

Datasheet

6000 Series Programmable Heat/Cool Thermostats

Features



The 6000 Series of heat/cool thermostats provide cost effective control of heating, cooling and heat/cool systems.

This range of programmable heat/cool thermostats is available in battery and 230 volt versions and comprises of three basic model families.

HCW Models

This model, which is designed for use in hydronic 2-pipe change-over systems, operates as a heating thermostat in the winter and a cooling thermostat in the summer. Change-over between heating and cooling is initiated by means of a water temperature sensor which measures the temperature of water flowing in the distribution pipe-work. This model offers 3 speed fan output.

HCM Models

This models is as per the HCW model but without pipe sensor. Changeover is manually initiated.

HC Models

This model is designed for use in 4-pipe fan coil systems or in forced air systems and provides sequence control of one stage of heat and one stage of cool. Dual set point adjustments ensure that heat and cool temperatures can be set for maximum efficiency.

All models are available with 3 speed fan output.

All models:

- Available in battery and 230 volt version.
- Models for heat or cool, selectable at time of installation.
- Models for 2-pipe change over systems.
- Models for 4-pipe non-changeover systems and split units.
- Large, easy to read LCD display.
- Simple to use 5/2 day programming.
- Up to 4 time and temperature events each day, including off option.

Installer Settings

A number of DIL switches on the rear of the thermostat allow the installer to make basic hardware configurations. The drawing below details the options.

HCM Model		HCW Model		HC Model	
On/Off	<input type="checkbox"/>	Chrono-proportional	On/Off	<input type="checkbox"/>	Chrono-proportional
Not Used	<input type="checkbox"/>	Not Used	Not Used	<input type="checkbox"/>	Compressor Delay On
Not Used	<input type="checkbox"/>	Not Used	Pipe Sensor Fitted	<input type="checkbox"/>	Pipe Sensor Not Fitted
4 events each day	<input type="checkbox"/>	2 events each day	4 events each day	<input type="checkbox"/>	2 events each day
	<input type="checkbox"/>			<input type="checkbox"/>	Compressor Delay Off
	<input type="checkbox"/>			<input type="checkbox"/>	Not Used
	<input type="checkbox"/>			<input type="checkbox"/>	4 events each day
	<input type="checkbox"/>			<input type="checkbox"/>	2 events each day

Software Settings

The 6000 Series incorporates a selected range of advanced programming options which the installer can set at the time of commissioning. Please refer to the table below for details.

Option	Description	Models	Factory Setting	Installer Options
1	Keyboard disable	All	Keyboard enabled	Keyboard disabled
2	Compressor delay timer. Active only if enabled on DIP switch	All	2 minutes	3, 4 or 5 minutes
3	Fan run-on after cooling timer	All	Off	30, 60 or 90 seconds
4	Heat/Cool dead band setting	All	2°C	1, 2, 3 or 4°C
5	Thermometer calibration offset	All	0	+ or - 3°C

Specification

Power supply	Battery Powered Models: 230 Volt Powered Models:	2 x AA alkaline batteries 195-265 Vac, 50/60Hz
Temperature Range	Heating stage - 5-30°C and Off, Cooling stage - 16-37°C and Off	
Temperature Accuracy	± 0.5°C	
Deadzone Adjustment	1, 2, 3 or 4°C	
Changeover temperature for HCW water sensor changeover models	Heat - Cool 16°C Cool - Heat 30°C	
Voltage Rating of Contacts	20-250 Vac, 50/60 Hz	
Current Rating of Contacts	10mA - 3 A resistive, 1A inductive	
Switching Action	Voltage Free SPDT contacts, Type 1B	
Time Accuracy	± 1 minute	
Memory Retention	230V models: 15 days, Battery model: 1 minute for battery change	
IP Rating	IP30	
Dimensions (mm)	130 x 100 x 37 (W x H x D)	
Control Pollution Situation	Degree 2	
Rated Impulse Voltage	2.5 kV	
Ball Pressure Test	75°C	

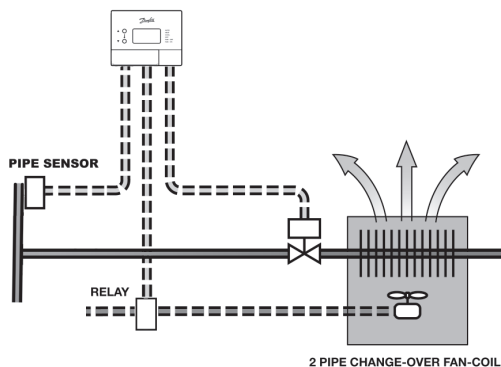
Ordering Details

Thermostat Function	Battery Powered Models		230V Powered Models	
	Type	Code No.	Type	Code No.
1 heat or 1 cool with manual changeover from heat to cool. (3 speed fan)	HCM6110-3	087N706000	HCM6113-3	087N705600
1 heat or 1 cool with water temperature changeover from heat to cool. Pipe sensor included (3 speed fan)	HCW6110-3	087N706100	HCW6113-3	087N706600
1 heat or 1 cool with auto changeover from heat to cool (3 speed fan) (Built-in Sensor)	HC6110-3	087N705300	HC6113-3	087N705700
1 heat or 1 cool with auto changeover from heat to cool (3 speed fan) (Remote Sensor)	HC6110A-3	087N710300	HC6113A-3	087N710100

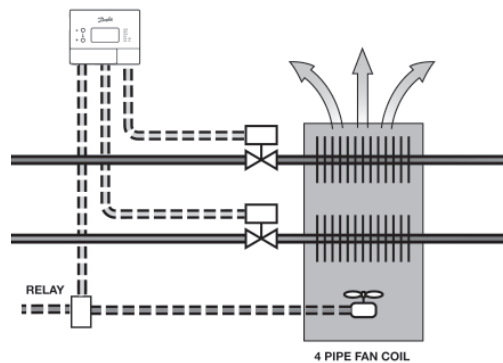
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Application Examples

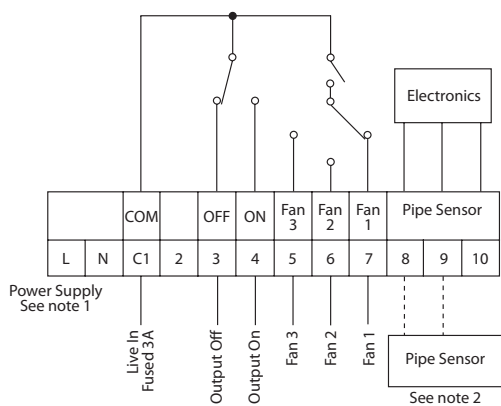
1) 2 Pipe Changeover System (with water temperature sensor)



2) 2 Pipe Non Change-over System



HCW Model with 3 speed fan (using water temperature sensor) & HCM Model with manual changeover

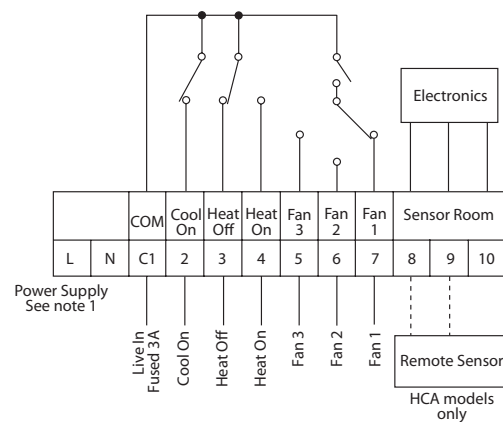


Note 1
for 230V - connect to L & N

Note 2

HCW models only: water temperature sensor must be positioned in main pipework which must be fitted with by-pass to ensure constant flow past sensor.

HC Model with 3 speed fan (4 pipe auto changeover)



Note 1
for 230V - connect to L & N

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