

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 024X**
4. Product: **Level measurement and control units**
 Certified types: **idOil-20, idOil-30, idOil-D30, idOil-30 3G, idOil-30 Battery, idOil-30 Battery 3G, idOil Solar**
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-T1.
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:



II (1)G [Ex ia Ga] IIB

Ta = -30 °C...+60 °C

Espoo, 22.06.2021

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 024X**

 15. **Description of Product**

Labkotec idOil series level measurement and control units are safe area associated apparatuses with level of protection [Ex ia] output for Gas Group IIB. The control units are intended for range of Labkotec digital level switches. The control unit can be operated with three level switches.

Model descriptions:

| | |
|----------------------------|--|
| idOil-20 | AC-version with standard enclosure, without LCD and WLAN |
| idOil-30 | AC-version with standard enclosure, LCD and WLAN |
| idOil-D30 | AC-version with DIN-enclosure, LCD and WLAN |
| idOil-30 3G | AC-version with standard enclosure and 2G/3G-modem, LCD and WLAN |
| idOil-30 Battery | DC-version with standard enclosure, LCD and WLAN |
| idOil-30 Battery 3G | DC-version with standard enclosure and 2G/3G-modem, LCD and WLAN |
| idOil Solar | 12 VDC SOLAR-panel version, based on idOil-30 DC-versions |

The user can configure the alarm levels and relay operation in the idOil-30 series models over WLAN connection. The two potential free relay contacts are intended for switching safe area equipment only. Supply voltage range for AC-versions is 100 - 240 V a.c., for Battery versions the range is 11 - 17 V d.c.

Um = 250 V a.c. (for AC-versions, mains supply and relay contacts)

Um = 30 V d.c. (for DC-versions, supply voltage and relay contacts)

Output parameters:

U_o = 14,5 V I_o = 78 mA P_o = 367 mW C_o = 4,0 μF L_o = 16,7 mH

R = 243 Ω

Combined values for C_o + L_o:

| | |
|-----------------------|-----------------------|
| C_o: | L_o: |
| 1,65 μF | 1,7 mH |
| 1,2 μF | 2,7 mH |
| 1,1 μF | 4,7 mH |
| 1,0 μF | 6,7 mH |

 16. **Report Number**

EUF129-21003167-T1

 17. **Specific Conditions of Use**

1. Allowed ambient temperature range is Tamb -30 °C to +60 °C.
2. The battery in idOil-30 Battery models shall be detached from the unit for charging.

 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 16 ATEX 018X | 6.7.2018 | VTT-S-01654-16 | Prime certificate |
| EESF 21 ATEX 024X | 22.06.2021 | EUFI29-21003167-T1 | NB name changed from VTT Expert Services to Eurofins Expert Services. New certificate template. |