Moisture Sensor Relay

A 5VDC Power Supply is required for operation of Moisture Sensor Relay

• Connections to Aquavar SOLO and SOLO²
• Connections to S-Drive and SPD
• Connections to Aquavar ABII (AquaBoost II)

INSTALLATION AND OPERATION MANUAL FOR 9K585
SAFETY INSTRUCTIONS

TO AVOID SERIOUS OR FATAL PERSONAL INJURY OR MAJOR PROPERTY DAMAGE, READ AND FOLLOW ALL SAFETY INSTRUCTIONS IN MANUAL AND ON EQUIPMENT.

THIS MANUAL IS INTENDED TO ASSIST IN THE INSTALLATION AND OPERATION OF THIS UNIT AND MUST BE KEPT WITH THE UNIT.

This is a SAFETY ALERT SYMBOL. When you see this symbol on the pump, the controller or in the manual, look for one of the following signal words and be alert to the potential for personal injury or property damage.

⚠️ DANGER

WARNING

Warns of hazards that WILL cause serious personal injury, death or major property damage.

⚠️ WARNING

Warns of hazards that CAN cause serious personal injury, death or major property damage.

⚠️ CAUTION

Warns of hazards that CAN cause personal injury or property damage.

NOTICE: INDICATES SPECIAL INSTRUCTIONS WHICH ARE VERY IMPORTANT AND MUST BE FOLLOWED.

THOROUGHLY REVIEW ALL INSTRUCTIONS AND WARNINGS PRIOR TO PERFORMING ANY WORK ON THIS CONTROLLER.

MAINTAIN ALL SAFETY DECALS.

5VDC MOISTURE SENSOR RELAY

MODEL #9K585

INSTALLATION INSTRUCTIONS

The Sensor can detect the presence of water and provide a relay output for signal or control of an external device. The switch operates on 5 Volts DC and functions as a Normally Closed Sensor, for a Closed Loop system. The Red and Black wires power the switch while the White and Green wires are the relay output wires.

For installation to an alarm panel, the Red wire is connected to the positive side of a 5 Volt supply and the Black wire is connected to the negative. The Green and White wires can then be connected to any pre-selected Closed Loop zone. A resistor can be connected in series with either the Green or White wire for those panels that require end-of-line resistance.

After installation these units should be tested with a damp sponge or paper towel and inspected annually. If there is any corrosion or damage the sensor should be replaced.

SPECIFICATIONS

Power Requirements:

<table>
<thead>
<tr>
<th>Operating Voltage</th>
<th>5 Volts DC</th>
</tr>
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<tbody>
<tr>
<td>Operating Current</td>
<td>10 mA</td>
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Contact Characteristics:

<table>
<thead>
<tr>
<th>Contact Resistance</th>
<th>100 mΩ</th>
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<tbody>
<tr>
<td>Switching Voltage</td>
<td>30 Volts DC Max</td>
</tr>
<tr>
<td>Switching Current</td>
<td>500 mA Max</td>
</tr>
<tr>
<td>Power</td>
<td>250 mW Max</td>
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</tbody>
</table>

Wire Connections:

<table>
<thead>
<tr>
<th>Color</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red</td>
<td>5 Volts DC</td>
</tr>
<tr>
<td>Black</td>
<td>- Ground</td>
</tr>
<tr>
<td>Green</td>
<td>Relay Contact</td>
</tr>
<tr>
<td>White</td>
<td>Relay Contact</td>
</tr>
</tbody>
</table>
**AQUAVAR SOLO, SOLO² AND BALANCED FLOW**

Connections for Moisture Sensor (Part Number 9K585) for Balanced Flow, Aquavar SOLO, SOLO² and 3AB2, 5AB2; ABII Controllers

Connect White and Green wires from Moisture Sensor to the terminals 1 and 2 on controller.

Connect Red wire from Moisture Sensor to the terminal number 8 on controller.

Connect Black wire from Moisture Sensor to transducer terminal marked "B" on controller.

Connect Black wire from Moisture Sensor to transducer terminal marked "R" on controller.

Connect Red wire from Moisture Sensor to RUN/STOP INPUT marked "JUMPER TO RUN" on controller.

Connect White and Green wires from Moisture Sensor to transducer terminal marked "B" on controller.

**S-DRIVE AND AQUAVAR SPD**

Connect White and Green wires from Moisture Sensor to the terminal number 8 on controller.

Connect Black wire from Moisture Sensor to the terminal number 9 on controller.

Connect Red wire from Moisture Sensor to the terminal number 9 on controller.
WIRING 2 OR MORE MOISTURE SENSOR RELAY IN SERIES

Connect Black and Red wires to the transducer terminal. Connect the white wire from sensor 1 and green wire from sensor 2 to the Run/Stop input terminal. Then wire the green wire from sensor 1 to the white wire of sensor 2. Now these sensors are wired in series. After all connections are made, perform a test to ensure the drive turns off when moisture is present at the sensors.

Aquavar SOLO UIB Board

Transducer Block

Run Stop / Input

Wire 2 Sensors in Series