



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 EESF 21.0016X** Page 1 of 4 [Certificate history:](#)

Status: **Current** Issue No: 0

Date of Issue: 2021-09-21

Applicant: **Labkotec Oy**
Myllyhaantie 6, FI-33960 Pirkkala
Finland

Equipment: **Liquid level switch OMS-1 with Sensor**

Optional accessory: n/a

Type of Protection: **Intrinsically Safe**

Marking: **OMS-1:**
[Ex ia Ga] IIB
-30 °C ≤ Ta ≤ +50 °C
Sensor:
Ex ia IIA T6 Ga
-30 °C ≤ Ta ≤ +60 °C

Approved for issue on behalf of the IECEx
Certification Body:

Jenni Hirvelä

Position:

Senior Expert

Signature:
(for printed version)

Date:

2021-09-21

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:

Eurofins Expert Services Oy
Kivimiehentie 4
FI-02150 Espoo
Finland

 **eurofins** | Expert Services



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Manufacturer: **Labkotec Oy**
Myllyhaantie 6
FI-33960 PIRKKALA
Finland
Finland

Additional
manufacturing
locations:

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 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

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 Report:

[FI/EESF/ExTR21.0018/00](#)

Quality Assessment Report:

[FI/EESF/QAR19.0001/01](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Associated apparatus OMS-1 is an alarm device for one sensor bus, to be used with OMS sensor normally. Application area is especially oil and grease separators. In addition to I.S. output the device incorporates output relays (potential free relay contact output 250 V, 5 A, 100 VA) for signal lamp and Test/Reset pushbutton. The device is supplied from the mains (230 VAC or optionally 110 VAC, then $U_m = 250$ V rms). The OMS-1 liquid level switch shall be installed outside potentially explosive atmospheres.

SPECIFIC CONDITIONS OF USE: YES as shown below:

Allowed ambient temperature range for OMS-1 is $-30\text{ °C} \leq T_a \leq +50\text{ °C}$

Allowed ambient temperature range for Sensor is $-30\text{ °C} \leq T_a \leq +60\text{ °C}$



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Equipment (continued):

Electrical data:

The maximum values of the intrinsically safe output values of OMS-1 are:

$U_o \leq 6.6 \text{ V}$

$I_o \leq 20.2 \text{ mA}$

$P_o \leq 33.3 \text{ mW}$

Maximum external capacitance and inductance values are:

Group IIB:

$C_o \leq 500 \mu\text{F}$

$L_o \leq 300 \text{ mH}$

Combined external capacitance and inductance values are:

$L_o + C_o$, Group IIB:

0,15 mH + 40 μF

0,5 mH + 20 μF

1,0 mH + 12 μF

2,0 mH + 10 μF

5,0 mH + 8,5 μF