

A CSW Industrials Company

INSTALLATION INSTRUCTIONS

Safe-T-Switch Model SS1

PRODUCT CODE **97632**

MODEL SS1 - LOW VOLTAGE CONDENSATE OVERFLOW SHUT-OFF SWITCH

INSTALLATION:

NOTICE: Failure to read and comply with all warnings, cautions and instructions prior to starting installation may cause personal injury and/or property damage and void the warranty.

HORIZONTAL INSTALLATION (see Figs. 1 & 2):

- 1. Glue 3/4" stub onto drain pan outlet adapter.
- 2. Press switch/cap assembly firmly into top 1" opening in Tee, until the rim is flush against the Tee opening. If more sensitivity is desired, the switch can be threaded out of the cap. DO NOT GLUE THE SWITCH/CAP INTO THE TEE.
- 3. Glue 1"x 3/4" bushing into remaining 1" Tee outlet.
- 4. Glue bushed inlet of Tee onto ¾" stub from pan outlet. Tee may be sloped up to 45° from pan outlet. If more slope is needed, see VERTICAL INSTALLATION, below.
- 5. For plugged installation on auxiliary outlets, seat plug firmly into 3/4" outlet of Tee, ensuring it is water tight. DO NOT GLUE. Pipe tape may be required to ensure seal.
- 6. For inline installation, glue 3/4" outlet of Tee onto drain line.
- 7. Wire the switch as per instructions under Wiring, below
- 8. Test the switch by lifting the float while the unit is running. If wired correctly, the unit will stop.
- 9. Test all drain and fitting connections for plumbing leaks.
- 10. Test switch sensitivity: Plug drain downstream from installation point and run unit to fill pan. Float should rise and unit should stop before pan overflows. If the pan overflows, reposition the float lower by either:
 - A. plumbing the entire assembly lower, or
 - B. loosening the jamb nut on the threaded stem and adjust the height of the float as necessary.
 Test for proper sensitivity. Retighten jamb nut.
- 11. Affix warning sticker to air handler or condenser unit.

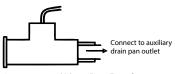


Figure 1: Horizontal (plugged) installation for auxiliary drain outlets.

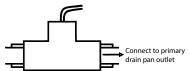
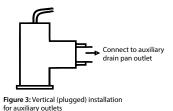


Figure 2: Horizontal (Inline) installation

VERTICAL INSTALLATION (see Figs. 3 & 4)

- 1. Glue 3/4" stub onto drain pan outlet adapter.
- 2. Remove switch/cap assembly from top 1" Tee inlet and insert into remaining 1" Tee inlet so that rim is flush against the Tee opening. If more sensitivity is desired, the switch can be threaded out of the cap. DO NOT GLUE THE SWITCH CAP INTO THE TEE.
- 3. Glue 1"x 3/4" bushing into the open 1" Tee inlet.
- 4. Glue bushed inlet of Tee onto ¾" stub from pan outlet. Tee may be sloped up to 45° in either direction by rotating on stub.
- 5. For plugged installation on auxiliary outlets, seat plug firmly into 3/4" outlet of Tee, ensuring it is water-tight. DO NOT GLUE. Pipe tape may be required to ensure the seal. Ensure Tee is level or sloped downward from the pan outlet. If upward slope is unavoidable, adjust float switch downward out of cap by turning clockwise 1/8".



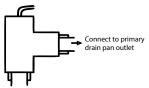


Figure 4: Vertical (Inline) installation.

- 6. For inline installation, glue 3/4" outlet of Tee onto drain line.
- 7. Wire switch according to instructions under Wiring, below.
- 8. Test all drain and fitting connections for plumbing leaks.
- 9. Test switch sensitivity: plug drain downstream from installation point and run unit to fill pan. Float should rise and unit should stop before pan overflows. If pan overflows, reposition float lower by either:
 - A. plumbing entire assembly lower, or
 - B. turning switch assembly counter-clockwise 1/8" away from cap/plug, so that it stops unit sooner in response to rising water.
- 10. Affix warning sticker to air handler or condenser unit.

WIRING (see fig. 5)

- 1. WARNING: Disconnect power to unit at main panel prior to performing electrical work.
- 2. If not present, it is recommended that an inline fuse be installed to protect 24-volt circuit and time delay to avoid rapid cycling of equipment.
- 3. Locate 24-volt thermostat cable entering the air handler unit.
- 4. Disconnect or cut the red wire and connect to switch lead using wire nut. Connect other switch lead to air handler terminal. Incorporating switch in red circuit shuts down entire unit. If placed in the yellow circuit, fan continues to run (inhibits mold during long absences.)
- 5. Test switch by lifting float while unit is running. If wired correctly, unit will stop when float is lifted.

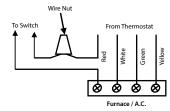


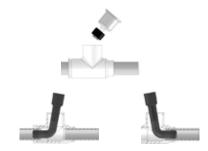
Figure 5: Wiring Diagram for Unit Shutdown

INSTRUCTIONS

Safe-T-Switch SS1 Directional Cleanout Tool

- 1. Remove SS1 Cup/Float subassembly from SS1 body. (i.e. the Tee).
- 2. Clear debris or any other obstacles inside SS1 body.
- Route the Cleanout Tool into SS1 body, either upstream or downstream depending on where blockage is. Insert the rubber nozzle portion into the 3/4" pipe glued to SS1 body on the blockage side.
- Attach a pressurizing (or vacuuming) device (such as RectorSeal Mighty Pump™) to Cleanout Tool's rigid plastic opening. Pump or vacuum until the blockage is cleared.
- 5. Disconnect the pressurizing (or vacuuming) device from Cleanout Tool.
- 6. Remove Cleanout Tool and hang it outside of the SS1 body.
- 7. Insert SS1 Cup/Float subassembly into SS1 body. Test SS1 function.

- · For directional cleanout of condensate drain line
- Fits perfectly with Safe-T-Switch® SS1 & all 3/4" drain lines
- Can be left with Safe-T-Switch® or removed for future jobs
- Can be used with Mighty Pump™ or a shop vac



WARNING: This device must be installed strictly in accordance with manufacturer's instructions (to ensure proper operation) and in accordance with all applicable local plumbing, drainage and electrical codes.

WARNING: Electric shock hazard. Disconnect power supply before installing this product to avoid electrical shock and/or equipment damage. Use in Class 2 (thermostat) circuit only, not to exceed 24-volts, 1.25 amps to avoid damage or fire hazard.

CAUTION: This device will not detect clogs occurring upstream from the installation point.

CAUTION: If not present, it is recommended that a fuse and time delay be installed, to protect the 24-volt circuit and avoid rapid cycling of equipment, prior to installing this product.

CAUTION: When installing this device in plugged configuration on auxiliary drain outlets, it is essential that PVC plug is closed off and water-tight.

CAUTION: This product is intended for use in water only. Not for use in the presence of flammable liquids or vapors.

CAUTION: Refer to the appropriate HVAC equipment operation manual prior to installing this product.

CAUTION: Do not use on dual compressor systems.

us 24 Volt AC, 1.25 Amp, GP, Use in Class 2 (Thermostat) Circuit Only

6 ft. 18 AWG Lead Wire

