

TVI 9 SERIES ON/OFF LCD THERMOSTAT

DESCRIPTION

TVI 9 series on/off LCD thermostat is mainly used in central air-conditioning heating and cooling system. It works with TSC series temperature sensor. It provides temperature control for central air-conditioning fan coil cooling / heating motorized valve or other electric actuator by the control signal which produced by comparison of actual tested ambient temperature and setting temperature.



CHARACTERISTICS

- Power surge and instant pulse protection.
- LCD (with backlight) showing ambient temperature and state.
- Built-in or external long-distance temperature sensitive element (NTC thermistor).
- With PC plastic housing, in compliance with UL-94V0 standard.
- With flexible installation and convenient wiring.

TECHNICAL DATA

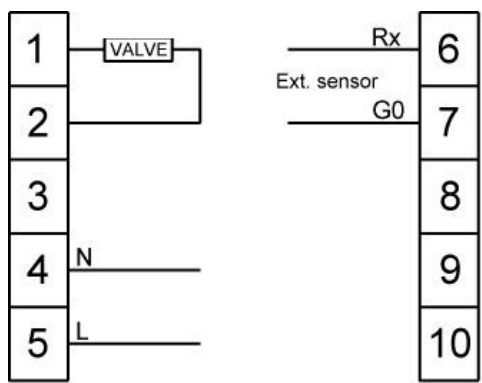
PRODUCT NAME	TVI-TD 9001A (Heat/Cool) TVI-TD 9001B (Cool Only)		TVI-TD 9003	
	2-PIPE		4-PIPE	
POWER SUPPLY	AC24V	AC220/230V	AC24V	AC220/230V
OUTPUT	AC24V 1A	AC220/230V 1A	AC24V 1A	AC220/230V 1A
POWER CONSUMPTION	0.6VA (without load)	6VA (without load)	0.6VA (without load)	6VA (without load)
CONTROL PRECISION	±0.5□(±1°F)			
CONTROL RANGE	10□ ~ 30□ or 50 °F ~ 86 °F			
SENSITIVE ELEMENT	NTC thermistor 10kΩ (when at 25□)			
DISPLAY PRECISION	0.2□ / 1 °F			
BACKLIGHT CONTROL	Button-press operation (It will automatically go out when stop pressing the button for 5 seconds.)			
BACKLIGHT COLOR	Green-G, Blue-B, Yellow-Y (three backlight colors for optional)			
WORKING TEMPERATURE	0 ~ 55 □			
STORAGE TEMPERATURE	-10 ~ 60 □			
AMBIENT HUMIDITY	Max. 90% RH no condensation			

INSTRUCTION

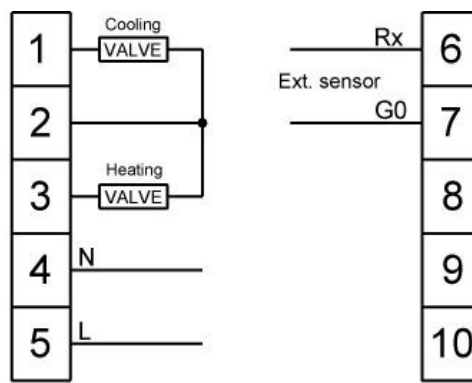
1. **Turn on/Turn off:** When it is power on, the thermostat will self-check, and then the LCD will go out. The backlight will automatically go out after holding for about 5 seconds. The system will enter into **turn off** state. When user presses the on/off button (keep for 0.5 seconds and then release), the system will enter into **turn on** state. The LCD backlight will light on for about 5 seconds and then light off automatically. Then it turns into on/off temperature control modulating mode. During system operation, when user presses the on/off button, the LCD will turn off. The system will enter into **turn off** state. Every time when user presses the on/off button, the **turn on/turn off** state will automatically shift.

- Cool/heat shift:** During system operation, when user presses the cool/heat shift button (only suitable for 2-pipe application, the button will not action for 4-pipe application), cool/heat state will change over, cool/heat (❄/☀) symbol will show on the display; When it is used in 4-pipe application, cool/heat state will shift automatically according to the ambient temperature and setting temperature. Cool/heat (❄/☀) symbol shown on the display will automatically shift, too.
- Temperature setting:** When user presses □(increase)/ □(decrease) button, LCD display temperature setting will show increase or decrease accordingly. The increase/decrease rate is 1□/1 °F. The adjusting range is 10~30□/50~86 °F. When user stops pressing the button for over 5 seconds, the thermostat will change the setting temperature data in its memory, and save the updating data. The LCD will show the ambient temperature. (Initialization value is 25□/77 °F.)
- Built-in/external sensor:** When built-in NTC thermistor is used, the jumper J1 should be put to "Int" position (Ex-factory setting position is "Int"). If the external NTC sensor is used, the jumper J1 should be put to "Ext" position.

WIRING DIAGRAM



TVI-TD 9001A / TVI-TD 9001B



TVI-TD 9003

INSTALLATION DIAGRAM

