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° family of circulators and thermostats, total system integration is achieved.





Effective Date: 12/08/20 Printed in USA

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

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 Relays

| Product | Number | Transformer | Maximum | Dimensions of Enclosure | | | |
|----------|------------------------------|---------------|---------------|-------------------------|--------|--------|--|
| Number | of Zones | Voltage | Combined Load | Width | Height | Depth | |
| SR501 | 1 Zone 120 VAC Input 12 amps | | 12 amps | 4-7/8″ | 6-5/8″ | 2-3/8″ | |
| SR501-HC | 1 or 2 Zone | 120 VAC Input | 20 amps | 20 amps 4-7/8" | | 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

| Product | Number | PowerPort | Power Control | Transformer | Maximum | Dimens | ions of Er | nclosure |
|-----------|---------------|-----------|---------------|---------------|---------------|---------|------------|----------|
| Number | of Zones | Slots | Plugs | Voltage | Combined Load | Width | Height | Depth |
| SR501-EXP | Zone | 0 | 1 | 120 VAC Input | t 12 amps | 4-1/4″ | 6-5/8″ | 2-3/8″ |
| SR503-EXP | with Priority | 3 | 1 | 120 VAC Input | t 15 amps | 10-1/4″ | 7″ | 2-3/4″ |
| SR504-EXP | with Priority | 3 | 1 | 120 VAC Input | t 20 amps | 10-1/4″ | 7″ | 2-3/4″ |
| SR506-EXP | with Priority | 3 | 1 | 120 VAC Input | t 20 amps | 12-1/4″ | 8″ | 3″ |
| | , | 3 | 1 | | | | 8″ | _ |

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*

| Boiler Reset Control |
|--|
| Two Stage Boiler Reset Control |
| Variable Speed Pump Injection Mixing Control |
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