

# EU-TYPE EXAMINATION CERTIFICATE



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

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

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

Manufacturer: **Day Sun Technology Ltd.**

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

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

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**

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**

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.

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.

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

**Notified Body**

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



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**Schedule**  
**EU-TYPE EXAMINATION CERTIFICATE No.**  
**DEMKO 16 ATEX 1661X Rev. 0**  
**Report: 4787290896**

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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.

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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.

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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.

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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.



*We light up your business...*

## Dekodierliste der explosionsgeschützten Handleuchten von KSE-LIGHTS Decoding list of the explosion-proof hand lamps of KSE-LIGHTS

Die folgenden explosionsgeschützten Handleuchten von KSE-LIGHTS wurden in unabhängigen Laboren geprüft und erfüllen alle Anforderungen bezüglich folgender Normen:

*The following explosion-proof hand lamps are tested by independent laboratories and fulfill all requirements concerning following norms:*

EN 60079-0:2009  
EN 60079-11:2007  
EN 60079-26:2007

EN 60079-0:2012/A11:2013  
EN 60079-11:2012  
EN 60079-26:2015

Die Produkte wurden für übereinstimmend mit der Europäischen ATEX-Vorschrift 94/9/EC befunden.  
*The products have been found in compliance with the European ATEX Directive 94/9/EC.*



Aussteller der EC-Baumusterprüfbescheinigung / *Issuer of EC-type approval:*

UL International Demko A/S,  
Borupvang 5A, 2750 Ballerup,  
Denmark

Sira Certification Service  
Unit 6, Hawarden Industrial Park, Hawarden, CH5 3US,  
United Kingdom

Produktbezeichnung <i>Product No.</i>	Produktbezeichnung in Zertifikat <i>Product No. in certificate</i>	Zertifikatsnummer <i>Certificate No.</i>	Prüflabor <i>Testing laboratory</i>	Prüfdatum <i>Test date</i>
KS-8800	SF-07	DEMKO 13 ATEX 1302999X	UL International DEMKO	08.10.2013
KS-8810	DS-08	DEMKO 13 ATEX 1205039X	UL International DEMKO	14.10.2013
KS-8900	SF-14	SIRA 15 ATEX 2166X	SIRA Certification Service	15.06.2015
KS-9800	DF-104	DEMKO 13 ATEX 1112940X	UL International DEMKO	27.06.2013
KS-9900	DS-19	DEMKO 16 ATEX 1661X	UL International DEMKO	03.06.2016

KSE-LIGHTS GmbH

Ennepetal, 04.12.2018

Unterschrift:

Nikolai Seel (Geschäftsleitung)