INSTALLATION INSTRUCTIONS
TV/SC-I
USED TO CONTROL FLOW TO VORTEX DEVICES

Refer to the **TV/SC-IR** valve product sheet for dimensions and other information.

GENERAL VALVE OPERATION:

TV/SC-IR valves open on rising temperature at the customer specified temperature. These valves are commonly used to control flow of air to vortex devices in response to the temperature of the sensor/actuator on end of the valve. The sensor/actuator is normally installed inside an enclosure to be cooled by inserting that end of the valve through an opening in the enclosure. The opening is sealed by o-rings in the bulkhead fitting on the valve. The bulkhead fitting also allows for saving space inside the enclosure since most of the valve can remain outside the enclosure. When air temperature inside the enclosure exceeds the specified temperature, the valve opens allowing airflow to the vortex device. The cold air from the vortex then flows into and cools the enclosure or equipment. When the enclosure or equipment cools below the specified closing temperature of the **TV/SC-IR,** the valve closes to prevent further cooling and wasteful flow of cooling air. Vortex devices must also discharge some amount of hot exhaust air as they provide cool air. The hot air should be discharged outside of the enclosure to avoid heating the enclosure with the hot exhaust.

INSTALLATION:

1) The bulkhead fitting on the **TV/SC-IR** valve requires a 1.25" hole be cut in the enclosure wall at the location where the sensor/actuator on the valve will be inserted.
2) After cutting the 1.25" hole, mount the bulkhead fitting through the hole by removing the nut from the fitting, inserting the bulkhead through the hole, and tightening the nut on the inside of the enclosure to hold the bulkhead in place.
3) Insert the sensor/actuator end of the valve through the bulkhead fitting.
4) If the air supply contains particulates, install a suitable strainer or filter ahead of the **TV/SC-IR** valve.

   IMPORTANT: To protect electronics and other sensitive equipment inside the enclosure, it is important to provide for the removal of water and oil from the air supply by suitable filtration.
5) Run piping or tubing from the compressed air supply to the valve's inlet connection.
6) Run piping or tubing from the **TV/SC-IR** outlet to the vortex device inlet connection.
7) In some cases, the enclosure must be vented to avoid excessive pressurization and to allow air to escape as more cooling air flows in.

Proper Use: Use ThermOmegaTech® products only as specified to ensure performance, safety, and regulatory compliance.
No Modifications: Do not modify ThermOmegaTech® products, as changes may void warranties and violate regulations (e.g., RoHS, REACH).
Proper Disposal: Dispose of end-of-life products per local hazardous substance regulations; contact ThermOmegaTech® or recycling facilities for guidance.

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

Warranty information disclosed at www.thermomegatech.com/terms-conditions/

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