Heatcom Thermostat HC70

Electric floor heating thermostat

Introduction

HC70 series thermostat is designed for heating systems especially floor heating, which produced accordance with EN60730-1 and EN60730-2-9. The thermostat equipped with matrix dot display. And it will be very easy to understand the settings and operation.

Supply voltage	100~240VAC 50/60Hz
Maximum Load	16A
Operating temperature	0∼50°C
Storage temperature	-10∼60℃
Temperature range, room sensor	5~35°C
Temperature range, floor sensor	5~40°C
Control modes	Floor sensor, room sensor or room sensor with floor
	sensor as a limiter
IP class	IP21
Terminals	Max. 2.5 mm ²
Floor sensor with 3.5m cable	NTC, 100K / 25°C
Dimensions	$82 \text{ mm} \times 82 \text{ mm} \times 56 \text{mm}$
color	Polar white RAL 9010

Technical data

First time settings

The first time you switch on the thermostat, the screen shows product version number, and then time, control mode and date must be set. You just need to follow the menu directly.

- Choose your time with the Up and Down buttons and confirm with OK.
- Set the actual Hour and press the OK button. Then set the Minute. Press OK.
- Set the actual date: Day. Confirm the settings with the OK button.

Operation quick reference

You now need to select the system load (0.1~3.5KW), i.e. the output of the heating system powered by the thermostat. Select the appropriate load and press OK.

The next menu allows you to select the mode you want the thermostat to control. If the thermostat is in the room to be heated, select Room/limit. If the thermostat is outside of the room to be heated, select Floor. Once you have chosen the required setting, press OK. You now need to select the actual sensor setting so that the thermostat can take this into account during operation. Select the actual sensor setting and press OK.

The thermostat is now ready for use and your underfloor heating will operate in accordance with the pre-programmed Event schedule. See Factory Settings for full details of this.

Operating table



Appearance reference



Navigation buttons

General Operation

When the thermostat has powered on, the version Number will be displayed, and hold the menu button for 3 seconds, the thermostat will turn off, all the settings, including time and date will be saved.

Operation mode

The thermostat has three different modes of temperature control: Room Mode, Floor Mode, Room mode with floor limits.

Auto mode

O, Select Auto if you want the temperature to be controlled automatically via the 4-event schedule Room mode with floor limits.

Hold mode

 \bigcup , Select Manual to cancel the programmed Event schedule (e.g. during holidays) and to set the required temperature manually. For example, you may want to adjust the temperature to 5°C for frost protection while you are away. Press Manual, confirm with OK and choose the required Temperature, and it will override the auto operation.

Override operation

Selecting CO mode and ECO mode after pressing Override, then you need choose a setpoint for heating, the system will provide you a option if you select OK or not, if so, the Override operation will offer you CO in WEAK and RETURN event, and ECO in LEAVE and SLEEP event, which a day has 4 different events include WEAK, LEAVE, RETURN, SLEEP, or CO in WEAK event and ECO in SLEEP event, which a day has a two different event; if not, system will exit menu automatically.

Stand by mode

Press and hold the center button for 4s. and the thermostat is in Stand by mode. Exit Stand by mode by pressing the center button.

Thermostat setup options

The menu allows you to select the following options:

Event schedule

7: Allows you to choose individual programs for each day of a week.4 events- wake, leave, return, sleep for each day.

2: Monday to Friday with the same events setting and Saturday and Sunday with the same setting. Typically used if you work from Monday to Friday.

4 events- wake, leave, return, sleep for Monday to Friday, 2 events- wake, sleep for Saturday and Sunday



7 days of a week programs respectively.
2 events- wake, sleep for each day.

Program setting:

1. Press the OK button to activate the Program setting.

2. Choose the days for which you want to change the Settings, Mon-Fri or Sat-Sun using the up or down Button. Press OK.

3. Now select the time and temperature for each daily event in the program. Press OK and set the start time for the event concerned. Confirm with OK. Set the temperature for this event and confirm with OK.

4. After setting the required events, select Exit in the menu to return to the initial display.



(Each icon for events programming Wake, In Leave, In Return, Sleep)

Factory settings

Preset schedule

7:

7 days	-\\ Wake		In° Leave		Return		Sleep	
	Time	Temp.	Time	Temp.	Time	Temp.	Time	Temp.
4 events	6:30	22° C	7:30	19 ℃	17:00	22 ℃	23:00	18 ℃

2:

								
Monday to Friday	-\\ Wake				Î∏ Î Return))Sleep	
	Time	Temp.	Time	Temp.	Time	Temp.	Time	Temp.
4 events	6:30	22° C	7:30	19 ℃	17:00	22° C	23:00	18 ℃

Saturday	<u> </u>	
& Sunday), Slee p

	Time	Temp.	Time	Temp.
2 events	6:30	22 ℃	23:00	18 ℃

1:

7 days		Nake)) Sleep		
	Time Temp.		Time	Temp.	
2 events	6:30	22° C	23:00	18 ℃	

Time and day

Press OK and set the actual time in hours and minutes. The day will then be displayed. Set the day and confirm with OK.



Calibration

If the actual measured temperature does not corresponding to the thermostat value, you can adjust the thermostat by offsetting the temperature. Press OK and enter the value of the measured temperature. Confirm with OK.

Range -4°C \sim 4°C, Default 0°C.



Adaptive function

It is ensure that the required temperature has already been reached when you get up in the morning or come home from work. After just a few days, according to your habit, the adaptive function will have automatically entered CO mode while the heating must be turned on. Press OK and set the function to on. Confirm with OK.



Control mode

Set the type of regular used system. There are 3 options:

Floor reg. : The thermostat regulates floor temperature only. A floor sensor must be connected.

Room reg. : The thermostat regulates room temperature only.

Room/limit: The thermostat regulates room temperature with min. and max. limits for floor temperature. A floor sensor must be connected.

Press OK and select the required heating system.



Limitation

Allows you to set the temperature range within which the thermostat can be set. It is then only possible to set a temperature in this range in auto, comfort and manual mode. Press OK to highlight Min temperature. Use the up or down button to select the minimum permissible temperature. Press OK and select the maximum permissible temperature. Confirm the settings with OK.

Temperature Max 20~40℃, Default 35℃; Min 5~20℃, Default 5℃.

Floor protection Max 15~27 $^{\circ}$ C, Default 27 $^{\circ}$ C; Floor protection Min 5~10 $^{\circ}$ C, Default 5 $^{\circ}$ C. Floor protection Max/Min only works at Room/limit mode.



Factory Reset

Allows all the settings to be reset. Your personal settings will be erased. Press YES and choose Reset in the menu.

Press NO and cancel the factory reset



Child lock

Allows you to lock the thermostat settings if you do not want the settings to be changed or something. Press OK and select YES or NO to set up the child lock. Confirm with OK. The child lock can be unlocked by pressing two side buttons simultaneously for 5 seconds.



Energy Monitor

Load: You should adjust the load (KW) that you connected, and then you can read your weekly or daily energy consumption for the last week.



Exit

Returns to initial display.



Error alert

If a fault or an error occurs, the thermostat will display an error code as follows:



E1: Internal sensor defective or short- circuited.

Wiring diagram



E2: External sensor defective or short- circuited.

