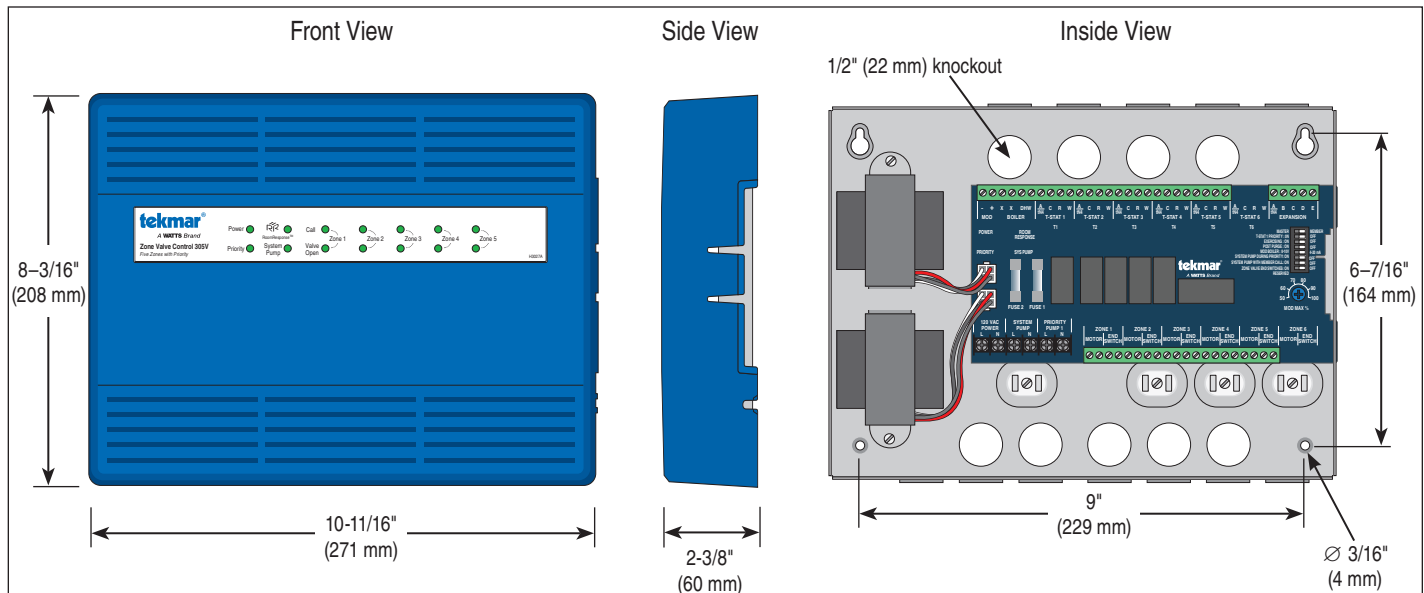


## Submittal

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

# Zone Valve Control 305V

The Zone Valve Control 305V connects up to five thermostats and operates zone valves to provide heating to a zoned hydronic heating system. The 305V operates a system pump whenever a zone valve opens. Zone 1 can operate either a zone valve or a circulator to provide heat to an indirect domestic hot water tank with optional priority over zones 2 through 5. The 305V includes optional exercising to prevent circulator seizure when not in use, and optional post purge operation of the domestic hot water tank to maximize energy savings. The 305V provides a RoomResponse™ signal to modulating-condensing boilers to optimize comfort while improving boiler efficiency.



## Specifications

Zone Valve Control 305V Five Zones with Priority	
Literature	Submittal 305V_C, Installation Manual 305V_D, Job Record 305V_J
Packaged weight	6.0 lb. (2750 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, 11 A
Transformer	80 VA at 24 V (ac)
Control load	7 VA at 24 V (ac)
Fuses	T5A 250 V slow blow 5 x 20 mm glass fuse, two spare fuses included
Zone valve outputs	24 V (ac), 2 A max each, one transformer 33 VA, two transformers 73 VA
Zone valve end switch	24 V (ac)
Pump relays	230 V (ac), 5 A, 1/3 hp
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

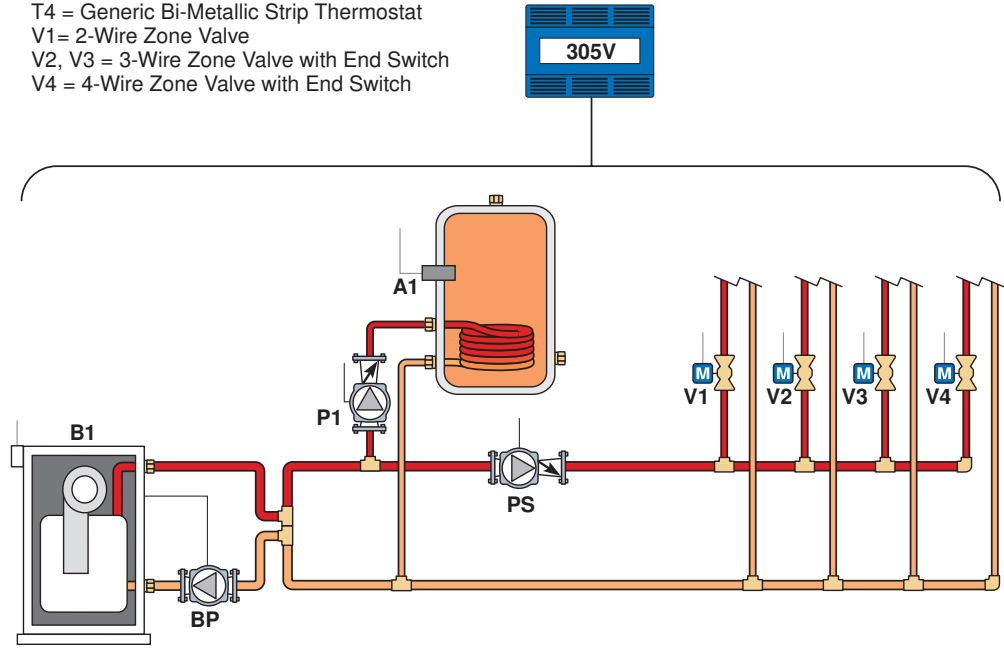
- RoomResponse™ signal (Patent Pending)
- Compatible with all low voltage thermostats
- Compatible with 2, 3 and 4-wire zone valves
- Unlimited zone expansion
- Zone priority
- Priority override
- Pump exercising
- Post purge
- LED for each zone, priority, end switch and RoomResponse™
- Away signal shared 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

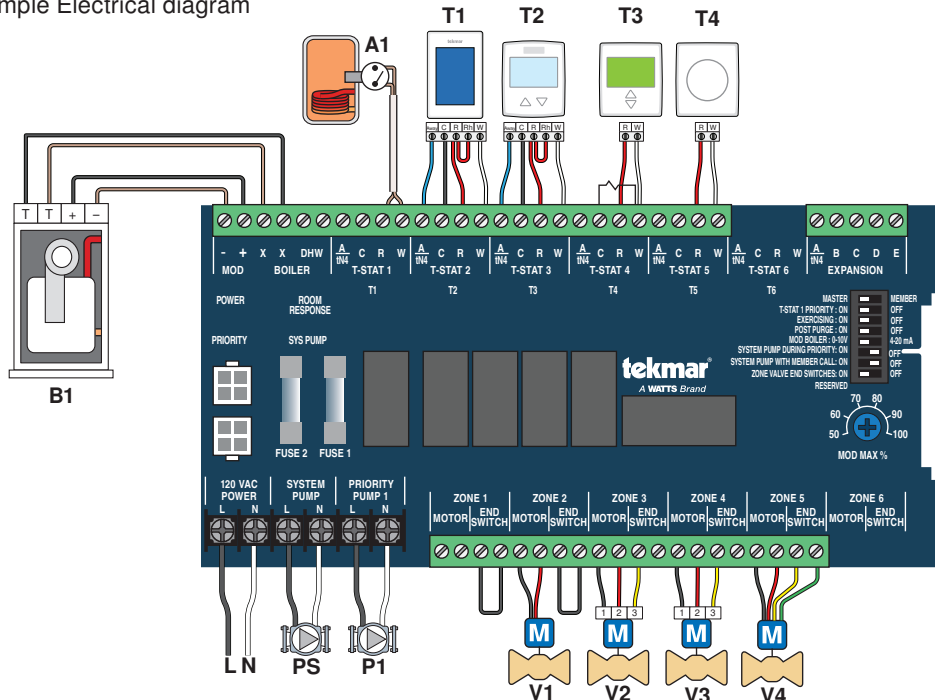
Sample Mechanical diagram

**Legend**

- A1 = DHW Tank Aquastat
- B1 = Boiler
- BP = Boiler Pump
- P1 = Zone 1 DHW Tank Pump
- PS = System Pump
- T1 = WiFi Thermostat 561 or 562
- T2 = Thermostat 518 or 519
- T3 = Generic Digital Power-Stealing Thermostat
- T4 = Generic Bi-Metallic Strip Thermostat
- V1 = 2-Wire Zone Valve
- V2, V3 = 3-Wire Zone Valve with End Switch
- V4 = 4-Wire Zone Valve with End Switch



Sample Electrical diagram



**DIP Switches**

- Master
- T-stat 1 Priority = On
- Exercising = On
- Post Purge = On
- Mod Boiler = depends on boiler
- System Pump During Priority = Off
- System Pump With Member Call = Off
- Zone Valve End Switches = On

**Notice**

End switch jumper required for Zone 1 when using a pump and Zone Valve End Switch DIP = On

Included resistor must be installed when using power stealing thermostats (e.g. Thermostat T3)

**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.



A WATTS Brand

All specifications are subject to change without notice.

Tel: 1-800-438-3903 • F: (250) 984-0815  
tekmarControls.com