

Aqualarm Smart Bilge Pump Switch System

System Description and Operation:

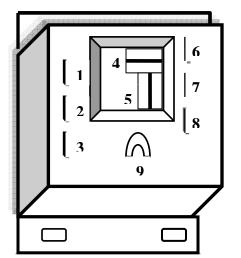
The smart bilge pump switch system is a three component system. The water level sensing device is the reliable Aqualarm 208A Bilge Level Detector, and the power switching device is the Smart Bilge Pump Switch. A small red light bilge panel is also supplied for mounting near the helm to alert on bilge flooding or excessive pumping.

The smart switch contains a 30 amp relay to handle the bilge pump load, and special circuitry to provide an additional 15 second pumping period after the 208A senses the bilge empty. This allows the bilge pump to get as much water out of the bilge as possible and to clear the discharge hose. It also tends to prevent "short-cycling" of the pump therby adding to its life. If for some reason, the pump can't empty the bilge in two minutes, the smart switch will send a signal to trigger an alarm device and light the bilge light panel. If you have a very large bilge that normally requires longer than two minutes to pump dry, the delay period may be lengthened to more than three minutes by cutting the small red wire that extends out of the epoxy.

Installation Instructions:

Mount the smart switch to the bulkhead 2 feet above the 208A bilge detector. Mount the 208A with the screws provided as low as possible in the bilge. Mount the bilge light panel near the helm.

There are two male push on connectors in the relay block. The ship's battery positive is connected to the silver terminal marked com. The gold connector is marked NO and is connected to the positive side of the pump. These terminals are labeled on the wiring diagram below as well as the other necessary connections.



SS-208 Smart Bilge Pump Switch

- 1- To battery ground (-).
- 2- Bilge pump ground (-).
- 3- Ground for warning light or audio alarm.
- 4- To positive (+) side of bilge pump.
- 5- Positive (+) voltage from battery.
- 6- Either wire from 208a bilge det.
- 7- To positive (+) side of bilge light panel and/or audio alarm.
- 8- Second wire of 208a bilge det.
- 9- Jumper wire (cut to extend pump run time.