Guide to Energy Savings

WIRING THE BECKETT AquaSmart® ADVANCED BOILER CONTROL
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*Aquastat is a registered trademark of Honeywell International, Inc.
Please refer to the latest edition of 61738 AquaSmart manual for complete specifications and installation instructions.

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</table>

**WARNING**
Do not use in steam applications. For use in hot water boilers or water heaters only. Do not use outside of the intended use and specifications.

**WARNING**
Explosion Hazard. Can Cause Severe Injury, Death or Property Damage.
Use this product only in systems with a pressure relief valve.

**WARNING**
Electrical Shock, Fire, Explosion and Burn Hazards

This control must be installed, adjusted and put into operation only by a trained, licensed, qualified professional or service agency in accordance with the latest revision of the National Electric Code ANSI/NFPA 70 (Canada CSA C22.1) state, local codes and authorities having jurisdiction.

- Follow the appliance manufacturer’s wiring diagrams and note all safety controls.
- Typical safety controls include high temperature or pressure limits, low water cut-offs, anti-scald valves, pressure relief valves and water feed valves.
- Verify all limits and safety controls are installed and functioning correctly, as specified by the appliance manufacturer, applicable safety standards, codes and all authorities having jurisdiction.
- Provide ground wiring to the appliance, burner and controls.

**WARNING**
Electrical Shock Hazard. Can Cause Severe Injury, Death, or Equipment Damage.

Disconnect power before wiring to prevent electrical shock or equipment damage.

- All wiring must comply with local electrical codes and ordinances. The limits given in the specifications section must not be exceeded when applying this control. Terminals on the AquaSmart are approved for copper wire only.
- Refer to the label on the inside of the AquaSmart door or to Technical Specifications in this manual for Electrical ratings and maximum load information. Use manufacturer instructions when wiring controlled equipment or refer to typical hook-ups in the AquaSmart Manual. (#61738).
- More than one service switch may be needed to disconnect all power to the AquaSmart. The optional power disconnect switch interrupts power to the AquaSmart control. Depending on system wiring, some terminals and connections (most notably ZR and the input to the optional power disconnect switch) may still be live.
Section I: Single Zone Relays

SPECIAL NOTICE: All temperature designations in this guide are degrees Fahrenheit (°F).

• Use the temperatures shown in the examples for typical reference only.
• Always follow the appliance manufacturer’s instructions regarding temperature settings.
AquaSmart A or B single-zone connections
(with or without tankless H/W coil)

Control Programming - for optimal energy savings

1. High Limit: 180
2. High Differential: 10
3. Low Limit: “OFF”
4. Low Limit: 160 (with tankless H/W coil)
5. Low Differential: 10
6. Set DHWP to “OFF”
7. Set Circulator on “TT”
8. Circulator On-Delay: 30 Seconds
9. Circulator Off-Delay: 4 Minutes
10. Set Economizer to “ON”
11. Set Efficiency “HI”
AquaSmart A or B multi-zone connections with main zone circulator (with or without tankless H/W coil)

Control Programming - for optimal energy savings

1. High Limit: 180
2. High Differential: 10
3. Low Limit: “OFF”
4. Low Limit: 160 (with tankless H/W coil)
5. Low Differential: 10
6. Set DHWP to “OFF”
7. Set Circulator on “TT”
8. Circulator On-Delay: “OFF”
9. Circulator Off-Delay: 4 Minutes
10. Set Economizer to “ON”
11. Set Efficiency “HI”
Control Programming - for optimal energy savings

1. High Limit: 180
2. High Differential: 10
3. Low Limit: “OFF”
4. Set DHWP to “TT”
5. Set Circulator on “TT”
6. Circulator On-Delay: “OFF”
7. Circulator Off-Delay: 2 - 4 Minutes
8. Set Economizer to “ON”
9. Set Efficiency “HI”
Control Programming - for optimal energy savings

1. High Limit: 180
2. High Differential: 10
3. Low Limit: “OFF”
4. Low Limit: 160 (with tankless H/W coil)
5. Low Differential: 10
6. Set DHWP to “OFF”
7. Set Circulator on “ZR”
8. Circulator On-Delay: As Needed
9. Circulator Off-Delay: “OFF”
10. Set Economizer to “ON”
11. Set Efficiency “HI”
SPECIAL NOTICE: All temperature designations in this guide are degrees Fahrenheit (°F).

- Use the temperatures shown in the examples for typical reference only.
- Always follow the appliance manufacturer’s instructions regarding temperature settings.
AquaSmart A or B with Honeywell V8043E/V8044E zone valves (with or without tankless H/W coil)

Control Programming - for optimal energy savings

1. High Limit: 180
2. High Differential: 10
3. Low Limit: “OFF”
4. Set DHWP to “OFF”
5. Low Limit: 160 (with tankless H/W coil)
6. Low Differential: 10
7. Set Circulator on “TT”
8. Circulator On-Delay: 30 Seconds
9. Circulator Off-Delay: “OFF”
10. Set Economizer to “ON”
11. Set Efficiency “HI”
# Control Programming - for optimal energy savings

1. High Limit: 180
2. High Differential: 10
3. Low Limit: “OFF”
4. Set DHWP to “OFF”
5. Low Limit: 160 (with tankless H/W coil)
6. Low Differential: 10
7. Set Circulator on “TT”
8. Circulator On-Delay: 30 Seconds
9. Circulator Off-Delay: “OFF”
10. Set Economizer to “ON”
11. Set Efficiency “HI”

![Diagram of boiler control wiring](image-url)
Control Programming - for optimal energy savings

1. High Limit: 180
2. High Differential: 10
3. Low Limit: “OFF”
4. Set DHWP to “OFF”
5. Low Limit: 160 (with tankless H/W coil)
6. Low Differential: 10
7. Set Circulator on “TT”
8. Circulator On-Delay: 30 Seconds
9. Circulator Off-Delay: “OFF”
10. Set Economizer to “ON”
11. Set Efficiency “HI”
Control Programming - for optimal energy savings

1. High Limit: 180
2. High Differential: 10
3. Low Limit: “OFF”
4. Set DHWP to “OFF”
5. Low Limit: 160 (with tankless H/W coil)
6. Low Differential: 10
7. Set Circulator on “TT”
8. Circulator On-Delay: “30 Seconds”
9. Circulator Off-Delay: 4 minutes
10. Set Economizer to “ON”
11. Set Efficiency “HI”
AquaSmart A or B with Honeywell V8043E/V8044E zone valves & indirect H/W circulator

Control Programming - for optimal energy savings

1. High Limit: 180
2. High Differential: 10
3. Low Limit: “OFF”
4. Set DHWP to “TT”
5. Set Circulator on “TT”
6. Circulator On-Delay: “OFF”
7. Circulator Off-Delay: 2 - 4 Minutes
8. Set Economizer to “ON”
9. Set Efficiency “HI”
**Control Programming - for optimal energy savings**

1. High Limit: 180
2. High Differential: 10
3. Low Limit: “OFF”
4. Set DHWP to “OFF”
5. Low Limit: 160 (with tankless H/W coil)
6. Low Differential: 10
7. Set Circulator on “TT”
8. Circulator On-Delay: 30 Seconds
9. Circulator Off-Delay: 4 Minutes
10. Set Economizer to “ON”
11. Set Efficiency “HI”
AquaSmart A or B with Taco 550 zone valves & indirect H/W circulator

Control Programming - for optimal energy savings

1. High Limit: 180
2. High Differential: 10
3. Low Limit: “OFF”
4. Set DHWP to “TT”
5. Set Circulator on “TT”
6. Circulator On-Delay: “OFF”
7. Circulator Off-Delay: 2 - 4 Minutes
8. Set Economizer to “ON”
9. Set Efficiency “HI”
Control Programming - for optimal energy savings

1. High Limit: 180
2. High Differential: 10
3. Low Limit: “OFF”
4. Set DHWP to “OFF”
5. Low Limit: 160 (with tankless H/W coil)
6. Low Differential: 10
7. Set Circulator on “TT”
8. Circulator On-Delay: “OFF”
9. Circulator Off-Delay: 2 - 4 Minutes
10. Set Economizer to “ON”
11. Set Efficiency “HI”
AquaSmart A or B with Honeywell V8043F zone valves & indirect H/W circulator

Control Programming - for optimal energy savings

1. High Limit: 180
2. High Differential: 10
3. Low Limit: “OFF”
4. Set DHWP to “TT”
5. Set Circulator on “TT”
6. Circulator On-Delay: “OFF”
7. Circulator Off-Delay: 2 - 4 Minutes
8. Set Economizer to “ON”
9. Set Efficiency “HI”
AquaSmart A or B with Honeywell V8043E/8044E zone valves with indirect H/W wired as priority

Control Programming - for optimal energy savings

1. High Limit: 180
2. High Differential: 10
3. Low Limit: “OFF”
4. Set DHWP to “ZR”
5. Set Circulator on “BOTH”
6. Circulator On-Delay: “OFF”
7. Circulator Off-Delay: “OFF”
8. Set Economizer to “ON”
9. Set Efficiency “HI”
AquaSmart A or B with Honeywell V8043F zone valves with indirect H/W wired as priority

Control Programming - for optimal energy savings

1. High Limit: 180
2. High Differential: 10
3. Low Limit: “OFF”
4. Set DHWP to “ZR”
5. Set Circulator on “BOTH”
6. Circulator On-Delay: “OFF”
7. Circulator Off-Delay: “OFF”
8. Set Economizer to “ON”
9. Set Efficiency “HI”
AquaSmart A or B with Taco 550 zone valves with indirect H/W wired as priority

Control Programming - for optimal energy savings

1. High Limit: 180
2. High Differential: 10
3. Low Limit: “OFF”
4. Set DHWP to “ZR”
5. Set Circulator on “BOTH”
6. Circulator On-Delay: “OFF”
7. Circulator Off-Delay: “OFF”
8. Set Economizer to “ON”
9. Set Efficiency “HI”
AquaSmart B only. Zone valves powered with 7600B. Circulator on-delay on all valves.

Control Programming - for optimal energy savings

1. High Limit: 180
2. High Differential: 10
3. Low Limit: “OFF”
4. Set DHWP to “OFF”
5. Set Circulator on “TT”
6. Circulator On-Delay: “30 Seconds”
7. Circulator Off-Delay: “OFF”
8. Set Economizer to “ON”
9. Set Efficiency “HI”
Section III: Zone Panels

SPECIAL NOTICE: All temperature designations in this guide are degrees Fahrenheit (°F).

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- Always follow the appliance manufacturer’s instructions regarding temperature settings.
**AquaSmart A or B Taco SR503 zone panel & indirect H/W circulator**

**Control Programming - for optimal energy savings**

1. High Limit: 180
2. High Differential: 10
3. Set DHWP to “TT”
4. Set Circulator on “TT”
5. Circulator On-Delay: “OFF”
6. Circulator Off-Delay: 2 - 4 Minutes
7. Set Economizer to “ON”
8. Set Efficiency “HI”
AquaSmart A or B with Taco SR503 zone panel & main zone circulator (with or without tankless H/W coil)

Control Programming - for optimal energy savings

1. High Limit: 180
2. High Differential: 10
3. Low Limit: “OFF”
4. Low Limit: 160 (with tankless H/W coil)
5. Low Differential: 10
6. Set DHWP to “OFF”
7. Set Circulator on “TT”
8. Circulator On-Delay: 30 Seconds
9. Circulator Off-Delay: 4 Minutes
10. Set Efficiency “HI”
AquaSmart A or B with Taco SR504 zone panel
(without tankless H/W coil)

Control Programming - for optimal energy savings

1. High Limit: 180
2. High Differential: 10
3. Low Limit: “OFF”
4. Low Limit: 160 (with tankless H/W coil)
5. Low Differential: 10
6. Set DHWP to “OFF”
7. Set Circulator on “TT”
8. Circulator On-Delay: “OFF”
9. Circulator Off-Delay: “OFF”
10. Set Economizer to “ON”
11. Set Efficiency “HI”

Note: If tankless H/W coil installed, run wire between ZC terminals on AquaSmart & Zone Panel and set low limit to 160°
Control Programming - for optimal energy savings

1. High Limit: 180
2. High Differential: 10
3. Low Limit: “OFF”
4. Set DHWP to “TT”
5. Set Circulator on “TT”
6. Circulator On-Delay: “OFF”
7. Circulator Off-Delay: 2 - 4 Minutes
8. Set Economizer to “ON”
9. Set Efficiency “HI”
Control Programming - for optimal energy savings

1. High Limit: 180
2. High Differential: 10
3. Low Limit: “OFF”
4. Low Limit: 160 (with tankless H/W coil)
5. Low Differential: 10
6. Set DHWP to “OFF”
7. Set Circulator on “TT”
8. Circulator On-Delay: 30 Seconds
9. Circulator Off-Delay: “OFF”
10. Set Economizer to “ON”
11. Set Efficiency “HI”
Control Programming - for optimal energy savings

1. High Limit: 180
2. High Differential: 10
3. Low Limit: “OFF”
4. Set DHWP to “TT”
5. Set Circulator on “TT”
6. Circulator On-Delay: “OFF”
7. Circulator Off-Delay: 2 - 4 Minutes
8. Set Economizer to “ON”
9. Set Efficiency “HI”
AquaSmart A or B with Argo 861 zone panel (without tankless H/W coil)

Control Programming - for optimal energy savings

1. High Limit: 180
2. High Differential: 10
3. Low Limit: “OFF”
4. Low Limit: 160 (with tankless H/W coil)
5. Low Differential: 10
6. Set DHWP to “OFF”
7. Set Circulator on “TT”
8. Circulator On-Delay: “OFF”
9. Circulator Off-Delay: “OFF”
10. Set Economizer to “ON”
11. Set Efficiency “HI”
AquaSmart A or B with Argo 861 zone panel & main zone circulator (with or without tankless H/W coil)

**Control Programming - for optimal energy savings**

1. High Limit: 180
2. High Differential: 10
3. Low Limit: “OFF”
4. Low Limit: 160 (with tankless H/W coil)
5. Low Differential: 10
6. Set DHWP to “OFF”
7. Set Circulator on “TT”
8. Circulator On-Delay: 30 Seconds
9. Circulator Off-Delay: 4 Minutes
10. Set Economizer to “ON”
11. Set Efficiency “HI”
AquaSmart A or B with Argo 861 zone panel & indirect H/W circulator

Control Programming - for optimal energy savings

1. High Limit: 180
2. High Differential: 10
3. Low Limit: “OFF”
4. Set DHWP to “TT”
5. Set Circulator on “TT”
6. Circulator On-Delay: “OFF”
7. Circulator Off-Delay: 2 - 4 Minutes
8. Set Economizer to “ON”
9. Set Efficiency “HI”
Control Programming - for optimal energy savings

1. High Limit: 180
2. High Differential: 10
3. Low Limit: "OFF"
4. Set DHWP to "OFF"
5. Set Circulator on "TT"
6. Circulator On-Delay: 30 Seconds
7. Circulator Off-Delay: 4 Minutes
8. Set Economizer to "ON"
9. Set Efficiency "HI"

*Aquastat is a registered trademark of Honeywell International, Inc.
Section IV: Install AquaSmart with Line Voltage Thermostat

SPECIAL NOTICE: All temperature designations in this guide are degrees Fahrenheit (°F).

- Use the temperatures shown in the examples for typical reference only.
- Always follow the appliance manufacturer’s instructions regarding temperature settings.
Control Programming - for optimal energy savings

1. High Limit: 180
2. High Differential: 10
3. Low Limit: “OFF”
4. Low Limit: 160 (with tankless H/W coil)
5. Low Differential: 10
6. Set DHWP to “OFF”
7. Set Circulator on “TT”
8. Circulator On-Delay: “OFF”
9. Circulator Off-Delay: “OFF”
10. Set Economizer to “ON”
11. Set Efficiency “HI”
AquaSmart A or B with line voltage thermostat & indirect H/W circulator

Control Programming - for optimal energy savings

1. High Limit: 180
2. High Differential: 10
3. Low Limit: “OFF”
4. Set DHWP to “TT”
5. Set Circulator on “TT”
6. Circulator On-Delay: “OFF”
7. Circulator Off-Delay: 2 - 4 Minutes
8. Set Economizer to “ON”
9. Set Efficiency “HI”
Section V: Direct Replacement of Honeywell Aquastat® Relays to Beckett AquaSmart®

*SPECIAL NOTICE: All temperature designations in this guide are degrees Fahrenheit (°F).

- Use the temperatures shown in the examples for typical reference only.
- Always follow the appliance manufacturer's instructions regarding temperature settings.
**AquaSmart B only. Single zone connections to replace with millivolt gas valve**

**Control Programming - for optimal energy savings**

1. High Limit: 180
2. High Differential: 10
3. Low Limit: “OFF”
4. Low Limit: 160 (with tankless H/W coil)
5. Low Differential: 10
6. DHWP: “OFF” Set Circulator on “TT”
7. Circulator On-Delay: 30 Seconds
8. Circulator Off-Delay: 4 Minutes
9. Set Economizer to “ON”
10. Set Efficiency “HI”
AquaSmart A only. Single-zone replacement for Honeywell R8182H

Control Programming - for optimal energy savings

1. High Limit: 180
2. High Differential: 10
3. Low Limit: “OFF”
4. Set DHWP to “OFF”
5. Low Limit: 160 (with tankless H/W coil)
6. Low Differential: 10
7. Set Circulator on “TT”
8. Circulator On-Delay: 30 Seconds
9. Circulator Off-Delay: 4 Minutes
10. Set Economizer to “ON”
11. Set efficiency “HI”
Legend

1 - Neutral / White
2 - Hot / From Low Water Cut Off
3 - Red / To Thermostat
4 - White / To Thermostat
5 - Hot / To Circulator
6 - Neutral / To Circulator
7 - Hot / To Burner Ignition
8 - Neutral / To Burner Ignition
9 - Ground

Notes on AquaSmart:
1. Terminals ZC and ZR are not used in this application.
2. If using the 2-in-1 probe, the hot to L1 will be supplied from Service Switch. Also remove current Low Water Cut Off.

AquaSmart Settings:

- High Limit: 180
- High Differential: 10
- Low Limit: “OFF”
- Set DHWP to “OFF”
- Set Circulator on “TT”
- Circulator On-Delay: 30 Seconds
- Circulator Off-Delay: 4 Minutes
- Set Economizer to “ON”
- Set Efficiency “HI”
Direct Replacement of Honeywell L8124A with AquaSmart A

Legend
1 - Neutral / White
2 - Hot / From Low Water Cut Off
3 - Red / To Thermostat
4 - White / To Thermostat
5 - Hot / To Circulator
6 - Neutral / To Circulator
7 - Hot / To Burner Ignition
8 - Neutral / To Burner Ignition
9 - Ground

Notes on AquaSmart:
1. Terminals ZC and ZR are not used in this application.
2. If using the 2-in-1 probe, the hot to L1 will be supplied from Service Switch. Also remove current Low Water Cut Off.

AquaSmart Settings:
- High Limit: 180
- High Differential: 10
- Low Limit: “OFF”
- Set DHWP to “OFF”
- Low Limit: 160 (with Tankless H/W Coil)
- Low Differential: 10
- Set Circulator on “TT”
- Circulator On-Delay: 30 Seconds
- Circulator Off-Delay: 4 Minutes
- Set Economizer to “ON”
- Set Efficiency “HI”
Legend
1 - Neutral / White
2 - Hot / From Low Water Cut Off
3 - Red / To Thermostat
4 - White / To Thermostat
5 - Hot / To Circulator
6 - Neutral / To Circulator
7 - Hot / To Burner Ignition
8 - Neutral / To Burner Ignition
9 - Ground

Notes on AquaSmart:
1. Set control to match determined High Limit or Low Limit application.
2. Terminals ZC and ZR are not used in this application.
3. If using the 2-in-1 probe, the hot to L1 will be supplied from Service Switch. Also remove current Low Water Cut Off.

AquaSmart Settings:
- High Limit: 180
- High Differential: 10
- Low Limit: “OFF”
- Set DHWP to “OFF”
- Low Limit: 160 (with Tankless H/W Coil)
- Low Differential: 10
- Set Circulator on “TT”
- Circulator On-Delay: 30 Seconds
- Circulator Off-Delay: 4 Minutes
- Set Economizer to “ON”
- Set Efficiency “HI”
Legend

1 - Neutral / White
2 - Hot / From Low Water Cut Off
3 - Red / To Thermostat
4 - White / To Thermostat
5 - Hot / To Circulator
6 - Neutral / To Circulator
7 - Hot / To Burner Ignition
8 - Neutral / To Burner Ignition
9 - Ground

Notes on AquaSmart:

1. Must add a primary control to the burner. (Example: GeniSys 7505A).
2. Terminals ZC and ZR are not used in this application.
3. If using the 2-in-1 probe, the hot to L1 will be supplied from Service Switch. Also remove current Low Water Cut Off.

AquaSmart Settings:

- High Limit: 180
- High Differential: 10
- Low Limit: “OFF”
- Set DHWP to “OFF”
- Low Limit: 160 (with Tankless H/W Coil)
- Low Differential: 10
- Set Circulator on “TT”
- Circulator On-Delay: 30 Seconds
- Circulator Off-Delay: 4 Minutes
- Set Economizer to “ON”
- Set Efficiency “HI”
RIB (Relay In a Box)

**Description:**
Enclosed Relay 10 Amp SPDT with 10-30 VAC/dc/120Volt Coil

**Specifications:**
- Coil Voltage - AC/DC 10-30
- Coil Voltage - AC 120V
- Contact Rating - Motor 1/3HP
- Contact Rating - Ballast 480 VA
- Contact Rating - Tungsten 600W
- Contact Rating - Pilot Duty 480VA
- Gold Flash - Yes
- Override Switch - No
Section IV - Cross-Reference Guide
### Table 1 - Direct Replacements

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<th>Honeywell</th>
<th>AquaSmart 7600A</th>
</tr>
</thead>
<tbody>
<tr>
<td>L8124A (All)</td>
<td>Replace with AquaSmart 7600A</td>
</tr>
<tr>
<td>L8124C (All)</td>
<td>7600 outputs are not rated for 240 VAC.</td>
</tr>
<tr>
<td>L7124A (All)</td>
<td>Replace with AquaSmart 7600A</td>
</tr>
<tr>
<td>L7124C (All)</td>
<td>The 7600 has no Honeywell EnviraCOM™ Communications port. The diagnostic LED lights are replaced by the 7600’s display.</td>
</tr>
<tr>
<td>L7148A (All)</td>
<td></td>
</tr>
<tr>
<td>L7224A (All)</td>
<td></td>
</tr>
<tr>
<td>L7224C (All)</td>
<td></td>
</tr>
<tr>
<td>L7248A (All)</td>
<td>Replace with AquaSmart 7600A</td>
</tr>
<tr>
<td>L7248C (All)</td>
<td>7600 outputs are not rated for 240 VAC.</td>
</tr>
<tr>
<td>L7224E 1016</td>
<td>Replace with AquaSmart 7600A</td>
</tr>
<tr>
<td>L7248E 1265</td>
<td>7600 outputs are not rated for 240 VAC.</td>
</tr>
<tr>
<td>L8124M (All)</td>
<td>Replace with AquaSmart 7600A</td>
</tr>
<tr>
<td>L8148A (All)</td>
<td>For replacement with the 7600: Turn low limit off so the circulator is controlled directly by the thermostat and ZC is constantly powered.</td>
</tr>
<tr>
<td>L8148E 1265</td>
<td>Replace with AquaSmart 7600A</td>
</tr>
<tr>
<td>L8151A</td>
<td>7600 outputs are not rated for 240 VAC.</td>
</tr>
<tr>
<td></td>
<td>Remote mount sensor cable needed (Part No. 52120)</td>
</tr>
<tr>
<td>Hydrolevel</td>
<td>Replace with AquaSmart 7600B</td>
</tr>
<tr>
<td>3100</td>
<td>Not a suitable replacement if Low Water Cutoff (LWCO) functionality is used.</td>
</tr>
<tr>
<td>3150</td>
<td>Replace with AquaSmart 7600A</td>
</tr>
<tr>
<td></td>
<td>Not a suitable replacement if Low Water Cutoff (LWCO) functionality is used.</td>
</tr>
<tr>
<td>Carlin</td>
<td>Replace with AquaSmart 7600A</td>
</tr>
<tr>
<td>90524A</td>
<td>Make sure 7600 outputs do not exceed 7.4A. Available operating limit and differential ranges are not equivalent.</td>
</tr>
<tr>
<td>White Rodgers</td>
<td>Replace with AquaSmart 7600A</td>
</tr>
<tr>
<td>11C15-11</td>
<td>Make sure 7600 outputs do not exceed 7.4A @ 120 VAC. 7600 outputs are not rated for 240 VAC. Available operating limit and differential ranges may not be equivalent.</td>
</tr>
<tr>
<td>11C30-3 11B54-4</td>
<td>Replace with AquaSmart 7600A</td>
</tr>
<tr>
<td>8B48A-217</td>
<td>Make sure 7600 outputs do not exceed 7.4A @ 120 VAC. 7600 outputs are not rated for 240 VAC.</td>
</tr>
<tr>
<td>11C61-12</td>
<td>Replace with AquaSmart 7600A</td>
</tr>
<tr>
<td></td>
<td>Not a suitable replacement if SPDT switch action is required; only break-on-rise available on 7600. Make sure 7600 outputs do not exceed 7.4A @ 120 VAC. 7600 outputs are not rated for 240 VAC.</td>
</tr>
<tr>
<td>8F48A-351 8B43A-601</td>
<td>Replace with AquaSmart 7600A</td>
</tr>
</tbody>
</table>

**Functional replacements on next page ➤**
Table 2 - Functional Replacement *(Advanced Wiring Needed)*

Note: Available operating limit and/or differential ranges may not be equivalent. Compare settings to the AquaSmart ranges before replacing.

<table>
<thead>
<tr>
<th>Honeywell</th>
<th>Replace with AquaSmart 7600A or 7600B <em>(Based on System Voltage Requirements)</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>L4006A (All)</td>
<td>Make sure 7600 outputs do not exceed 7.4A@120VAC. 7600 outputs are not rated for 240VAC. 7600 will require an additional wire (L2) for operation. Short TW-TR terminals. C1, C2, ZC, and ZR are unused. ● Set low limit on 7600 to OFF. ● To use with a millivolt system an appropriate voltage relay with isolated gold plated contacts must be added to switch the millivolt circuit.</td>
</tr>
<tr>
<td>L4006E (All)</td>
<td>Requires the addition of a manual-reset high limit.  ● Make sure 7600 outputs do not exceed 7.4A@120VAC. 7600 outputs are not rated for 240VAC. 7600 will require an additional wire (L2) for operation. Short TW-TR terminals. C1, C2, ZC, and ZR are unused.  ● Set low limit on 7600 to OFF.  ● To use with a millivolt system an appropriate voltage relay with isolated gold plated contacts must be added to switch the millivolt circuit.</td>
</tr>
<tr>
<td>L6006A (All)</td>
<td>Not a suitable replacement if SPDT switch action is required; only break-on-rise available on 7600.  ● To use with a millivolt system an appropriate voltage relay with isolated gold plated contacts must be added to switch the millivolt circuit.  ● Make sure 7600 outputs do not exceed 7.4A@120VAC. 7600 outputs are not rated for 240VAC. 7600 will require an additional wire (L2) for operation. Short TW-TR terminals. C1, C2, ZC, and ZR are unused.  ● Set low limit on 7600 to OFF.</td>
</tr>
<tr>
<td>L8124B 1039 L8148J 1009</td>
<td>Replace with AquaSmart 7600A or 7600B <em>(Based on System Voltage Requirements)</em> To use with a millivolt system an appropriate voltage relay with isolated gold plated contacts must be added to switch the millivolt circuit. 7600 outputs are not rated for 240VAC.</td>
</tr>
<tr>
<td>L7148F (All) L8148E (All)</td>
<td>Must confirm that 7600 VA rating is adequate to meet VA requirements of system.  ● Make sure 7600 B1 output does not exceed 1.25A@24VAC (30VA).  ● 7600 outputs are not rated for 240VAC. B2, TW and TR terminals replace TV, T and Z, respectively.  ● If damper is used, consult damper manufacturer’s wiring instructions for using damper without damper plug.</td>
</tr>
<tr>
<td>L4081A/B L6081A/C</td>
<td>Remove switching relay, if used, from the system when replacing the L4081 or L6081.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Carrier</th>
<th>Replace with AquaSmart 7600A or 7600B <em>(Based on System Voltage Requirements)</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>90200A</td>
<td>Make sure 7600 outputs do not exceed 7.4A. Set low limit on 7600 to OFF.</td>
</tr>
<tr>
<td>90000 (All) 90200E 90300B</td>
<td>Replace with AquaSmart 7600A or 7600B <em>(Based on System Voltage Requirements)</em> Requires the addition of a manual-reset high limit. Make sure 7600 outputs do not exceed 7.4A.  ● Set low limit on 7600 to OFF.</td>
</tr>
<tr>
<td>90200D</td>
<td>Replace with AquaSmart 7600A or 7600B <em>(Based on System Voltage Requirements)</em> Not a suitable replacement if SPDT switch action is required; only break-on-rise available on 7600. Make sure 7600 outputs do not exceed 7.4A. Set low limit on 7600 to OFF.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>White Rodgers</th>
<th>Replace with AquaSmart 7600A or 7600B <em>(Based on System Voltage Requirements)</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>11B06-1 11B18-1 11B30-104 11B20-1</td>
<td>Replace with AquaSmart 7600A or 7600B <em>(Based on System Voltage Requirements)</em> Make sure 7600 outputs do not exceed 7.4A@120VAC. 7600 outputs are not rated for 240VAC. 7600 will require an additional wire (L2) for operation. Short TW-TR terminals. C1, C2, ZC, and ZR are unused.  ● Set low limit on 7600 to OFF.</td>
</tr>
<tr>
<td>11D82-1 11D31-1 1131-102</td>
<td>Replace with AquaSmart 7600A or 7600B <em>(Based on System Voltage Requirements)</em> Not a suitable replacement if SPDT switch action is required; only break-on-rise available on 7600. 7600 outputs are not rated for 240VAC. 7600 will require an additional wire (L2) for operation. Short TW-TR terminals. C1, C2, ZC, and ZR are unused.  ● Set low limit on 7600 to OFF.</td>
</tr>
<tr>
<td>11B27-9</td>
<td>Replace with AquaSmart 7600A or 7600B <em>(Based on System Voltage Requirements)</em> Requires the addition of a manual-reset high limit.  ● Make sure 7600 outputs do not exceed 7.4A@120VAC. 7600 outputs are not rated for 240VAC. 7600 will require an additional wire (L2) for operation. Short TW-TR terminals. C1, C2, ZC, and ZR are unused.  ● Set low limit on 7600 to OFF.</td>
</tr>
<tr>
<td>8J48A-209</td>
<td>Replace with AquaSmart 7600A or 7600B <em>(Based on System Voltage Requirements)</em> To use with a millivolt system an appropriate voltage relay with isolated gold plated contacts must be added to switch the millivolt circuit.</td>
</tr>
</tbody>
</table>
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2. Email your request to: rwb-customer-service@beckettcorp.com
3. Write to: R. W. Beckett Corporation, P. O. Box 1289, Elyria, OH 44036

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