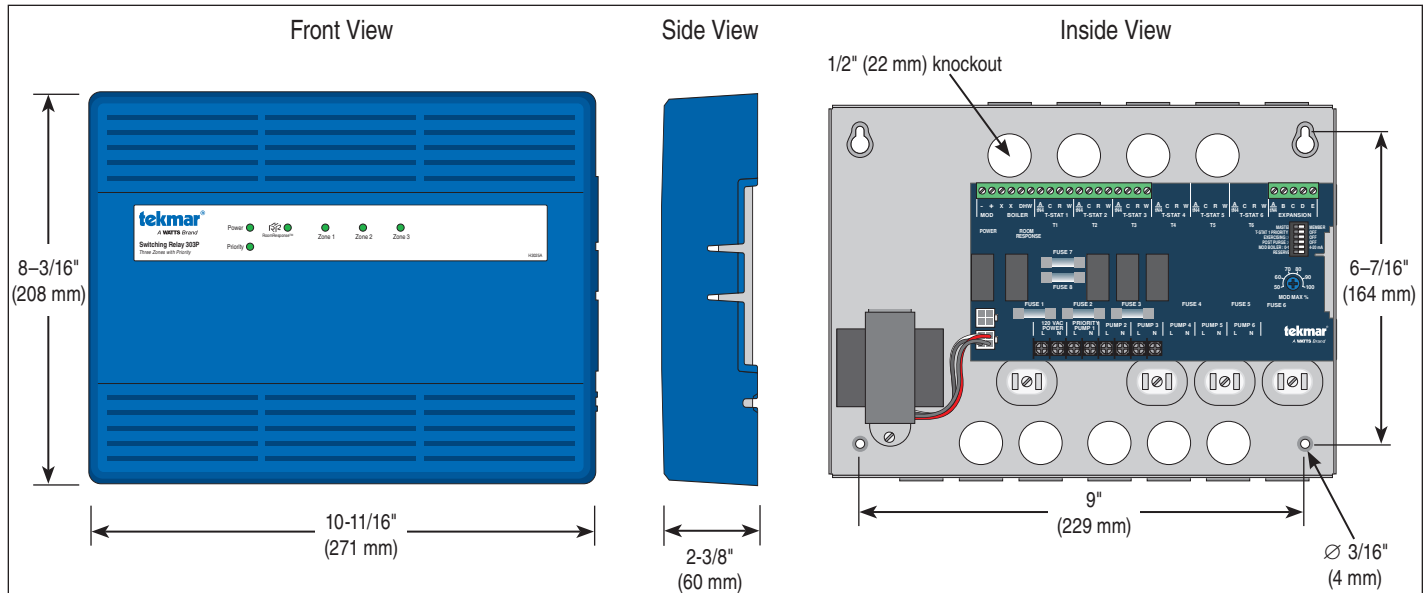


# Submittal

Job \_\_\_\_\_ Designer \_\_\_\_\_ Contact \_\_\_\_\_

## Switching Relay 303P

The Switching Relay 303P connects up to three thermostats and operates circulators to provide heating to a zoned hydronic heating system. Zone 1 has optional priority over zones 2 and 3 and can be used to provide heat to an indirect domestic hot water tank. The 303P includes optional exercising to prevent circulator seizure when not in use, and optional post purge operation of the last operating zone to maximize energy savings. The 303P provides a RoomResponse™ signal to modulating-condensing boilers to optimize comfort while improving boiler efficiency.



### Specifications

Switching Relay 303P Three Zones with Priority	
Literature	Submittal 303P_C, Installation Manual 303P_D, Job Record 303P_J
Packaged weight	5.0 lb. (2250 g)
Dimensions	8-3/16" H x 10-11/16" W x 2-3/8" D (208 x 271 x 60 mm)
Enclosure	Cover: ABS plastic, Base: galvanized steel, NEMA type 1
Approvals	CSA C US, RoHS
Ambient conditions	Indoor use only, 32 to 122°F (0 to 50°C), RH ≤90% non-condensing
Power supply	115 V (ac) ±10%, 60 Hz, 16 A
Transformer	40 VA at 24 V (ac), expandable to 80 VA with additional transformer M3069 (sold separately)
Control load	7 VA at 24 V (ac)
Fuses	T5A 250 V slow blow 5 x 20 mm glass fuse, two spare fuses included
Pump relays	115 V (ac), 5 A, 1/3 hp, 15 A combined
Boiler XX end switch	24 V (ac), 5 A
DHW end switch	24 V (ac), 5 A
Mod boiler output	0-10 V (dc) 500 Ω min load impedance 4-20 mA 1kΩ max load impedance
Warranty	3 Year Limited Warranty

### Features

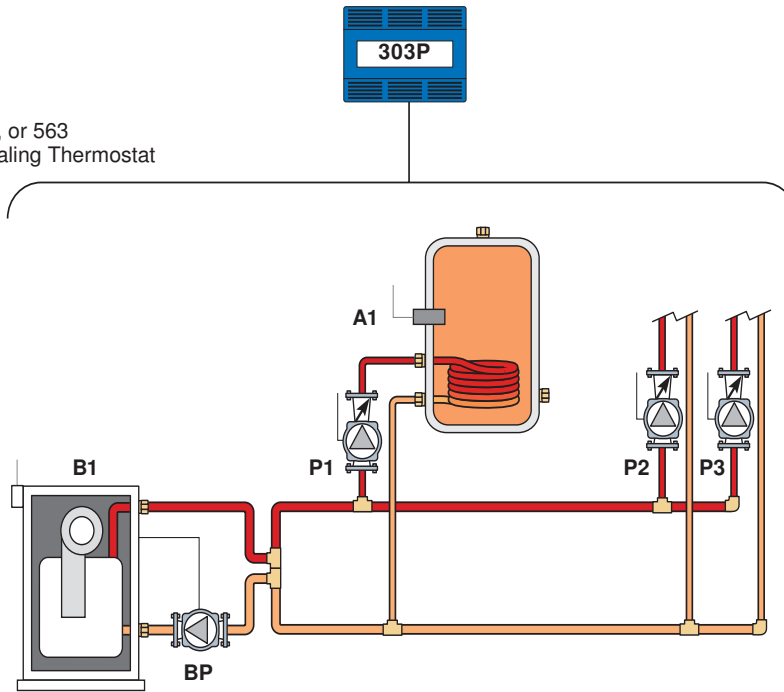
- RoomResponse™ signal (Patent Pending)
- Compatible with all low voltage thermostats
- Unlimited zone expansion
- Zone priority
- Priority override
- Pump exercising
- Post purge
- LED for each zone, priority, end switch and RoomResponse™
- Away signal shared between tekmar thermostats
- Four ground screws
- Top, bottom and back conduit knockouts
- Fuses protect transformers and pumps
- Two spare fuses included
- CSA approved

## Example Application

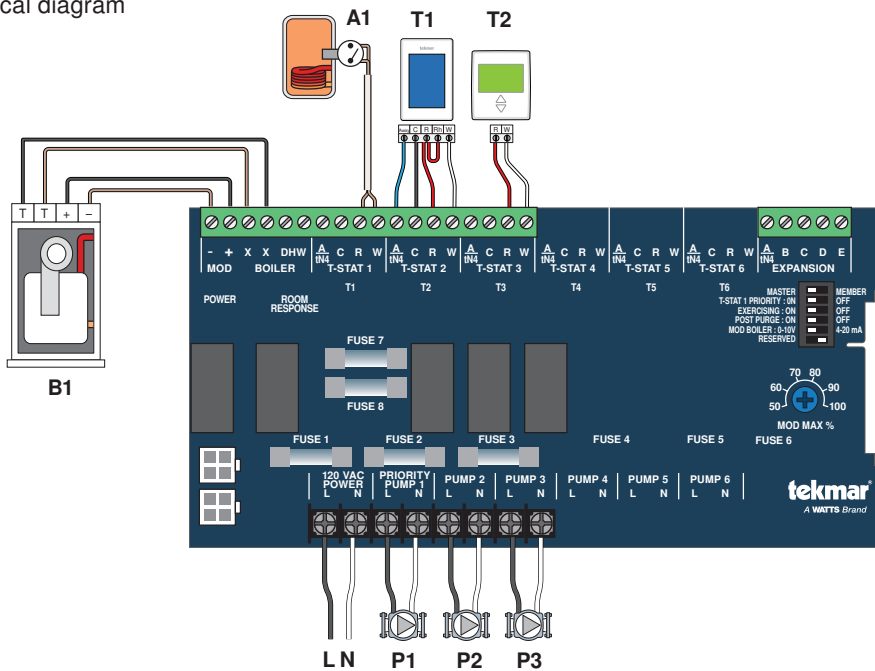
### Sample Mechanical diagram

#### Legend

- A1 = DHW Tank Aquastat
- B1 = Boiler
- BP = Boiler Pump
- P1 = Zone 1 DHW Tank Pump
- P2, P3 = Zone 2 and 3 Pumps
- T1 = WiFi Thermostat 561, 562, or 563
- T2 = Generic Digital Power-Stealing Thermostat



### Sample Electrical diagram



#### DIP Switches

- Master
- T-stat 1 Priority = On
- Exercising = On
- Post Purge = On
- Mod Boiler = depends on boiler

### CAUTION

This Submittal is not intended to provide full installation instructions and safety information. In order to avoid property damage or injury, please refer to the complete installation manual and product safety information provided with the product.

**tekmar**<sup>®</sup>

A WATTS Brand

All specifications are subject to change without notice.

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