



# INSTALLATION INSTRUCTIONS

## TV/SC-A & US/A AMBIENT-SENSING VALVES

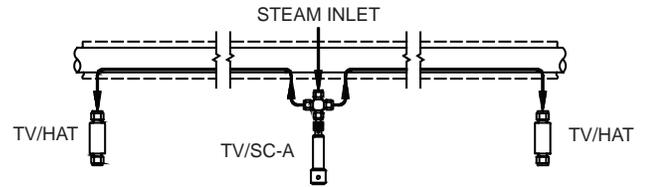
## TV/SC-AR & US/A-R REVERSE ACTING VALVES

If installed and maintained as recommended, the ThermOmegaTech® valves will yield reliable and trouble free service. **IMPORTANT:** Before installation, please read and understand the following instructions.

**REMEMBER:** The **TV/SC-A & US/A** valves are open at its stated temperature and closed approximately 10°F higher. The **TV/SC-AR & US/A-R** are reverse acting, and are also open at their stated temperature, but are closed at approximately 10°F lower. Unless otherwise stated, these valves are supplied at their greatest standard CV or flow rate. Smaller CV's are available on request. **NEVER** undersize installations.

Maximum Pressure: 200 PSIG (13.79 BAR)

The **TV/SC-A** and **US/A** can be used with air, steam, water, oil, most fluids and gases or any media compatible with stainless steel and Teflon®. Call factory for extreme applications.



The **TV/SC-A** and **US/A** may be installed as illustrated for seasonal control of steam tracing for freeze protection. The valve should be positioned with the sensor end of the extension pointed down or horizontal relative to the valve body and located so that the valve will only sense the true ambient air temperature. **Do not** install the valve with the sensor above valve body or in direct sunlight or near an heat source or heat producing equipment. If possible, the valve should be located in the shade, or shaded to further reduce the effects of solar heating.

Valve body, source and inlet piping may be insulated. **Do not insulate yoke, isolation extension or sensor.**

The **TV/SC-A** tubing compression nuts should be tightened 1-1/4 turns from hand tight. Do not over tighten.

**Do not hold valve by yoke or extension to tighten connections.** Use only special tee wrench or spud wrench on tee body of valve. Do not tamper with the calibration adjustment. Tampering will change the set point and void warranty.

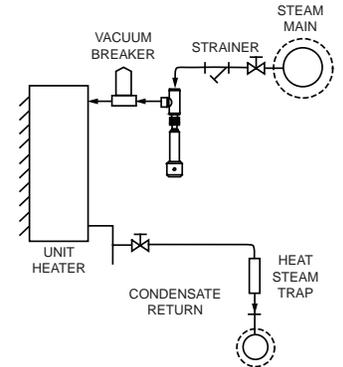
### US/A IN UNIT HEATER INSTALLATIONS.

The **US/A** can be used to accurately control steam input for unit heater applications. Do not expose sensor to radiant heat from the steam main, unit heater, or condensate return line.

### CAUTIONS

- Use only standard and proper connections
- Do not over-tighten connections
- Do not hold valve by yoke or extension to tighten extensions. Use only special tee wrench or spud wrench on tee body of valve
- Always test after installation and before use
- Always test before winter and summer seasons
- Always test after periods of extended non-use or inactivity
- Test at regular intervals
- Do not tamper with calibration adjustment.

Tampering will change the set point and void the warranty.



### TO TEST FOR PROPER SET POINT i.e. 35-45°F

**FOR DIRECT-ACTING VALVES:** Remove from system and place entire valve in a bath at full open set point (lower temperature). For 35° valves, this must be an ice and water slurry at 33-35°F. The valve should be open within five minutes. Move the valve to a bath at a higher (closed) temperature. The valve should close bubble tight within five minutes.

**FOR REVERSE-ACTING VALVES:** the closed bath will be 10°F LOWER than the open set-point bath.



**WARNING:** This product can expose you to chemicals, for example lead, nickel, acrylonitrile, which are known to the State of CA to cause cancer, birth defects, or reproductive harm. For more information, go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Warranty information disclosed at [www.thermomegatech.com/terms-conditions/](http://www.thermomegatech.com/terms-conditions/)

TV-US-A-AR IMI  
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