FG-ALS8

Eight Zones Alarm & Locating System Unit

Product Datasheet

► Locating Leak Detection System
► 8 Independent Zones
► 8 Simultaneous Leaks can be Detected
► Touch Screen Display
► MODBUS/JBUS Integration
► Adjustable Sensitivity

Description

The FG-ALS8, Eight Zones Alarm & Locating Unit is designed to be used with TTK analog sense cables: FG-ECS, FG-ACS and FG-ECX, FG-ACX to give instant detection and location of liquid leaks (water, acid or base).

In the event of liquid leak or fault on the sense cables in any zone, the FG-ALS8 will respond as follows:

■ An audible alarm is triggered and a relay is activated.

■ The touch screen of the panel displays the zone, the location of the leak (+/- 3 ft (+/- 1 m)) and details of the fault (the type of fault leak or cable break).

■ Event report is sent to the BMS via MODBUS /JBUS.

To mute the alarm sound, simply touch the screen, or the panel will mute the alarm sound automatically when the leak or break is cleared.

Features & Benefits

FEATURES

■ The FG-ALS8 unit can control up to 328 ft (100 m) of sense cable per zone.

■ 4.3" touch-screen gives a clear indication of the system status.

■ 8 detection zones are available.

■ 9 relays are available, 8 for leak and 1 for cable break (all zone) + power failure.

■ RS485 serial link with MODBUS /JBUS communication protocol for interfacing with BMS is available.

BENEFITS

■ Accurate reporting of leak location to +/- 3 ft (+/- 1 m) .

■ The sensitivity of the unit is adjustable via the potentiometer on the PCB.

■ Detects cable break faults.

■ Compatible with existing monitoring systems.

■ User-friendly system - users can customise the system with the sub menus accessible from the home screen, to set up the unit.

■ The FG-ALS8 unit is accurate and easy to use, ideal for small and medium applications where accurate leak location is required.

Technical Data

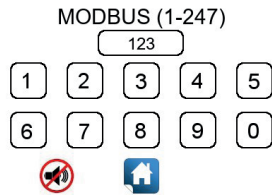|	
Compatibility	Digital unit: FG-NET Analog sense cables: FG-ECS, FG-ECX, FG-ACS, FG-ACX
Enclosure Type	ABS flame retardant UL94V0
Operating Temperature	23° to 131°F (-5° to 55°C)
Serial Interface Physical Support	Optoisolated two wire RS485
Serial Link Parameters	9600 baud, 8 data bits, 1 stop, no parity
Supported Protocol	MODBUS, function 3
Relays Type: Leak + Cable Break	9 SPDT single contact NO-NC
Relay Max. Switching Voltage	125VAC and 220VDC
Relay Max. Switching Capacity	60W (30V x 2 A)
Power Consumption	10 W
Supply Current (typ.)	0.25A/115VAC 0.15A/230VAC
Dimension (W, H, D)	8.66"W x 7.87"H x 2.16"D (220mmW x 200mmH x 55mmD)
Ingress Protection (IP)	IP40

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 eight zones:

ZONES

Zone 1: 15m	Zone 5: 7m
Zone 2: 30 m	Zone 6: 30
Zone 3: 60 m	Zone 7: 15m
Zone 4: 7m	Zone 8: 45 m

■ The third button (gears) allows to change the Modbus slave number and to set the «mute» mode:

MODBUS (1-247)

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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.

ZONES

1: SENSOR	5: SENSOR
2: 30 m	6: OK
3: 99 m	7: SENSOR
4: OK	8: 45 m

Electrical Specification

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

Identification Codes

FG-ALS8	Eight zones alarm & location system unit
FG-ECS, FG-ACS and FG-ECX, FG-ACX	Water or acids sense cable in 9, 22, 49 ft (3, 7, 15m) in length
Accessories:	
FG-CLC	Leader cable of 11.48 ft (3.5 m) length
FG-TMX	End termination plug
CF-EC100	100 hold-down clips with glue
ES-EC	40 tags

Certificates

CE

The FG-ALS8 unit meets the requirements of all European Standards in EN61000-6-2 / EN61000-6-3/EN61000-3-2/EN61000-3-3.

All the connections in the FG-ALS8 alarm locating system unit must be done with the power supply switched off.
Read carefully the installation procedure for the FG-ALS8 alarm locating system unit.