## **Electronic Controls**

# **Switching Relay**

The Taco Switching Relay is the best choice for all your zoning needs, with advanced timer and boiler functions, external diagnostic lights, switchable priority and contractor friendly PC board layouts. Combined with the time proven reliability of the 00<sup>®</sup> family of circulators and thermostats, total system integration is achieved.





## **Submittal Data Information** Switching Relay

## **Features**

Front Diagnostic Lights Switchable Priority **Built-in Priority Protection** Simplified Wiring Premium Sealed Relays Compact Design **Fuse Protected** 100% Factory Tested Isolated End Switch Contractor Friendly PC Board Layout Universal Thermostat Compatibility 24 Volt Power Output for hard wired thermostats Field Replaceable Transformer **UL** Approved

Extended 3 Year Warranty

Made in the USA

#### Additional -EXP Features Add-on Power Control Plug

Built-in; Post Purge and Pump Exercise Functions Switchable Primary Circulator Output

Two boiler contacts, utilizes full functionality of Mod-Con boilers Expandable to 20 Zoning Panels (120 zones if all are 6 zone panels)

Interface with -EXP Zone Valve Controls

## **The Taco Connection**

Combine the reliability of the Taco Zone Valves, Priority Zoning Circulators, Thermostats, and the 00® family of circulators with the advanced features of the Taco Zone Controls to achieve total system integration. No matter the application, Taco now provides the products to maximize system performance while simplifying both installation and service.

## **External Diagnostics**

It's no longer necessary to open the box to troubleshoot the system. Externally visible lights show full functionality of the switching relay. The green light should always be on, indicating that power is connected. When the thermostat calls for heat, both the appropriate circulator and red indicating light is energized.

## **Switching Relays**

Taco Switching Relays combine clearly labeled PC board layouts with advanced features that allow for total system customization. Whether using basic priority switching or the advanced features of the -EXP controls, the job is made easy. External indicator lights provide instant diagnostic feedback, making a snap of service calls or new installation start-ups. All switching relays are UL listed, are compatible with conventional and programmable thermostats.

## **Taco Expandable Switching Relays**

Whether you want to expand up to 120 zones or utilize the advanced features of the Add-on Power Controls, Taco -EXP controls allow for simple integration of advanced features. Built-in Post Purge and Pump Exercise functions can optimize the operation of any system.

## Wiring Diagram



#### Switching Rolave

Product	Number	Transformer	Maximum	Dimensions of Enclosure		
Number	of Zones	Voltage	Combined Load	Width	Height	Depth
SR501	l Zone	120 VAC Input	12 amps	4-7/8"	6-5/8"	2-3/8"
SR501-HC	I or 2 Zone	120 VAC Input	20 amps 4-7/8"		6-5/8"	2-3/8"
SR502	2 with Priority	120 VAC Input	15 amps	10-1/4"	7"	2-3/4"
SR503	3 with Priority	120 VAC Input	15 amps	10-1/4"	7"	2-3/4"
SR504	4 with Priority	120 VAC Input	20 amps	10-1/4"	7"	2-3/4"
SR506	6 with Priority	120 VAC Input	20 amps	12-1/4"	8"	3"

## Expandable Switching Relays

Number	PowerPort	Power Control	Transformer	Maximum	Dimensions of Enclosure		
of Zones	Slots	Plugs	Voltage	Combined Load	Width	Height	Depth
I Zone	0	Ι	120 VAC Input	: 12 amps	4-1/4"	6-5/8"	2-3/8"
3 with Priority	3	I	120 VAC Input	: 15 amps	10-1/4"	7"	2-3/4"
4 with Priority	3	I	120 VAC Input	: 20 amps	10-1/4"	7"	2-3/4"
6 with Priority	3	I	120 VAC Input	: 20 amps	12-1/4"	8"	3"
	of Zones I Zone 3 with Priority 4 with Priority	of ZonesSlotsI Zone03 with Priority34 with Priority3	of ZonesSlotsPlugsI Zone0I3 with Priority3I4 with Priority3I	of Zones Slots Plugs Voltage   I Zone 0 I 120 VAC Input   3 with Priority 3 I 120 VAC Input   4 with Priority 3 I 120 VAC Input	of ZonesSlotsPlugsVoltageCombined LoadI Zone0II20 VAC InputI2 amps3 with Priority3II20 VAC InputI5 amps4 with Priority3II20 VAC Input20 amps	of ZonesSlotsPlugsVoltageCombined LoadWidthI Zone0II20 VAC InputI2 amps4-1/4"3 with Priority3II20 VAC InputI5 ampsI0-1/4"4 with Priority3II20 VAC Input20 ampsI0-1/4"	of ZonesSlotsPlugsVoltageCombined LoadWidthHeightI Zone0I120 VAC Input12 amps4-1/4"6-5/8"3 with Priority3I120 VAC Input15 amps10-1/4"7"4 with Priority3I120 VAC Input20 amps10-1/4"7"

All circulator relay connections, including ZC/ZR, are rated 1/3 hp, 6 amps at 120 VAC. End switch connections are rated 24 VAC. 1 amp. All thermostat connections supply a 24 VAC class 2 output. SR501-HC has a single phase motor rating per zone of 3/4 hp (13.8 A) @ 120 VAC

## Add-on Power Controls\*

PC700 Boiler Reset Control PC702 Two Stage Boiler Reset Control

PC705 Variable Speed Pump Injection Mixing Control

\*For use with -EXP controls



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