1、Parameter table of controller PC1000

The description of the parameter is after the parameter table.

NO.	Type	parameter and description	Setting value		Default level
			Code	Setting	
1	d	Start defrosting temperature	d01	-30-0℃	F/U
2		End defrost temperature	d02	0-30℃	F/U
3		Defrosting cycle	d03	1-90min	F/U
4		Maximum defrosting time	d04	1-20min	F/U
5	E	EEV mode	E01	0-1	F/U
6		Super heat	E02	-20-20℃	F
7		Initial place	E03	0-500	F
8		Minimum place	E04	0-500	F
9		Defrost place	E05	0-500	F
10		Cooling place	E06	0-500	F
11	F	Fan parameter	F01	0-4	F/U
12		Coil temp. in high speed fan mode(Cooling)	F02	-15-60℃	F
13		Coil temp. in low speed fan mode(Cooling)	F03	-15-60℃	F
14		Coil temp. when the fan stop (Cooling)	F04	-15-60℃	F
15		Coil temp. in high speed fan mode(Heating)	F05	-15-60℃	F
16		Coil temp. in low speed fan mode(Heating)	F06	-15-60℃	F
17		Coil temp. when the fan stop(Heating)	F07	-15-60℃	F
18		Fan start low speed running time	F08	0-23h	F
19		Fan stop low speed running time	F09	0-23h	F
20		Fan speed control temp.	F10	0-1	F
21	h	Automatic restarting	H01	0-1	F
22		Model(cooling only/AUTO/heating only)	H02	0-2	F/U
23		Temperature unit transformation	H03	0-1	F
24	P	Water pump model	P01	0-2	F/U
25		Water pump running cycle	P02	0-120min	F/U
26		Water pump running time	P03	0-30min	F/U
27		Delay in switching on the compressor after switching on the pump	P04	0-30min	F/U
28	r	Inlet water setting temp. (cooling)	r01	r08-r09	F
29		Inlet water setting temp. (Heating)	r02	r10-r11	F
30		Target setting temp. (Auto mode)	r03	r08-r11	F
31		Cooling differential	r04	0-10℃	F
32		Cooling stop differential	r05	0-10℃	F
33		Heating differential	r06	0-10℃	F

34	r	Heating stop differential	r07	0-10℃	F
35		Minimum set point in Cooling	r08	-30-r09℃	F
36		Maximum Cooling set point	r09	r08-80℃	F
37		Minimum Heating set point	r10	-30-r11℃	F
38		Maximum Heating set point	r11	r11-80℃	F
39	S	On/off switch	S01	CL/OP	F/U
40		Water Flow switch	S02	CL/OP	F/U
41		System LP	S03	CL/OP	F/U
42		System HP	S04	CL/OP	F/U
43		Mode switch	S05	CL/OP	F/U
44	t	Suction temp.	T01	-30~99℃	F/U
45		Inlet water temp.	T02	-30~99℃	F/U
46		Outlet water temp.	T03	-30~99℃	F/U
47		Coil temp.	T04	-30~99℃	F/U
48		Ambient temp.	T05	-30~99℃	F/U
49	0	Compressor output	O1	CL/OP	F/U
50		Circulate pump output	O2	CL/OP	F/U
51		4-way valve output	O3	CL/OP	F/U
52		Fan output (High speed)	O4	CL/OP	F/U
53		Fan output (Low speed)	O5	CL/OP	F/U
54		Electronic expansion valve output	O6	0~500	F/U

◆ Description of the parameters

D——Defrost parameter

D01——Start defrost temperature

To start the defrost cycle; the condition must be valid for the time d03.

D02——End defrost temperature

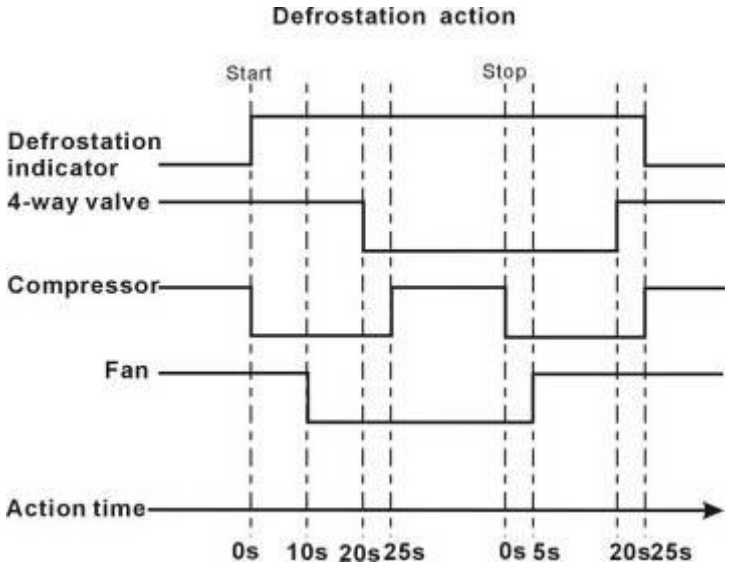
Establishes the temperature above which the defrost cycle ends.

D03——Defrosting cycle

Represents delay between two successive defrost cycle. The first time, when coil temperature is lower than D01, there must be valid for the time d03 to start defrost.

D04——Max. defrosting duration

Represents the maximum duration of the defrost cycle (the defrost ends when the maximum duration has been arrived, even if the defrost hasn't finished)



Attention: The situation of defrosting abnormal end

1) Shut off the unit during defrosting, system will continue running defrost until it has finished.

2) HP switch has broken during defrosting, then unit will be shut off and show HP malfunction. After recovering it, system enters to normal heating mode.

3) LP switch has broken during defrosting, the unit will skip LP malfunction and exit defrosting and back to normal heating mode, then system will check LP switch after 5min.

4) Flow switch has broken during defrosting, then unit will be shut off and show Flow Malfunction. After recovering this malfunction, system goes on defrosting.

5) Exhaust temperature is too high during defrosting, then unit will be shut off and show this malfunction. After recovering it, system goes on defrosting.

6) Temperature difference between inlet and outlet during defrosting, then unit will be shut off and show this malfunction. After recovering it, system goes on defrosting.

7) System show Antifreezing protection during defrosting, then unit will be shut off and show this malfunction. After recovering it, system goes on defrosting.

E——EEV parameter

E01——EEV mode

E01=0: EEV is running by manual operation;

E01=1: EEV is running by automatic operation;

E02——Target Super heat

E03——Initial position

If E01=0, represents expansive valve fix this position always.

If E01=1, represents expansive valve initiation position

E04——Minimum position

E05——Defrost position

Fix the EEV position during system is defrosting.

E06——Cooling position

Fix the EEV position during system at cooling mode.

F——Fan parameter

Normally, Fan will start up 5s ahead of Compressor and 30s later to shut off. When at defrosting, Fan running situation is according to defrosting control.

F01——Fan parameter

F01=0: in low speed fan mode;

F01=1: in high speed fan mode;

F01=2: the fan running modes depend on coil or ambient temperature (F02-F07);

Attention: The temperature probe is decided by F10.

F01=3: the fan runs at low speed depends on time (F08-F09), the fan runs at high speed during the other time;

F01=4: the fan running speed depends on F02 and F03.

F02——Coil or ambient temperature set point for high speed fan mode (Cooling)

This represents if the temperature above F02, the fan will on high speed (Cooling)

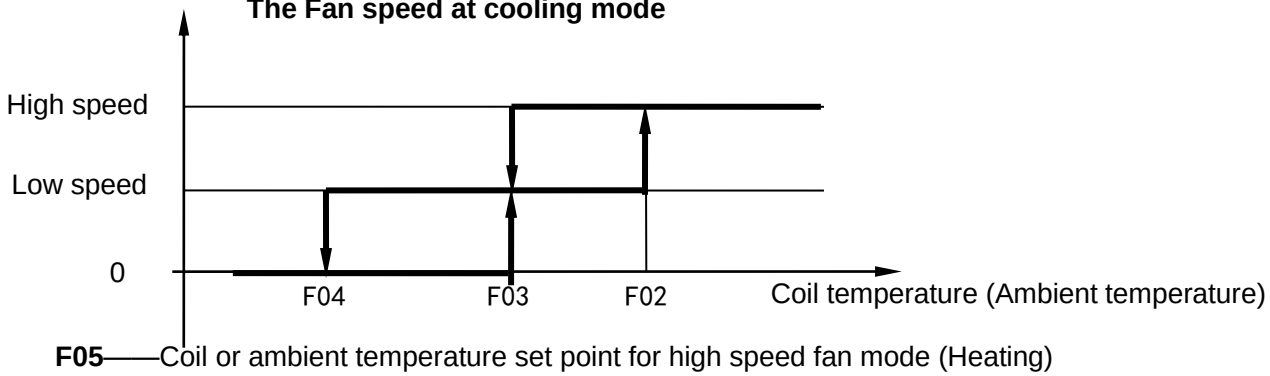
F03——Coil or ambient temperature set point for low speed fan mode (Cooling)

This represents if the temperature below which the fans remain on at low speed (Cooling)

F04——Coil or ambient temperature set point for the fan stop (Cooling)

This represents the temperature in reference to F03 below which the fans are stopped.

The Fan speed at cooling mode



F05——Coil or ambient temperature set point for high speed fan mode (Heating)

This represents the temperature above which the fans remain on at high speed (Heating)

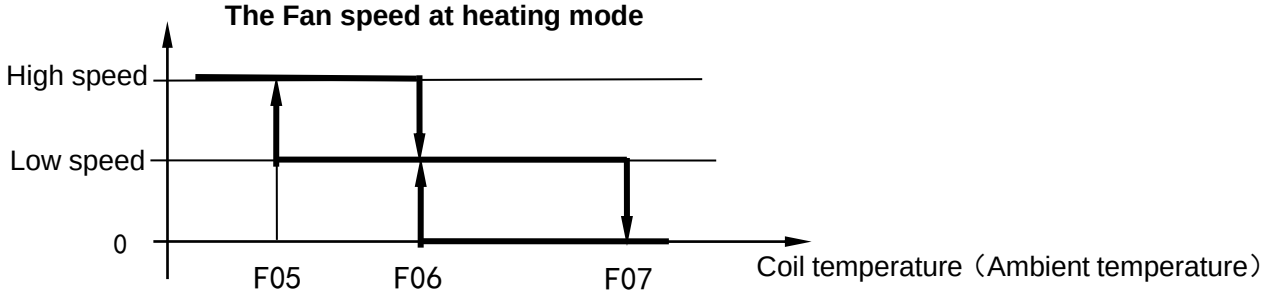
F06——Coil or ambient temperature set point for low speed fan mode (Heating)

This represents the temperature below which the fans remain on at low speed (Heating)

F07——Coil or ambient temperature set point for the fan stop (Heating)

This represents the temperature in reference to F06 below which the fans are stopped.

The Fan speed at heating mode



F08——Fan start low speed running time (Just for F01=3)

F09——Fan stop low speed running time (Just for F01=3)

F10——Fan speed control temp.

When F10=0, Fan speed is decided by coil temperature;

When F10=1, Fan speed is decided by ambient temperature.

H——System Parameter

H01——Automatic restart

H01=0: disable automatic restart; H01=1: enable automatic restart

H02——Mode

H02=0: only cooling;

H02=1: heating, cooling and automatic;

H02=2: only heating.

H03——Temperature unit of measure

H03=0: Centigrade unit; (Other area)

H03=1: Fahrenheit unit.(For North America area)

P——Water pump parameters

P01——Water pump model

P01=0, water pump will always on except on standby and alarm.

P01=1, water pump will operate depend on compressor, and has 2 minutes delay after the compressor has stopped;

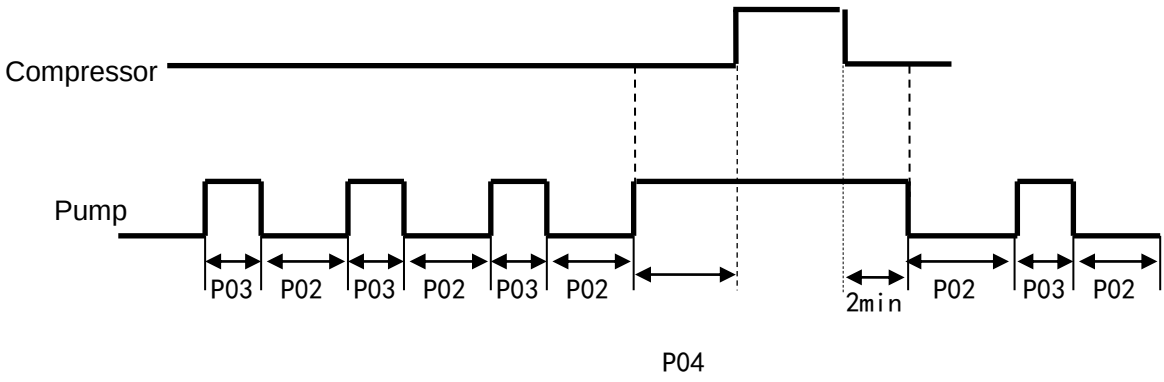
P01=2, water pump will be started and stopped at regular intervals after compressor stop. Depend on P02 and P03.

P02—— Minimum off time before the next pump start.

P03—— minimum on time that the pump remains on.

P04——the time of pump advance compressor to start up.

The action sequence of pump and compressor



R——Temperature parameter

R01——Cooling set point

Inlet water setting temp. (Cooling)

R02——Heating set point

Inlet water setting temp. (Heating)

R03——AUTO set point (Auto mode)

Target setting temperature for auto mode.

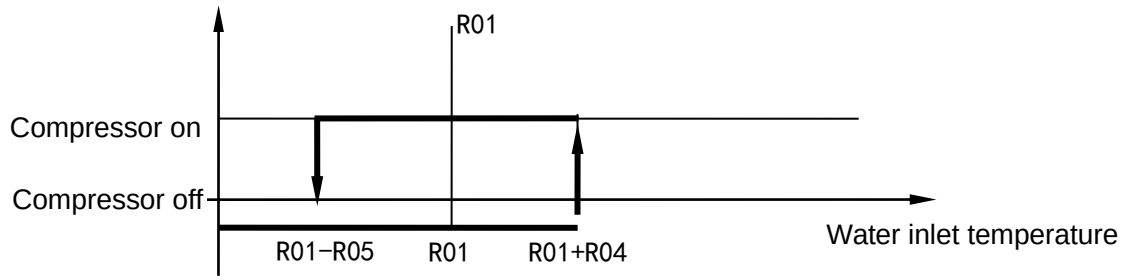
R04——Start differential of cooling

This represents the difference between R01 and start cooling point.

R05——Stop differential of cooling

This represents the difference between R01 and stop cooling point.

Compressor action at cooling mode



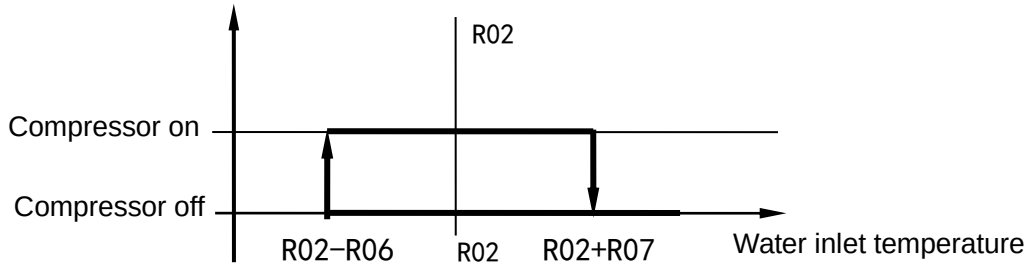
R06——Start differential of heating

This represents the difference between R02 and start heating point.

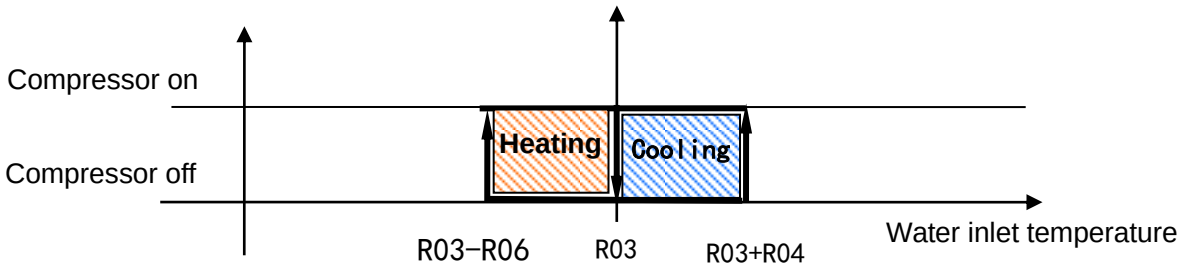
R07——Stop differential of heating

This represents the difference between R02 and stop heating point.

Compressor action at heating mode



Compressor action at Automatic mode



R08——Min. set point in Cooling

Establishes the minimum limit for setting the Cooling set point

R09——Max. Cooling set point

Establishes the maximum limit for setting the Cooling set point

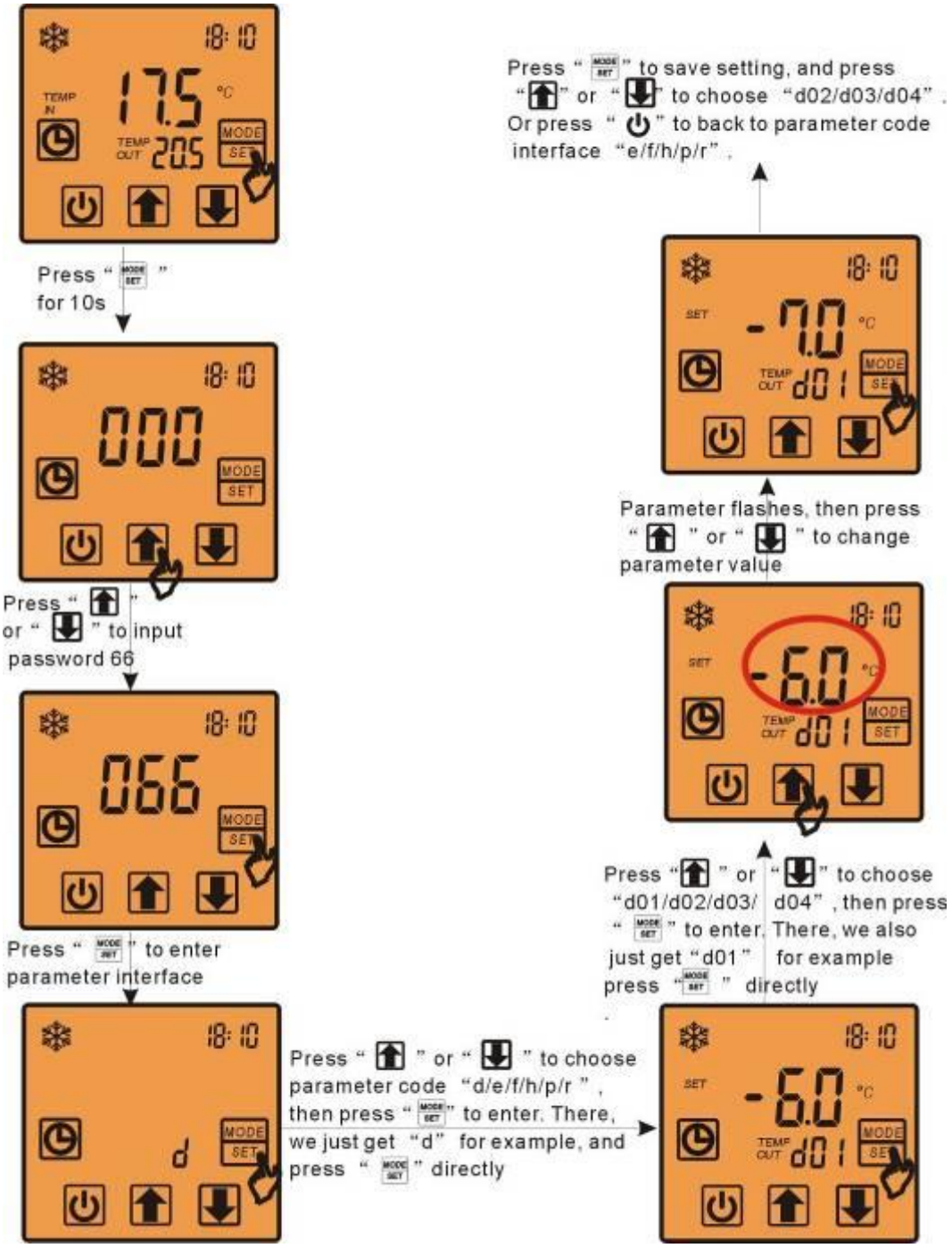
R10——Min. Heating set point

Establishes the minimum limit for setting the Heating set point

R11——Max. Heating set point

Establishes the maximum limit for setting the Heating set point

2、According the method below, to display the degree Celsius just change the parameter h03 to 0. (h03 = 1 display the fahrenheit)



Attention: 1) The other steps are the same with parameter "d01";

2) Press "on/off" twice can exit parameter interface;

3) If there is no operation in 20 seconds, the system will remember the previous setting and exit the setting interface.