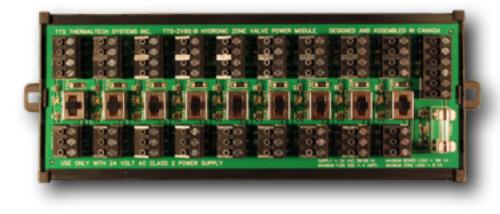
ZV9S Zone Board Radiant Zoning Made Easy

Power Distribution and End Switch termination with visual indication and manual control.



The ZV9S zone board greatly simplifies valve wiring, diagnostics, and testing when used in 24VAC hydronic systems where 4 wire zone valves are utilized. 3 wire zone valves are also supported.

Visual indication using LED indicator lamps is provided for both supply power as well as individual zone operation. An easy to use OFF / ON / THERMOSTAT switch makes testing, maintenance and diagnostics extremely easy.

This product is designed for 24VAC Class II (2) power circuits only. Do not attempt to connect this zone board to any other power supply other than specified.

For complete specifications, usage and wiring information, please consult the ZV9S user manual.

SPECIFICATIONS

- 24VAC 50/60 Hz. Supply¹
- CLASS II (2) Use Only
- Power Consumption³ : 100ma
- Dimensions : 9.15" x 3.45" x 1.10"
- Valve Connections : 9
- Thermostat Connections : 9
- Power Connections : 2
- TT / Output Connections : 1
- Max Power per zone : 8VA
- Max Power per board : 100VA
- Mounting² : Panel Mount
- IP Rating : None / Open Chassis
- ROHS Compliant : PENDING
- Frame Material : PVC / Nylon
- Terminals : #22 #14 Gauge
- Fuse : 2 Amp Fast Acting
- ¹ 24VAC class II power supply not included.
- ² DIN rail mount adapter available as option.
- ³ Calculated at rated input voltage of 24VAC

ASSEMBLED IN CANADA

FROM PARTS SOURCED GLOBALLY

3 YEAR LIMITED PRODUCT WARRANTY FOR THE UNITED STATES OF AMERICA AND CANADA

TTS Thermaltech Systems Inc. (TTS) will repair or replace without charge (at the company's option) any ZV series zone board or board component that is proven defective under normal use within (3) years from date of manufacture.

In order to obtain service under this warranty, it is the responsibility of the purchaser to promptly notify TTS in writing and promptly deliver the subject part(s), delivery prepaid to TTS, Should the subject part(s) contain no defect(s) as covered by this warranty, the purchaser will be invoiced for parts and labour charges in effect at the time of factory examination and repair.

Any TTS part not installed or operated as per detailed in these instructions, or which has been subject to misuse, misapplication, abuse or modification, will not be covered by this warranty.

TTS reserves the right to provide replacement products and parts which are substantially similar in design and functionally equivalent to the defective product or part. TTS reserves the right to make changes in details of design, construction, or arrangement of materials of its products without notification.

TTS OFFERS THIS WARRANTY IN LIEU OF ALL OTHER EXPRESS WARRANTIES. ANY WARRANTY IMPLIED BY LAW INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS IS IN EFFECT ONLY FOR THE DURATION OF THE EXPRESS WARRANTY SET FORTH IN THE FIRST PARAGRAPH ABOVE.

THE ABOVE WARRANTIES ARE IN LIFLL OF ALL OTHER WARRANTIES EXPRESS OR STATUTORY, OR ANY OTHER WARRANTY OBLIGATION ON THE PART OF TTS.

TTS WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF ITS PRODUCTS OR ANY INCIDENTAL COSTS OF REMOVING OR REPLACING DEFECTIVE PRODUCTS.

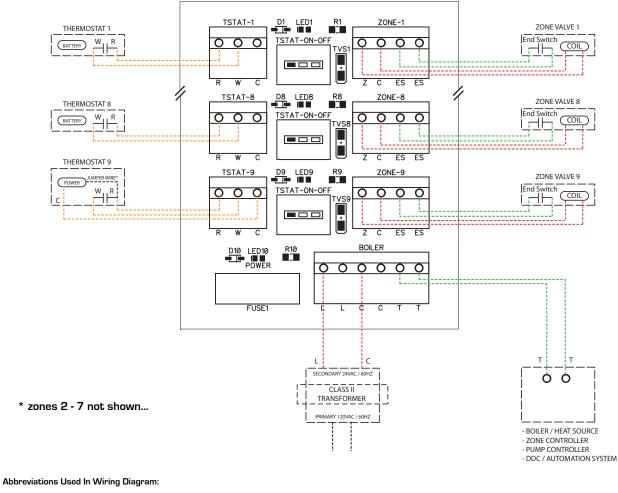
This warranty gives the purchaser specific rights, and the purchaser may have other rights which vary within their jurisdiction. Some jurisdictions do not allow limitations on how long an implied warranty lasts or on the exclusion of incidental or consequential damages, so these limitations or exclusions may not apply to you.

TYPICAL ZV9S WIRING DIAGRAM

4-Wire Zone Valve Connections with Dry Contact End Switch Output

Typical 4-wire zone valve connections to the ZV9S board should be made as per the wiring diagram below. In this configuration, the ZVS9 board provides an isolated dry contact output as supplied by the end switches in the zone valves. This configuration is typical when used with pump zone controllers which tend to supply their own control power voltage in the range of 5V AC/DC and 24V AC/DC.

Terminal Blocks may be removed from the circuit board to assist in wiring. To remove, firmly grab terminal block and pull in a motion perpendicular to the board. Terminals should disconnect easily. DO NOT USE EXCESSIVE FORCE! Terminals may be installed with wiring oriented towards the top, or bottom of the circuit board. Terminals may also be installed vertically to allow for increased wiring space. When connecting terminal blocks, ensure that wiring connections are correct as certain terminal block orientations will reverse wiring and may cause incorrect operation.



 TSTAT = Thermostat
 L = 24VAC Line
 C = 24VAC Common
 Z = Zone Valve
 ES =End Switch
 W = Thermostat Heat Relay
 R = Thermostat Line/Hot

 BATTERY = Thermostat Battery
 POWER = Thermostat Power Supply
 LED = Light Emitting Diode
 COLL = Zone Valve Motor, Actuator or Solenoid