Aquavar ABII Quick Start Guide

Installation Steps:

1. Install the Pump
   • Plumb suction and discharge of pump into piping.
   • Install a check valve on the suction side.
   • Locate the pump as near liquid source as possible.

2. Install the Pressure Transducer
   • Install the pressure transducer in the tank tee provided with the unit.
   • Locate the transducer within 120” of the controller.

3. Mount the Controller
   • Mount vertically in a well ventilated, shaded area with 8 inches of free air space on every side and temperature between 34º F and 104º F.

4. Connect Input Power
   • Connect the 1Ø power from a 20 amp 2-pole circuit breaker.
   • Do not use GFCI protection with ABII as nuisance tripping will result.

5. Output Power Connections
   • Connect the output power leads from the controller to the 3 motor leads in the conduit box on the motor.

6. Set the motor Overload Switches (or dials, 3 and 5 HP)
   • Complete systems have overloads pre-set at factory.

7. Set the Pressure - Factory pre-set is 50 PSI
   • Push and Hold the Increase or Decrease Pressure Adjust Pushbutton until the desired pressure setting is reached.
   • The maximum allowable pressure setting is 85 psi.

8. Set the Application Switches (or dials, 3 and 5 HP)
   • Minimum Speed of 10 Hz - the incoming pressure is within 20 PSI of the desired pressure setting.
   • Minimum Speed of 30 Hz - the incoming pressure is 20 PSI or more below the desired pressure, if pumping from a tank or if drawing a suction lift.
   • Ramp Speed - Slow - Low flow; Medium - Medium flow; Fast - High flow
Aquavar ABII Controller
Typical Installation

This diagram shows a set-up for municipal water connection. This allows pump maintenance without main line shut-off.

Aquaboost II Required Components:

1. Pump with Motor
2. Aquaboost II Controller with Integral Pressure Sensor Cable
3. Pressure Tank
4. Pressure Sensor
5. Mounting Kit
6. Tank Tee with Pipe Plug
7. Pressure Gauge
Aquavar ABII
Quick Start Up Guide

LABELS FOUND ON THE CONTROLLER ACCESS COVER:

**Motor Overload Setting**

*WARNING: Disconnect Power And Wait For LED Indicator To Turn Off Before Touching Motor Overload Setting Switches.*

<table>
<thead>
<tr>
<th>DIP Switch Setting</th>
<th>Motor Overload Setting (Amps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4</td>
<td>1AB2</td>
</tr>
<tr>
<td>1 1 1 1</td>
<td>2.5</td>
</tr>
<tr>
<td>1 1 1 0</td>
<td>2.8</td>
</tr>
<tr>
<td>1 1 0 1</td>
<td>3.3</td>
</tr>
<tr>
<td>1 0 1 1</td>
<td>3.5</td>
</tr>
<tr>
<td>0 1 1 1</td>
<td>3.8</td>
</tr>
<tr>
<td>0 0 0 0</td>
<td>4.2</td>
</tr>
</tbody>
</table>

**Application Switch Setting**

*WARNING: Disconnect Power And Wait For LED Indicator To Turn Off Before Touching Application Setting Switches.*

<table>
<thead>
<tr>
<th>DIP Switch Setting</th>
<th>Minimum Speed (Hz)</th>
<th>Ramp Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 1 1 1 *</td>
<td>10</td>
<td>Slow</td>
</tr>
<tr>
<td>1 1 1 0 *</td>
<td>10</td>
<td>Medium</td>
</tr>
<tr>
<td>1 1 0 1 *</td>
<td>10</td>
<td>Fast</td>
</tr>
<tr>
<td>1 0 1 1</td>
<td>30</td>
<td>Slow</td>
</tr>
<tr>
<td>0 1 1 1</td>
<td>30</td>
<td>Medium</td>
</tr>
<tr>
<td>0 0 0 0</td>
<td>30</td>
<td>Fast</td>
</tr>
</tbody>
</table>

*These settings are not to be used with submersible pumps.*
Aquavar ABII Wiring Diagram

1 AND 2 HP

Line input power from 2-pole disconnect or circuit breaker.

Line output to motor. Correct motor rotation determines order of colors.

Note: Verify controller voltage input on label. 115 volt or 230 volt.

3 AND 5 HP

* Input Power Supply
Single Phase
208-240 VAC

Note: Use 2 pole disconnect or circuit breaker.