex ia IIC T5 Ga**

Model DS-19 Z1 -

 **I M 2 Ex ib I Mb**

 **II 2 G Ex ib IIC T5 Gb**

Certification Manager
Jan-Erik Storgaard

This is to certify that the sample(s) of the Equipment described herein ("Certified Equipment") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Equipment Certification Program Requirements. This certificate and test results obtained apply only to the equipment sample(s) submitted by the Manufacturer. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured equipment. UL has not established Follow-Up Service or other surveillance of the equipment. The Manufacturer is solely and fully responsible for conformity of all equipment to all applicable Standards, specifications, requirements or Directives. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

Date of issue: 2016-06-03



Notified Body

UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark
Tel. +45 44 85 65 65, info.dk@ul.com, www.ul.com

[13]

Schedule

[14]

EU-TYPE EXAMINATION CERTIFICATE No.

DEMKO 16 ATEX 1661X Rev. 0

Report: 4787290896

[15]

Description of Product:

Models DS-19 and DS-19 Z1 are portable, hand-held flashlights powered by two size "AAA" alkaline batteries, connected in series. These models are available in three different color enclosures: yellow, black, and orange. The batteries are only to be replaced in a non-hazardous location. The following batteries were considered acceptable for use in the flashlight:

- Alkaline type Model E92 manufactured by Energizer
- Alkaline type Model MN2400 manufactured by Duracell
- Alkaline type Model LR03 manufactured by Panasonic
- Alkaline type Model LR03 manufactured by Rayovac

Temperature range:

The ambient temperature range is -20°C to +40°C.

Performance Testing:

The optical radiation output of the apparatus with respect to explosion protection, according to Annex II clause 1.3.1 of the Directive 2014/34/EU is not covered in this certificate.

Routine tests

None.

[16]

Descriptive Documents

The scheduled drawings are listed in the report no. provided under item no. [8] on page 1 of this EU-Type Examination Certificate.

[17]

Specific conditions of use:

- Read manual before use.
- Do not open the enclosure in a hazardous area.
- Replace batteries only in non-hazardous areas.
- Use only battery type Energizer E92, Duracell MN2400, Panasonic LR03, or Rayovac LR03.
- To reduce the risk of explosion, do not mix new batteries with used batteries, or mix batteries from different manufacturers or from different types.
- The screw shall be secured tightly after opening and closing the enclosure.

[18]

Essential Health and Safety Requirements

The Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9.

Additional information

The models DS-19 and DS-19 Z1 flashlights have in addition passed the tests for Ingress Protection to IP 67 in accordance with EN60529:1991+A1:2000+A2:2013.

The manufacturer shall inform the notified body concerning all modifications to the technical documentation as described in Annex III to Directive 2014/34/EU of the European Parliament and the Council of 26 February 2014.

The Registered Trademark,  **DAYSUN, DAYSUN**, or

 **DAYSUN TECHNOLOGY LTD.**

, for Day Sun Technology Ltd. may be used as the company identifier on the marking.