

# SEQUENCE OF OPERATION

## A. Sequence of Operation

### **(Three Float Operation)**

The system shall be configured for (3) three tilt type, normally open float switch operation. The First Float, bottom float, will provide the “Pump OFF” level. The Second Float shall provide the “Pump ON” level. The Third Float, top float, shall provide the “High Level Alarm”.

Should the level in the wet well rise to the actuation point of the “High Level” float, the High Level Alarm will sound until the level falls below the “High Level” Float. The following will occur:

1. General alarm Red LED Beacon will illuminate
2. Alarm Buzzer will sound
3. General Alarm Auxiliary contact for the BAS will close

The alarm buzzer can be silenced by switching the Alarm Buzzer Toggle switch to the off position; however, both pumps will run, the alarm beacon will remain on and the auxiliary alarm contact will remain closed until the level in the wet well pumps down and the high level alarm float resets

### **(Two Float Operation)**

#### **Wire bottom float to terminals “4” and “5”**

The system shall be configured for two wide angle tilt type float switch operation. The Pump Float switch shall provide On/Off for the Pump call-to-run.

Should the level in the wet well rise to the actuation point of the High Level Alarm wide angle float, the following will occur:

1. Alarm Red LED Beacon will illuminate
2. Alarm Buzzer will sound
3. General Alarm Auxiliary contact for the BAS will close

The alarm buzzer can be silenced by placing the Alarm Silence 3-position switch in the “OFF”, center, position; however, the alarm beacon will remain on and the auxiliary alarm contact will remain closed until the level in the wet well pumps down and the high level alarm float resets

### **(One Float Operation)**

#### **Field note, install jumper on terminals “2” and “4”.**

#### **Wire float to terminals “4” and “5”**

The system shall be configured for one wide angle tilt type float switch operation. The Pump Float switch shall provide On/Off for the Pump call-to-run and the High Level Alarm.

Should the level in the wet well rise to the actuation point of the wide angle float, the following will occur:

1. Pump Will Run
2. Alarm Red LED Beacon will illuminate
3. Alarm Buzzer will sound
4. General Alarm Auxiliary contact for the BAS will close

The alarm buzzer can be silenced by placing the Alarm Silence 3-position switch in the “OFF”, center, position; however, the alarm beacon will remain on and the auxiliary alarm contact will remain closed until the level in the wet well pumps down and the high level alarm float resets

The Pump can be Manually stopped by placing the Pump 3-position switch in the “OFF”, center, position. Otherwise, it will automatically stop and the alarm will reset once the level has receded below the float actuation point.

**B. High Temperature Terminals:**

The high temp utilizes a contact, normally closed, to confirm if there is a high temp condition in the motor stator. During a “High Temp” condition the pump will be disabled in both “Auto” and “Run” operation via the 3-Position switch on the control panel.

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## A. Sequence of Operation

### **(Four Float Operation)**

The system shall be configured for (4) four tilt type, normally open float switch operation. The First Float, bottom float, will provide the “Pump(s) OFF” level. The Second Float shall provide the “Lead ON” level. The Third Float shall provide the “Lag ON” level. The Forth Float, top float, shall provide the “High Level Alarm”. With the Alternating Relay in “Alternate”, after each pumping cycle the Alternating Relay shall alternate the lead pump. Should the level in the wet well rise to the actuation point of the “Lag Pump ON” Level float, the lag pump will run until the level falls below the “Pump OFF” Float.

Should the level in the wet well rise to the actuation point of the High Level Alarm float, the following will occur:

1. General alarm Red LED Beacon will illuminate
2. Alarm Buzzer will sound
3. General Alarm Auxiliary contact for the BAS will close

The alarm buzzer can be silenced by placing the Alarm Silence 3-position switch in the “OFF”, center, position; however, the alarm beacon will remain on and the auxiliary alarm contact will remain closed until the level in the wet well pumps down and the high level alarm float resets

### **(Three Float Operation)**

**Field note, install jumper on terminals “2” and “4”. Wire top float to terminals “3” and “4”.**

The system shall be configured for (3) four tilt type, normally open float switch operation. The First Float, bottom float, will provide the “Pump(s) OFF” level. The Second Float shall provide the “Lead ON” level. The Third Float, top float, shall provide the “High Level Alarm” and “Lag Pump Run”. With the Alternating Relay in “Alternate”, after each pumping cycle the Alternating Relay shall alternate the lead pump.

Should the level in the wet well rise to the actuation point of the “High Level” float, the lag pump will run and the High Level Alarm will sound until the level falls below the “High Level” Float. The following will occur:

1. Both Pumps will be started
2. General alarm Red LED Beacon will illuminate
3. Alarm Buzzer will sound
4. General Alarm Auxiliary contact for the BAS will close

The alarm buzzer can be silenced by switching the Alarm Buzzer Toggle switch to the off position; however, both pumps will run, the alarm beacon will remain on and the auxiliary alarm contact will remain closed until the level in the wet well pumps down and the high level alarm float resets

### **(Two Float Operation)**

**Field note, install jumper on terminals “2” and “4”. Wire top float to terminals “3” and “4”.**

**Wire bottom float to terminals “6” and “7”**

The system shall be configured for two wide angle tilt type float switch operation. The Lead Pump Float switch shall provide On/Off for the Lead Pump call-to-run. With the Lead Pump Selector in "AUTO", after each pumping cycle the controller shall alternate the lead pump.

Should the level in the wet well rise to the actuation point of the Lag Pump/High Level Alarm wide angle float, the following will occur:

1. The Lag Pump will be started
2. Alarm Red LED Beacon will illuminate
3. Alarm Buzzer will sound
4. General Alarm Auxiliary contact for the BAS will close

The alarm buzzer can be silenced by placing the Alarm Silence 3-position switch in the "OFF", center, position; however, the alarm beacon will remain on and the auxiliary alarm contact will remain closed until the level in the wet well pumps down and the high level alarm float resets

**B. High Temperature Terminals:**

The high temp utilizes a contact, normally closed, to confirm if there is a high temp condition in the motor stator. During a "High Temp" condition the pump will be disabled in both "Auto" and "Run" operation via the 3-Position switch on the control panel.