RECTORSEAL

A CSW Industrials Company

PRODUCT DATA SHEET

SAFE-T-SWITCH® SS1

For primary drain outlet



US Patent No. 10,406,570

Description

Safe-T-Switch® Model SS1 is installed inline. The patented magnetic reed switch can be installed on a slope of up to 45°. The SS1 switch cap is easily removed for cleaning and servicing condensate drain lines.

Component List: (Fig. 1)

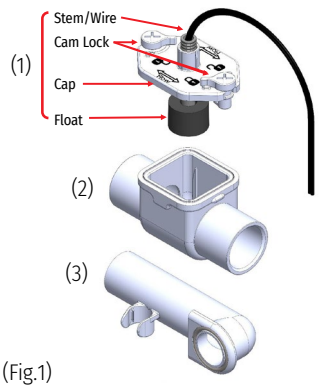
(1) Cap/Float Subassembly (includes Stem/Wire, two Cam Locks)
(2) Tee **(3)** Cleanout Tool **(4)** Warning Sticker (not shown)

Installation Instructions:

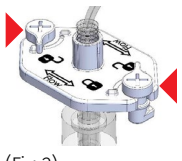
Notice: Failure to read and comply with all warnings, cautions and instructions prior to starting installation may cause personal injury and/or property damage and void the warranty. **Note:** this device works with both ¾" and 1" drain pipes.
For use with 1" drain pipe, add 1" x ¾" socket couplings (not included) to the SS1 ends.

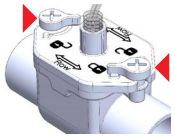
INSTRUCTIONS FOR 3/4" DRAIN PIPE

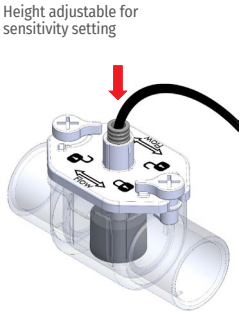
1. Disconnect power to the air conditioner (A/C) unit at the main panel. **2.** Glue a ¾" stub (not included) onto drain pan outlet adapter. **3.** Glue the Tee inlet onto the ¾" stub (Note that the Tee is not directional). Tee may be sloped to a maximum of 45° from pan outlet. **4.** Glue the Tee outlet onto the downstream drain line. **5.** Test all drain and fitting connections for plumbing leaks. **6.** Wire the switch per instructions under WIRING (Fig. 7). **7.** Rotate the two Cam Locks to the UNLOCK position (Fig. 2). Remove the Cap/Float Subassembly from the Tee. Test the switch by lifting the Float while the unit is running. If wired correctly, the A/C unit will stop. **8.** Secure the Cap/Float Subassembly (A) Place the Cap/Float Subassembly onto the Tee, then rotate the two Cam Locks to the LOCK position (Fig. 3). DO NOT GLUE THE CAP/FLOAT SUBASSEMBLY INTO THE TEE. (B) It is recommended to push the Stem to the bottom position for the most sensitive water detection (Fig. 4). If sensitivity needs to be adjusted, move the stem up or down accordingly. **9.** Test switch sensitivity: Plug drain downstream from installation point and run A/C unit to fill the drain pan. Float should rise and A/C unit should stop before pan overflows. (A) If the pan overflows, increase the switch sensitivity by: 1 - Shifting the entire assembly lower, or 2 - Pushing the Stem down. (B) If the unit stops too early or too frequently, reduce the switch sensitivity by: 1 -Shifting the entire assembly higher, or 2 - Pulling the Stem up. **10.** Place included Warning Sticker on a visible surface, such as air handler or condenser unit.



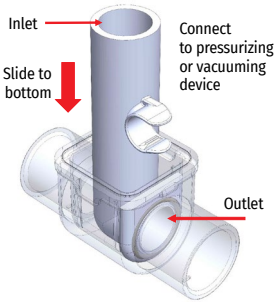
(Fig. 1)


(Fig. 2)

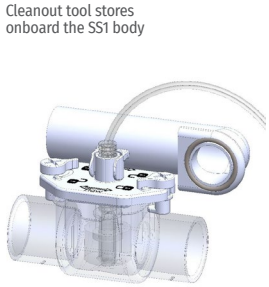

(Fig. 3)



(Fig. 4)



(Fig. 5)



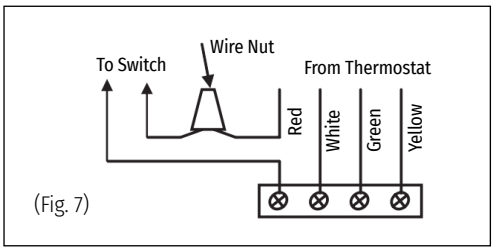
(Fig. 6)

Packaging

Code	Size	Qty. per Case	Lbs. per Case	Cubic Ft per Case
97085	SAFE-T-SWITCH SS1 GEN3	24	11	1.01

WIRING

⚠ WARNING **1.** Disconnect power to A/C unit at the 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 be configured to avoid rapid cycling of equipment. **3.** Locate the 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 (to inhibit mold growth during long absences). **5.** Reconnect power to the A/C unit.



(Fig. 7)

SPECIFICATIONS

24-Volts A/C, Maximum 1.25 Amp. Carrying Capacity, 6ft., 18 AWG Lead Wires.

c UL us
Tested to UL 508

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

MAINTENANCE

Open the Cap/Float Subassembly to inspect, clean and test this device at least every 180 days and following every cleaning of the drain line. **1.** Remove the Cap/Float Subassembly. **2.** Clear debris or any other obstacles inside Tee and around the Cap/Float Subassembly. **3.** Check for any damage. If damage is observed, replace this product with a new one. **4.** Test switch function by following Step 7-9 in the "INSTRUCTIONS FOR 3/4" DRAIN PIPE" section above. If this product failed function test, replace it with a new one. **5.** Add RectorSeal's Nu-Line™ drain cleaner to prevent the build-up of algae and clogs. **6.** Reinstall and secure the Cap/Float Subassembly.

DIRECTIONAL CLEANOUT TOOL INSTRUCTIONS

1. Detach the Cleanout Tool from the Cap/Float Subassembly. **2.** Remove Cap/Float Subassembly from the Tee. **3.** Clear debris or any other obstacles inside the Tee. **4.** Face the Cleanout Tool outlet (Fig. 5) towards the drain line to be cleaned (either upstream or downstream, depending on where the blockage is). Insert the Cleanout Tool into the Tee. **5.** Attach a pressurizing (or vacuuming) device (such as RectorSeal Mighty Pump™, or RectorSeal Lineshot™) to Cleanout Tool's inlet. Pump or vacuum until the blockage is cleared. **6.** Completely shut off the pressurizing (or vacuuming) device and disconnect it from Cleanout Tool. **7.** Remove the Cleanout Tool from the Tee and clip it onto the Cap/Float Subassembly (Fig. 6). **8.** Install the Cap/Float Subassembly back into the Tee. Rotate the two Cam Locks to the LOCK position.

IMPORTANT SAFETY INFORMATION:

⚠ WARNING **1.** 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 **2.** 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 **1.** This device will not detect clogs occurring upstream from the installation point.

⚠ CAUTION **2.** 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.

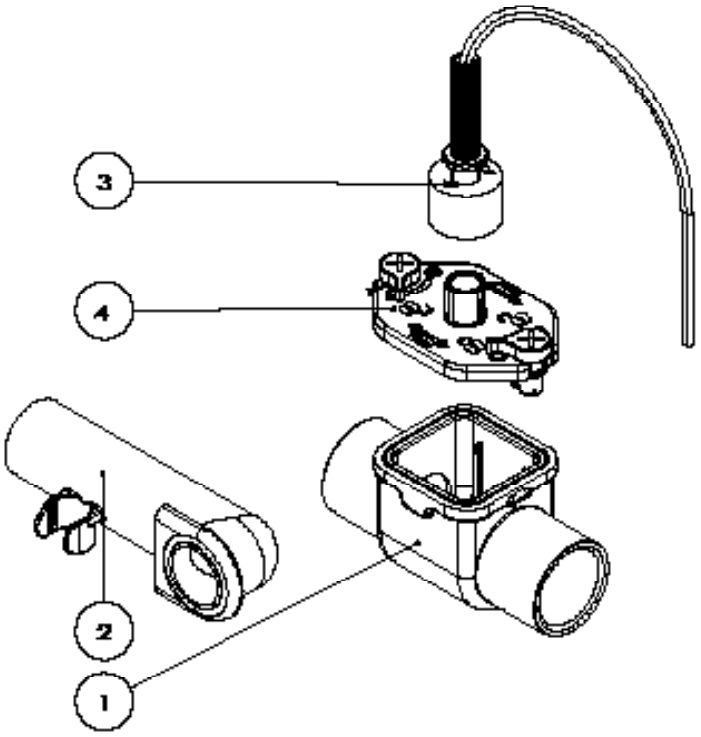
⚠ CAUTION **3.** This product is intended for use in water only. Not for use in the presence of flammable liquids or vapors.

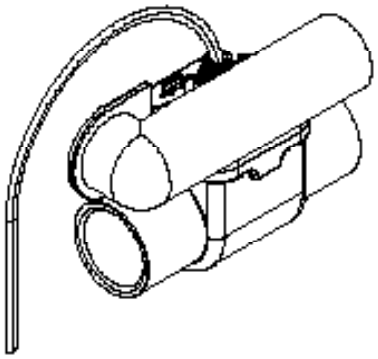
⚠ CAUTION **4.** Refer to the appropriate HVAC equipment operation manual prior to installing this product.

⚠ CAUTION **5.** Do not use on dual compressor systems.

Safe-T-Switch SS1 Assembly

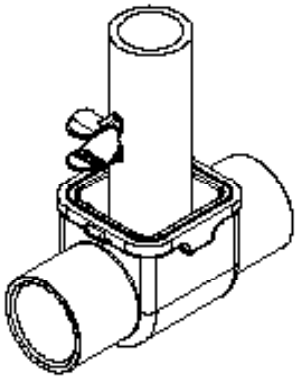
SIZE	DRAWING		REV	SCALE	WEIGHT
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Installed Status

Cleanout Tool is stored onboard the SS1 body



Cleanout Status

Cleanout tool is inserted inside the SS1 body during cleanout

Item No.	Part Number	Description	Quantity
1	FAB01281	SS1/SC1 Housing	1
2	ASB00451	L Shape Cleaning Tube Assembly	1
3	ASB00452	Stem Assembly	1
4	ASB00450	SS1 Cap Assembly	1

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Limited Warranty

LIMITED 3YR WARRANTY

For more information on our product limited warranty, visit RectorSeal.com

Manufactured by

RectorSeal, LLC

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