

GOOP Alarm Panel

Single Phase, 120/240VAC | Type 4X Enclosure
Models: GA240



QUICK START GUIDE

QSG000526_Rev02_GOOP Alarm Panel GA240 Series | December 31, 2024 7:32 AM

Safety Guidelines



WARNING

Before proceeding with the installation or operation of this product, read all instructions thoroughly, as well as complying with all federal, state and local codes, regulations, and practices. This product must be installed by qualified personnel familiar with all applicable local electrical and mechanical codes. Refer to the National Electrical Code (NEC) (NFPA 70). Failure to properly install, test, and operate this product can result in personal injury or equipment malfunction.

1. DISCONNECT POWER when installing or servicing the product. Failure to disconnect all power sources could result in serious injury or death.
2. NEVER enter a flooded space without proper Personal Protective Equipment (PPE). Always wear dielectric rubber boots and other applicable protective equipment when water is on the floor and you must service an energized pump, alarm system, or product.
3. DO NOT enter the water if the water level is higher than that of the protection your PPE offers or if your PPE is not watertight.
4. DO NOT use or install this product with or near flammable liquids.
5. DO NOT use or install this product in locations classified as hazardous or in explosive atmospheres as defined by any applicable electrical safety code.

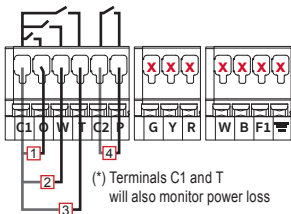
Step 1: Installation

Use this quick start guide as reference to match up each component included to the correct terminals inside the Alderon™ alarm panel shown in each step.

1. Mount and secure the alarm panel in the desired location. Recommended to use four (4) screws (not included) and wall mount anchors (not included) if necessary.
2. Install using the appropriate conduit connections. Make sure all conduits are sealed and waterproof per local codes.
3. **WARNING:** Do not mix high and low voltage wires in the same conduit or junction box, failure to do so will cause system failure. Follow NEC requirements pertaining to separation of voltages if run in the same conduit.
4. Incoming alarm/control power must match the alarm panel voltage. Refer to included electrical schematic for complete wiring and voltage information.

Step 2: Wiring | Auxiliary Contacts

Wire the auxiliary contacts of the alarm panel to a building automation system (BAS) or SCADA system for remote notification of alarm conditions and power loss. Connect existing product to the terminals listed below and shown in the diagram.



- External Alarm/BAS; GO1, Grease/Oil Alarm 1 = PCB:C1 and PCB:O (#1)
External Alarm/BAS; GO2, Grease/Oil Alarm 2 = PCB:C1 and PCB:W (#2)
External Alarm/BAS; Oil in Water Alarm & Power Loss = PCB:C1 and PCB:T (#3)
External Alarm/BAS; Oil/Water Monitoring Enabled = PCB:C2 and PCB:P (#4)

Note: The auxiliary dry contacts can switch 24VDC, 500mA maximum (each). It is recommended to use 18 gauge 2-conductor wire.

(*) Terminals C1 and T will also monitor power loss

Step 3: Wiring | WAGO Connectors

Before making wire connections and terminations, carefully read this step for proper functions of both types of WAGO connectors.

WARNING: Improper use of the connectors will cause damage, DO NOT use mechanical tools to open or close, hand usage only.

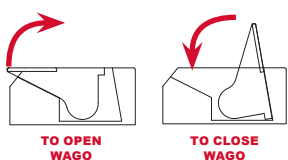
Wire Termination - Splice Connector WAGO (Fig. 1):

- 1) Lift tab(s) upward.
- 2) Insert wire(s) into slot.
- 3) Press tab(s) downward.
- 4) Make sure wire(s) are secured.

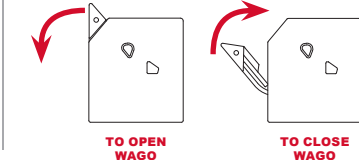
Wire Connection - Quick Snap Terminal WAGO (Fig. 2):

- 1) Press tab(s) outward.
- 2) Insert wire(s) into slot.
- 3) Press tab(s) inward.
- 4) Make sure wire(s) are secured.

(Fig. 1)



(Fig. 2)

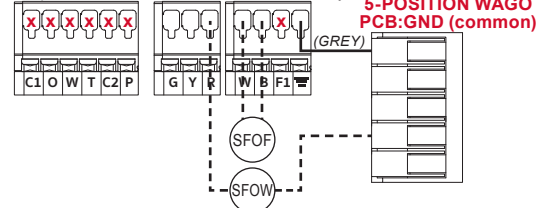


Step 4: Wiring | Sensors

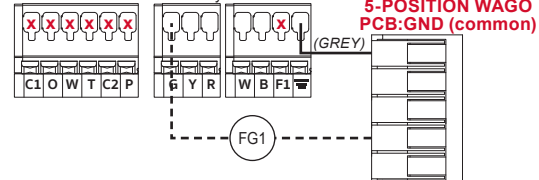
Wire the sensors (signaling device) to the terminal blocks and the WAGO connectors which are pre-wired to the alarm panel terminal blocks listed below.

- P1 – Oil or Grease Probe 1 = PCB:G
FG1 – Float Grease, Internally Weighted = PCB:G and PCB:GND (common)
P2 – Oil or Grease Probe 2 = PCB:Y
SFOF – Suspension Float Oil Water = PCB:R and PCB:GND (common)
SFOF – Suspension Float Oil Fluid = PCB:W and PCB:B
NOT USED = PCB:F1 (open terminal)

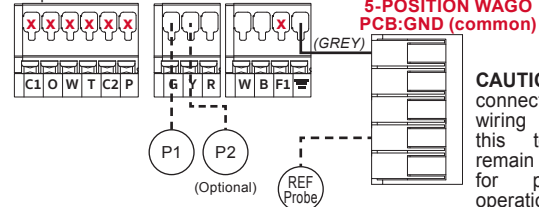
Suspension Float Switches for Oil Alarm Only



Float Switch for Grease Only



Suspension Probes for Both Oil and Grease

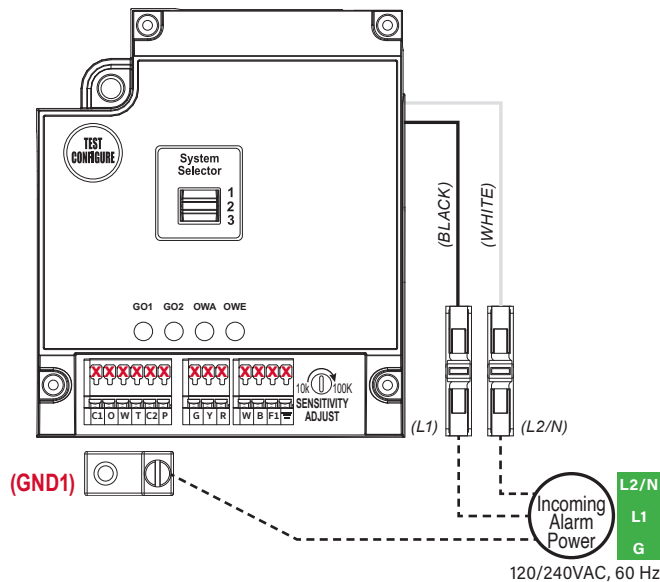


CAUTION: DO NOT connect sensors or wiring to terminals F1, this terminal MUST remain disconnected for proper system operation.

Step 5: Wiring | Alarm Power 120/240VAC

Wire the incoming alarm power to the terminals listed below and shown in the diagram.

Incoming Alarm Power; Line (L1) = WAGO/Black Wire
Incoming Alarm Power; Line 2/Neutral (L2/N) = WAGO/White Wire
Incoming Alarm Power; Ground (G) = GND1

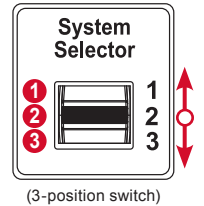


CAUTION: If installing with 240VAC power, it is recommended to place a red band around the white wire (L2/N) to indicate the line is hot.

Step 6: System Selector Switch

The System Selector Switch is used to select the type of sensors used on the application.

- (1) One Alarm; either Float/Probe, Grease or Oil: For Grease, Only use FG style float – internally weighted, For Oil Alarm with 1 Float only use SFOW type Suspension Float Water with Specific Gravity (.95). Probes can be used for grease or oil.
- (2) Two Alarm Levels; Using Probes Only for Grease or Oil.
- (3) One Alarm; Using 2 Suspension Floats (Type SFOW and Type SFOF) for monitoring Oil Only Alarm.



Step 7: Water Sensitivity Adjustment

The water detect sensitivity which correlates to the oil/water resistance level can be adjusted from 10,000 ohms (10K) to 100,000 ohms (100K). Use this feature to adjust system for oil detection alarm. With the maximum setting of 100K ohms, the system will be more sensitive to alarms and with the minimum setting of 10K ohms the system will be less sensitive. In either minimum or maximum setting, the alarm will go off if the sensor tip is 100 percent immersed in oil or grease. Alarms generated without the tip 100 percent immersed in oil or grease is a sign that the sensor tip needs cleaning or the system is detecting a concentration of oil/grease and water surrounding the sensor probe tip.

1. **Recommended Value;** set the sensitivity potentiometer to 50k-Ohms and adjust if needed.
2. **Less Sensitive;** rotate the sensitivity potentiometer counter clockwise towards 10k.
3. **More Sensitive;** rotate the sensitivity potentiometer clockwise towards 100k.



Step 8: Test/Configure Pushbutton

The test/configure pushbutton is used to activate an alarm test and enable or disable system configuration settings. See below how to view and change factory settings to customize per application (refer to full user guide).

Configurable settings include: Enable or disable the green beacon

LED TEST PATTERN (Press and Hold: less than 5-seconds):

LEDs illuminate (slow blink), buzzer annunciates, and auxiliary contacts close.

TOGGLE SETTINGS (Press and Hold: at least 10-seconds):

Release while the green beacon is blinking fast to toggle the green beacon.

EXIT WITHOUT SAVING:

Continue to press and hold until the system returns to the LED test pattern.

Included with Product

• **Base Model: GA240;** (1) Alderon Alarm Panel, (2) pre-installed in-line WAGO connectors, and (1) pre-installed 5-Port WAGO Connector (sensor commons).

Customer Support

Online
alderonind.com

Email
info@alderonind.com

QR Code

Scan code for full product details, documents, and operating information



Specifications (standard; base model)

Alderon™ GOOP Alarm Panel

Primary Power:	120/240VAC, 60 Hz
Phase Type:	Single Phase
Auxiliary Contacts:	24VDC, 500mA
Fuses:	Positive Temperature Coefficient (PTC), Resettable
Sensor Inputs:	(1) Float Switch (for GREASE application ONLY) (2/3) Probe Sensors (for GREASE or OIL applications) (2) Suspension Float Switches (for OIL application ONLY)
Alarm Beacon:	100mA, 12VDC, Polycarbonate (clear bulb; various color indicators)
Alarm Buzzer:	12VDC, 95dB at 2-feet
Test/Silence Switch:	Single Pole, Single Throw
Enclosure (inches):	Thermoplastic, 8x6x4, Type 4X (outdoor), Lockable Latches
Certifications:	UL 508 (US and Canada)
Warranty:	Three-Year Limited Warranty

Step 9: Power and Quick Test

After all wiring and installation steps are completed, verify the incoming voltage matches the alarm panel. Apply power to the alarm panel, then place the system selector switch to the desired position to match system sensors.

- 1) Toggle the test/silence switch upward to activate an alarm test. The buzzer should annunciate, red alarm beacon should illuminate (flashing).
- 2) Activate a sensor input, the buzzer should annunciate, red alarm beacon should illuminate (flashing), and auxiliary contacts should activate. Toggle the test/silence switch upward during an alarm condition, the buzzer should silence and alarm beacon should remain illuminated (solid). Deactivate the sensor and the alarm condition should reset. Test each sensor connected to the alarm panel to ensure system integrity.