

Data sheet

idOil-20

idOil[®]-20 oil separator alarm control unit



Fulfils
requirements
of EN 858-1&2
standards

The idOil-20 is an easy to use oil separator alarm control unit that offers all necessary basic features. It can be equipped with up to three different types of idOil sensors that are identified automatically with a one-touch commissioning feature.

- High liquid level alarm, when the liquid level in the oil separator rises excessively e.g. in an outlet blockage situation.
- Oil layer thickness alarm, when the oil separator's full capacity for oil or petrol has been reached.
- Sludge layer thickness alarm, when the sludge layer in the bottom of the separator has reached its maximum level.
- Separator leakage alarm, when the liquid level drops unexpectedly.

In these situations, an integrated alarm buzzer will sound, the display will show the alarm information and the relay(s) will switch.

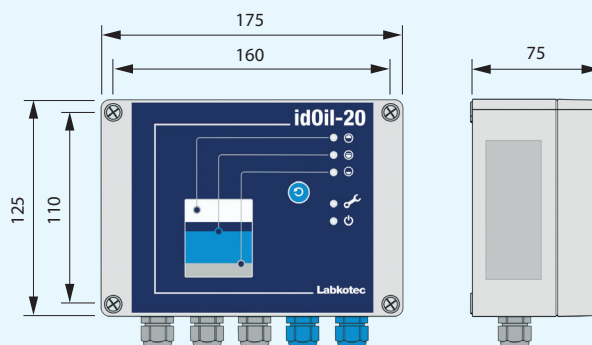
Features

- Multi supply voltage
- Sensor combination with up to three different idOil sensors
- Polarity-free sensor connection
- Automatic sensor and sensor type detection
- Quick one-touch commissioning
- LED lights for alarms, sensor fault and power
- Buzzer for alarm indication
- Two potential free relay outputs. One for alarms and one for faults

Technical data

| | |
|-----------------------|---|
| Mounting | Wall mounting |
| Enclosure material | Polycarbonate |
| Weight | 750 g |
| IP classification | IP65 |
| LED lights | For alarms, sensor fault and power |
| Ambient temperature | -30 °C...+60 °C |
| Supply voltage | 100-240 V AC, 50/60 Hz |
| Supply power fuse | Max. 10 A |
| Power consumption | Max. 8 VA |
| Relay outputs | 5 A, 250 V AC/30 V DC, 100 VA potential free changeover contacts, 2 pcs |
| EMC | IEC/EN 61000-6-2 IEC/EN 61000-6-3 |
| Electrical safety | Class I, IEC/EN 61010-1, UL 61010-1 CAN/CSA-C 22.2 NO. 61010-1-12 |
| Oversvoltage category | II |
| Ex-classification | ⊕ II (1) G [Ex ia Ga] IIB |
| ATEX | VTT 16 ATEX 018X |
| IECEx | IECEx VTT 16.0005X |
| Exi interface values | $U_o = 14.5 \text{ V}$, $I_o = 78 \text{ mA}$, $P_o = 367 \text{ mW}$, $R = 243 \Omega$ |
| Max values in IIB | $C_o = 4.0 \mu\text{F}$, $L_o = 16.7 \text{ mH}$ |
| Compatible sensors | idOil-LIQ high liquid level sensor idOil-OIL oil sensor idOil-SLU sludge sensor |
| Accessories | LCJ1-1 cable connector for one sensor LCJ1-2 cable connector for two sensors LCJ1-3 cable connector for three sensors LMS-SAS5 mounting set for one sensor |

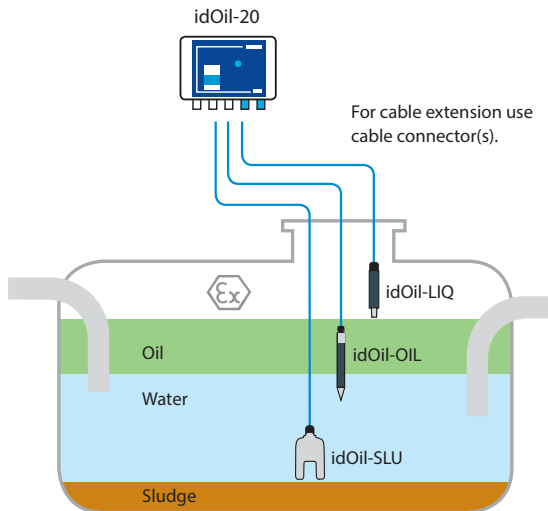
Dimensions (mm)



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Application



Cable connectors

Cable connectors are used for cable extension between the sensors and the control unit. They are oil resistant, IP68 and suitable for ATEX Zone 0. Simple apparatus according to IEC/EN 60079-11.



LCJ1-1

Cable connector for one sensor.



LCJ1-2

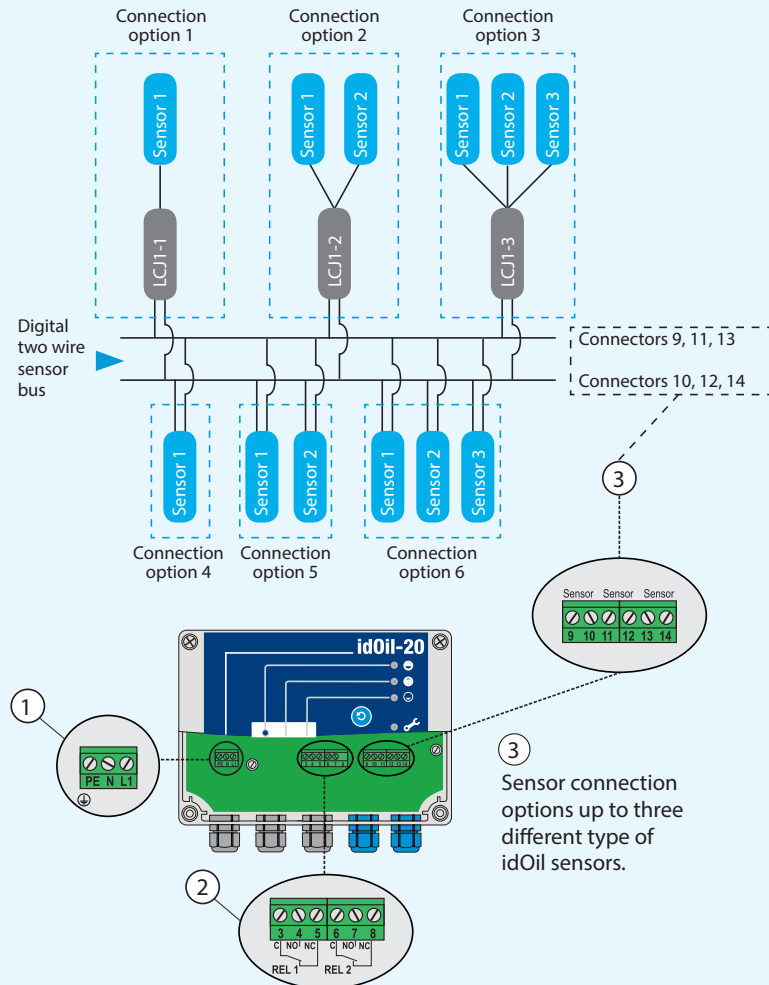
Cable connector for two sensors.



LCJ1-3

Cable connector for three sensors.

Installation



1 Supply voltage 100-240 V AC

PE = Ground conductor
N = Neutral conductor
L1 = Phase conductor

2 Relay output

Relay 1
3 = Common pole
4 = Opening pole when alarm
5 = Closing pole when alarm
Relay 2
6 = Common pole
7 = Opening pole when alarm
8 = Closing pole when alarm

3 Sensor connectors

9 = Sensor 1 connection 1
10 = Sensor 1 connection 2
11 = Sensor 2 connection 1
12 = Sensor 2 connection 2
13 = Sensor 3 connection 1
14 = Sensor 3 connection 2

Measure your success

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