FG-ALS4-OD

Four Zones Alarm & Locating System Unit for Hydrocarbon Sense Cables

LIQUID LEAK DETECTION SYSTEMS

OIL & GAS DIVISION

Product Datasheet

► Locating Leak Detection System
► 4 Independent Zones
► 4 Simultaneous Leaks can be Detected
► Touch Screen Display
► MODBUS/JBUS Integration
► Exclusive for FG-OD Sense Cable

Description

The FG-ALS4-OD, Four Zones Alarm & Locating System Unit is designed to be used with TTK hydrocarbon addressable sense cables FG-OD to give instant detection and location of liquid (non-conductive hydrocarbon liquids and solvent).
In the event of liquid leak or default on the sense cables for each zone, the responses from the FG-ALS4-OD alarm & locating unit:
- An audible alarm is triggered and a relay is activated.
- The touch screen of the panel displays the zone, the location of the leak (to the nearest cable) and details of the fault (the type of fault leak or cable break).
- Report to the BMS via a JBUS/MODBUS protocol.

Features & Benefits

FEATURES
- The FG-ALS4-OD unit is dedicated to the FG-OD sense cables.
- The FG-ALS4-OD unit can control up to 4 FG-OD sense cables, or a maximum length of 48 metres of sense cables per unit.
- 3.2" touch-screen gives a clear indication of the system status.
- User-friendly system - users can customise the system with the sub menus accessible from the home screen, to set up the unit.
- 4 detection zones are available.
- 5 relays are available, 4 for leak and 1 for system fault.
- RS485 serial link with MODBUS/JBUS communication protocol for interfacing with BMS is available.

BENEFITS
- Pinpoint the location of leaks monitored by 4 independent zones.
- Detect cable-break fault.
- The FG-ALS4-OD unit is accurate and easy to use in Oil & Gas and Chemical Industries.

Technical Data

Compatibility	Hydrocarbon sense cables: FG-OD12, FG-OD7, FG-OD3
Enclosure Type	ABS flame retardant UL94V0
Operating Temperature	-5°C to 55°C
Serial Interface Physical Support	Optoisolated two wire RS485
Serial Link Parameters	9600 baud, 8 data bits, 1 stop, no parity
Supported Protocol	MODBUS, function 3
Relays Type: Leak + Cable Break	5 SPDT single contact NO-NC
Relay Max. Switching Voltage	230VAC and 220VDC
Power Consumption	5 VA
Supply Voltage	85Vac to 230Vac-50/60Hz
Dimensions (W,H,D)	168 x 153 x 56 mm

Screen Shots

■ The first button (flag) allows to change the system language: English / French / German

■ The second button (arrows) allows to show the installed lengths on each of the four sections:

SECTION 1	SECTION 2
3 m	7 m
SECTION 3	**SECTION 4**
12 m	0 m

■ The third button (gears) allows to change the Modbus slave number:

MODBUS (1 - 255)

1	2	3	4	5
6	7	8	9	0

■ In the case of faults (leak or cablebreak), the touch screen shows below:
The leak alarms, represented by a drop of liquid;
The cablebreak alarms, represented by scissors and the ''sensor'' label.

SECTION 1	SECTION 2
Leak	Bus
SECTION 3	**SECTION 4**
OK	Sensor

Electrical Specification

Power Supply 230-240VAC	N : Neutral / L : Line / ⏚ : Earth
RS485	R1 : COM / R2 : RT+ / R3 : RT-
Cable Break Relay	R1 : NO / R2 : COM / R3 : NC
Leak Relay	R1 : NO / R2 : COM / R3 : NC
FG-CLOD Leader Cable	B : White wire / C : Black wire / D : Red wire

Identification Codes

FG-ALS4-OD F	Analog Touchscreen Panel 4 Zones (Wall mounted) 100-240VAC - Oil Detection Cables - 1 Cable / Zone
FG-OD12, FG-OD7, FG-OD3	Addressable Oil Sensing Cable in 12, 7, 3 m with Connectors
Accessories:	
FG-CLOD	Leader Cable, on ˙OD Bus 8771˙
FG-TMOD	Digital End Plug on ˙OD Bus 8771˙ for FG-OD Cable
FG-NOD N	˙OD Bus 8771˙ Neutral Cable ˙N˙ (30, 15, 7, 3, 1m) With Connectors

Certificates

FG-OD sense cables which are certified by ATEX can be connected to the FG-ALS4-OD alarm & location unit.