

OPERATION MANUAL OF WIRE CONTROLLER



Original instructions.

Please read this manual carefully and keep it for future reference.

All the pictures in this manual are for illustrations purpose only.

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ICG Heat Pumps

1 GENERAL SAFETY PRECAUTIONS

- This document is applicable only to the wired controller. Read this document and follow the instructions carefully before operating the wired controller.
- Always observe all the operating instructions.
- Hand these instructions and all other applicable documents to the end user.

WARNING

Follow the safety precautions in the INSTALLATION MANUAL for the correct use of the heat pump unit.

1.1 Safety signs

Action-related warnings in the document:

WARNING

It indicates a hazard with a medium level of risk which, if not avoided, could result in death or serious injury.

NOTE

Additional information.

1.2 Notice to users

If you are not sure how to operate the unit, contact your installer.

- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge provided that they have been given supervision or instruction concerning the use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and maintenance shall not be made by children without supervision.
- The unit is marked with the following symbol:



This means that electrical and electronic products may not be mixed with unsorted household waste. Do not try to dismantle the system yourself. The dismantling of the system and the treatment of the refrigerant, oil and other parts must be done by an authorized installer and must comply with applicable legislation.

The unit must be treated at a specialized treatment facility for reuse, recycling and recovery. By ensuring this product is disposed of correctly, you will help to prevent potential negative consequences for the environment and human health. For more information, contact your installer or local authority.

Working conditions of the wired controller.

1.3 First power-on setting of wired controller

- When the controller is powered on for the first time, the following page appears on the screen. The user needs to press "▲""▼""◀""▶" to select the display language and click "↵".

ENGLISH		
	中文	
OK		

- After setting SETTING ADDRESS, click"↵" to enter GENERAL SETTING. Then after setting GENERAL SETTING, click "↵".

GENERAL SETTING	
YEAR	◀ 2020 ▶
MONTH	◀ 12 ▶
DAY	◀ 10 ▶
12-24HOUR	◀ 12 ▶
HOUR	◀ 10 ▶
OK	1/3

GENERAL SETTING	
MINUTE	◀ 55 ▶
AMPM	◀ AM ▶
LANGUAGE	◀ ENGLISH ▶
BACKLIGHT	◀ 20 ▶
OFF DELAY(s)	
OK	2/3

GENERAL SETTING	
UNIT SETTING	◀ S1 ▶
BUZZER	◀ NO ▶
OK	3/3

1.4 Restore initialization

If the user accidentally sets the display language of the wired controller to a language that the user does not know, the following three steps can be used to restore the wired controller to the factory setting and reset the display language:

1) Power off the wireline controller and power it on again. Press and hold  +  +  to enter the following page within 60 seconds.

1	2	3
4	5	6
7	8	9

2) Press the buttons from left to right, from top to bottom, click  ->  ->  -> ... Turn on 1, 2, 3, 4, 5, 6, 7, 8 and 9, wait for 100 % initialization, and enter the FCT page. After entering the FCT page, the version number is displayed. All set parameters of the equipment are reset to the default parameters, and saved. The timing settings and fault records are cleared. The equipment returns to the factory state. (exit FCT after power on again).

3) Follow the steps of first power-on setting of the wired controller.

2 OVERVIEW OF WIRED CONTROLLER

Basic using conditions:

1)Power range: power input: AC 8 V to 12 V;

2)Operating temperature: -20 °C to 60 °C;

Operating humidity: RH40 % to RH90 %;

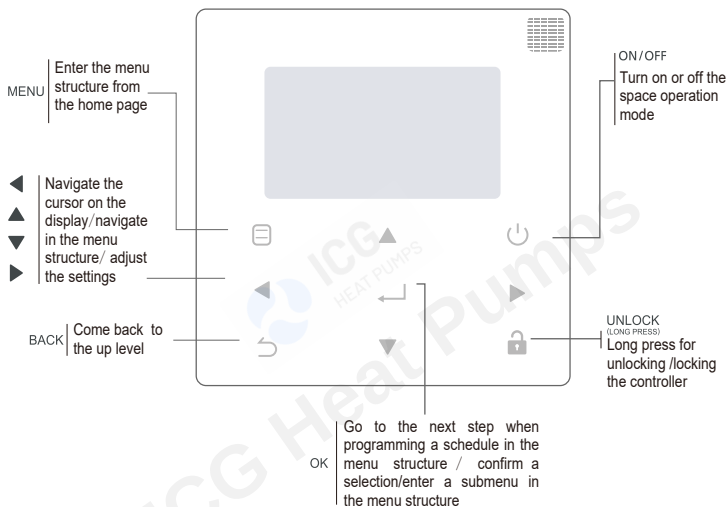
Where: HP—HEAT PUMP;

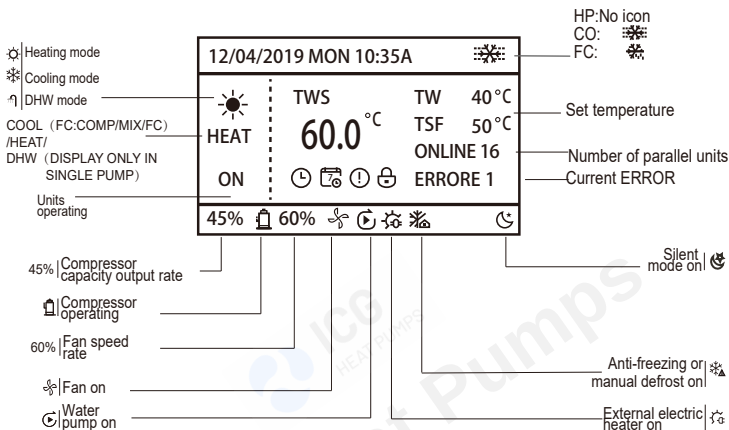
CO—ONLY COOLING;

FC—FREE COOLING.

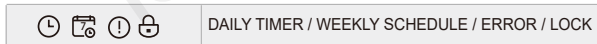
It's a general manual. The functions of different models are different. The wired controller automatically recognizes and hides irrelevant interfaces. Please set and inquire related parameters according to the outunit model.

2.1 Operation interface description





TWS/T5S: setting temperature
 TW: total outlet water temperature
 T5: tank temperature
 TSF: safe temperature



3 FUNCTION INTRODUCTION

Power on for the first time or restore factory settings, you need to preset: SETTING ADDRESS and GENERAL SETTING. Click "↩" after setting. Please follow the interface prompts.

3.1 Unlocking/locking operation

When the wired controller is locked, press and hold the "🔒" button for 3 s to unlock it. Then the lock icon is not displayed and the wired controller can be operated.

When the wired controller is unlocked, press and hold the "🔒" button for 3 s to lock it. Then the lock icon is displayed and the wired controller cannot be operated. When there is no operation for continuous 60 s on any page, the wired controller returns to the home page and automatically locks, displaying the lock icon.

NOTE

It can only be locked by long pressing the "🔒" button for 3 s under the main page, and it is invalid under the "☰" page.

12/04/2019 MON 10:35A			
	TWS	TW	9 °C
COOL	7.0 °C	ONLINE 16	
ON			
45%		60%	

12/04/2019 MON 10:35A			
	TWS	TW	9 °C
COOL	7.0 °C	ONLINE 16	
ON			
45%		60%	

3.2 Power-on/off

When the wired controller is unlocked and the unit is on, "⏻" can be pressed to power off the unit under the home page only. And it can be pressed to power on the unit when the unit is off.

In the unlocked state, the set temperature can be adjusted by pressing "▲" "▼" button. And you need to Press "↵" button to confirm after setting. It's invalid without confirmation within 5 s.

	LOCK	UNLOCK: ON	UNLOCK: OFF
HP-COOLING	12/04/2019 MON 10:35A TWS TW 9°C COOL 7.0°C ONLINE 16 ON 45% 60%	12/04/2019 MON 10:35A TWS TW 9°C COOL 7.0°C ONLINE 16 ON 45% 60%	12/04/2019 MON 10:35A TWS TW 9°C COOL 7.0°C ONLINE 16 ON 45% 60%
CO-COOLING	12/04/2019 MON 10:35A TWS TW 9°C COOL 7.0°C TSF 5°C ONLINE 16 ON 45% 60%	12/04/2019 MON 10:35A TWS TW 9°C COOL 7.0°C TSF 5°C ONLINE 16 ON 45% 60%	12/04/2019 MON 10:35A TWS TW 9°C COOL 7.0°C TSF 5°C ONLINE 16 ON 45% 60%
FC-COOLING	12/04/2019 MON 10:35A TWS TW 9°C COMP 7.0°C TSF 5°C ONLINE 16 ON 45% 60% 12/04/2019 MON 10:35A TWS TW 9°C MIX 7.0°C TSF 5°C ONLINE 16 ON 45% 60% 12/04/2019 MON 10:35A TWS TW 9°C FC 7.0°C TSF 5°C ONLINE 16 ON 45% 60%	12/04/2019 MON 10:35A TWS TW 9°C COMP 7.0°C TSF 5°C ONLINE 16 ON 45% 60%	12/04/2019 MON 10:35A TWS TW 9°C COMP 7.0°C TSF 5°C ONLINE 16 ON 45% 60%
HP-HEATING	12/04/2019 MON 10:35A TWS TW 40°C HEAT 55.0°C ONLINE 16 ON 45% 60%	12/04/2019 MON 10:35A TWS TW 40°C HEAT 55.0°C ONLINE 16 ON 45% 60%	12/04/2019 MON 10:35A TWS TW 40°C HEAT 55.0°C ONLINE 16 ON 45% 60%
HP-HOT WATER	12/04/2019 MON 10:35A TSS TS 40°C DHW 60.0°C ONLINE 16 ON 45% 60%	12/04/2019 MON 10:35A TSS TS 40°C DHW 60.0°C ONLINE 16 ON 45% 60%	12/04/2019 MON 10:35A TSS TS 40°C DHW 60.0°C ONLINE 16 ON 45% 60%

3.3 Mode setting

In Unlock mode, Press "☐" button to enter the menu setting interface, Press "▼" and "▲" buttons to select "MODE" and set a mode, and Press "←" button as shown in the above figure to access the submenu (mode setting). As shown below: three modes available.

12/04/2019 MON 10:35A			
	TWS	TW	9°C
COOL	7.0	°C	

12/04/2019 MON 10:35A			
	TWS	TW	40°C
HEAT	55.0	°C	

12/04/2019 MON 10:35A			
	T5S	T5	40°C
DHW	60.0	°C	ADDRESS 01#

Cycle: Cooling-->Heating-->DHW-->Cooling. Skip the mode cycle when there is no corresponding mode. The DHW mode is divided into single pump (no need to select the address) and multiple pumps (need to select address 00-15, and the address of the unit without DHW function is directly skipped).

Only Tws/T5 s and address can be set in cooling、heating and DHW mode. Tw/T5 can only be displayed but not be set. DHW can only be power on/off under the MODE setting. The detailed steps are as follows: Enable the DHW function from Service Menu-->Enable the DHW from User Menu-->Define the Priority of DHW from User-->Activate the DHW function from Mode Menu.

HP-Cooling setting range lower limit is subject to the low water outlet control setting under SERVICE MENU. CO/FC-Cooling setting range lower limit is subject to the lowest outlet water temperature set by antifreeze ratio under PROJECT MENU.

NOTE

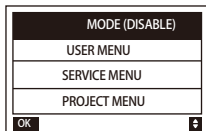
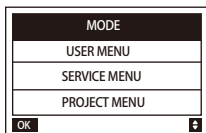
When Tsafe is set below 5 °C /41 °F, antifreeze must be added to the antifreeze system and the following requirements must be met:

- Use 30 % ethylene glycol antifreeze system or other antifreeze system similar to the freezing point;
- The freezing point temperature of the antifreeze solution must be less than the coldest local temperature minus 5.5 °C /9.9 °F

Press "↵" to save the settings after setting and back to homepage. Or press "↶" to back. When there is no operation for continuous 60 s, it will save the settings and back to homepage.

3.4 Menu setting

When the wired controller is unlocked, press "☰" to enter menu setting page as follows:



The default selection is "MODE" and choose the menu you need by pressing "▲▼". Press "←" to enter its submenu or back to homepage by "→". Back to homepage if there is no operation for 60 s under menu page.

NOTE

The mode menu is invalid when the unit is controlled by modbus or host computer and display as above.

3.5 User menu

Select "USER MENU" to enter the user menu. The interface display is as follows:

USER MENU
QUERY
TIMER
GENERAL SETTING
DOUBLE SETPOINT
OK 1/2

USER MENU
SNOW-BLOWING SWITCH
SILENT SWITCH
DHW SWITCH
WATER COIL CONTROL
OK 2/2

Users choose functions by "▲▼".

Select "QUERY" in the "USER MENU" interface to access the query function. The interface display and operation are as follows:

QUERY
STATE QUERY
TEMP QUERY
HISTORY ERRORS QUERY
OK

State query

Select "STATE QUERY" and press "↵". Display as follows:

STATE QUERY	
SELECT ADDRESS	◀ 11 ▶ #
OPERATION STATE	STANDBY
RUNNING MODE	COOL
CURRENT SILENT MODE	NIGHT SILENT1
BACK	⏏

Select address by pressing "◀", "▶" to view the status of the system at that address.

Back to upper menu by "↶".

Temp query

Select "TEMP QUERY" and press "↵". Display as follows:

TEMP QUERY	
SELECT ADDRESS	◀ 11 ▶ #
INLET WATER TEMP	25°C
OUTLET WATER TEMP	25°C
TOTAL OUTWATER TEMP	25°C
AMBIENT TEMP	25°C
BACK	

Select address by pressing "◀", "▶" to view the temperature of the system at that address. Back to upper menu by "↶".

History errors query

Select "HISTORY ERRORS QUERY" and press "↵". Display as follows:

HISTORY ERRORSQUERY	
SELECT ADDRESS	◀ 11 ▶ #
SELECT QUERY NUMBER	10 #
E2:11/3/2020 15:05P COMMUNICATION ERROR	
OK	

Select address by pressing "◀", "▶" to view the history errors of the unit at that address. Press "▲" "▼" to choose the history error that you want and the number of errors that can be viewed is 10. Click "↵" to query detailed historical error information.

Timer setting

Select "TIMER" and press "←". Display as follows:

TIMER
DAILY TIMER
WEEKLY SCHEDULE
OK

TIMER
DAILY TIMER(DISABLE)
WEEKLY SCHEDULE(DISABLE)
OK

NOTE

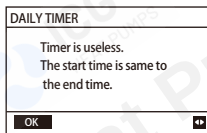
After MODBUS control and the remote control of the external machine are used, the daily and weekly time settings of the wired controller are invalid, and users cannot enter the timing menu for setting.

When MODBUS control and the remote control of the external machine are invalid. Select "DAILY TIMER" and press "←". Display as follows:

DAILY TIMER	
TIMER	◀ 1 ▶ #
ACT	◀ OFF ▶
TIME ON	◀ 10:00 ▶ A
TIME OFF	◀ 10:00 ▶ A
MODE	◀ HEAT ▶
OK	1/2

DAILY TIMER	
TWS	◀ 40 ▶ °C
SILENT MODE	◀ NIGHT ▶
	SILENT1
OK	2/2

Only one setting is enabled between "DAILY TIMER" and "WEEKLY SCHEDULE". If any of the pattern in "WEEKLY SCHEDULE" is set to ON, "DAILY TIMER" is disabled. "DAILY TIMER" can be set across days, but "WEEKLY SCHEDULE" can't. Users can set up to two timers, and set the ON or OFF time (set the interval of time to 10 minutes) 、 operation mode (there are heating, cooling and DHW modes for single pump; only cooling and heating modes can be selected for multiple pumps, and it cannot be set as DHW mode) and temperature setting for each segment of timer. It's invalid if the ON and OFF time are same. Display as follows:



Operating Introduction:

Press "▲" "▼" to select TIMER, ACT, TIME ON, TIME OFF, MODE, TWS or SILENT MODE. When the cursor stays at "TIMER ", press "◀" and "▶" to select "TIMER 1" or "TIMER 2". When it stays at other items, we can also use "◀", "▶" to adjust corresponding settings. After setting, press "↵" to confirm saving, or press "↶" to cancel setting and return to the previous interface.

If Time1 T.ON is set the same as Time1 T.OFF, then the setting is invalid, the ACT option for the timer of this segment jumps to "OFF", the setting of Timer2 is the same as that of Timer1, and the timing interval of Time2 can cross with that of Time1.

For example, if Timer1 T.ON is set to 12:00 and Timer1 T.OFF is set to 15:00, then the values of Timer2 T.ON and Time2 T.OFF can be set in the range of 12:00-15:00. If the time interval crosses, the machine will be powered on at the time T.ON which is set in Timer1 or Timer2, and will be powered off at the time T.OFF which is set in Timer1 or Timer2.

After the daily timer function setting is enabled, there will be corresponding prompts displayed on the homepage.

When two timers overlap, the second setting takes precedence.

Weekly schedule setting:

Select "WEEKLY SCHEDULE" and press "←|". Display as follows:

WEEKLY SCHEDULE	
WEEKLY SCHEDULE	◀ MON ▶
WEEKLY SWITCH	◀ OFF ▶
OK	⏏

MONDAY TIMER	
TIMER	◀ 1 ▶ #
ACT	◀ OFF ▶
TIME ON	◀ 10:00 ▶ A
TIME OFF	◀ 10:00 ▶ A
MODE	◀ HEAT ▶
OK	1/2 ⏏

MONDAY TIMER	
TWS	◀ 40 ▶ °C
SILENT MODE	◀ NIGHT ▶ SILENT1
OK	2/2 ⏏

Press "▲" and "▼" buttons to select "WEEKLY SCHEDULE" or "WEEKLY SWITCH". And press "◀" or "▶" buttons to select Monday to Sunday.

After changing a setting, you need to press "←|" to confirm or enter the submenu. For "WEEKLY SWITCH", "OFF" means not to set the timing for this day or cancel the set timing. When change to "ON" and confirm, you will enter the day timer. The operation is the same as the day timer. The page refers to the day timer. The top displays the set day and Timer 1 or Timer 2 for

that day.

There can be up to 2 timings in a day of weekly timing, and each timing needs to be set on and off time (set interval is 10 minutes).

Operating Introduction:

Press "▲" and "▼" to select "WEEKLY SCHEDULE". Select the day you need by "◀" or "▶", and press "↵" to enter it. Then you can switch between TIMER, ACT, TIME ON, TIME OFF, MODE, TWS and SILENT MODE by "▲" and "▼". Refer to the operating introduction of "DAILY TIMER".

General setting:

Select "GENERAL SETTING" and press "↵". Display as follows:

GENERAL SETTING	
YEAR	◀ 2020 ▶
MONTH	◀ 12 ▶
DAY	◀ 10 ▶
12-24HOUR	◀ 12 ▶
HOUR	◀ 10 ▶
OK 1/3	

GENERAL SETTING	
MINUTE	◀ 55 ▶
AMPM	◀ AM ▶
LANGUAGE	◀ ENGLISH ▶
BACKLIGHT	◀ 20 ▶
OFF DELAY(s)	
OK 2/3	

GENERAL SETTING	
UNIT SETTING	◀ S1 ▶
BUZZER	◀ NO ▶
OK 3/3	

Press "▲" and "▼" to select the date, time, time format, language, unit setting and buzzer to be set. Adjust their parameters by "◀" or "▶", and press "↵" to save. The backlight time setting range is 10-1200 s, the default is 60 s, and each adjustment is 10 s.

Back to previous page by "↶" after setting.

Double Setpoint

Select "DOUBLE SETPOINT" and press "↵". Display as follows:

DOUBLE SETPOINT	
DOUBLE SETPOINT	◀DISABLE▶
SETPOINT COOL_1	◀ 16 ▶°C
SETPOINT COOL_2	◀ 20 ▶°C
SETPOINT HEAT_1	◀ 16 ▶°C
SETPOINT HEAT_2	◀ 25 ▶°C
OK	

Press "▲" and "▼" to select items and "◀" or "▶" to adjust parameters.

the lower limit of the set range of HP refrigeration is subject to the low water outlet control set under SERVICE MENU, and the lower limit set for CO/FC refrigeration is subject to the minimum water outlet set under the antifreeze ratio set under PROJECT MENU.

Snow-Blowing switch

Select "SNOW-BLOWING SWITCH" under "USER MENU" page and press"↵". Display as follows:

SNOW-BLOWING SWITCH
SNOW-BLOWING SWITCH YES ⚡
OK

Press "▲" and "▼" to select "YES" or "NO" and press"↵" to confirm. "YES" means the function is valid, "NO" means invalid.

NOTE

Some models do not have this function. Please refer to the instructions of the outdoor machine for whether they have anti-snow control function.

Silent mode:

Select "SILENT SWITCH" and press "←". Display as follows:

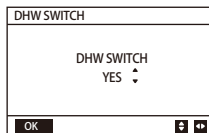
SILENT SWITCH	
SELECT SILENT	◀ NIGHT ▶ SILENT1
CURRENT SILENT	NIGHT SILENT1
OK	

Press "▲" and "▼" to select "SELECT SILENT", press "◀" or "▶" to select the mode you need (7 types: NIGHT SILENT1-4, STANDARD, SILENT and SUPER SILENT), and press "←" to save. Users can check whether it is the mode they want here and press "↶" to back if there is no problem. Once the silent mode turned on, in homepage light up.

NIGHT SILENT 1	6/10h
NIGHT SILENT 2	6/12h
NIGHT SILENT 3	8/10h
NIGHT SILENT 4	8/12h

DHW SWITCH

Press "▲" and "▼" to select "DHW SWITCH" under "USER MENU" page and press "←" :



NOTE

DHW SWITCH is only available for custom made DHW models. DHW SWITCH is displayed only when enable the DHW function from Service Menu. Water Coil Control.

Water Coil Control

Press "▲" and "▼" to select "WATER COIL CONTROL" and press "←".

Display as follows for single heat pump mode or multiple heat pumps mode:

WATER COIL CONTROL	
COIL CONTROL	◀AUTO ▶
OK	↵

Press "▲" and "▼" to select "COIL CONTROL" and press "◀" or "▶" to select control mode:

AUTO (automatically control), MANUALON (with water coil), MANUALOFF (without water coil). Press "↵" to save. Press "↶" to exit this page.



NOTE

Water Coil Control is only applicable to FC models.

3.6 Service menu setting

Password input: Please contact us Select "SERVICE MENU" and press "↵". The screen prompts for a password, as shown in the figure below:

SERVICE MENU	
PLEASE INPUT THE PASSWORD	
000	
OK	↵

Press "▲" and "▼" buttons to change the number to enter, and Press "◀" and "▶" buttons to change the bit code to enter. After the number is entered, the display is not changed. After entering the password, Press "↵" button to enter the interface or Press "↶" button to go back to the previous interface.

Display as follows if the input is incorrect:

SERVICE MENU
SORRY WRONG PASSWORD PLEASE INPUT AGAIN
000
OK  

Enter setting page as follows if the input is correct:

SERVICE MENU
STATE QUERY
CLEAR HISTORY ERRORS
HANDLE ENABLE
HEAT CONTROL
OK 1/3 

SERVICE MENU
TEMPERATURE COMPENSATION
PUMP CONTROL
MANUAL DEFROST
LOW OUTLET WATER CONTROL
OK 2/3 

SERVICE MENU
VACUUM SWITCH
ENERGY SAVING SWITCH
DHW ENABLE
FACTORY DATA RESET
OK 3/3 

State query

Press "▲" or "▼" to select "STATE QUERY" under "SERVICE MENU" page. Then press "↵" to enter submenu.

STATE QUERY	
SELECT ADDRESS	◀ 07 ▶ #
ODU MODEL	130 kW
COMP FREQUENCY	50 Hz
COMP1 CURRENT	20 A
COMP2 CURRENT	20 A
BACK 4/9	

STATE QUERY	
H-P PRESSURE	3.83 MPa
L-P PRESSURE	1.00 MPa
TP1 DISCHARGE TEMP	30 °C
TP2 DISCHARGE TEMP	30 °C
TH SUCTION TEMP	-20 °C
OK 2/9	

STATE QUERY	
T2 TEMP	-20°C
T3 TEMP	-20°C
T4 TEMP	-20°C
T6A TEMP	40°C
T6B TEMP	40°C
BACK 3/9	

STATE QUERY	
TFIN1 TEMP	60 °C
TFIN2 TEMP	60 °C
TD5H	30 °C
T5SH	15 °C
TCSH	15 °C
BACK 4/9	

STATE QUERY	
FAN1 SPEED	850 RPM
FAN2 SPEED	850 RPM
FAN3 SPEED	850 RPM
EXV A	1800 P
EXV B	1800 P
BACK 5/9	

STATE QUERY	
EXV C	1800P
Twi TEMP	30°C
Two TEMP	30°C
Tw TEMP	30°C
TAF1 TEMP	30°C
BACK 6/9	

STATE QUERY	
TAF2 TEMP	30 °C
T5 TEMP	30 °C
COMP TIME1	120 MIN
COMP TIME2	120 MIN
COMP TIME3	120 MIN
BACK 7/9	

STATE QUERY	
COMP TIME	65535 H
FIX PUMP TIME	65535 H
INV PUMP TIME	65535 H
ODU SOFTWARE	V45
HMI SOFTWARE	V45
BACK 8/9	

STATE QUERY	
DEFROSTING STATE	
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15	
E2 SOFTWARE V45	
END	
OK 9/9	

Press "◀" or "▶" to select the address of module to view (the offline address is skipped automatically). There are 9 pages and 41 state values. Press "▲" or "▼" buttons to select the different page.

Clear history errors:

Press "▲" or "▼" to select "CLEAR HISTORY ERRORS" and confirm by "↵".

SERVICE MENU
STATE QUERY
CLEAR HISTORY ERROR
HANDLE ENABLE
HEAT CONTROL
OK 1/3

CLEAR HISTORY ERRORS
CLEAR UNIT HISTORY ERRORS
CLEAR ALL HISTORY ERRORS
CLEAR LOCK ERROR
CLEAR RUN TIME
OK

Press "▲" or "▼" to select "CLEAR UNIT HISTORY ERRORS" and press "↵" to confirm.

Display as follows:

CLEAR UNIT HIS ERRS	
SELECT ADDRESS	◀ 07 ▶
DO YOU WANT TO CLEAR?	◀ YES ▶
OK	↵

Press"▲" or "▼" to select "SELECT ADDRESS" and press "◀"or "▶"to select address value.

Press "▲" or "▼" to select clear or not, and press "◀" or "▶"to select YES or NO, and press "↵" to confirm.

Press"▲" or "▼" to select "CLEAR ALL HIS ERRS" and press "↵" to confirm. Display as follows:

CLEAR ALL HIS ERRS	
DO YOU WANT TO CLEAR?	◀ YES ▶
OK	↵

Press "▲" or "▼" to select "CLEAR LOCK ERROR" and press "↵" to confirm. Display as follows:

CLEAR LOCK ERR	
DO YOU WANT TO CLEAR?	◀ YES ▶
OK ⏏	

press "◀" or "▶" to select YES or NO, and press "↵" to confirm. Press "▲" or "▼" to select "CLEAR RUN TIME" and press "↵" to confirm. Display as follows:

CLEAR RUN TIME	
SELECT ADDRESS	◀ 07 ▶
CLEAR COMP TIME?	◀ NO ▶
CLEAR FIX PUMP TIME?	◀ NO ▶
CLEAR INV PUMP TIME?	◀ NO ▶
OK ⏏	

Press "▲" or "▼" to select "SELECT ADDRESS", press "◀" or "▶" to select address value.

Press "▲" or "▼" to select clear or not, and press "◀" or "▶" to select YES or NO, and press "↵" to confirm.

Handle enable :

Press "▲" or "▼" under "HANDLE ENABLE" page to select "ON" or "OFF", and press "↵" to confirm.

SERVICE MENU
STATE QUERY
CLEAR HISTORY ERROR
HANDLE ENABLE
HEAT CONTROL
OK 1/3

HANDLE ENABLE
HANDLE SETTING ENABLE OFF
OK

Heat control

HEAT1 means pipe electric heating in cooling/heating mode.
HEAT2 means tank electric heating in DHW mode.

Press "▲" or "▼" to select "HEAT CONTROL" under "SERVICE MENU" page. Press "↵" and enter submenu.

SERVICE MENU
STATE QUERY
CLEAR HISTORY ERROR
SETTING ADDRESS
HEAT CONTROL
OK 1/3

HEAT CONTROL
HEAT1
HEAT2
FORCED HEAT2 OPEN
OK

Press "▲" or "▼" to select item to be set. Press "↵" and enter submenu.

HEAT1	
HEAT1 ENABLE	◀ NO ▶
TEMP-AUXHEAT1-ON	◀ 07 ▶ °C
TW.HEAT1-ON	◀ 25 ▶ °C
TW.HEAT1-OFF	◀ 45 ▶ °C
DTW-HEAT1-ON	◀ 2 ▶ °C
OK 1/2	

HEAT1	
T-HEAT1-DELAY	◀ 30 ▶ MIN
T4-HEATPUMP-OFF1	-30.0 °C
FORCED-HEAT1-OPEN	NO
OK 2/2	

HEAT2	
ALL HEAT2 DISABLE	◀ YES ▶
SELECT ADDRESS	◀ 10 ▶ #
HEAT2-ENABLE	◀ NO ▶
T-HEAT2-DELAY	◀ 190 ▶ MIN
DTS-HEAT2-OFF	◀ 10 ▶ °C
OK 1/2	

HEAT2	
T4-HEAT2-ON	◀ 10 ▶ °C
T4-HEATPUMP-OFF2	-30.0 °C
OK	2/2

FORCED HEAT2 OPEN	
SELECTED ADDRESS	◀ 10 ▶ #
FORCED HEAT2 OPEN	◀ NO ▶
OK	

Press "▲" or "▼" to select item and press "◀" or "▶" to set value. Then press "↵" to confirm and "↶" to back.

Temperature Compensation:

Press "▲" or "▼" to select "TEMPERATURE COMPENSATION" under "SERVICE MENU" page. Press "↵" and enter submenu.

SERVICE MENU
TEMPERATURE COMPENSATION
PUMP CONTROL
MANUAL DEFROST
LOW OUTLET WATER CONTROL
OK

TEMP COMPENSATION	
COOL MODE ENABLE	◀ YES ▶ °C
T4 COOL-1	◀ 15 ▶ °C
T4 COOL-2	◀ 08 ▶ °C
OFFSET-C	◀ 10 ▶ °C
OK	1/2

TEMP COMPENSATION	
HEAT MODE ENABLE	◀ YES ▶ °C
T4 HEAT-1	◀ 15 ▶ °C
T4 HEAT-2	◀ 08 ▶ °C
OFFSET-H	◀ 10 ▶ °C
OK	2/2

Press "▲" or "▼" to select item and press "◀" or "▶" to set value. Then press "↵" to confirm.

SERVICE MENU
TEMPERATURE COMPENSATION
PUMP CONTROL
MANUAL DEFROST
LOW OUTLET WATER CONTROL
OK

PUMP CONTROL
FORCED PUMP OPEN
INV PUMP SETTING
PUMP ON/OFF TIME
OK

Press "▲" or "▼" to select "FORCED PUMP OPEN". Press "↵" and enter submenu.

FOECED PUMP OPEN	
SELECT ADDRESS	◀ 0 ▶ #
FORCED PUMP OPEN	◀ NO ▶
OK  	

FORCED PUMP OPEN	
Cannot control the pump before shutting down.	

Under "FORCED PUMP OPEN" page, press "▲" or "▼" to select item and press "◀" or "▶" to set value. Press "↵" to confirm or "↶" to back. If the unit at that address is ON, the pump cannot be controlled by the wired controlled. Display as above.

Under "INV PUMP OPEN" page, press "▲" or "▼" to select item and press "◀" or "▶" to set value. Press "↵" to confirm or "↶" to back.

INV PUMP SETTING	
SELECT ADDRESS	◀ 07 ▶ #
SWITCH ON THE PUMP	◀ NO ▶
RATIO PUMP	◀ 100 ▶ #
OK  	

NOTE

Can only be set under a single pump. The setting range of RATIO-PUMP is 30 % to 100 %. It should ensure its flow meet the requirement of whole unit, otherwise the unit may be damaged.

Under "PUMP CONTROL" page, press "▲" or "▼" to select item and press "◀" or "▶" to set value. Press "↵" to confirm or "↶" to back.

PUMP ON/OFF TIME
PUMP ON TIME ◀ 05 ▶ MIN
PUMP OFF TIME ◀ 05 ▶ MIN
OK ▶▶ ⏮

Parameter setting requirements are as follows:

	Set range	Default value	Adjustment range
PUMP ON TIME	5 min to 60 min	5	5
PUMP OFF TIME	0 min to 60 min	0	5

Manual Defrost

Press "▲" or "▼" to select "MANUAL DEFROST" under "SERVICE MENU" page. Press "↵" and enter submenu.

SERVICE MENU
TEMPERATURE COMPENSATION
PUMP CONTROL
MANUAL DEFROST
LOW OUTLET WATER CONTROL
OK 2/3 ▶▶ ⏮

MANUAL DEFROST
SELECT ADDRESS ◀ 07 ▶ #
MANUAL DEFROST ◀ NO ▶
OK ▶▶ ⏮

Press "▲" or "▼" to select item to be set and press "◀" or "▶" to set value. Press "↵" to confirm or "↶" to back.

If the external unit successfully enters the defrost mode after the "MANUAL DEFROST" is turned on, the defrost icon will be displayed at homepage of the wired controller.

Low outlet water temperature control

Press "▲" or "▼" to select "LOW OUTLETWATER CONTROL" under "SERVICE MENU" page. Press "↵" and enter submenu. Suitable for HP-UNIT.

SERVICE MENU
TEMPERATURE COMPENSATION
PUMP CONTROL
MANUAL DEFROST
LOW OUTLET WATER CONTROL
OK 2/3

LOW OUTLET WATER CTRL	
MIN TEMP FOR COOL	◀ 50°C ▶
HISTORICAL SETTING	
04/06/2020 11:30A	5°C
04/06/2020 11:30A	5°C
04/06/2020 11:30A	5°C
OK	

Press "◀" or "▶" to set value. Press "↵" to confirm or "↶" to back. At this page, the historical minimum water outlet temperature setting can be viewed. When the setting temperature is less than 5 °C, a prompt box will pop up:

LOW OUTLET WATER CONTROL
The setting temp is below 5 degrees. please confirm whether it is an antifreeze system?
OK

Vacuum mode

Before entering the vacuum mode, the wired controller needs to select off.

Press "▲" or "▼" to select "VACUUM SWITCH" under "SERVICE MENU" page. Press "↵" and enter submenu.

SERVICE MENU
VACUUM SWITCH
ENERGY SAVING SWITCH
DHW ENABLE
FACTORY DATA RESET
OK 3/3

VACUUM SWITCH	
VACUUM SWITCH	◀ NO ▶
OK	

Press "◀" or "▶" to set YES or NO. Select YES and press "↵" to confirm, the dialog box is as follow. Press the "↵" again to enter the mode.

Otherwise, press "↶", or select NO and press "↵" to return to the previous screen.

VACUUM SWITCH
To exit the vacuum pumping mode, you need to power on again or wait for 4 hours to run, please confirm if you want to enter?
OK BACK

VACUUM SWITCH
please wait... 3h59m56s

Energy saving mode

Press "▲" or "▼" to select "ENERGY SAVING SWITCH" under "SERVICE MENU" page. Press "↵" and enter submenu.

SERVICE MENU
VACUUM SWITCH
ENERGY SAVING SWITCH
DHW ENABLE
FACTORY DATA RESET
OK 3/3

ENERGY SAVING SWITCH	
SAVING SWITCH	◀ 80% ▶
HISTORICAL SETTING	
04/06/2020 11:30A	80%
04/06/2020 11:30A	80%
04/06/2020 11:30A	80%
OK	

press "◀" or "▶" to set value. Press "↵" to confirm or "↶" to back.

NOTE

Only applicable to MC-SU **-RN8L-B series models. For other models, please refer to the instructions of the outdoor machine.

DHW ENABLE

Press "▲" or "▼" to select "DHW ENABLE" under "SERVICE MENU" page. Press "↵" and enter submenu.

DHW ENABLE	
DHW ENABLE	◀ NO ▶
OK	↵

Press "▲" or "▼" to set YES or NO. Press "↵" to confirm or "↶" to back.

NOTE

DHW ENABLE is only available for custom made DHW models.

Factory data reset:

Press "▲" or "▼" to select "FACTORY DATA RESET" under "SERVICE MENU" page.

Press "↵" and enter submenu.

FACTORY DATA RESET	
LOAD DEFAULT PART ?	◀ YES ▶
DO YOU WANT TO RESET ?	◀ YES ▶
OK	↵

Press "▲" or "▼" to select corresponding item and press "◀" or "▶" to select restore or not. Press "↵" to confirm or "↶" to back.

3.7 Project menu setting

Password input: Please contact us.

Select "PROJECT MENU" and press "↵" to entry. The screen prompts to enter the password, as shown in the figure below:

PROJECT MENU
PLEASE INPUT THE PASSWORD
0000
OK

The initial password must be obtained by a professional. Press the "▲" or "▼" buttons to change the number to enter, and press the "◀" or "▶" buttons to change the bit code to enter. After the number is entered, the display is not changed. After entering the password, press the "↵" button to enter the interface; press the "↶" button to go back to the previous interface; the display is as follows if the input is incorrect:

PROJECT MENU	
SORRY WRONG PASSWORD PLEASE INPUT AGAIN	
0000	
OK	↵ ↶

The query interface as follows is displayed if the input is correct:

PROJECT MENU		
SET UNIT AIRCONDITIONING		
SET PARALLEL UNIT		
SET UNIT PROTECTION		
SET DEFROSTING		
OK	1/3	↵

PROJECT MENU		
SET DHW TIME		
SET E9 TIME		
INV PUMP RATIO		
CHECK PARTS		
OK	2/3	↵

PROJECT MENU		
OK	3/3	↵

Unit Setting:

Select "SET UNIT AIRCONDITIONING" and press "↵" to entry. Display as follow:

SET UNIT	
TWO_COOL_DIFF	◀ 2 ▶ °C
TWO_HEAT_DIFF	◀ 2 ▶ °C
DT5_ON	◀ 8 ▶ °C
DT155	◀ 10 ▶ °C
DT1ws	◀ 1 ▶ °C
OK	↵ ↶

SET UNIT	
Dtmix	◀ 2 ▶ °C
FCoffset	◀ 2 ▶ °C
FCyser	◀ 1 ▶ °C
OK	↵ ↶

Press "▲" or "▼" to select item and press "◀" or "▶" to set suitable temperature or time. Press "↵" to confirm. Back to homepage if there is no operation within 60 s.

Detailed setup information:

Parameter	Setting range	Note
Two_COOL_DIFF	1 °C↔5 °C	
Two_HEAT_DIFF	1 °C↔5 °C	
dT5_ON	2 °C↔10 °C	DHW
Dt1s5	5 °C↔20 °C	

Parallel units setting:

Select "SET PARALLEL UNIT" and press "↵" to entry. Display as follows:

SET PARALLEL UNIT		
TIM_CAP_ADJ	◀ 80 ▶	S
TW_COOL_DIFF	◀ 2.0 ▶	°C
TW_HEAT_DIFF	◀ 2.0 ▶	°C
RATIO_COOL_FIRST	◀ 50 ▶	%
RATIO_HEAT_FIRST	◀ 50 ▶	%
OK		

Press "▲" or "▼" to select item to be set and press "◀" or "▶" to set value. Press "↵" to confirm. Back to homepage if there is no operation within 60 s.

Detailed setup information:

Parameter	Setting range
Tim_Cap_Adj	60 s↔360 s
Tw_Cool_diff	1 °C↔5 °C
Tw_Heat_diff	1 °C↔5 °C
Ratio_cool_first	0 %↔100 %
Ratio_heat_first	0 %↔100 %

Unit protection setting:

Select "SET UNIT PROTECTION" and press "↵" to entry. Display as follows:

SET UNIT PROTECTION	
T_DIFF_PRO	◀ 12 ▶ °C
TWI_O_ABNORMAL	◀ 2 ▶ °C
OK	⏮ ⏭

Press "▲" or "▼" to select item to be set and press "◀" or "▶" to set value. Press "↵" to confirm. Back to homepage if there is no operation within 60 s.

Detailed setup information:

Parameter	Setting range
T_DIFF_PRO	8 °C to 15 °C/8 °C to 25 °C (The range of Settings varies according to the mode)
TWI_O_ABNORMAL	1 °C to 5 °C

Defrosting Setting:

Select "SET DEFROSTING" and press "↵" to entry. Display as follows:

SET DEFROSTING	
T_FROST	◀ 35 ▶ min
T_DEFROST_IN	◀ 0 ▶ °C
T_FROST_OUT	◀ 0 ▶ °C
OK	⏮ ⏭

Press "▲" or "▼" to select item to be set and press "◀" or "▶" to set value. Press "↵" to confirm. Back to homepage if there is no operation within 60 s.

Detailed setup information:

Parameter	Setting range
T_FROST	20 min to 120 min
T_DEFROST_IN	-5 °C to 5 °C
T_FROST_OUT	-10 °C to 10 °C

DHW time setting:

Select " SET DHW TIME " and press "↵" to entry. Display as follows:

SET DHW TIME	
SELECT ADDRESS	◀ 07 ▶ #
COOL MAX TIME	◀ 08 ▶ h
COOL MIN TIME	◀ 0.5 ▶ h
HEAT MAX TIME	◀ 08 ▶ h
HEAT MIN TIME	◀ 0.5 ▶ h
OK	1/2

SET DHW TIME	
DHW MIN TIME	◀ 0.5 ▶ h
DHW MAX TIME	◀ 08 ▶ h
OK	2/2

Press "▲" or "▼" to select item to be set and press "◀" or "▶" to set value. Press "↵" to confirm. Back to homepage if there is no operation within 60 s.

Detailed setup information:

Parameter	Setting range
SELECT ADDRESS	0 to 15
COOL MIN TIME	0.5 h to 24 h
COOL MAX TIME	0.5 h to 24 h
HEAT MIN TIME	0.5 h to 24 h
HEAT MAX TIME	0.5 h to 24 h
DHW MIN TIME	0.5 h to 24 h
DHW MAX TIME	0.5 h to 24 h

E9 Error time setting:

Select "SET E9 TIME" and press "↵" to entry. Display as follows:

SET E9 TIME	
E9 PROTECT TIME	◀ 10 ▶ 5
E9 DETECTION METHOD	◀ 1 ▶
OK	⬅ ➡

Press "▲" or "▼" to select item to be set and press "◀" or "▶" to set value (setting range 2 to 20 s, default 5 s, adjust interval 1 s). Press "↵" to confirm. Back to homepage if there is no operation within 60 s. The setting range of " E9 DETECTION METHOD" is 1-2, default 1 (Method1: detect after pump starting. Method 2: detect before and after pump starting.)

Inverter pump output setting:

Select " INV PUMP RATIO " and entry the following page to select pump: Use in the case of multiple pumps, do not send instructions for single pump.

INV PUMP RATIO	
MIN RATIO	◀ 70 ▶ %
MAX RATIO	◀ 100 ▶ %
OK ⏮ ⏭	

Press "▲" or "▼" to select item to be set and press "◀" or "▶" to set value. Press "↵" to confirm. Back to homepage if there is no operation within 60 s. MINRATIO setting should ensure its flow meet the requirement of the whole unit, otherwise the unit may be damaged.

MIN RATIO	MINIMUM RATIO	25 % to 100 %
MAX RATIO	MAXIMUM RATIO	70 % to 100 %

CHECK PARTS

Select "CHECK PARTS" and press "↵" to entry submenu. Display as follows:

CHECK PARTS	
SELECT ADDRESS	◀ 07 ▶ #
FIX PUMP STATE	OFF
INV PUMP STATE	80%
FOUR-WAY VALVE	OFF
SV1 STATE	OFF
BACK 1/3 ⏮ ⏭	

CHECK PARTS	
SV2 STATE	OFF
SV4 STATE	OFF
SV5 STATE	OFF
SV6 STATE	OFF
SV8A STATE	OFF
BACK 2/3 ⏮ ⏭	

CHECK PARTS	
SV8B STATE	OFF
HEAT1 STATE	OFF
HEAT2 STATE	OFF
COIL VALVE	OFF
BACK 3/3 ⏮ ⏭	

Press "▲" or "▼" to view 13 state. Press "↶" to return to the previous page.

PERCENT OF GLYCOL

Select "PERCENT OF GLYCOL" and press "←" to entry submenu. Display as follows:

PERCENT OF GLYCOL	
GLYCOL TYPE	◀ ETHE ▶
SET THE PRECENT	◀ 70 ▶ %
TSafe	5 °C
PAF	0.7 MPa
△PAF	◀ 0 ▶ MPa
BACK	1/2

PERCENT OF GLYCOL	
HISTORICAL SETTING	
04/06/2020 11:30 A	80 %
04/06/2020 11:30 A	80 %
04/06/2020 11:30 A	80 %
04/06/2020 11:30 A	80 %
OK	2/2

Press "▲" or "▼" to select item to be set and press "◀" or "▶" to set value. Press "←" to confirm. Back to homepage if there is no operation within 60s. Up to 16 historical setting records.

Parameter	Setting range
GLYCOL TYPE	ETHE/PROP
SET THE PRECENT	0 % to 50 %
TSafe	DISPLAY
PAF	DISPLAY
△PAF	0 MPa to 0.2 MPa
HISTORICAL SETTING	04/06/2020 12:00 A
HISTORICAL SETTING	04/06/2020 12:00 A
HISTORICAL SETTING	04/06/2020 12:00 A

Water Coil Control

Press "▲" and "▼" to select "WATER COIL CONTROL" and press "←". Display as follows:

WATER COIL CONTROL	
COIL CONTROL	◀AUTO ▶
OK ▶▶	

Press "▲" and "▼" to select "COIL CONTROL" and press "◀" or "▶" to select control mode:

AUTO (automatically control), MANUALON (with water coil), MANUALOFF (without water coil).

Press "←" to save. Press "↵" to exit this page.

NOTE

Water Coil Control is only applicable to FC models.

3.8 Power failure memory function

The power supply to the system fails unexpectedly during operation. When the system is powered on again, the wired controller continues to operate according to the status before the last power failure, including the power-on/off status, mode, set temperature, failure, protection, wired controller address, timer, hysteresis, etc. However, the memorized content must be the content set at least 7s before the power failure.

3.9 Parallel function of wired controller

Parallel function by MODBUS:

- 1) A maximum of 16 wired controllers can be connected in parallel, and the address can be set in the range of 0 to 15.
- 2) After multiple wired controllers are connected in parallel, data is shared among them, e.g., the power-on/off function, data settings (such as the water temperature and hysteresis) and other parameters will be kept consistent.

NOTE

The mode, temperature, and hysteresis settings can be shared only when the system is powered on.

- 3) Start point of data sharing: After the power-on/off button is pressed, data can be shared during parameter adjustment. The "↩" button must be pressed after parameters are adjusted, and the finally adjusted values will be shared.
- 4) Since the bus is processed in the polling mode, the data of the wired controller which is set last is valid if multiple wired controllers are operated at the same time in the same bus cycle (4s). Avoid the above situation during operation.
- 5) After any one of parallel wired controllers has been reset, the address of this wired defaults no address and needs to be set manually in order to enter into normal communication.

Parallel function by XYE:

- 1) A maximum of 16 wired controllers can be connected in parallel.
- 2) The wired controller need to set to control/monitor controller. The former has control functions, while the latter has only viewing functions.

3.10 Upper computer communication function

1) When communicating with the upper computer, the homepage displays: Communication between the wired controller and the upper compute.

2) If the outdoor main control board is in the remote ON/OFF control mode and the wired controller icon flash. At this point, the upper computer network control setting line control mode switch machine is invalid.

3.11 Monitor wired controller function

When the wired controller is set to monitor wired controller, press the "⊖" to enter the following query interface and related settings of the controller.

CHECK MENU
QUERY
GENERAL SETTING
STATE QUERY
SETTING ADDRESS
OK 

4 ATTACHED TABLE 1:OUTDOOR UNIT ERRORS AND PROTECTION CODES

No.	Error Code	Explanation
1	E0	Main control EPROM error
2	E1	Phase sequence error of main control board check
3	E2	Main control and wired control transmission error
4	2E2	The communication between the mainboard and expansion board is faulty
5	3E2	The communication between the primary and secondary systems is faulty
6	E3	Total water outlet temperature sensor error (valid for the main unit)
7	E4	Unit water outlet temperature sensor error
8	1E5 2E5	Condenser tube temperature sensor T3A error Condenser tube temperature sensor T3B error
9	E6	Water tank temperature sensor T5 error
10	E7	Ambient temperature sensor error
11	E8	Power supply phase sequence protector output error
12	E9	Water flow detection error
13	1Eb 2Eb	Taf1 the pipe of the tank antifreeze protection sensor error Taf2 cooling evaporator low-temperature antifreeze protection sensor error
14	EC	Slave unit module reduction
15	Ed	system discharge temperature sensor error
16	1EE	EVI plate heat exchanger refrigerant temperature T6A sensor error

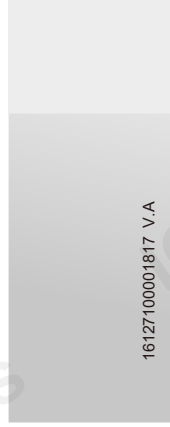
No.	Error Code	Explanation
	2EE	EVI plate heat exchanger refrigerant temperature T6B sensor error
17	EF	Unit water return temperature sensor error
18	EP	Discharge sensor error alarm
19	EU	Tz sensor error
20	P0	System high-pressure protection or discharge temperature protection
	1P0	Compressor module 1 high pressure protection
	2P0	Compressor module 2 high pressure protection
21	P1	System low pressure protection
22	P2	Tz total cold outlet temperature too high
23	P3	T4 ambient temperature is too high
24	1P4	System A current protection
	2P4	System A DC bus current protection
25	1P5	System B current protection
	2P5	System B DC bus current protection
26	P6	Module error
27	P7	High temperature protection of system condenser for 3 times in 60 minutes(power failure recovery)
28	P9	Water inlet and outlet temperature difference protection
29	PA	Abnormal water inlet and outlet temperature difference protection

No.	Error Code	Explanation
30	Pb	Winter antifreeze protection
31	PC	Cooling evaporator pressure too low
32	PE	Cooling evaporator low temperature antifreeze protection
33	PH	Heating T4 too high temperature protection
34	PL	Tfin module too high temperature protection for 3 times in 60 minutes(power failure recovery)
35	1PU	DC fan A module protection
	2PU	DC fan B module protection
36	H5	Voltage too high or low
37	xH9	Drive model not matched (x = 1 or 2)
38	HC	High pressure sensor error
39	1HE	No inset A valve error 1HE
	2HE	No inset B valve error 2HE
	3HE	No inset C valve error 3HE
40	1F0	IPM module transmission error
	2F0	IPM module transmission error
41	F2	Superheat insufficient
42	1F4	L0 or L1 protection occurs for 3 times in 60 minutes(power failure recovery)
	2F4	L0 or L1 protection occurs for 3 times in 60 minutes(power failure recovery)
43	1F6	A system buss voltage error (PTC)
	2F6	B system buss voltage error (PTC)
44	Fb	Pressure sensor error

No.	Error Code	Explanation
45	Fd	Suction temperature sensor error
46	1FF	DC fan A error
	2FF	DC fan B error
47	FP	DIP switch inconsistency of multiple water pumps
48	C7	3 times PL
49	xL0	L0 module protection (x = 1 or 2)
50	xL1	L1 low-voltage protection (x = 1 or 2)
51	xL2	L2 high-voltage protection (x = 1 or 2)
52	xL4	L4 MCE error (x = 1 or 2)
53	xL5	L5 zero-speed protection (x = 1 or 2)
54	xL7	L7 phase loss (x = 1 or 2)
55	xL8	L8 frequency change over 15 Hz (x = 1 or 2)
56	xL9	L9 frequency phase difference 15 Hz (x = 1 or 2)
57	dF	Defrosting prompt
58	1bH	Module 1 relay blocking or 908 chip self-check failed
	2bH	Module 2 relay blocking or 908 chip self-check failed

Attached Table 2: Wired control errors and protection codes

No.	Error code	Explanation	Note
1	E2	Main control and wired control transmission error	Recovered upon error recovery
2	E1	Slave unit module reduction	



16127100001817 V.A



ICG Heat Pumps

技术要求

规格：120*120mm

材料：封面、封底用双胶纸120克，内页用双胶纸80克

更改说明（本页不打印）

版本升级	更改人	更改日期	更改主要内容	涉及更改页面 (印刷页码)

