

FG-A-OD Alarm Unit for Hydrocarbon Leak Detection

Installation Instructions

Installation Instructions FG-A-0D



Connection and Adjustment

FG-A-OD Alarm Unit Description

- The FG-A-OD Alarm Unit is designed to be used with FG-OD hydrocarbon range of sense cable or point detector, to provide quick detection of liquid (non-conductive hydrocarbon liquids and solvent). The appearance of a fault (leak, cable break) is detected in the following way:
 - An audible alarm is triggered;
 - A luminous diode turns on: red (for leak) or yellow (for cable break);
 - A dry contact is activated to transfer the alarm information to remote monitoring equipments.
- To stop the audible alarm, press the central button. The diode and the dry contact remain activated as long as the fault is present.
- When the fault disappears, the diode switched off and the relay returns to its original normal status.
- The panel is designed to connect only 1 length of sensor cable, if there are more than 1 sensor installed, the panel will be locked and the alarm will be active permanently.

2 Panel Mounting

Available in Wall Mounted Version:

Two of the three cable glands are placed on the FG-A-OD Alarm Unit, the last one can be screwed in the place of plug PG7.

Use the four fixing holes in the lower part of the unit box. Release the higher part of the box of the lower part which is maintained by four screws. These two parts could be easily dismounted after mural fixing. Withdraw carefully the higher part with the PCB (printed circuit board).

FG-A-OD Alarm Unit, wall mounted version, contains:

- 1 FG-A-0D Alarm Unit
- 3 PG cable glands: 2 PG7 + 1 PG9
- 1 plug PG7
- Installation Instructions (this document)

1. Power Connection	Three possibilities for power connection: 12 to 24 VAC / 15 to 30 VDC / 100-240 VAC 50/60Hz. Maximum capacity: 10W The maximum section of the cable is of 14 AWG for 100-240 VAC 50/60Hz, and 18 AWG for 12- 24VAC and 15-30VDC. It is not necessary to respect the polarity in 12/24 V. Use PG9 cable gland for the cable 230 V.
2. Connection of the Dry Relays	Simple relay: COM-NO-NC Max. commutated Voltage: 125 VAC / 220 VDC Max. commutated Power: 60W (30V x2A) The dry relays are free of potential. The maximum section of the cables is of 18 AWG. - Dry Contact for Leak: The leak contact transfers the information of leak to a PC (or supervisor), allowing automated equipment control. - Dry Contact for Cable Break: A specific contact is activated in case of cable break. A power supply failure also activates the contact.



Connection of Sense Cable FG-OD:

 $\mathsf{FG}\text{-}\mathsf{OD}$ sense cable will be connected at the extremity of $\mathsf{FG}\text{-}\mathsf{CLOD}.$

To connect the FG-CLOD to FG-A-OD, please refer to next section 5.



Connection of Point Detector FG-ODP :

FG-ODP point detector/probe can be connected to FG-A-OD in two different ways (refer to next Section 5 for wiring):

- Direct connection: FG-ODP leader cable (4 wires) into FG-A-OD;
- Via FG-DOP box: FG-ODP leader cable (4 wires) into FG-DOP box, and 'TTK 8771' bus leader cable (3 wires: B, C, D) from FG-DOP box into FG-A-OD.
- NB : The second way allows having extra length of leader cable, if required.



Motherboard Connection



Warning :

- The green terminal is only used for the connection of an FG-ODP point sensor.
- Only the white-black-red terminals are used for the connection of an FG-OD sensing cable. **DO NOT USE THE GREEN TERMINAL.**
- The shield of the leader cable must be connected with the earth terminal of the power supply connector. **DO NOT CONNECT TO THE GREEN TERMINAL.**

To connect the various cables (leader cable, power supply and relays) at the corresponding connector block.

Power supply 100-240 VAC 50/60Hz	N : Neutral P : Live ⊕: Earth
Power supply 12 V or 24 VDC	Polarity unnecessary
Cable Break Relay and/or Power Relay	R1 : COM R2 : NO R3 : NC
Leak Relay	R4: COM R5 : NO R6 : NC
FG-CLOD Leader Cable (or FG-ODP Connection Cable)	A : Green wire (only for FG-ODP cable) B : White wire C : Black wire D : Red wire

Caution: All connections of the connector blocks must be done with FG-A-OD Alarm Unit supply switched off.

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- TTK Headquarters / 19 rue du Général Foy / 75008 Paris / France / T : +33.1.56.76.90.10 / F : +33.1.55.90.62.15 / www.ttk.fr / ventes@ttk.fr
- TTK Oil & Gas Division / 19 rue du Général Foy / 75008 Paris / France / T : +33.1.56.76.90.10 / F : +33.1.55.90.62.15 / www.ttk.fr / rrisi@ttk.fr
- TTK UK Ltd. / 3 Luke Street / London EC2A 4PX / United Kingdom / T: 0207 729 6002 / F: 0207 729 6003 / www.ttkuk.com / sales@ttkuk.com

TTK Pte Ltd. / #09-05, Shenton House, 3 Shenton Way / Singapore 068805 / Tel.+65-6220.2068 / Mob: +65.9271.6191 / Fax. +65-6220.2026 / www.ttk.sg / salesfattk.sg
TTK Asia Ltd. / 2107-2108 Kai Tak Commercial Building / 317 Des Voeux Road Central / Hongkong / Tel.+852.2858.7128 / Fax.+852.2858.8428 / www.ttkasia.com / infofattkasia.com

TTK Middle East E700 / Duilding / EA. Office 510 DO Day 5/095 / Dubei Airport Eres Zene / LAC. T. 071 / 70.17 EE9 / M. 071 E0 000 /

TTK Middle East FZC0 / Building 6EA, Office 510 PO Box 54925 / Dubai Airport Free Zone / UAE T: +971 4 70 17 553 / M: +971 50 259 66 29 / www.ttkuk.com / cgalmiche@ttk.fr
TTK Deutschland GmbH / Berner Strasse 34 / 60437 Frankfurt / Deutschland / T: +49(0)69-95005630 / F: +49(0)69-95005640 / www.ttk-gmbh.de / vertrieb@ttk-gmbh.de

- TTK North America Inc / 1730 St. Laurent Boulevard, Suite 800 / Ottawa, ON K1G 5L1 / Canada / T : +1 613 566 5968 / www.ttkcanada.com / info@ttkcanada.com
- Thomas Sales & Marketing Inc. TTK Master Distributor For USA / 7200 W 66th St / Bedford Park, IL 60638 / The United States / T: +1 630-518-4724 / www.ttkusa.com / dmolk@ttkusa.com