



LIQUID LEAK DETECTION SYSTEMS

FG-A Alarm Unit

Product Datasheet



- ▶ Analog Leak Detection System
- ▶ Simple Detection Without Location
- ▶ Three LED Indicators
- ▶ Two Output Relays

Description

The FG-A alarm unit is designed to be used with TTK analogue sense cables (FG-ECS, FG-ECX, FG-ACS, FG-ACX) to give immediate detection of liquid leaks (water, acid or base).

LED's on the front of the panel indicate the presence of Power Supply (green), Leak Detected (red) or Cable Break (yellow).

The FG-A also features an RS485MODBUS/JBUS serial link to integrate with a variety of intelligent monitoring systems.

Responses on the FG-A alarm unit:

- In the case of a leak an audible alarm is triggered. The red LED is switched on and the leak relay is activated.
- In the case of cable break an audible alarm is triggered, the yellow LED is switched on and the cable break relay is activated.

The "SOUND OFF" button on the front of the panel allows manual silencing of the audible alarm. The LED's and corresponding relays remain activated as long as the fault persists. When the fault is corrected the LED's and relays return to normal status.

Features & Benefits

FEATURES

- Available as a wall mounted unit.
- The unit can control sense cables up to 15 metres.
- Visual and audible indicators for the type of fault (leak or cable break).
- Flexible supply voltage: 12-24VAC ;15-30VDC or 100-240VAC 50/60Hz.
- Easily accessible terminals for rapid installation.
- RS485 serial link with MODBUS provides a variety of intelligent interfacing options.
- Two zero volt contact relays provide numerous signalling and centralised monitoring options.

BENEFITS

- The FG-A is simple and easy to use, making an ideal choice for small or remote applications
- Detects cable break faults.
- A simple bi-annual test is all that is required.

Technical Data

| | |
|--|---|
| Compatibility | Analog sense cables: FG-ECS, FG-ECX, FG-ACS, FG-ACX |
| Enclosure Type | ABS material (rated to UL94HB) |
| Operating Temperature | 0°C to 50°C |
| Serial Interface Physical Support | Optoisolated two wire RS485 |
| Serial Link Parameters | 9600 bauds, 8 data bits, 1 stop, no parity |
| Supported Protocol | MODBUS, functions 3 and 4 |
| Relays Type: Leak + Cable Break | 1 SPDT single contact NO-NC |
| Dry Relay Max. Switching Voltage | 125Vac or 220Vdc |
| Relay Max. Switching Capacity | 60W (30V x 2A) |
| Power Consumption | 2VA |
| Supply Voltage | 230Vac / 110Vac — 50/60Hz or 12-24Vac, 15-30 Vdc |
| Dimensions (W,H,D) | 172 x 86.6 x 55 mm |

Panel Description

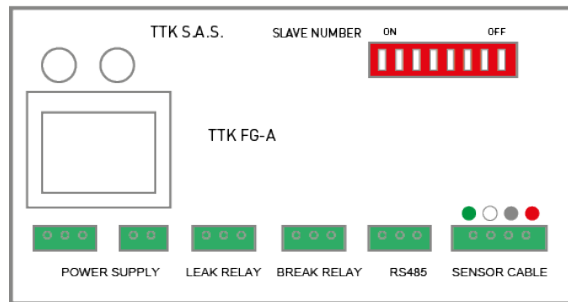
- 1: The leak signal (red LED) indicates that the system has detected a liquid leak.
- 2: The continuity signal (yellow LED) indicates that the system has detected a circuit interruption.
- 3: The power supply signal (green LED) indicates that the system is in normal operation.
- 4: The button is used to stop the audible alarm.



Dimensions



FG-A Wall Mounted Unit



Connector Description

Electrical Information

| | |
|----------------------------|---|
| Power Supply | N : Neutral / P : Phase / : 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-CLC Leader Cable | A : Green wire / B : White wire / C : Black wire / D : Red wire |

Identification Codes

| | |
|--|---|
| FG-A | Alarm unit FG-A wall mounted |
| Accessories: | |
| FG-CLC | Leader cable of 3.5 metres length |
| FG-ECS, FG-ACS and FG-ECX, FG-ACX | Water or acids sensing cable in 3m, 7m, and 15m in length |
| FG-TMX | End termination plug |
| CFE-100C | 100 hold-down clips with adhesive |
| ES-40 | 40 tags |

Certificates



The FG-A unit meets the requirements of all European Standards in EN 50081 and EN 50082 EMC.
 FG-A meets the TÜV requirements, according to IEC 61010-1/A2.

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

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