

Tips for Thermostatic Expansion Valve

Tips

(1) Check the valve and package to ensure correct model and intact appearance.

(2) Check flow direction mark on valve to ensure correct connection between valve and system tube.

⚠ (3)

a. If brazing connection, valve body temperature $<120^{\circ}\text{C}$ and powerhead temperature $<55^{\circ}\text{C}$ (bulb filled with refrigerant). Water cooling and wet cloth are needed for braze protection. Make sure no dirt and no water inside valve.

b. If flare connection, ensure no damage on sealing surface and sealing line. Screw is tightened as requested torque. Make sure no dirt and no water inside valve.

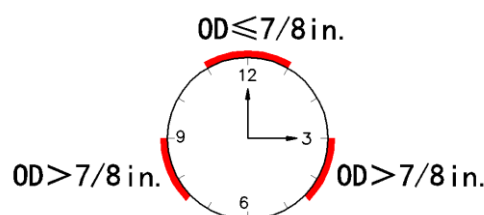
c. Strainer (≥ 100 meshes) is needed for inlet tube.

d. For TXVs with replaceable orifice, make sure orifice is loaded in valve before tightening screw on inlet tube, Screw tightening torque: $35\sim 40\text{N} \cdot \text{m}$.

⚠ (4)

Bulb must be fixed on the horizontal area of evaporator outlet and kept away from suction port of compressor (Do not fix bulb in vertical direction). Choose appropriate area to fix the bulb tightly according to suction tube size (see pics). Insulation measures are needed to prevent ambient temperature interference. Do not bend the capillary closed to the diaphragm housing ($\text{area} \leq 10\text{mm}$).

Ambient temperature should be higher than bulb temperature for TXV with MOP function.



(5) Avoid any impact from TXV falling and any other objects to cause the damage.

⚠ (6)

TXV in special situation (circumstance with acid, etc.), plz ask Sanhua for use suggestion.

⚠ (7)

Check the system vibration to avoid break-off of connection tube、capillary and connector on TXV.

(8) Regular superheat check is necessary. When system running failed, try to adjust the static superheat if TXV causes the failure.

(9) Defrosting on adjustment port is needed before making any adjustment to static superheat.

(10) Adjust system superheat according to superheat change when adjustment rod is rotated for 1 circle. Run the system for 15mins to evaluate the superheat after every adjustment.

(11) Make sure no refrigerant leak on TXV connection area when changing a new TXV to avoid any body injury to human.

(12) TXV has no function of cutting off refrigerant flow. Service valve is needed for system commissioning、running or repair.

⚠ (13)

RFGB is not suited for systems with potential reverse high pressure impact (Example: hot gas bypass defrost application、hot gas bypass harvest in ice machine etc.)

(14) Install valve in vertical direction with powerhead upwards