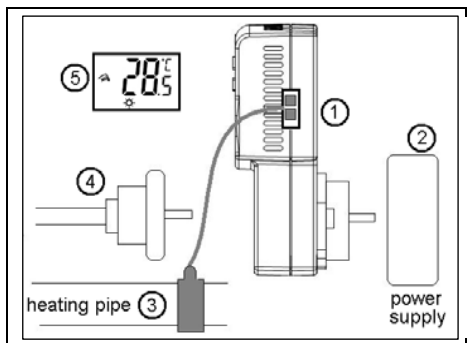


## ThermaControl with external clip sensor

### Installation

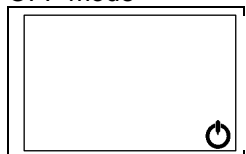
1. Plug the Clip sensor to the controller
2. Power the Controller to the power socket
3. Clip the sensor to the supply heating pipe
4. Connect the heating pump to the Controller
5. Set the desired on / off switch-temperature.
- 6.



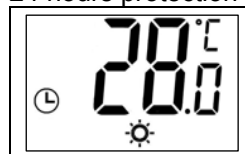
### User Interface

1. Rubber key
  - Up /Down to control the set point
  - Mode key to select OFF, Cool mode
2. LCD display

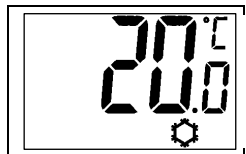
OFF mode



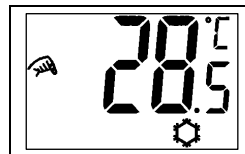
24 hours protection



Cool / pumpcontrol mode



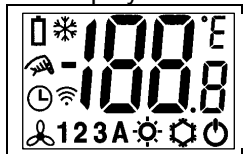
Setting temperature



F scale



Full display



### Temperature Specification

Measuring range: 0-50 °C/32~122° F

Resolution: 0.5 °C/1 °F

Accuracy: ±0.5 °C/±1 °F

Setting range: 0°C~49°C/ 32°F~120°F

If the temperatures below -5 °C / 23°F, display shows "LO"

If temperature exceeds 50 °C / 122°F, display shows "HI"

Temperature measurement in every 5 seconds.

### Operation Mode

Hold mode key 3 seconds to enter /exit OFF mode

### OFF mode

Output will be turn off immediately

LCD only display the off icon

### Cooling mode (pump control mode)

When set point is lower than room temperature 0.5 °C/1 °F, cooling output will be turned on and cool icon will flash

When set point is higher than room temperature 0.5 °C/1 °F, cooling output will be turned off and the cool icon will stop flashing

### Internal setting Mode

1. °F or °C scale selection
2. Offset temperature selection  
(-1,-0.5, 0, 0.5,1 °C)/ (-2,-1, 0, 1,2 °F)
3. Cooling Minimum off time  
(-- = Disable-> 15-> 30->45->60 seconds) Default 30 seconds.  
The cooling output will be forced off certain seconds according to the minimum off time setting to protect the compressor or pump.  
The heating output will not be affected by this setting.

Enter internal setting mode:

1. Power off
2. Press all the keys and power up
3. Please hold all the keys until LCD display °F or °C
4. Press up/down key to do the selection, then press mode key to confirm and go to next setting
5. After all the setting, it will go back to normal operation. All the data will be saved in back up

memory.

### Default setting:

1. Cooling (pump protection) mode (**not settable**)
2. °C scale selection (**settable**)
3. 0 °C /0 °F offset temperature (**settable**)
4. Pump protection enabled (**not settable**)
5. Delay time: 30 seconds (**settable**)

### Backup memory

EEPROM will save the heating/ cooling, C/F scale and on/off status after key released 15 seconds, all setting will be reloaded to RJ controller when the thermostat is reset.

### Specification ThermaControl

1. Supply Voltage: 230Vac (+10% / -15%) 50/60Hz
2. Relay Contact Voltage: 230 Vac 50/60 Hz
3. Relay Contact Current: 16A Max. (resistive)
4. Sensing Element: MFP-7
5. Temperature Accuracy: +/- 0.5 °C (+/- 1 °F)
6. Operating Temperature: -0 – 49 °C
7. Storage Temperature: -5 ~ 60 °C
8. Operating Humidity: 5-95%RH non-condensing