RECTORSEAL®

A CSW Industrials Company

PRODUCT DATA SHEET

SAFE-T-SWITCH® SS2P (PLENUM)

For primary drain pan auxiliary outlet



Description

Safe-T-Switch® Model SS2P with ¾" adapter can be installed on the auxiliary outlet of the primary drain pan. The magnetic reed switch can be installed on a slope of up to 20°. The SS2P switch cap is easily removed for cleaning and servicing condensate drain lines. SS2P is approved for use in plenum spaces.

Component List: (Fig. 1)

(1) Cap/Float Subassembly (includes Stem/Wire, 2 Cam Locks, Cap, and Float)
(2) Elbow **(3)** Adaptor **(4)** Warning Sticker (not shown)

Specifications

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

c UL us
Tested to UL 508

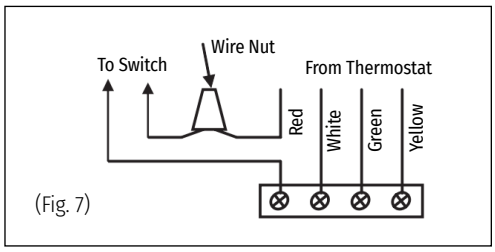
24 Volt AC, 1.25 Amp, GP, Use in Class 2 (Thermostat) Circuit Only
Suitable for use in air handling spaces

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 6-8 in the "PRIMARY DRAIN PAN, AUXILIARY DRAIN OUTLET INSTALLATION" section below. If this product failed function test, replace it with a new one. **5.** Reinstall and secure the Cap/Float Subassembly.

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)

Packaging

Code	Size	Qty. per Case	Lbs. per Case	Cubic Ft per Case
97088	SAFE-T-SWITCH SS2P PLENUM	12	4.7	0.41

SAFE-T-SWITCH® SS2P (PLENUM)

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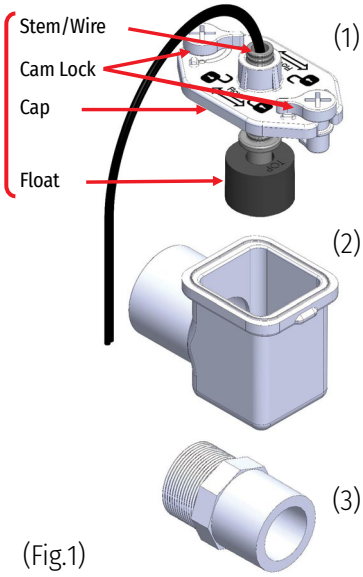
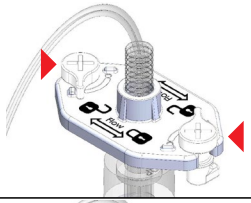
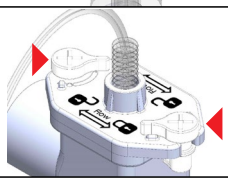


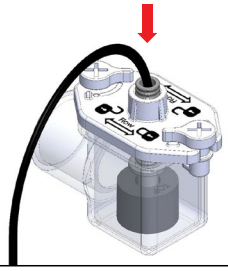
(Fig.1)



(Fig.2)

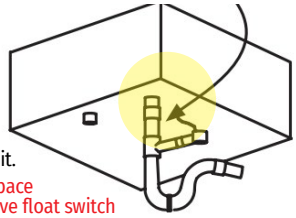


(Fig.3)

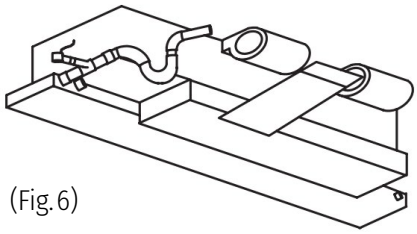


(Fig.4)

(Fig.5)



Bottom/back of typical wall unit.
3.25" minimum space required to remove float switch



(Fig.6)

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 3/4" drain pipe, add 1" socket couplings (not included) to connect the Tee to 1" drain pipe.

PRIMARY DRAIN PAN, AUXILIARY DRAIN OUTLET INSTALLATION

1. Disconnect power to the air conditioner (A/C) unit at the main panel. **2.** Thread the Adapter to the auxiliary drain port of the primary drain pan. **3.** Glue the ¾" inlet of Elbow onto the Adapter. Ensure the Stem is as vertical as possible, angled no more than 20° from vertical orientation. **4.** Test all drain and fitting connections for plumbing leaks. **5.** Wire the switch per instructions under WIRING (Fig 7). **6.** Rotate the two Cam Locks to the UNLOCK position (Fig 2). Remove the Cap/Float Subassembly from the Elbow. Test the switch by lifting the Float while the unit is running. If wired correctly, the unit will stop. **7.** Secure the Cap/Float Subassembly (A) Place the Cap Subassembly onto the Elbow, then rotate the two Cam Locks to the LOCK position (Fig 3). DO NOT GLUE THE CAP/FLOAT SUBASSEMBLY INTO THE ELBOW. (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. **8.** Test switch sensitivity: Plug drain downstream from installation point and run unit to fill pan. Float should rise and A/C unit should stop before pan overflows. (A) If the pan overflows, increase switch sensitivity by: 1. Plumbing 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. **9.** Place the included Warning Sticker on a visible surface, such as the air handler or condenser unit.

INLINE INSTALLATION FOR (WALL) UNITS WITH VERTICAL DRAIN OUTLET DRAIN OUTLET INSTALLATION: **Note:** It is recommended that this device be installed on the primary drain line between the pan outlet and P-Trap on wall units with vertical drain outlets. This will prevent the switch from shutting off the fan coil or activating the alarm circuit in the event condensate drips directly from the coil into the auxiliary pan outlet when the coil becomes dirty. 3.25" minimum space is required to remove float switch for maintenance (Fig 5). **1.** Disconnect power to A/C unit at the main panel **2.** Glue a 5" stub (not included) down from the primary pan outlet. **3.** Glue ¾" Tee (not included) to bottom of stub with Tee stem horizontal and plumb. **4.** Glue ¾" stub into horizontal outlet of Tee, ensuring it is also plumb. **5.** Insert the other end of the horizontal stub in to the switch ¾" socket and glue them. Ensure the switch stem is as vertical as possible. Switch could be angled up to 20° from vertical orientation. **6.** Glue drain line with P-Trap onto remaining outlet of Tee. **7.** Test all drain and fitting connections for plumbing leaks. **8.** Wire switch per instructions under WIRING (Fig 7) **9.** Test the switch by following Steps 6-8 in the "PRIMARY DRAIN PAN, AUXILIARY DRAIN OUTLET INSTALLATION" section. **10.** Place the included Warning Sticker on a visible surface, such as the air handler or condenser unit.

INLINE INSTALLATION FOR HORIZONTAL CEILING (PANCAKE) UNITS: (Fig 6).

Note: Primary drain (inline) installation is also recommended on horizontal ceiling (pancake) units as some flooding may occur if installed on auxiliary outlets, due to the closeness of the outlet to the top of the pan. **1.** Disconnect power to the air conditioner (A/C) unit at the main panel. **2.** Glue ¾" stub (not included) to primary pan outlet. **3.** Glue ¾" Tee (not included) onto stub with Tee stem positioned horizontally away from the unit and plumb. **4.** Follow steps 4-10 under "INLINE INSTALLATION FOR WALL UNITS" section.

⚠ WARNING

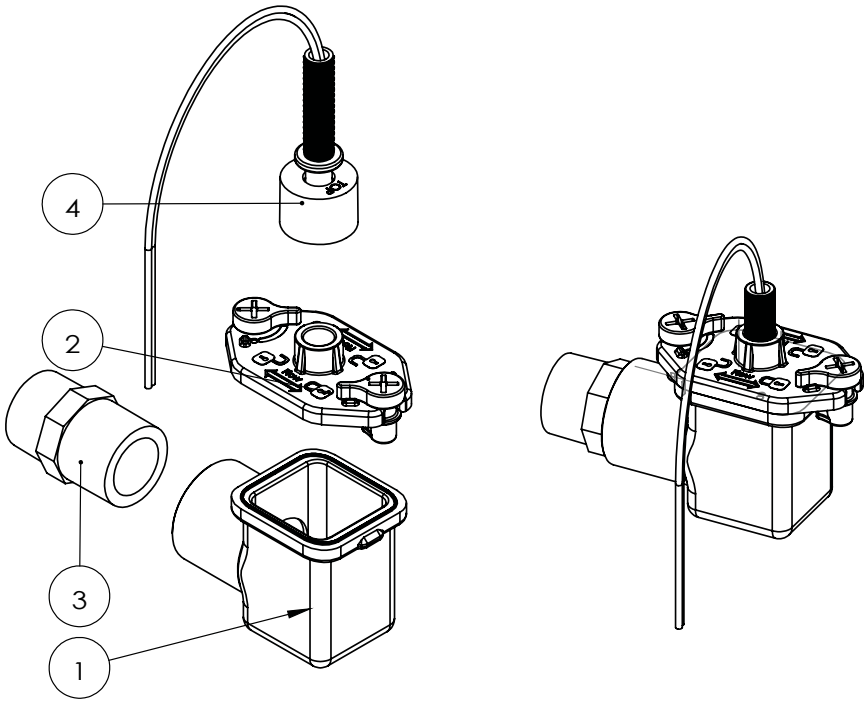
IMPORTANT SAFETY INFORMATION:

WARNINGS: 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. **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

CAUTIONS: 1. This device will not detect clogs occurring upstream from the installation point. **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. **3.** This product is intended for use in water only. Not for use in the presence of flammable liquids or vapors. **4.** Refer to the appropriate HVAC equipment operation manual prior to installing this product. **5.** Do not use on dual compressor systems.

Safe-T-Switch SS2P Assembly



Item No.	Description	Quantity
1	SS2P Housing	1
2	SS2P Cap Assembly	1
3	SS2P Coupling	1
4	Stem 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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