Application
The Oil Smart® Switch is factory calibrated and set up for immediate installation and operation. The dielectric design is extremely sensitive to variations in dielectric constant of air, water, oil and/or hydrocarbons (see Dielectric Data Chart).

Material
- The Oil Smart® Switch is constructed of high impact injection molded plastic.
- Enclosure (Ignition Proof).

Temperature
- The Oil Smart® Switch standard temperature operation range is -33°F (-36°C) to 170°F (77°C).

Operating Pressure
- The Oil Smart® Switch is designed to operate to 30 psig (2 bar) at 70°F (21°C).

Standby Current
- 0.004 Amps.

Signal Output
The Oil Smart® Switch is configured at the Factory.
- 120 VAC - 50/60 Hz (6 Amps).

Relay Configuration
- 20 Amp inline relay.

Approval
- UL Marine Listed
- CE Certified

Control Circuit
- Solid State.

Power Input
- 120 VAC - 50/60 Hz.
1. **Single Phase Pumps**
   **General**
Pump motor shall be hermetically sealed, submersible type operating in a high quality dielectric oil for cooling the windings and for lubrication of the motor bearings and ceramic-carbon shaft seal. Single phase motor shall have internal automatic resetting, thermal overload protection. Construction shall be of cast iron with 100% baked-on powder coated epoxy finish for corrosion resistance and longer casting durability. All fasteners and external metal parts shall be of stainless steel. Impeller shall be of vortex non-clog design. Check applicable series.

   ______ 57 (.3 HP) cast iron series pump shall have a shaded pole motor. Guard and handle shall be stainless steel.

   ______ 152 (.4 HP) ______ 153 (1/2 HP) series pump shall have a permanent split capacitor motor. The impeller shall be glass reinforced thermoplastic. Motor housing shall be cast iron.

2. **The Oil Smart® Pump Switch** is an industrial grade switch used to control water pumps in elevator, utility, marine and industrial sump applications. Installation will prevent hydrocarbons from being inadvertently pumped into the environment.

   Options:
   ______ 10 ft. cord with piggyback plug & 20 amp relay.
   ______ 20 ft. cord with piggyback plug & 20 amp relay.
   ______ 20 ft. cord, without piggyback plug or 20 amp relay (for use with Zoeller control panel reference statement #9).

3. **20 Amp Relay** Required for loads above 6 amps. Not required with use of control panel.

4. **115 Volt Piggyback Power Plug**

5. **Oil Smart® Alarm** will alert residents or maintenance personnel of liquid level problems. High Oil and High Water Level Lights and standard Remote Dry Contacts (SCADA Monitoring System).

   ______ Alarm System with High Liquid Audible Alarm (71db @ 2ft.), Red Beacon, Oil Present - Yellow Light and Water Present - White Light.

6. **Liquid Smart Sensor™** incorporates both an electro-optic and Oil Smart® Sensor all in one encapsulated unit. Differentiates and indicates the presence of oil and or water under high water condition.

7. **Check Valve Recommended** (purchased separately).

8. **Optional Simplex Control Panel (FM1596)**
   A Zoeller _________ Simplex Control Panel shall be furnished to control the Oil Smart® pump switch. The panel shall have a Nema 4x enclosure, pump run indicator light, high water alarm, selector switches, float switches and UL label. Panel will be sized for Zoeller model ________, ______ Volt, ______ Hz, ______ Phase, ______ HP, ______ FL A pump.