

Honeywell SPARCOMATIC™

Submittal Data /
Instruction Sheet
SD / IS 131

Effective
7/1/98

LARGE FLOW PROPORTIONAL THERMOSTATIC MIXING or DIVERTING VALVE

SUBMITTAL DATA APPROVAL

For: _____

Job: _____

Date submitted: _____ by: _____

Date approved: _____ by: _____

Model number: _____ quantity: _____

Model number: _____ quantity: _____

Model number: _____ quantity: _____

INSTALLER

1. Fill in measured discharge temperature on caution label.
2. Attach CAUTION label to SPARCOMATIC.
3. Explain CAUTION label to owner.
4. Leave this instruction sheet with owner or on the job site.

APPLICATION: Any application requiring accurate control of water temperature based on mixing of hot and cold water, such as:

- Domestic water for hotels, schools, hospitals, nursing homes, offices, public facilities, commercial and industrial buildings.
- Space heating
- Radiant floor heating
- Central distribution systems
- Combo systems
- Heat pump systems
- Industrial applications

PRODUCT SPECIFICATIONS

- Dual purpose mixing or diverting valve.
- Constant water temperature under different operating conditions.
- Proportional valve (control of hot and cold water)
- Flow reduction in seconds if cold water supply is interrupted.
- Temperature adjustable.
- Allen wrench for temperature adjustment included.
- Install in any position, heat trapping not required.
- Recirculation connection for fast response.
- Bronze / stainless construction.
- Wear surfaces Teflon coated to prevent lime deposits.
- Tapped flange connections.
- Maximum pressure differential between hot and cold ports 7 psi.
- ISO 9001 facility.

ISO 9001
CERTIFIED

Number	Size Flanged	Flow Cv	GPM at 30 psi	Temp. Range	Weight lbs.	Dimension inch			
						A	B	C	D
MX 131	2 1/2 "	34	186	110°-150°F 43°-65°C	51	5.7	1"	11.4	4.0
MX 132	3"	50	274		62	6.1	1 1/4 "	12.2	4.0

With threaded recirculation adaptor female NPT .
Max. working pressure 150 psi. (1034 kpa)
Max. temperature 200°F (93°C)

Minimum temperature difference between hot and mix 10°F (6°C)

BENEFITS

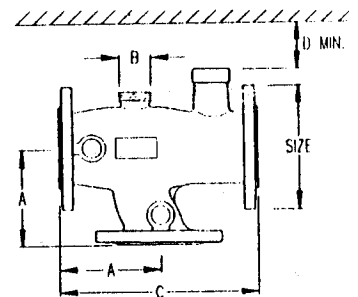
SPARCOMATIC provides energy savings, increased comfort and safety for the user.

OPERATION

Automatic operation is provided by thermostatic element. Element will control hot and cold supply based on valve setting. If cold water is shut off, valve reduces mixed flow rate in seconds (speed / residual flow rate varies by size.)

CAUTION

For domestic water application, set temperature not to exceed 120°F. for safety. Do not override calibration. Test temperature with thermometers.



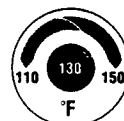
INSTALLATION NOTE: The flanges are threaded 5/8 - 11 UNC. Supplied with the valve are 12 D washers and 12 back - up nuts. You must install the D washers and back - up nuts (torqued as necessary) to assure leak tight, secure system.

SERVICE

To remove dirt, flush valve. To remove calcium deposits, place valve in vinegar for 24 hours and flush or contact factory for assistance. Do not attempt to field repair this calibrated valve.

TEMPERATURE SELECTION

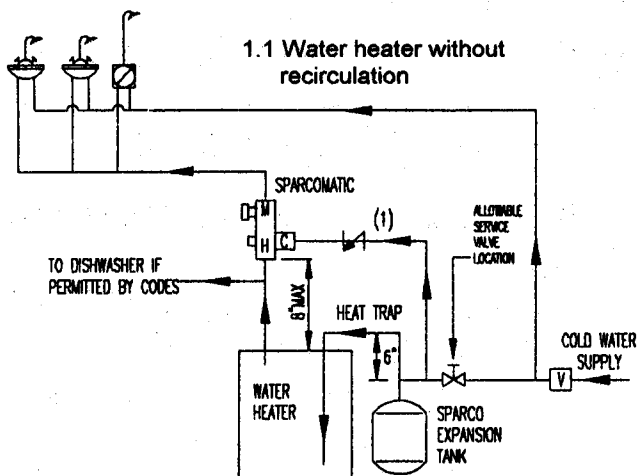
The SPARCOMATIC is calibrated: 110°-150°F. The factory setting is at 130°F. Change temperature setting with an Allen wrench which is included. Punch through the center of the temperature range label. By turning the screw clockwise, the mix temperature increases (counter clockwise, it decreases). Each complete turn with the Allen wrench changes the temperature by 3.6°F. Do not operate valve at temperatures outside of its calibrated range of 110°-150°F. Use a thermometer to verify temperature.



TYPICAL INSTALLATION DIAGRAMS

1. DOMESTIC WATER MIXING

Use when water temperature produced by heater is hotter than desired at point of use. Many codes require that water supplied to the system be limited to 120° max.



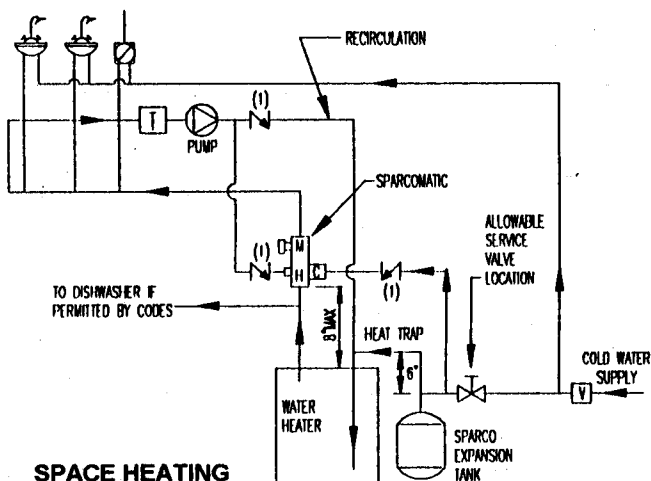
1 = Check Valve

2 = Alternate pump location

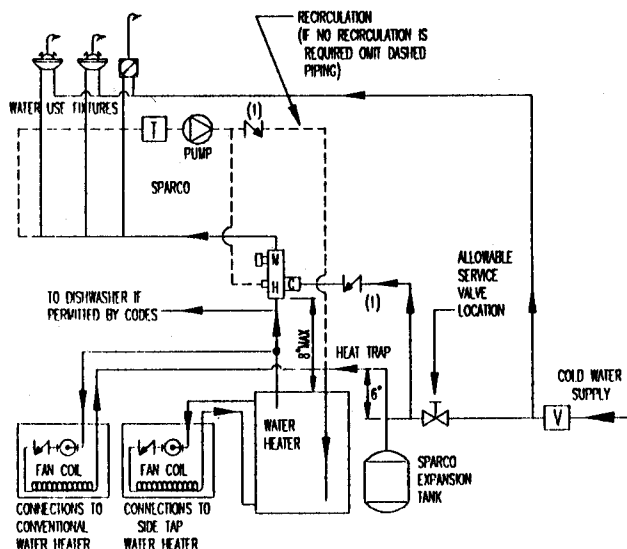
V = Any device which turns the domestic water system into a closed system, such as backflow preventers, check valves or pressure reducing valves.

Notes: 1. "V" is optional depending on local codes. If a "V" type valve is used, it is mandatory that a thermal expansion tank be installed as shown. Otherwise dangerously high pressures could result or water heater safety relief valve will frequently expel water. If no "V" device is used, no thermal expansion tank is required.

1.2 Heater with recirculation.



1.3 Water heater is used for domestic water and space heating.

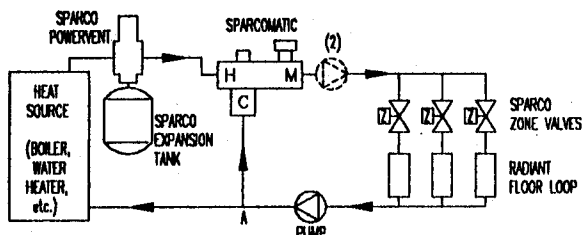


2. SPACE HEATING

Boiler must operate at a water temperature higher than the desired temperature in the heating system in order to perform at maximum efficiency. Example: Radiant floor heating.

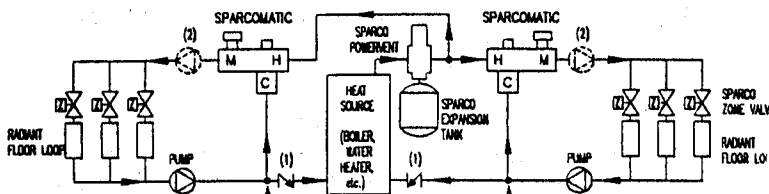
2.1 Mixing Applications (constant supply temperature)

2.1.1 Single Loop



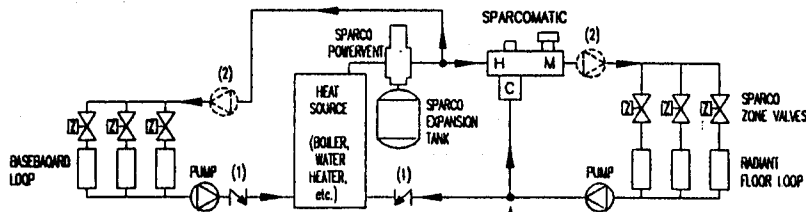
2.1.2 Multiple Loops

Each loop operates at different temperature.



2.1.3 Multiple Loops

One loop operates at boiler water temperature and Sparcomatic loops at lower temperature.



2.2 Diverting Application (constant temperature)

2.2.1 Single loop. For multiple loops refer to 2.1

