SALUS® Instruction Manual

THERMOSTATIC RADIATOR VALVES

for Model Nos. **TRV310A , TRV31LS5 , TRV310S**

LOCATION OF THE VALVE

This reversible thermostatic radiator valve may be fitted in the flow or return pipe of the central heating system. The valve should be positioned so that the sensor head can detect the temperature of the air in the room. The sensor must not be shielded by the curtains or the other similar obstructions and should not be exposed to direct sunlight. Failure to adhere to these guidelines may effect the operation of the valve.

INSTALLATION

Before installing this TRV ensure heating system is free from debris/contamination in accordance with good plumbing practice.

Use the manual closing cap provided with the valve to protect the valve during installation.

1. **Fit** the manual closing cap and screw down sufficiently to close the valve. Do not over-tighten.
2. Screw the 1/2 "BSP tail into the radiator **using PTFE tape wrapped tightly around the male thread.**
3. Connect the valve body to tail in the desired orientation, **by sliding chrome nut and olive on to the tail, smear olive with a suitable jointing compound.** The valve may be used with the control head vertical or horizontal, **loosely** tighten the chrome nut.
4. **Mark the supply pipe to allow sufficient to be inserted up to the stop in the valve body, cut pipe to length.** For 8mm or 10mm diameter pipe use appropriate reducing set.
5. **Undo valve body from tail piece slide nut and olive onto supply pipe, smear olive with a suitable jointing compound and refit valve body ensuring all connections are firmly tightened. DO NOT OVER-TIGHTEN.**
6. **Fill the system, bleed radiator and check for leaks.** After commissioning, remove the manual closing cap and store it in a safe place for future use.
7. Turn control head to fully open (position "**5**").
8. Assemble control head on the valve body ensuring that the indicator line can be seen. Tighten knurled securing ring by hand. Do not over-tighten or use grips etc.
9. It is strongly recommended that the differential pressure should not exceed 0.2 bar, to avoid flow related noise. A differential bypass valve must be fitted to ensure that the pump pressure does not exceed 0.2 bar under all operating conditions.

USER INSTRUCTIONS

The control head contains a temperature sensor, which controls the opening and closing of the valve to keep the room temperature at a constant level. The control head is provided with calibration marks, which correspond to the approx temperatures in the following table.

Mark	*	I	2	3	4	5
Approx Temperature C	6-8	11-13	15-17	19-21	23-25	27-29

SETTING THE TEMPERATURE

Select the desired room temperature from the table above and turn the control head to align the appropriate number with the set point symbol ^ on the fixed part of the head. Allow at least one hour for the room temperature to stabilise. To change the room temperature, readjust the setting and allow at least one hour for the temperature to stabilise.

FIXING THE TEMPERATURE OR TEMPERATURE RANGE

To prevent tampering, the control head can be fixed in position or, alternatively, a fixed range of adjustment can be set. For these settings use the locking pegs supplied with the valve.

To fix the valve settings, turn the head to desired position. Insert the locking pegs in the holes either side of the set point symbol ^. The holes are on the underside of the control head. The head is now locked in the selected position until the locking pegs are removed.

To fix a temperature range, turn the control head to a position inside the desired range. Insert the locking pegs into the holes adjacent to the required highest and lowest settings. The range of travel is now limited until the locking pegs are removed.

FROST PROTECTION

If heating is not required, **but** there is a danger of freezing, the valves may be turned to the frost protection setting* which will allow the valves to open if the temperature falls below approx 6 degrees C. **(Locking and limiting may need to be removed to allow this temperature adjustment.)** The boiler must remain operational, controlled by a frost protection thermostat.

RADIATOR REMOVAL

To remove a radiator it is necessary to use the manual shut-off cap supplied with the valve. Remove the control head and substitute the manual shut-off cap. Close the valve manually and proceed in the normal manner.

If the control head is used to close the valve, there is a danger of water damage if the temperature falls and the valve re-opens unexpectedly.

SUMMER OPERATION

If the heating system is to be turned off for a lengthy period (eg during the summer months), it is recommended that all TRV are set to the fully open position. **It may be necessary to remove locking and limiting pegs for this adjustment.**

TECHNICAL SPECIFICATIONS

Maximum working pressure 10 bar
Maximum flow temperature 120 degrees C
Maximum differential pressure 0.6 bar
Recommended differential pressure 0.2 bar
Temperature range 6 to 29 degrees C.

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