

1. **EU-TYPE EXAMINATION CERTIFICATE**
2. **Equipment or Protective System Intended for use in Potentially explosive atmospheres  
Directive 2014/34/EU**
3. EU-Type Examination Certificate Number: **EESF 21 ATEX 023X**
4. Product: **Liquid level switch**  
Certified types: **OMS-1 with Sensor**
5. Manufacturer: **Labkotec Oy**
6. Address: **Myllyhaantie 6, FI-33960 Pirkkala, Finland**
7. This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
8. Eurofins Expert Services Oy, Notified Body number 0537, in accordance with Article 17 of 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 confidential report No. EUFI29-21003167-T3.
9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with:  
  
**EN IEC 60079-0:2018                      EN 60079-11:2012**
10. If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of 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 this certificate.
12. The marking of the product shall include the following:

OMS-1:



II (1)G [Ex ia Ga] IIB  
-30 °C ≤ Ta ≤ +50 °C

Sensor:



II 1G Ex ia IIA T6 Ga  
-30 °C ≤ Ta ≤ +60 °C

Espoo, 21.09.2021  
**Eurofins Expert Services Oy**

Jenni Hirvelä  
Senior Expert

Kari Koskela  
Senior Expert

This document is digitally signed.

13. **Schedule**

 14. **EU-Type Examination Certificate EESF 21 ATEX 023X**

 15. **Description of Product**

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 ac). The OMS-1 liquid level switch shall be situated outside potentially explosive atmospheres.

Electrical data:

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

$$U_o \leq 6,6 \text{ V} \quad I_o \leq 20,2 \text{ mA} \quad P_o \leq 33,3 \text{ mW}$$

Maximum external capacitance and inductance values are:

**Group IIB:**

$$C_o \leq 500 \text{ } \mu\text{F} \quad L_o \leq 300 \text{ mH}$$

Combined external capacitance and inductance values are:

**Lo+Co, Group IIB:**

$$0,15 \text{ mH} + 40 \text{ } \mu\text{F} \quad 0,5 \text{ mH} + 20 \text{ } \mu\text{F} \quad 1,0 \text{ mH} + 12 \text{ } \mu\text{F} \quad 2,0 \text{ mH} + 10 \text{ } \mu\text{F} \quad 5,0 \text{ mH} + 8,5 \text{ } \mu\text{F}$$

 16. **Report Number**

EUF129-21003167-T3

 17. **Specific Conditions of Use**

Allowed ambient temperature range is  $-25 \text{ }^\circ\text{C} \leq T_a \leq +50 \text{ }^\circ\text{C}$

 18. **Essential Health and Safety Requirements**

The Essential Health and Safety Requirements are covered by the standards listed at item 9.

 19. **Drawings and Documents**

Drawings and documents are listed in the confidential report.

 20. **Certificate History**

Issue	Date	Report No.	Change
VTT 12 ATEX 003X	15.02.2012	VTT-S-00789-12	Prime Certificate
EESF 21 ATEX 023X	21.09.2021	EUF129-21003167-T3	NB name changed from VTT Expert Services to Eurofins Expert Services. New certificate template. Compliance with EN IEC 60070-0:2018 reviewed.