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Product information presented here reflects conditions at time of publication. Consult factory regarding discrepancies or inconsistencies.



SECTION: Z5.00.105

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0718

Supersedes

New

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TECHNICAL DATA SHEET

OIL DETECTION SYSTEM

FOR SUBMERSIBLE DEWATERING APPLICATIONS FOR MODEL 6155

Designed to help protect the environment and equipment from the dispersion of oil and/or hydrocarbons.

SYSTEMS:

- Operation of the Zoeller® Oil Guard® System has been independently verified by OnSpeX, a division of CSA, when installed in accordance with our instructions.
- Choose from four pump models. Includes pump, Oil Smart® switch and alarm (optional control panel)
- Controls are ASME A17.1 compliant

Oil Smart® SWITCH AND ALARM PANEL

FEATURES:

- NEMA-4X alarm panel enclosure
- Audible, light alarms and dry contacts
- Preset "on" and "off" points differentiate oil and water and alerts personnel of high water or oil detected conditions
- 20' (6 m) piggyback electrical supply cord
- 20 amp internal relay
- Alarm test and silence switches
- 304 stainless steel probes
- UL508 approved switch



Pump not included.
 Product may not be exactly as shown.

PUMP FEATURES:

- Pumps are durable, cast iron construction with powder coated epoxy finish and all stainless steel fittings.
- Tested to UL Standard UL778 and Certified to CSA Standard CSA 22.2 No. 108

WARNING These systems are not designed for hazardous environments. Please consult factory for special options and requirements.



BUILD YOUR OWN SYSTEM

Part Number	Description	Alarm Panel	Oil Smart® Pump Switch	Oil Smart® High Liquid Alarm Switch	Oil Smart® High Liquid Switch
10-4625	Oil Smart® Alarm Panel	√	√	√	√

√ INCLUDED * VARIABLE LEVEL FLOAT SWITCH

SIMPLEX PANEL:

- 115V, single phase
- NEMA 4X watertight enclosure w/ lockable latch
- 30 amp motor start relay
- Pump HOA switch
- Top-mounted red alarm beacon light
- 81 - 84 decibel rated alarm horn
- Horn silence and alarm test switches
- Alarm automatically resets
- Dry auxiliary alarm contacts
- Separate circuit protection for alarm
- Circuit breaker protection
- Pump "Run" indicator light



Model 10-2149

DUPLEX ALTERNATING PANEL:

- 115V, single phase
- NEMA 4X watertight enclosure w/ lockable latch
- (2) 30 amp motor start relays
- Pump HOA switches
- Top-mounted red alarm beacon light
- 81 - 84 decibel rated alarm horn
- Horn silence and alarm test switches
- Alarm automatically resets
- Dry auxiliary alarm contacts
- Separate circuit protection for alarm
- Pump "Run" indicator light



Model 10-2150

CAUTION
 All installation of controls, protection devices and wiring should be done by a qualified licensed electrician. All electrical and safety codes should be followed including the most recent National Electrical Code (NEC) and the Occupational Safety and Health Act (OSHA).

OIL SMART® PUMP SWITCH

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).
- 304 stainless steel sensor probes.

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 internal relay.

Approval

- UL Marine Listed
- CE Certified

Control Circuit

- Solid State.

Power Input

- 120 VAC - 50/60 Hz.

OIL DETECTION PUMP SYSTEM

Single Phase Pumps

General

1. 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.

_____ 6155 (0.5 HP) series pump shall have a 3450 RPM motor. Motor housing, switch case and pump housing shall be cast iron.

2. The Oil Smart® Pump Switch is an industrial grade switch with internal 20 amp relay and 304 stainless steel sensor probes used to control water pumps in elevator, utility, marine and industrial sump applications. Installation will prevent oil and or hydrocarbons from being inadvertently pumped into the environment.

Options:

_____ 20' (6 m) cord with piggyback plug.

3. 115 Volt Piggyback Power Plug
4. 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 @ 2' [0.6 m]), Red Beacon, Oil Present - Yellow Light and Water Present - White Light. Built with Oil Smart® technology.

5. 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.
6. Check Valve Recommended (purchased separately).
7. Optional Oil Smart® Simplex Control Panel - Built with Oil Smart® technology. Will control pump and alert residents or maintenance personnel of liquid level problems. High Oil and High Water Level Lights and standard Remote Dry Contacts (SCADA Monitoring System).
_____ Simplex Panel 10-2149.
8. Optional Oil Smart® Duplex Control Panel - Built with Oil Smart® technology. Will control pumps and alert residents or maintenance personnel of liquid level problems. High Oil and High Water Level Lights and standard Remote Dry Contacts (SCADA Monitoring System).
_____ Duplex Panel 10-2150.

Notes: 20 Amp Relay is inside pump switch.
For float tree installation see FM2364.

Dielectric Data Chart

