FG-ALS4

Four Zones Alarm & Locating System Unit

Product Datasheet

► Locating Leak Detection System
► 4 Independent Zones
► 4 Simultaneous Leaks can be Detected
► Touchscreen Display
► MODBUS/JBUS Integration
► Adjustable Sensitivity

Description

The FG-ALS4, Four Zones Alarm & Locating Unit is designed to be used with TTK analog sense cables to give instant detection of liquid leaks (water, acids or base).
In the event of liquid leak or fault on the sense cables in any zone, the FG-ALS4 will respond as follows:

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

■ The touchscreen 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 automatically mute the alarm when the leak or break is resolved.

Key Advantages

■ Zone Control: The FG-ALS4 unit can control up to 147 ft (45 m) of sense cable per zone.

■ Adjustable Sensitivity: The sensitivity of the unit is adjustable via the potentiometer located on the PCB.

■ Flexible Mounting Options: Available in both wall mounted and rack mounted (19'' and 3U).

■ Fault Detection: The system detects cable break faults to ensure reliable monitoring.

■ User-Friendly Interface: Users can customize the system through submenus accessible from the home screen to set up the unit easily.

■ Seamless BMS Integration: The unit features an RS485 serial link with MODBUS/JBUS communication protocol, enabling easy interfacing with Building Management Systems (BMS).

■ Precision & Usability: The FG-ALS4 unit is accurate and easy to use, making it ideal for small and medium applications where precise leak location is required.
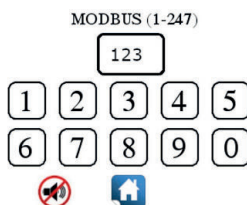
Screen Shots

■ 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 zones:

ZONE 1	ZONE 2
20 m	5 m
ZONE 3	ZONE 4
45 m	15 m

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

MODBUS (1-247)

123

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.

ZONE 1	ZONE 2
SENSOR	OK
ZONE 3	ZONE 4
16m	SENSOR

Technical Data

Compatibility	Digital units: FG-NET, FG-BBOX, FG-BB-PoE, FG-RELAYS via FG-DTM Analog sense cables: FG-ECS, FG-ECX, FG-ACS, FG-ACX
Dimensions & Weight	Wall mounted: 6.61'' W × 6.02'' H × 2.20'' D (168 mm W × 153 mm H × 56 mm D) 1.76 lbs (0.8 kg) Rack mounted: 3U (5.25'') (or 482.60mm x 132.56 mm) 1.54 lbs (0.7 kg)
Sensor Capacity	4 x 147 ft (45 m)
Location Accuracy	+/- 3 ft (1 m)
Operating Languages	English, French, German
Supply Voltage	100-240 VAC, 50/60 Hz
Current	0.06 A (120 V), 0.03 A (230 V)
Power Consumption	7 VA Max
Operating Temperature	5°F to 131°F (-15°C to 55°C)
Case Type	ABS flame retardant UL94V0
Screen Size	3.5''
Format	Wall mounted & rack mounted 3U
Ingress Protection	IP40 for wall mounted, no IP indice for rack mounted
Serial Connection	MODBUS/JBUS RS485
Numbers of Realys	5 (4 leak relays + 1 break & power failure relay)
Relay Types	Volt free dry contact (NO, NC, COM)
Power Failure Relay	Activated on loss of supply voltage
Type of Faults Available on the Configurable Relays	Non-configurable
Maximum Relay Switching Voltage	125 VAC and 220 VDC
Maximum Relay Switching Capacity	60 W (30 V x 2A)

Identification Codes

FG-ALS4 F	Analog Touchscreen Panel 4 Zones (Wall Mounted) 100-240VAC - Water & Acids Detection
FG-ALS4 E	Analog Touchscreen Panel 4 Zones (19' Rack Mounted) 100-240VAC - Water & Acids Detection
Accessories:	
FG-CLC	Leader Cable 11.5 ft (3.5 m)
FG-TMX	End Termination
CF-EC100	100 Hold-down Clips with Adhesive
ES-EC	40 Signal Tags

Certifications

CE

All the connections in the FG-ALS4 alarm locating system unit must be done with the power supply switched off.
Read carefully the installation procedure for the FG-ALS4 alarm locating system unit.

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