

NA841 User Guide

Basic Operating:

1. Pressing the both keys at the same time can enter the state of parameter setting.
2. Press the key “▼” to show the temperature of the defrost temperature sensor.
3. Press the key “▲” to show the current temperature when in defrost state (Display the code of DEF).
4. Press the key “▲” and hold it for 5 seconds, and then enter the state of parameter setting, if password (o05) is set, the controller displays “PAS”, you must enter password, if password is correct, you can enter the state of parameter setting.

Temperature Controlling:

1. Temperature setting: Press the keys “▲” and “▼” at the same time.
2. r01 difference: Start refrigeration when the temperature reach “setting temperature + r01”, and stop refrigeration when the temperature reaches “setting temperature – r01”.
3. The setting temperature must be between r02 and r03.
4. r04 revise the bias of the sensor, it is used for both sensors.

Defrost:

1. Real time clock: 6 defrost start time, t01-06, t11-t16.
2. t07, t08: adjust real time clock.
3. Defrost end is according to defrost end temperature (d02) and Max. defrost time (d04), if one condition is satisfied, defrost ends. But if d10 is No, the controller doesn't detect the defrost end temperature.
4. d06: Set dripping time
5. Fan doesn't run after defrosting (d07) unless d09 is Yes.
6. The controller doesn't detect high temperature alarm when defrosting and for some time after defrosting (d11).
7. Press the key “▲” to show the current temperature when in defrost state (Display the code of DEF).
8. The controller display “DEF” after defrosting, if the temperature of the temperature sensor is below high temperature alarm temperature (A01), or reach the time of d12.
9. Press the key “▼” and hold it for 5 seconds, and then enter the state of defrosting. The state of defrosting can be ended forcibly when you press the key “▼” and hold it for 5 seconds again.
10. d01: electric heat defrost (No), hot gas defrost (Yes).

Compressor:

1. c02: Min. OFF-time, it means “compressor delay time”.
2. c01: Min. ON-time, if the parameter is set, once the compressor runs, it will run for the setting time (c01), and it will not stop when it reaches the setting temperature.
3. c03: compressor running frequency, enable when the temperature sensor is error.

Alarm:

1. Temperature alarm

When the temperature is above A01 or below A02 and the time reaches A03, the controller gives an alarm (Alarm relay attracts and the controller displays current temperature, A01 and A02 alternately).

But high temperature alarm is relative to the parameter of d11, the controller doesn't detect high temperature alarm when defrosting and for some time after defrosting (d11).

2. Sensor alarm

Alarm relay attracts when sensor error, the controller displays temperature, A21 and A22 alternately, A21 means temperature sensor error, A22 means defrost sensor error. It displays “OPE” and “SHr” when sensor error, “OPE” means the sensor is open, and “SHr” means the sensor is short.

3. Alarm output

When alarm above occurs, alarm relay attracts, and release when you press any key, but the controller still displays alarm code. Alarm relay will attract again when new alarm occurs.

Password:

In order to prevent irrespective persons from changing the parameters, you can set a password (o05), and if you have set a password, the controller will display “PAS” to hint you to enter the password when you enter state of the parameter setting, when enter the password, use the key “▲” to change the number and the key “▼” to shift.

Others:

End means exit the state of parameter setting. In the state of parameter setting, it will exit the state of setting if no one presses the key within 20 seconds.

Note:

The RTC power of the controller is supplies by super capacitance, and the RTC can run for 3 days when power cut, if the power cut time is over 3 days, you may adjust the RTC again.

Parameter code is showing below:

Parameter Name	Parameter codes	Min. Value	Max. Value	Factory setting	Unit
Normal operation					
Temperature Setting		-45	145	3	℃
Temperature adjustment					
Differential	r01	0.1	20	1	℃
Max. limitation of set temperature	r02	-45	145	145	℃
Min. limitation of set temperature	r03	-45	145	-45	℃
Adjustment of temperature indication	r04	-20	20	0	℃
Alarm					
Temperature of high temperature alarm	A01	-45	145	OFF	℃
Temperature of low temperature alarm	A02	-45	145	OFF	℃
Temperature alarm delay	A03	0	240	30	min
Compressor					
Min. ON-time	c01	0	15	0	min
Min. OFF-time	c02	0	15	0	min
Running frequency when sensor fault	c03	0	100	0	%
Defrost					
If compressor On when defrosting (yes/no)	d01	No	Yes	No	
Defrost end temperature	d02	0	50	10	℃
Defrost cycle	d03	Not support			
Max. defrost time	d04	1	180	30	min
First defrost cycle (after power on)	d05	Not support			
Dripping time	d06	0	30	0	min
Fan start delay time after defrost	d07	0	30	0	min
Fan start temperature	d08	Not support			
If fan running when defrosting (yes/no)	d09	No	Yes	No	
If use defrost sensor (yes/no)	d10	No	Yes	Yes	
Temperature alarm delay time after defrost	d11	0	240	90	min
Temperature delay display after defrost	d12	0	30	1	min
If defrost when power on (yes/no)	d13	Not support			
Fan					
If fan stop when compressor stops (yes/no)	F01	No	Yes	No	
Fan stop delay time	F02	0	15	0	min
Real time clock					
Six start times for defrost（Hour） OFF means not used	t01-t06	0	23	OFF	Hour
Hour setting	t07	0	23	0	Hour
Minute setting	t08	0	59	0	Min
Six start times for defrost（Minute） Be relevant to t01-t06	t11-t16	0	59	0	Min
Miscellaneous					
Delay of output signal after start-up	Not support				
Password	o05	0	999	OFF	
Test self	o99	This function can attract all relays in turn, and please don't use it when the controller is running!			
Exit Parameter Setting	End	-	-	-	-