



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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

Certificate No.:	IECEx ULD 18.0015X	Page 1 of 4	<u>Certificate history:</u>
Status:	Current	Issue No: 1	Issue 0 (2018-11-29)
Date of Issue:	2026-04-23		
Applicant:	dol-sensors a/s Hedelund 4 Glyngoere Roslev, 7870 Denmark		
Equipment:	Capacitive sensor - DOL 46Rxx and iDOL 46Rx		
Optional accessory:			
Type of Protection:	Dust Ignition Protection by Enclosure "ta"		
Marking:	Ex ta IIIC T₂₀₀ 85°C Da		

Approved for issue on behalf of the IECEx
Certification Body:

Lucy Frieders

Position:

Staff Engineer

Signature:
(for printed version)

Date:
(for printed version)

2026-04-23

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



Certificate issued by:

UL Solutions (Demko)
Borupvang 5A
Ballerup DK-2750
Denmark





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Manufacturer: **dol-sensors a/s**
Hedelund 4 Glyngore
Roslev, 7870
Denmark

Manufacturing
locations: **dol-sensors a/s**
Hedelund 4 Glyngore
Roslev, 7870
Denmark

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 60079-31:2022](#) Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t"
Edition:3.0

[IEC 60079-31:2013](#) Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

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 Reports:

[DK/ULD/ExTR18.0016/00](#)

[DK/ULD/ExTR18.0016/01](#)

Quality Assessment Report:

[DK/ULD/QAR18.0003/05](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

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.

Please see Annex for additional information.

SPECIFIC CONDITIONS OF USE: YES as shown below:

- 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.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Issue 1: Update of IEC 60079-31 to latest edition, minor update to marking labels.

Annex:

[Annex to IECEx ULD 18.0015X Issue 1.pdf](#)

TYPE DESIGNATION

Nomenclature for the DOL/iDOL 46R 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).

PARAMETERS RELATING TO THE SAFETY

Supply voltage: 20-280V AC/DC, 47-63Hz

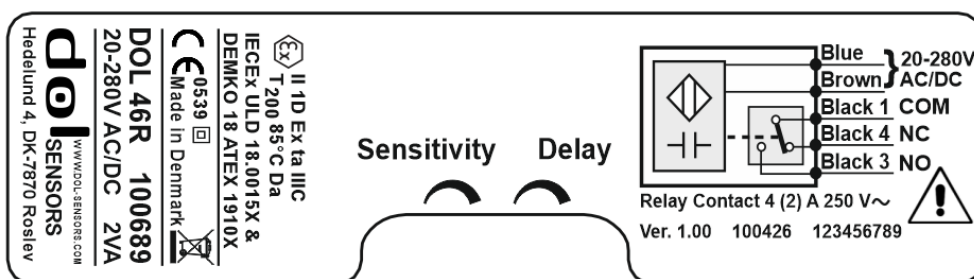
Maximum consumption: 2 W

Relay switch: Max. 250V AC

Relay switch: Max 4 A Resistive / 2 A Inductive load

MARKING

Marking has to be readable and indelible; it has to include the following indications:





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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