

Data sheet

idSET-34

idSET-34 oil separator alarm control unit



Fulfils
requirements
of EN 858-1&2
standards

The idSET-34 is an easy to use oil separator alarm control unit. 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.

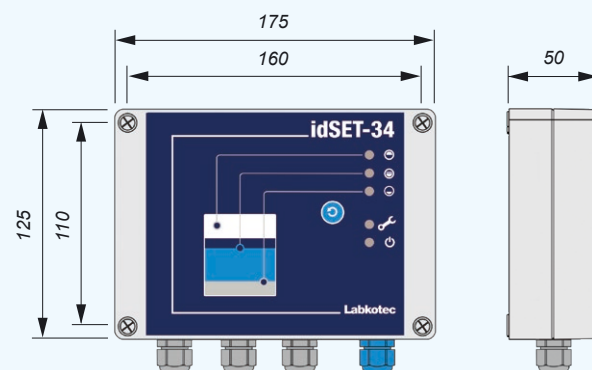
Features

- 4 relay outputs, one for each sensor alarm and one for sensor faults
- Two wire digital sensor bus
- 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 sensor alarms, sensor fault and supply voltage
- Integrated buzzer for alarm indication

Technical data

Mounting	Wall mounting
Enclosure material	Polycarbonate
Weight	650 g
IP classification	IP65
Indicators	5 LED lights for alarm and faults, integrated alarm buzzer
Operating environment	Temperature -30 °C...+50 °C Max. elevation above sea level 2 000 m Relative humidity RH 100 %
Supply voltage	230 V AC \pm 10 %, 50/60 Hz
Supply power fuse	Max. 16 A
Power consumption	Max. 8 VA
Relay outputs	4 relays, 5 A, 250 V AC/30 V DC, 100 VA potential free changeover contacts
EMC	IEC/EN 61000-6-2 IEC/EN 61000-6-3
Electrical safety	Class II, IEC/EN 61010-1
Overvoltage category	II
Ex-classification	⊕ II (1) G [Ex ia Ga] IIB ATEX, IECEx Certified. UKEX Pending.
Exi interface values	$U_o = 14.5$ V, $I_o = 78$ mA, $P_o = 367$ mW, $R = 243$ Ω
Max values in IIB	$C_o = 4.0$ μ F, $L_o = 15$ 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 Mounting sets for control unit and sensors

Dimensions (mm)

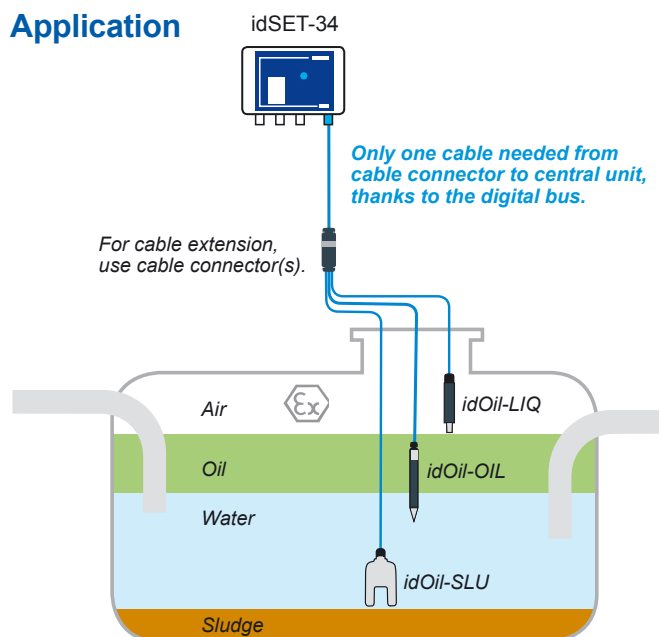


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Application



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

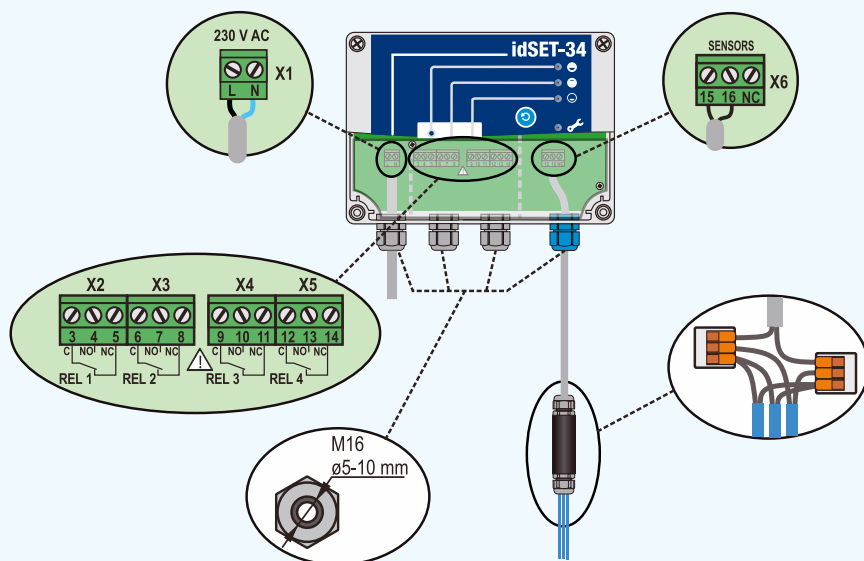
Cable connector for two sensors.



LCJ1-3

Cable connector for three sensors.

Installation



Supply voltage 230 V AC

N = Neutral conductor

L = Phase conductor

Relay outputs

Relay 1 oil sensor alarms

3 = Relay common contact

4 = Contact that opens in an alarm situation

5 = Contact that closes in an alarm situation

Relay 2 high liquid level sensor alarms

6 = Relay common contact

7 = Contact that opens in an alarm situation

8 = Contact that closes in an alarm situation

Relay 3 sludge sensor alarms

9 = Relay common contact

10 = Contact that opens in an alarm situation

11 = Contact that closes in an alarm situation

Relay 4 fault alarms

12 = Relay common contact

13 = Contact that opens in an alarm situation

14 = Contact that closes in an alarm situation