

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 18 ATEX 1910X Rev. 1**

Product : **DOL 46Rxx and iDOL 46Rx Sensors**

Manufacturer : **dol-sensors a/s**

Address : **Hedelund 4, Glyngoere, 7870 Roslev, Denmark**

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 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 the confidential report no. **DK/ULD/ExTR18.0016/01**.

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

**EN IEC 60079-0:2018
EN 60079-31:2014**

**EN IEC 60079-0:2018/A11:2024
EN IEC 60079-31:2024**

Where additional criteria beyond those given here have been used, they are listed at item 18 in the Schedule.

If the sign "X" is placed after the certificate number, it indicates that the product is subject to the "Specific Conditions of Use" listed under item 17 of this certificate.

This EU-Type Examination Certificate relates only to the technical design of the specified product in accordance with the Directive 2014/34/EU. 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 product shall include the following (marking is provided in the Schedule as a part of item 15, if applicable):

II 1 D Ex ta IIIC T₂₀₀ 85°C Da

Certification Manager
Thomas Wilson

This is to certify that the sample(s) of the Product described herein ("Certified Product") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Product Certification Program Requirements. This certificate and test results obtained apply only to the product 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 product. UL has not established Follow-Up Service or other surveillance of the product. The Manufacturer is solely and fully responsible for conformity of all product 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: 2018-11-29

Re-issued: 2026-04-23

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]

[14]

Schedule

EU-TYPE EXAMINATION CERTIFICATE No.

DEMKO 18 ATEX 1910X Rev. 1

[15]

Description of Product

The DOL 46R and iDOL 46R Sensors are cylindrical proximity sensors (30mm x 117 mm) using capacitive technique to detect presence of objects and bulk materials. The cylindrical plastic enclosure, are integrated with a cable gland and supplied through a permanently connected cable. The sensors have an isolated mechanical integrated relay with a switch function. For the DOL 46R version the timing properties can be configured with the help of two trimmers and two coloured LED's indicators (red and green). For the iDOL 46R version, the properties can be configured, with a smartphone supporting NFC (Near Field Communication) and an associated app (software application). The cable carries supply and relay contact signals.

Nomenclature for the DOL/iDOL 46 Sensors where:

I	Basic Capacitive Sensor	DOL 46	With potentiometers
		iDOL 46	With NFC (Near Field Communication)
II	Output type and function	R	Relay output with delayed switch-off
		RT	Relay output with delayed switch-off and fixed with T-bracket
		RR	Relay output with delayed switch-on
		RRT	Relay output with delayed switch-on and fixed with T-bracket
III	Control voltage	Blank	20-280V AC/DC

All models are fitted with a 2, 5 or 10 meter cable length (this is customer specific).

Temperature range

The relation between ambient temperature and the assigned temperature class is as follows:

Ambient temperature range
-30 °C to +50 °C

Temperature class
T₂₀₀ 85°C

Electrical data

Supply voltage: 20-280V AC/DC, 47-63Hz
Maximum dissipation: 2 W
Relay switch: Max. 250V AC
Relay switch: Max 4 A Resistive / 2 A Inductive load

Routine tests

Routine tests are not required.

[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:

- The Sensors are manufactured with a permanently mounted cable gland and permanently connected cable that is non-replaceable and shall be terminated in a safe area or in a suitable certified termination box.
- The Sensors must be protected against exposure to direct sunlight and other ultraviolet light sources.
- In case of cleaning the sensor, this must be done with a damp cloth in order to prevent build-up of electrostatic charges.
- Cable shall be protected from pulling or twisting.
- Ambient temperature range is -30°C to +50°C.

[18]

Essential Health and Safety Requirements

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

Additional information

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.