AX-DLD

Diesel Leak Detection Alarm Module



Product Overview

The AX-DLD is a multi-channel optical-sensor-based diesel leak detection alarm module designed to be used with AX-DLD-OPT optical sensors. The alarm module comes in an IP65 rated enclosure making it suitable for harsh environments. The normally open volt-free contacts are closed when a leak is detected on at least one channel or during loss of power to the unit. Although the product is commonly used for detecting diesel spillages in industries, it works with most liquids including water. Individual channels may be disabled or enabled using the on board dipswitch.



Products Features

- 24V ac/dc power
- LED indication when relay is active
- IP65 rated enclosure

- LED indications for individual sensors
- Dipswitch for disabling individual channels

Product Specifications

Supply voltage: 24Vac @ 50Hz $\pm 10\%$ or 24Vdc $\pm 10\%$

Power consumption: 2.5W

Relay: Normally Open. Closed during alarm or removal of power supply to the unit.

Contact rating: 10A Resistive

LED Indications: 4xSensor status, 1xRelay status

Sensor LED status: ON when leak is detected.

Relay LED status: ON when relay is active.

Terminals: Rising clamp for 0.5-1.5mm² cable, 2 part pluggable.

Cable glands: 6 Nos. M12x1.5, Suitable for cable sizes 3-6mm in dia

Ambient working conditions: -20°C to 70°C, 0-90% RH

Ingress protection: IP65

Enclosure: ABS (Polycarbonate Lid)

Dimensions (Enclosure) 162 x 82 x 46 mm

Weight: 300gms

Compliances: CE, EU ROHS
Country of origin: United Kingdom

Product Order codes

Order Code Description

AX-DLD-4C Diesel leak detection alarm module, 4 Channel

AX-DLD-8C Diesel leak detection alarm module, 8 Channel. Contact us for more info.

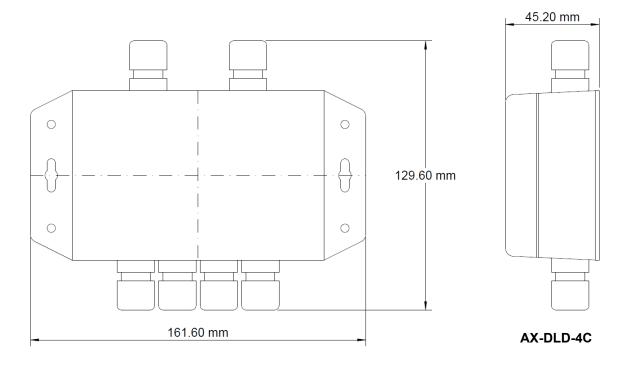
Compatible sensors

AX-DLD-OPT Optical sensor with SS clamp and IP65 enclosure (See AX-DLD-OPT datasheet)

Diesel Leak Detection Alarm Module



Dimensions



Installation

The unit should be installed by suitably qualified technician in conjunction with any guidelines for the equipment it is to be connected to and any local regulations. Avoid mounting the control module near other devices which generate heat. Proper ventilation must be provided to ensure that the ambient working conditions never exceed the maximum ratings. Do not route the conductors near power lines, power circuits with a high di/dt, switch-mode converters, power-regulation control devices.

Mount AX-DLD control module on to the wall using the mounting holes on the enclosure.

Terminate the signal and power wires as shown in the wiring diagram.

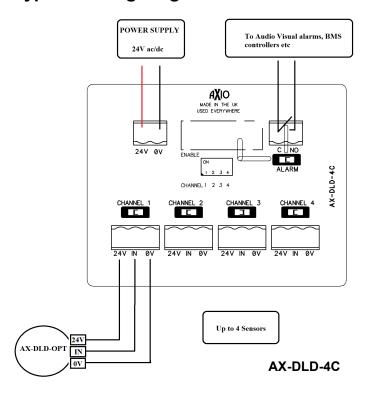
Tighten the cable glands to ensure protection from dust and water.

Disable unused channels using the dipswitch.

Power up the unit. If any of the sensors detect leak, the corresponding LED will be lit, and the relay contacts will be closed. LED near the Relay terminals indicate whether the relay contacts are closed (LED ON) or open (LED OFF).

Note that the relay contacts remain closed when no power is applied.

Typical wiring diagram



Datasheet Contents

Every effort has been taken in the production of this data sheet to ensure accuracy. Annicom do not accept responsibility for any damage, expense, injury, loss or consequential loss resulting from any errors or omissions. Annicom has a policy of continuous improvement and reserves the right to change this specification without notice.

AX-DLD-OPT

Optical Sensor for Diesel Leak Detection Alarm Module



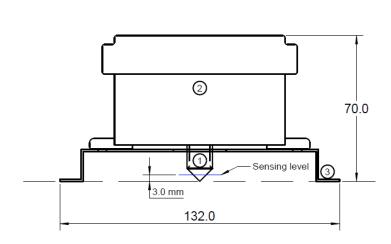
Product Overview

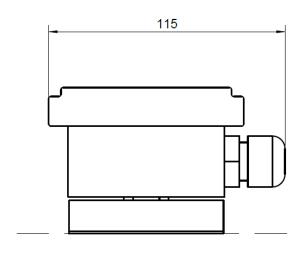
The AX-DLD-OPT is used with AX-DLD Diesel Detection Alarm Module to detect diesel leaks. It's an optical sensor in which the light transmitted by the internal LED is reflected back to a receiver when no liquid is present. When the liquid covers the tip of the sensor light is refracted out into the liquid and light does not reach the sensor. This is detected by the sensor and signals the leak detection module.



Dimensions

- (1) Sensor
- (2) IP 65 Enclosure
- (3) SS Clamp





Installation

Installation and field wiring must be carried out by trained personnel. Electrostatic precautions must be taken while handling the printed circuit board. Ensure that the power supply to the alarm module is off.

Adjust the detection level. The sensor has a threaded design. Set the required height and tighten the nuts to secure the position of the sensor inside the enclosure.

Terminate the cable (3-core shielded cable recommended) from the AX-DLD alarm module on the connector board. Ensure that wires from '24V', 'IN' and '0V' on the AX-DLD module are connected to the matching terminals on the sensor board. Improper connections could cause irreversible damage.

Close the lid and tighten the cable gland to protect the sensor from dust. Place the sensor on the surface where the leak is to be detected. The cable should be secured in such a way that the sensor clamp lays flat on the surface.

Product Order codes

Order Code

AX-DLD-OPT

Description

Optical sensor with SS clamp and IP65 enclosure