

CT-703 Programmable Heating Controller

Daily programmable heating controller with self recharging capabilities.



CT-703 Electric control box

Specification

- Dimensions : 120 × 80 × 14 mm
- Power Source : 110\240VAC 50\60Hz
- Control Panel has built in backup power source (Lithium Battery)
CT-101 Freezer temperature controller with self recharging capabilities.
- Power Usage : <2VA
- Relay Contact Output : 7A240VAC(Resistance load)
- Operating Temperature Range : 5~50 °C < 85% RH
(without Condensation)
- Temperature sensor is able to display / sense
temperatures from 2~99 °C
- Control Panel wiring : 4Control wirings allowing for easy
installations
- Features : 3 programmable-heating ON/OFF times/day
adjustable temperature range : 10 °C~85 °C
allows immediate heating.
- Compatible with electrical, heat pump, solar powered and
nonprogrammabl, water heater systems.

2. Setting parameter table

	Parameter	Codename	Factory default	Parameter setting range
1	Temperature setting	SEt	50°C	10~85°C
2	Temperature difference setting	td	2°C	1~9°C
3	Present moment	rt	0.0 hour	0.0~23.5(h\10m)
4	The first ON moment	on1	16.0 hour	0.0~23.5(h\10m)
5	The first OFF moment	oF1	20.0 hour	0.0~23.5(h\10m)
6	The second ON moment	on2	20.0 hour	0.0~23.5(h\10m)
7	The second OFF moment	oF2	20.0 hour	0.0~23.5(h\10m)
8	The third period of ON	on3	20.0 hour	0.0~23.5(h\10m)
9	The third period of OFF	oF3	20.0 hour	0.0~23.5(h\10m)
10	Mandatory timing (single time)	F	4.0 hour	1.0~23.5 (h\10m)
11	Temperature correction	tA	0°C	-10~10°C
12	Parameter lock function	Lon/LoF	LoF	Lon->Locked LoF ->Not Locked

3. Instructions

- 3.1 After the installation is complete, plug in the power supply. At this time, the seven-segment display and LED indicators are all on, indicating that the controller is normal.
- 3.2 After three seconds, the display shows the current temperature and the controller starts to work.
- 3.3 Parameter setting: Press the ▲ key for three seconds, the display shows the setting code SEt, press the ▲ key or the ▼ key to display the factory setting you can press the up or down key to set the parameter and the new setting value will be remembered. Each parameter will automatically switch and appear after three seconds until the parameter setting is exited.
- 3.4 Press and hold the ▼ key for five seconds to start the forced timing, the forced and the heater will run immediately (in this case, the operating temperature has been reached).
- 3.5 After starting the mandatory timer, press and hold the ▼ key for five seconds to turn off the
- 3.6 At OFF, the mandatory light will flash to indicate.
- 3.7 When the heater is running, the heating indicator lights up to indicate.
- 3.8 When on1, oF1, on2, on3, and oF3 are 0.0 hours at the same time, the timing function is invalid and the heater will always run (only the temperature control function).
- 3.9 When the lock function is set to Lon, it can only display parameters, but cannot adjust parameters.
- 3.10 When the controller is abnormal, the display flashes to show the fault code.
- 3.11 Relevant time setting: The minimum scale is 10 minutes (e.g. 13.5 represents 1:50 pm)

This controller has a three-stage on-OFF timing setting function, and its control priority sequence is : on1>oF1>on2>oF2>on3>oF3

4. Fault display

- 1.1 Op : The temperature sensor is open or the temperature is lower than 0°C
- 2.1 SH : The temperature sensor is short-circuited or the temperature is higher than 100°C

5. Parameter Description

- 1.1 Temperature setting : The highest temperature the water heater wants to run.
- 2.1 Temperature difference setting : When the heater stops running, the temperature of the water heater drops to (temperature setting value-temperature difference setting value), and the heater runs again.
- 3.1 Temperature correction : When the controller is used for a long time, the related parts will deteriorate, causing the difference between the sensed temperature and the actual temperature. This value can be set to compensate.

※ Remarks : The controller will perform a full test when it is turned on for the first time, and the seven-segment display and LEDs are all on. During the full test phase, you can press any key to test whether the relay has output.