DIN300A

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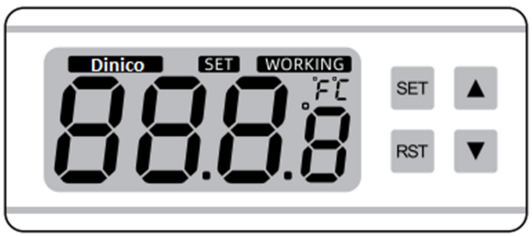
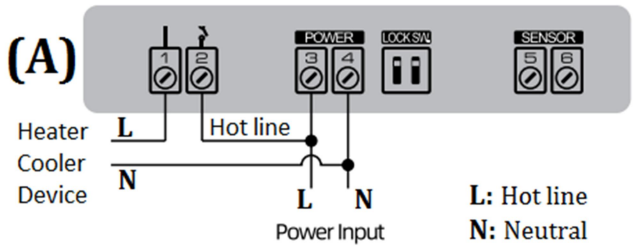
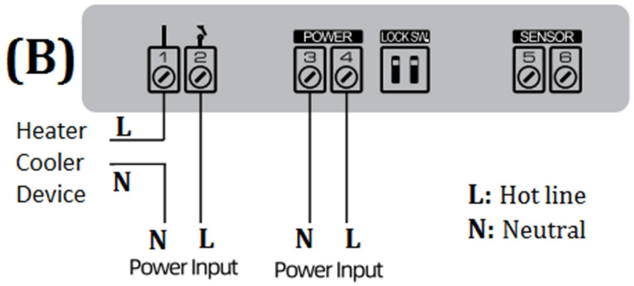


Product size: 75L x 34.5W x 85D (mm)
Mounting size: 71L x 29W (mm)
Temperature range: -30°C~300°C (-22°F ~ 572°F) with NTC100K
or-50°C~110°C (-58°F ~ 230°F) with NTC10K
Control accuracy: 1 °C
Maximum power consumption: 2W
Resolution: 0.1 °C
Control output load: 10Amp or 30 Amp (check the model no.)

1 Wiring Diagram (A) or (B):





Terminal 1,2 : Heating or cooling output (Contact relay switch, NO)
Normally open switch (dry contact for hot line wire)
Terminal 3,4 : Power supply connection (polarity does not matter)
Terminal 5,6 : Temperature sensor connection
LOCK SW off: Change all parameter setting
LOCK SW on: You can only change the set point

2 LED Light Indication:

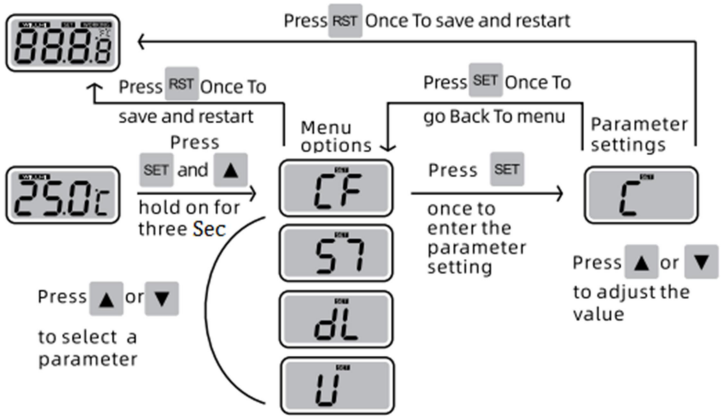
SET light on: in setting mode
SET light off: in running mode
WORKING light on: the load is on
WORKING light off: the load is off
WORKING light flash: time delay in effect

3 Turn On/Off The Thermostat:

TURN OFF: Press RST and hold the button for three seconds.
TURN ON: Press RST button once.

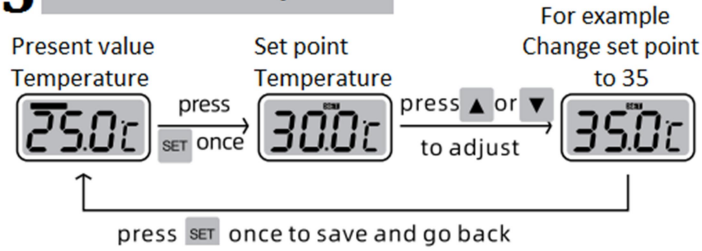
4 Advanced Parameter Setting Level 1:

Press and hold the SET key and ▲ key at the same time for more than 3 seconds and the controller will go to " Advanced Parameter Setting" menu. By pressing ▲ or▼ keys you can select the required parameter from the menu. When the needed parameter is found, press SET key once and then by pressing ▲ or ▼ keys, you can change the parameter value. When the Parameter is set, you can save and exit "parameter setting mode" by pressing RST key.
*Every time you go to advanced parameter setting (Level 1) , the basic parameter setting (Level 2) goes back to factory default setting values. So, it is recommended to set up Level 1 Parameters before Level 2.



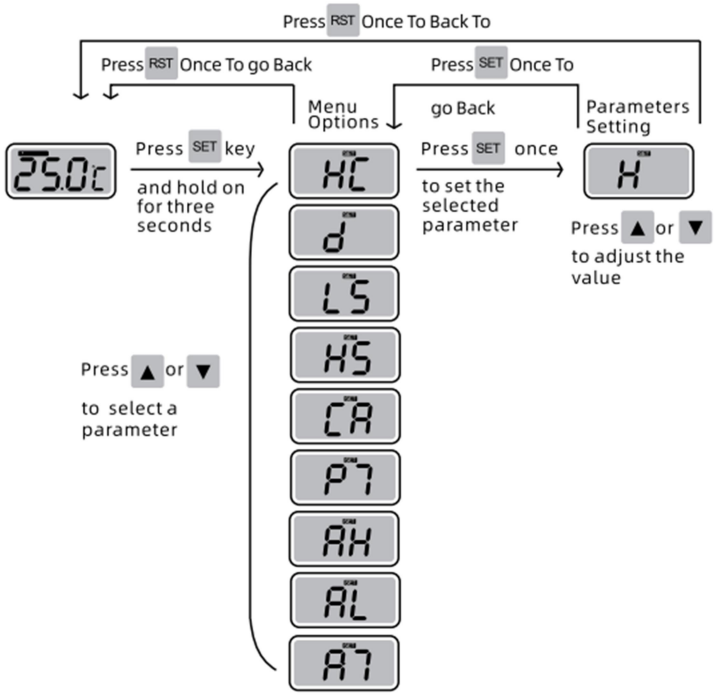
CODE	Description	RE
CF	Celsius/Fahrenheit	C:Celsius F:Fahrenheit
HL	Sensor Type H : NTC 100K L : NTC 10K	Don't change the default setting
S7	Decimal point	01: turn on decimal point 10: turn off decimal point
dL	Count down timer	ON : enable timer OFF: disable timer
U	Count down timer mode	ON : timer starts as soon as thermostat turns on. OFF: timer starts when the temp reaches to the set point.

5 Define the set point:



6 Basic Parameter Setting level 2:

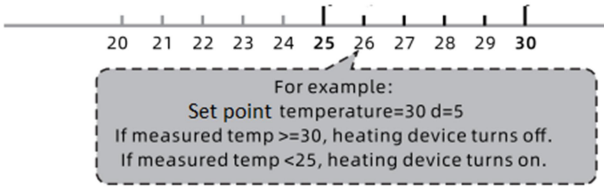
Press and hold SET key for 3 seconds until you see HC on the screen.
Press the UP or DOWN key to select a parameter that you want to set.
Press SET key once to enter the selected parameter and then using UP or DOWN key to modify the value. After you get the desired value press SET key once to save and go back to the main menu so you can select and set another parameter.
Press RST key to save and exit. The unit will automatically save your setting and exit if there's no operation for 5 seconds.



Symbol	Details	Range
HC	Heating / cooling	H = Heating C = cooling
d	Hysteresis or differential set value temperture range	0.1 to 25
LS	Lower temperature setting	-30 C to HS
HS	Higher temperature setting	LS to 300 C
CA	Temperature calibration	-9.0 to +9.0
P7	Delay protection time (colling mode)	0 to 30 minute
AH	High temperature alarm settings	0.0 to 25.0
AL	low temperature alarm settings	0.0 to 25.0
A7	Count down timer 0-999 minute	0 to 999 Minute

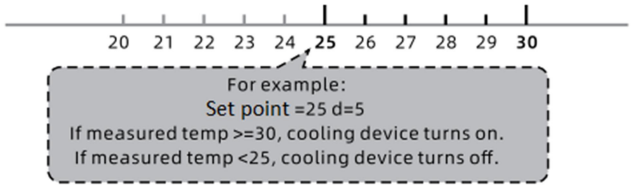
Heating Mode: HC=H

When the present value is less than the value of (set point – d), the heating device turns ON. When the present value is the same or higher than set point, the heating device turns OFF.



Cooling Mode: HC=C

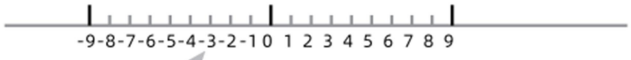
When the present value is the same or higher than the value of (set point + d), the cooling device turns ON. When the present value is less than set point, the cooling device turns OFF.



LS、HS Setting:

Optional Setting. Only use it to avoid serious mistake. For example, if you set LS=70 HS=80, then set point temperature can only be set between this range.

CA Temperature Calibration :



You can calibrate temperature when the reading temperature is not accurate. If the measured temp is 3 degree higher than the correct temprature, set CA=-3 or if it's 3 degree lower, set CA=3.

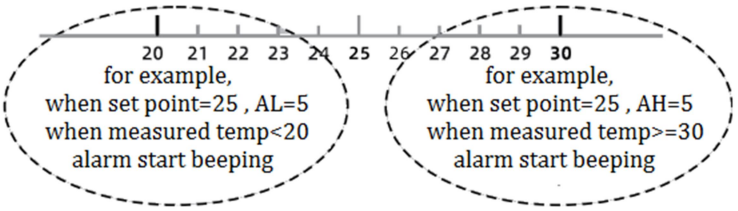
P7 Time Delay Setting:

Optional. Set a time delay to avoid frequent restarting of the cooling device's compressor.

AH、AL High and low Temperature Alarm Settings:

When (present value) < (setpoint - AL), alarm beeps

When (present value)>= (setpoint + AH), alarm beeps



When alarm is beeping, pressing any key can stop the beep.
The default value of AH and AL is 0 (both alarms are disable).
You need to set a value to enable the alarm.

A7 Countdown Timer

When dL is ON, AT parameter shows up in the setting menu. AT can be set between 0-999 minutes. When AT=0, timer will be OFF. If U is ON, timer starts counting down as soon as the controller turns ON and when the time reaches to 0, the controller output will turn OFF. If U is OFF, timer will start counting down when the temperature reaches to the set point.
Each time you press RST key the timer will restart.

Error messages and troubleshooting:

1) When the sensor is disconnected it displays EEE.
2) When the sensor detects temperature lower than LS it displays LLL and when the detected temperature is higher than HS it displays HHH.

Warnings:

1) The maximum current load of cooling or heating source must not exceed the maximum capacity of the output built-in relay. It will damage the unit and may cause fire.
2) Wrong wiring will damage the controller and may cause fire.
3) Extra force on the terminals screws will break the PCB base.
4) While wiring the controller power supply should be OFF.
5) Do not tight the sensor and power wires together. Power line noise affects the accuracy of measurement.

DIN300A Temperature Controller Manual

For current product information, availability, and compatible options, use the verified ThermoMart links below. The preceding pages remain the original manual content.

PRODUCTS USING THIS DOCUMENT

Models: BBQ-DIN300, DIN300-12V, DIN300-12V-WS, DIN300-30A, DIN300-pump3L, DIN300A, DIN300A-10A, DIN300A-30A, DIN300A-BBQ, DIN300A-NTC10, DIN300A-SV, DIY-DIN300, PP-DIN300, PP-DIN300-30, PP-DIN300-30-10K, PP-DIN300-L, PPDIN300, PPDIN300-240V, PPDIN300-C and 11 more

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