CTKHEXS

Installation Instructions

Bluefin®

We Lower Costs, Not Standards

HVAC CONDENSATE TRAP KIT

With Overflow Switch and Screw Cap

Purpose. Install the trap on the primary condensate drain outlet and connect the normally closed float switch so a blocked drain can interrupt the cooling call before overflow occurs.

Kit Contents

- 3/4" U-Bend ❶
- 3/4" Outlet tee ❷
- 3/4" Removeable Cap ❸
- Float Switch Assembly ❹
- 72” Modular Cable ❺
- 3/4” Inlet Cross ❻
- 3/4” Adapter ❼
- 1” Removeable Cap ❽
- 3/4” Elbow ❾



Before Beginning. Turn off power to the HVAC equipment. Confirm the drain outlet is 3/4 inch and review the equipment manufacturer’s drain and wiring instructions. Installation and wiring should be completed by a qualified person in accordance with applicable codes

Trap Installation:
Important. Dry-fit and mark the entire assembly before applying PVC cement. The trap and outlet tee may be rotated to suit the required location and angles.

FLOAT SWITCH ASSEMBLY

1. **Install the adapter.** Screw the threaded adapter ❼ into the primary drain pan outlet. **Do not** overtighten.

2. **Attach the elbow.** Cement the transparent elbow ❾ to the adapter ❼, keeping the float switch opening upright.

3. **Install the float switch.** Press the float switch assembly ❹ into the top opening of the elbow ❾. **Do not** use cement or adhesive**.** Confirm that the float moves freely inside the elbow.

CONDENSATE TRAP ASSEMBLY

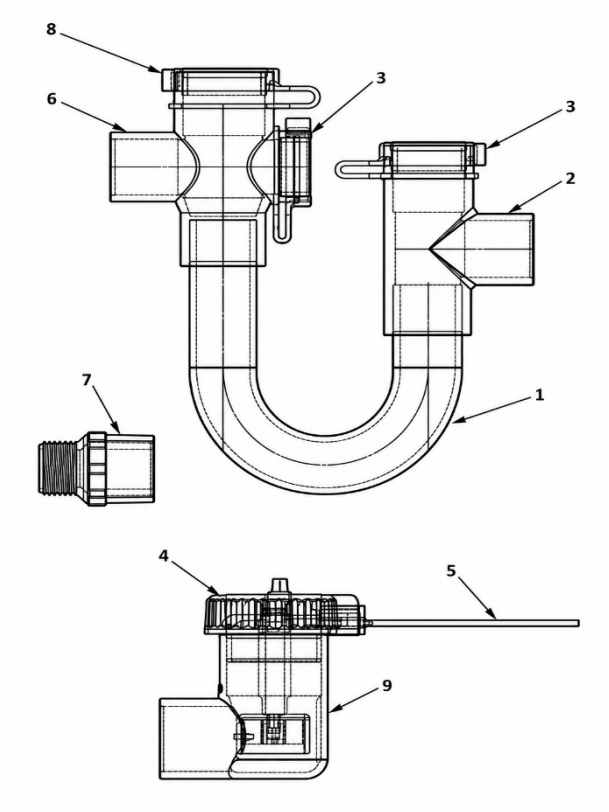
1. **Dry-fit the assembly.** Position the J-trap ❶, outlet tee ❷, and inlet cross ❻ in the desired orientation. Mark each connection for alignment

2. **Cement the connections.** Disassemble the dry-fit joints, then prime and cement them according to the primer and cement manufacturers’ instructions. Reassemble using the alignment marks and connect the inlet drain pipe to the inlet cross ❻

3. **Connect the outlet drain pipe.** Cement the outlet drain pipe into the side opening of the outlet tee ❷. Prime the trap, add water through the outlet tee ❷ to fill the trap ensure no leaks.

4. **Install the cleanout cap**. Fully seat the blue slip cap ❸. Keep the cap accessible and removable for cleaning and service.

5. **Apply the cleaning label.** Attach the supplied cleaning label to the HVAC unit where it will remain clearly visible during service.



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Switch Wiring Instructions:

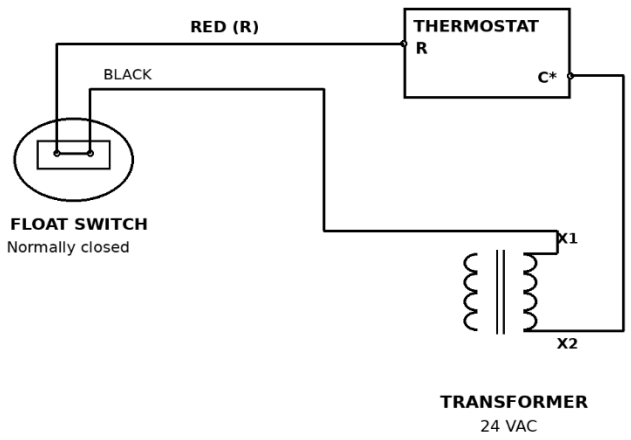
1. **Disconnect power** to the HVAC equipment before wiring.
2. **Select a wiring option** from the diagrams below and wire the float switch in series with the selected circuit. The switch is normally closed and rated for a maximum of 4 A at 24 VAC.
    - **Option A — R Circuit:** Connect the switch in the red (R) circuit to interrupt thermostat power when the float rises.
    - **Option B — Y Circuit:** Connect the switch in the yellow (Y) circuit to interrupt the cooling signal when the float rises. Fan operation depends on the equipment and thermostat configuration.
3. **Extend the switch leads if needed** using 18 AWG copper thermostat wire and listed wire connectors rated for the wire sizes and conductor types being joined.
4. **Restore power and test operation.** With the system calling for cooling, manually lift the float. Confirm that cooling stops.
5. **Lower the float**. Confirm that normal operation resumes, allowing for any equipment restart delay.

NOTE: *Follow the HVAC equipment manufacturer's wiring instructions. Identify wires by terminal designation rather than color alone.*

Wiring Diagram options:

OPTION A — R CIRCUIT

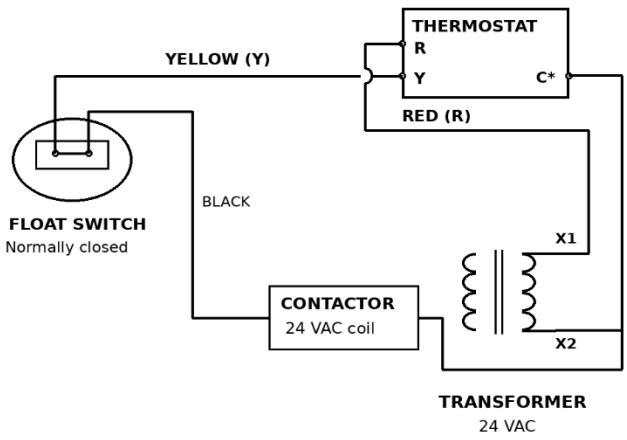
Interrupt thermostat power



Switch opens when the float rises.

OPTION B — Y CIRCUIT

Interrupt cooling signal



Switch opens when the float rises.

Typical single-stage control wiring. Follow equipment wiring instructions. *Common connection where required.

Normal operation. If a blockage causes condensate to rise, the float opens the safety circuit and stops the cooling call. Removing the obstruction allows the float to drop and resets the switch.

Cleaning. Turn off power. Remove the blue slip cap, use *only* supplied flexible cleaning brush to clear buildup, flush the drain as appropriate, reinstall the cap, and repeat the leak and float-switch tests. **Never** leave the cleanout opening uncapped.

⚠ **Service note**. *A safety switch does not correct a blocked drain. Locate and clear the obstruction before returning the equipment to service*

Tested to UL508
E548211
Ind. Cont. Eq.
207456

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