

Data sheet

idOil-D30

idOil®-D30 oil separator alarm control unit



Fulfills requirements of EN 858-1&2 standards

idOil-D30 is a control unit for oil separator alarm systems. It can be equipped with up to three any type of idOil sensors. With the idOil-D30 and applicable Labkotec sensors following alarms can be monitored:

- **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. idOil-D30 can be connected locally to laptop/tablet/smartphone via WLAN to access the inbuilt browser user interface for further configurations and settings.

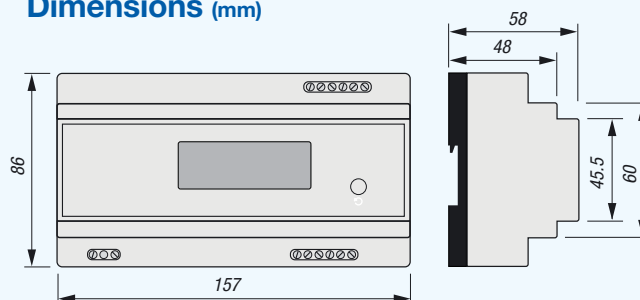
Features

- Multi supply voltage
- Selectable sensor combination with up to three sensors
- Polarity-free sensor connection
- Automatic sensor and sensor type detection
- Quick one touch commissioning
- Display for system status and alarm information
- Two fully configurable potential free relay outputs
- Alarm log
- Service and maintenance diary
- WLAN connection locally between control unit and laptop/tablet/smartphone to access the built in browser user interface for settings and configuration

Technical data

Mounting	M36 DIN rail housing
Enclosure material	Lexan 940 (top), Noryl VO 1550 (base)
Weight	380 g
IP classification	IP20
Display	4 line monochrome LCD
Ambient temperature	-30 °C...+60 °C
Supply voltage	100-240 V AC, 50/60 Hz
Supply power fuse	Max. 10 A
Power consumption	Max. 12 VA
Relay outputs	5 A, 250 V AC/30 V DC, 100 VA potential free change-over 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
Overvoltage category	II
Ex-classification	Ex II (1) G [Ex ia Ga] IIB
ATEX	EESF 21 ATEX 024X
IECEX	IECEX EESF 21.0017X
UKEX	CML 21UKEX21351X
Exi interface values	$U_0 = 14.5 \text{ V}$, $I_0 = 78 \text{ mA}$, $P_0 = 367 \text{ mW}$, $R = 243 \Omega$
Max values in IIB	$C_0 = 4.0 \mu\text{F}$, $L_0 = 16.7 \text{ mH}$
Compatible sensors	idOil-LIQ high liquid level sensor idOil-OIL / idOil-OIL-S 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)

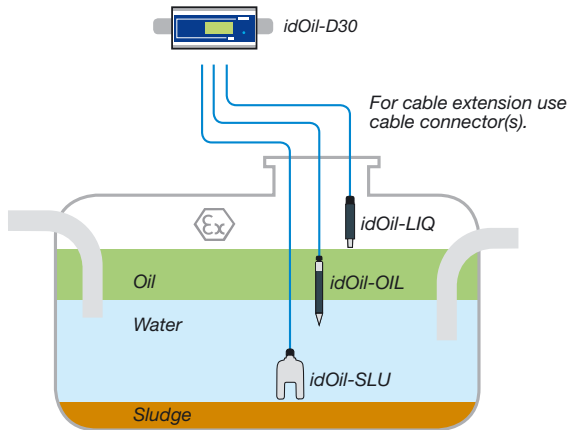


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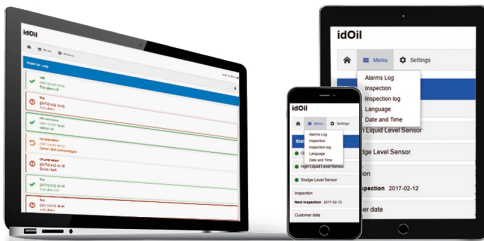
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Application



Settings, configurations and information via browser user interface

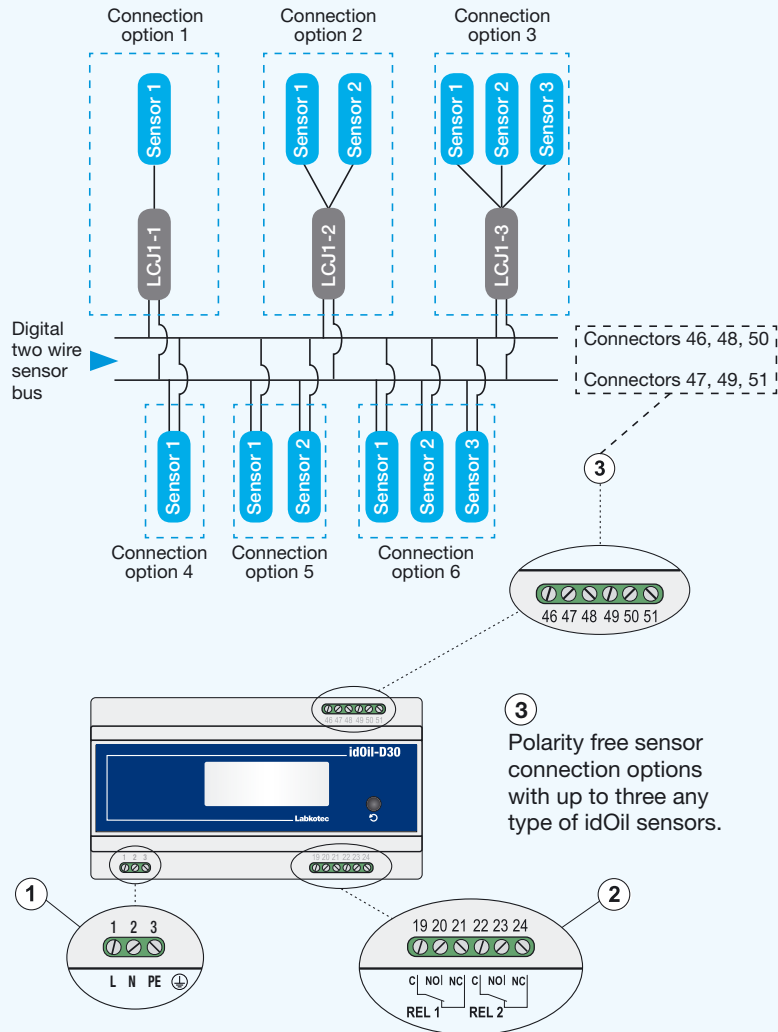


- System status view with current alarms
- Date and time settings
- Language selection
- Alarms log, downloadable
- Inspection settings
- Write inspection notes
- Inspection diary, downloadable
- Customer data input for display
- Alarm settings
- Sensor identification and naming
- Relay configuration
- Software update

Cable connectors

- 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

- 1 = L, phase conductor
- 2 = N, neutral conductor
- 3 = PE, ground conductor

2 Relay output

- Relay 1**
- 19 = Common pole
 - 20 = Opening pole when alarm
 - 21 = Closing pole when alarm
- Relay 2**
- 22 = Common pole
 - 23 = Opening pole when alarm
 - 24 = Closing pole when alarm

3 Sensor connectors

- 46 = Sensor 1 connection 1
- 47 = Sensor 1 connection 2
- 48 = Sensor 2 connection 1
- 49 = Sensor 2 connection 2
- 50 = Sensor 3 connection 1
- 51 = Sensor 3 connection 2

3 Polarity free sensor connection options with up to three any type of idOil sensors.

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