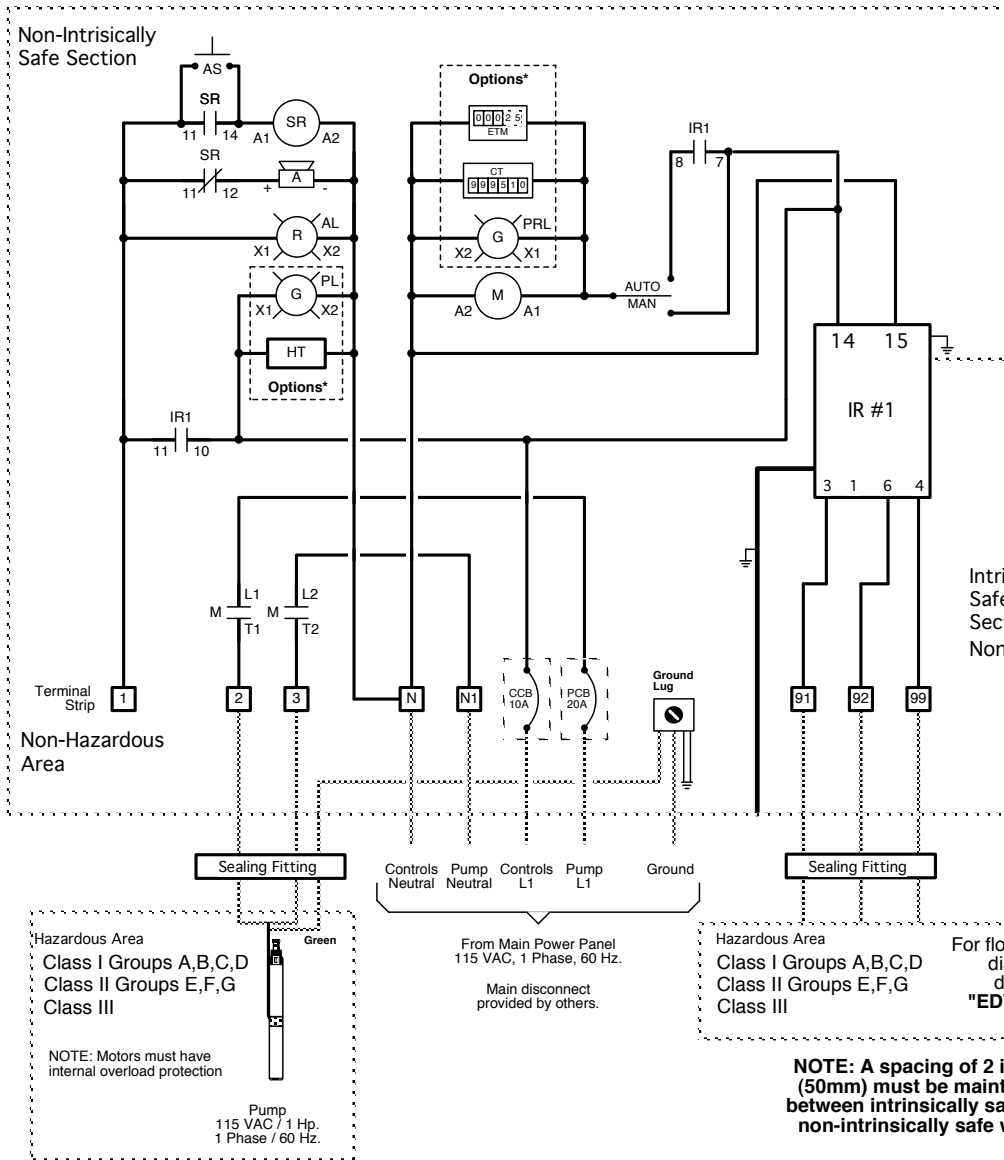# Panel Wiring Diagram
Model S1 IR1
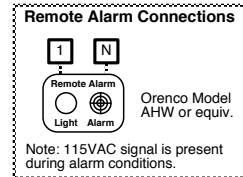
Simplex Operation

High Level Alarm: This float activates the alarm light and audible alarm when lifted. The audible alarm may be silenced by pressing the illuminated PUSH TO SILENCE button on the front of the control panel. The alarm light will remain on until the float is lowered.

Pump On: This float turns on the pump when lifted. The pump will continue to run until the pump off float is lowered.
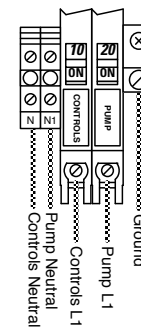
Pump Off: This float shuts off the pump when lowered.

Key

- = Factory Wire
- = Field Wire
- = Alternate Field Wire
A = Audio Alarm, 115 VAC
AL = Alarm Light
AS = Audio Silence Switch
CCB = Controls Circuit Breaker
IR = Intrinsically Safe Relay
M = Motor Contactor
PCB = Pump Circuit Breaker
SR = Silence Control Relay
TL = Terminal Link

*Options
CT = Cycle Counter
ETM = Elapsed Time Meter
HT = Heater
PL = Power Light
PRL = Pump Run Light

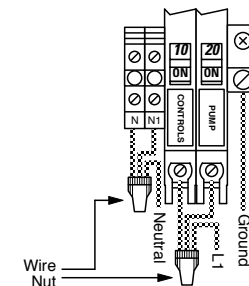**Remote Alarm Connections**

Remote Alarm
Light   Alarm

Orenco Model
AHW or equiv.

Note: 115VAC signal is present during alarm conditions.

Non-Intrisically Safe Section

Non-Hazardous Area

Terminal Strip

Options*
ETM
CT

IR1

IR #1

14 15

3 1 6 4

Intrinsically Safe Section
Non-Hazardous

Sealing Fitting

Hazardous Area
Class I Groups A,B,C,D
Class II Groups E,F,G
Class III

NOTE: Motors must have internal overload protection

Pump
115 VAC / 1 Hp.
1 Phase / 60 Hz.

Green

Ground Lug

CCB 10A   PCB 20A

Controls Neutral   Pump Neutral   Controls L1   Pump L1   Ground

From Main Power Panel
115 VAC, 1 Phase, 60 Hz.

Main disconnect provided by others.

Hazardous Area
Class I Groups A,B,C,D
Class II Groups E,F,G
Class III

For float arrangement diagram, see drawing no. **"EDW-FA-S-501"**.

NOTE: A spacing of 2 inches (50mm) must be maintained between intrinsically safe, and non-intrinsically safe wiring.

Power Wiring Options

Two Circuits

10 ON   20 ON
N N1   CONTROLS PUMP

Pump Neutral
Controls Neutral
Controls L1
Pump L1
Ground

Factory default.
Wire as shown.

One Circuit

10 ON   20 ON
N N1   CONTROLS PUMP

Wire Nut

Neutral   L1   Ground

Use one wire nut to connect the pole of the pump circuit breaker together with the controls breaker and with the incoming L1 power line. Use another wire nut to connect the neutral block of the pump with the controls neutral block and with the incoming neutral line.