RG57F3(B)/BGEFU1
Wireless Remote Controller

Service Manual

TABLE OF CONTENTS

INTRODUCTION

This service manual provides the necessary information to use the service functions on the RG57 wireless remote controller. Use the Table of Contents to locate a desired topic.

Fig. 1 – Remote Controller

HANDLING THE REMOTE CONTROLLER

Remote Controller Location

Keep the remote controller within a distance where its signals can reach the indoor unit's receiver (not to exceed a distance of 26 ft. (8m)).
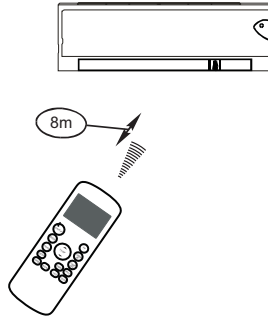
Fig. 2 – Remote Controller Location

⚠ CAUTION

- The air conditioner will not operate if curtains, doors or other materials block the signals from the remote controller to the indoor unit.
- Prevent any liquid from falling on or into the remote controller. Do not expose the remote controller to direct sunlight or heat.
- If the infrared signal receiver on the indoor unit is exposed to direct sunlight, the air conditioner may not function as designed. Use curtains to prevent sunlight from shining directly on the air conditioner.
- If other electrical appliances respond to the remote controller, either move the appliances or consult your local dealer.

Replacing Batteries

The remote controller uses two alkaline dry batteries (AAA).

1. Slide the battery compartment cover off, according to the arrow direction, then replace the old batteries with new batteries.
2. Insert the new batteries. Ensure the batteries are installed correctly, based on their (+) and (−) polarities.
3. Slide the battery compartment cover back into position.

NOTE:

- Do not mix old and new batteries or batteries of different types.
- Do not leave the batteries in the remote controller if the remote is not going to be used for 2 or 3 months.
- Dispose old batteries in the appropriate recycle bins.

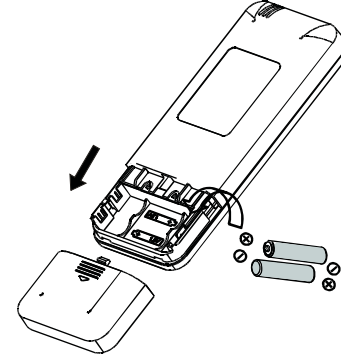**Fig. 3 – Replacing batteries**

Remote Controller Specification

Table 1—Remote Controller Specification

Model	RG57F3(B)/BGFEU1
Rated Voltage	3.0V (Dry batteries AAA)
Signal Receiving Range	26 ft. (8m)
Environment	23°F (−5°C) ~ 140°F (60°C)

STANDARD FUNCTION BUTTONS

Before you use your new system, familiarize yourself with the remote controller. The following is a brief introduction of the remote controller.
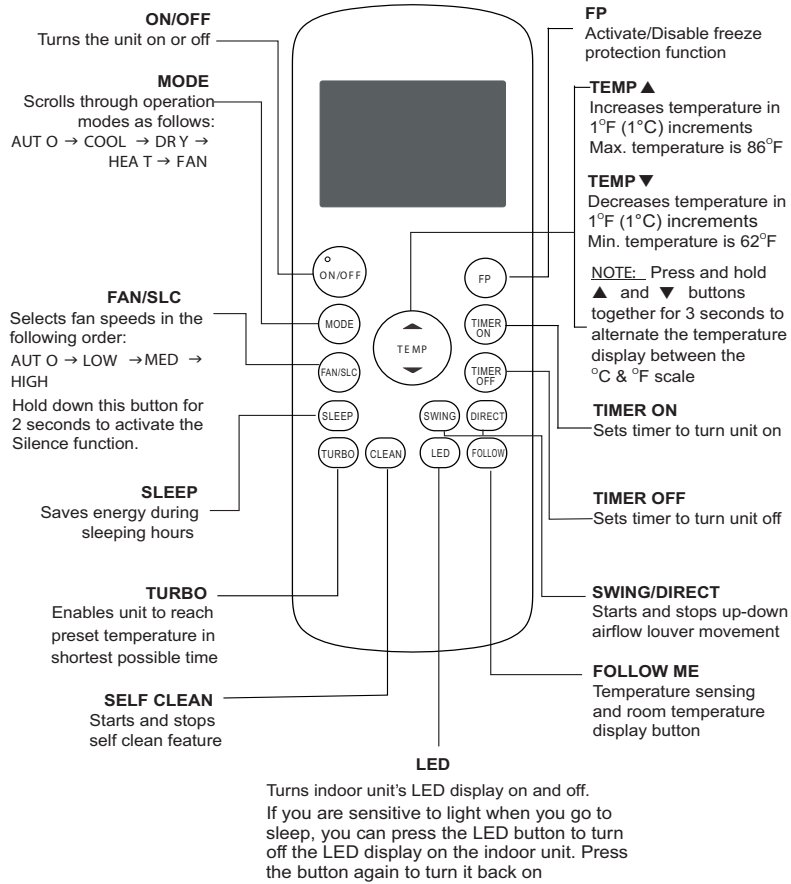
ON/OFF
Turns the unit on or off

MODE
Scrolls through operation modes as follows:
AUTO → COOL → DRY → HEAT → FAN

FAN/SLC
Selects fan speeds in the following order:
AUTO → LOW → MED → HIGH

Hold down this button for 2 seconds to activate the Silence function.

SLEEP
Saves energy during sleeping hours

TURBO
Enables unit to reach preset temperature in shortest possible time

SELF CLEAN
Starts and stops self clean feature

FP
Activate/Disable freeze protection function

TEMP ▲
Increases temperature in 1°F (1°C) increments
Max. temperature is 86°F

TEMP ▼
Decreases temperature in 1°F (1°C) increments
Min. temperature is 62°F

NOTE: Press and hold ▲ and ▼ buttons together for 3 seconds to alternate the temperature display between the °C & °F scale

TIMER ON
Sets timer to turn unit on

TIMER OFF
Sets timer to turn unit off

SWING/DIRECT
Starts and stops up-down airflow louver movement

FOLLOW ME
Temperature sensing and room temperature display button

LED
Turns indoor unit's LED display on and off.
If you are sensitive to light when you go to sleep, you can press the LED button to turn off the LED display on the indoor unit. Press the button again to turn it back on

Fig. 4 – Remote Controller

NOTE: New Remote Controller starting on production of week 41 year 2016 (serial number 4116V10001). For advanced functions, refer to the indoor unit's service manual.

ACCESSING THE SERVICE FUNCTIONS

In order to access the service functions, after installing the batteries, **during the first 30 seconds, press and hold MODE, FAN, and TIME ON together for 5 seconds.** The remote controller resets and the LCD window displays **"F1"**. Use the service functions (**F1**) menu to configure the remote controller's functions to personalize the unit's use.
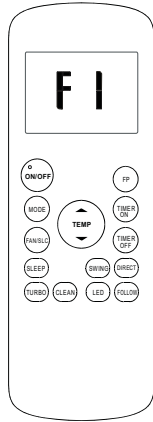

Fig. 5 – Remote Controller

IMPORTANT: **The remote controller is enabled within 10 minutes after the indoor unit is powered on, and the indoor unit must be turned off.**

 POWER OFF: Press to turn off the unit

Fig. 6 – Power Off

 MODE: Use to modify the selected function. Press **MODE** to enter the parameter setting interface, and the selected parameter indicator will flash. Use **TEMP ▲ and ▼** to modify the parameter or select another parameter in conjunction with **FAN** and **TIMER OFF**.

Fig. 7 – Mode
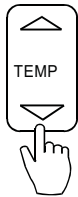
 TEMP ▲ and ▼: Use to select fuctions or adjust parameters. On the parameter unadjustable interface, press **▲ and ▼** to select the specified function in a range of F1~F9 and E1~E9. Next, press **MODE** to enter the parameter modifying interface and the relevant parameter flashes. Press **▲ and ▼** to adjust the parameter.

Fig. 8 – Temp

 TIMER ON: Press to confirm the setting parameter and transmit the signal to the unit.

Fig. 9 – Timer ON
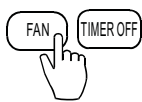
 FAN & TIMER: On the parameter setting interface, press FAN and TIMER OFF to select the parameter to modify.

Fig. 10 – Fan and Timer

 LOCK: Press and hold **SLEEP** and **DIRECT** for 2 seconds, all the indoor unit's current settings are locked in and the remote controller will not accept any operation other than the **LOCK** operation.

Fig. 11 – Lock

REMOTE CONTROLLER SERVICE FUNCTIONS

NOTE: The indoor unit beeps for 2 seconds indicating the function has been successfully set.

Auto−Start Function (F1)

In case of a sudden power failure, the module memorizes the setting conditions before the power failure. The unit resumes the previous operation setting automatically after 3 minutes when the power returns. In order to enable/disable this function:
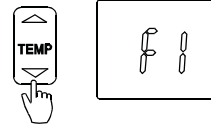
1. Press ▲ and ▼ to select **"F1"**.

Fig. 12 – Select F1

2. Press **MODE**. Next, press ▲ and ▼ to select **"ON"** or **"OFF"**.
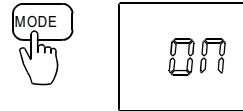

Fig. 13 – Select On or Off

3. Press **TIMER ON** and the Auto−start function setting is complete.

Fig. 14 – TIMER ON

Heating Temperature Compensation (F2)

Defines the adjustment for the thermal stratification in the room and how the indoor unit is sensing the space. To adjust the temperature compensation, in Celsius only:

NOTE: The temperature compensation in Celsius regardless of the units used.
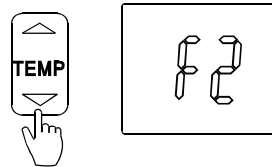
1. Press ▲ and ▼ to select **"F2"**.

Fig. 15 – Select F2

2. Press **MODE**. Next, press ▲ and ▼ to select the parameter (range: −6°C ~ 6°C).
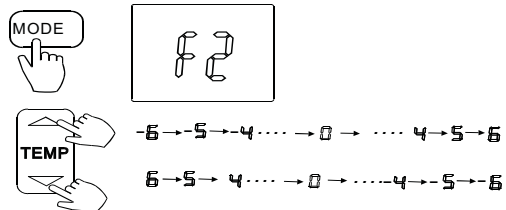

Fig. 16 – Select the parameter

3. Press **TIMER ON** to confirm**.**

Fig. 17 – Timer On

NOTE: The recommended setting is 0°C. The adjustment should not be more than 2°C.

Anti−Cold Air Function (F3)

A) Intelligent Anti−Cold Air Function

NOTE: The intelligent anti−cold air parameter changes with the room temperature. Once the room temperature rises, the anti−cold air temperature rises as well, which is designed to provide the user with increased comfort. After the room temperature decreases, the anti−cold temperature decreases as well, which is designed to improve fan speed and result in a faster heating operation.

NOTE: No setting adjustment recommended.

1. Press ▲ and ▼ to select **"F3"**.
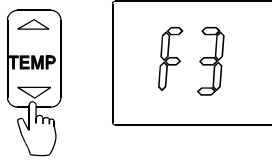
Fig. 18 – Select F3

2. Press **MODE**. Press **FAN** to select the parameter. Next, press ▲ and ▼ to select **1**.
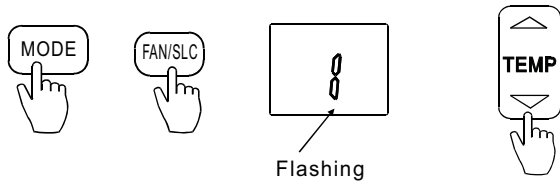
Flashing

Fig. 19 – Select 1

3. Press **TIMER OFF** to adjust the parameter. The parameter continues to flash. Next, press ▲ and ▼ to adjust the parameter (range: 63°F (17°C) ~ 70°F(21°C)).
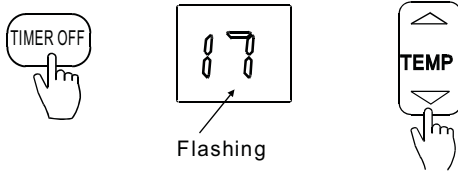
Flashing

Fig. 20 – TIMER OFF

4. Press **TIMER ON** to confirm.

Fig. 21 – TIMER ON

B) General Anti−Cold Air Function Setting (Cold Blow Prevention Function)

The general anti−cold air parameter is set regardless of the room temperature.

NOTE: No setting adjustment recommended.
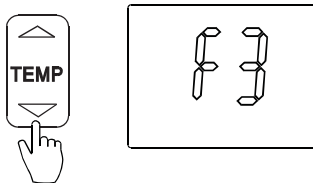
1. Press ▲ and ▼ to select **"F3"**.

Fig. 22 – Select F3

2. Press **MODE**. Press **FAN** to select the parameter. Next, press ▲ and ▼ to select **"2"**.
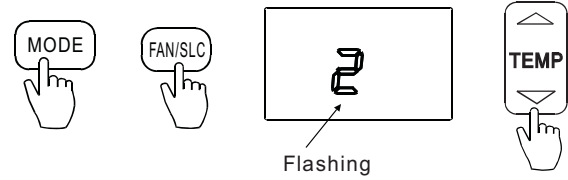
Flashing

Fig. 23 – Select 2

3. Press **TIMER OFF** to adjust the parameter, which continues to flash. Next, press ▲ and ▼ to adjust the parameter (range: 46°F(8°C) ~ 82°F(28°C)).
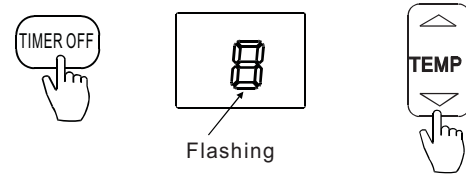
Flashing

Fig. 24 – Adjust the parameter

4. Press **TIMER ON** to confirm.

Fig. 25 – TIMER ON

Indoor Fan Motor Speed Control after Set Temperature is Reached (F4)
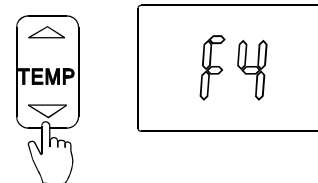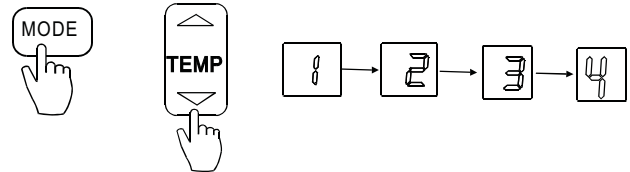
1. Press ▲ and ▼ to select **"F4"**.

Fig. 26 – Select F4

2. Press **MODE**. Next, press ▲ and ▼ to select **"1", "2", "3",** or **"4"**.

1	Indicates fan motor stopping
2	Indicates unit operating at lowest fan speed
3	Indicates unit operating at setting fan speed
4	Indicates terminal function

Fig. 27 – Select a number

3. Press **TIMER ON** to confirm.

Fig. 28 – TIMER ON

5

Louver Angle Memory Function (F5)
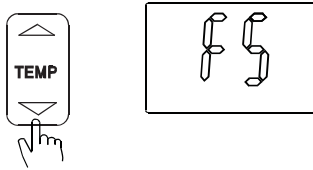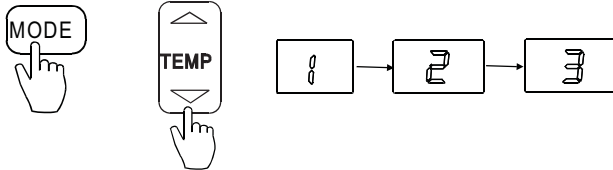
1. Press ▲ and ▼ to select **"F5"**.

Fig. 29 – Select F5

2. Press **MODE**. Next, press ▲ and ▼ to select **"1", "2",** or **"3"**.

1	Indicates memory function cancellation
2	Indicates the louver angle memory function is enabled either by turning off or a power failure
3	Indicates the louver angle memory function is enabled by turning off and disabled due to a power failure

Fig. 30 – Select a number

3. Press **TIMER ON** to confirm.

Fig. 31 – TIMER ON

Heating Only or Cooling and Heating Setting (F6)
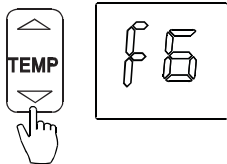
1. Press ▲ and ▼ to select **"F6"**.

Fig. 32 – Select F6

2. Press **MODE**. Next, press ▲ and ▼ to select **"HH"** or **"CH"** (**HH**: Heating only – **CH**: Cooling and Heating).
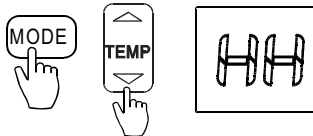
Fig. 33 – Select HH or CH

3. Press **TIMER ON** to confirm.

Fig. 34 – TIMER ON

Cooling Temperature Compensation (F7)

Defines the adjustment for the thermal stratification in the room and how the indoor unit is sensing the space. To adjust the temperature compensation, in Celsius only:

NOTE: Temperature compensation in Celsius regardless of the units used.

1. Press ▲ and ▼ to select **"F7"**.
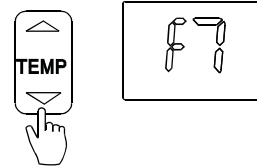
Fig. 35 – Select F7

2. Press **MODE**. Next, press ▲ and ▼ to select the parameter (range: −2°C ~ +2°C).

3. Press **TIMER ON** to confirm.

Fig. 36 – TIMER ON

Refrigerant Leakage Detection (F8)

1. Press ▲ and ▼ to select **"F8"**.
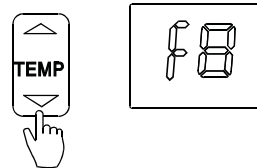
Fig. 37 – Select F8

2. Press **MODE**. Next, press ▲ and ▼ to select **"ON"** or **"OFF"**.

3. Press **TIMER ON** to confirm.

Fig. 38 – TIMER ON

Cleaning Filter Reminder (F9)

1. Press ▲ and ▼ to select **"F9"**.

Fig. 39 – Select F9

2. Press **MODE**. Next, press ▲ and ▼ to select **"ON"** or **"OFF"**.

3. Press **TIMER ON** to confirm.

Fig. 40 – TIMER ON

Filter Replacement Reminder (E1)

1. Press ▲ and ▼ to select **"E1"**.

Fig. 41 – Select E1

2. Press **MODE**. Next, press ▲ and ▼ to select **"ON"** or **"OFF"**.
3. Press **TIMER ON** to confirm.

Fig. 42 – TIMER ON

Lowest Temperature Setting (E2)

1. Press ▲ and ▼ to select **"E2"**.
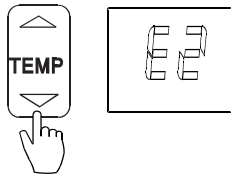
Fig. 43 – Select E2

2. Press **MODE**. Next, press ▲ and ▼ to set the temperature (range: 63°F(17°C) to 75°F(24°C)).
3. Press **TIMER ON** to confirm.

Fig. 44 – TIMER ON

Highest Temperature Setting (E3)

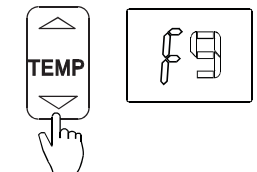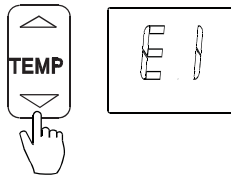1. Press ▲ and ▼ to select **"E3"**.
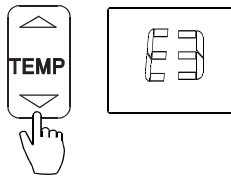
Fig. 45 – Select F3

2. Press **MODE**. Next, press ▲ and ▼ to set the temperature (range: 77°F(25°C) to 86°F(30°C)).
3. Press **TIMER ON** to confirm.

Fig. 46 – TIMER ON

Special Function Setting (E4)

Not available, used on future applications.

Priority Setting of Heating or Cooling (only on Multi−Zone Systems (E5))

1. Press ▲ and ▼ to select **"E5"**.
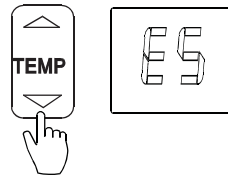
H : Heating mode first
C: cooling mode first

Fig. 47 – Select E5

2. Press **MODE**. Next, press ▲ and ▼ to select **"H"** or **"C"**.
3. Press **TIMER ON** to confirm.

Fig. 48 – TIMER ON

Network Address Setting (E6)

Not available, used on future applications.

Capacity Code Selection (E7)

Not available, used on future applications.

Twins Setting (E8)

Not available, used on future applications.

Static Pressure Setting (E9)

Available only on 40MBDQ Ducted Units.

1. Press ▲ and ▼ to select **"E9"**.

Fig. 49 – Select E9

2. Press **MODE**. Next, press ▲ and ▼ to select the values between 0 and 4.
3. Press **TIMER ON** to confirm.

Fig. 50 – TIMER ON
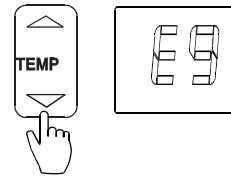
NOTE: Depending on the model, some of the remote controller's functions may not function.

DEFAULT VALUES OF INDOOR UNITS

Table 2—Default Values of Indoor Units

Description	Remote Code	High Wall	Cassette	Ducted	Floor Console
Auto−Start Function	F1	ON	ON	ON	ON
Heating Temperature Compensation	F2	2C	6C	6C	0C
Anti−Cold Air Function	F3	NORMAL	NORMAL	NORMAL	NORMAL
Indoor Fan Motor Speed Control after Set Temperature is Reached	F4	LOWEST SPEED	SET SPEED	SET SPEED	SET SPEED
Louver Angle Memory Function	F5	ON	N/A	N/A	N/A
Heating Only or Cooling and Heating Setting	F6	CH	CH	CH	CH
Cooling Temperature Compensation	F7	−2C	−2C	−2C	−2C
Refrigerant Leakage Detection	F8	ON	ON	ON	ON
Cleaning Filter Reminder	F9	OFF	OFF	OFF	OFF
Filter Replacement Reminder	E1	OFF	OFF	OFF	OFF
Lowest Temperature Setting	E2	17C	17C	17C	17C
Highest Temperature Setting	E3	30C	30C	30C	30C
Special Anti−Cold Air Function Setting	E4	N/A	N/A	N/A	N/A
Priority Setting of Heating or Cooling (Multi−Zone Systems only)	E5	H	H	H	H
Network Address Setting	E6	N/A	N/A	N/A	N/A
Capacity Code Selection	E7	N/A	N/A	N/A	N/A
Twins Setting	E8	N/A	N/A	N/A	N/A
Static Pressure Setting	E9	N/A	N/A	0	N/A

POINT CHECK FUNCTION

Press **LED** on the remote controller three times and then press **SWING** three times within 10 seconds, the buzzer rings for 2 seconds and the air conditioner enters the information enquiry status.

Next, press **LED** to search the information. Press **SWING** to search the remaining information. When the air conditioner enters the enquiry information status, it displays the code name in 2 seconds (see Table 3).

Table 3—Point Check Function

Enquiry Information	Displaying Code	Meaning
T1	T1	T1 temp.
T2	T2	T2 temp.
T3	T3	T3 temp.
T4	T4	T4 temp.
T2B	Tb	T2B temp.
TP	TP	TP temp.
TH	TH	TH temp.
Targeted Frequency	FT	Targeted Frequency
Actual Frequency	Fr	Actual Frequency
Indoor fan speed	IF	Indoor fan speed
Outdoor fan speed	OF	Outdoor fan speed
EXV opening angle	LA	EXV opening angle
Compressor continuous running time	CT	Compressor continuous running time
Causes of compressor stop	ST	Causes of compressor stop
Reserve	A0	
Reserve	A1	
Reserve	b0	
Reserve	b1	
Reserve	b2	
Reserve	b3	
Reserve	b4	
Reserve	b5	
Reserve	b6	
Reserve	dL	
Reserve	Ac	
Reserve	Uo	
Reserve	Td	

When the air conditioner enters the enquiry information status, it displays the code value in the next 25 seconds after the display name appears (see Table 4).

Table 4—Code Value

Enquiry Information	Display Value	Meaning	Remark
T1,T2,T3, T4,T2B,TP, TH, Targeted Frequency, Actual Frequency	−1F,−1E, −1d,−1c, −1b,−1A	−25,−24,−23,−22,−21,−20	1. The displaying temperature is the actual value.
	−19−99	−19−99	2. The temperature is Celsius no matter what kind of remote controller is used.
	A0,A1...A9	100,101......109	
	b0,b1...b9	110,111....119	3. T1,T2,T3,T4,T2B display range: 77°F(−25°C)~158°F (70°C), TP display range: −20~ 130.
	c0,c1....c9	120,121....129	4. Frequency display range: 0~159HZ.
	d0,d1...d9	130,131....139	
	E0,E1...E9	140,141....149	5. If the actual value exceeds the range, it displays the maximum value or minimum value.
	F0,F1...F9	150,151....159	
Indoor fan speed/Outdoor fan speed	0	OFF	
	1,2,3,4	Low speed, Medium speed, High speed, Turbo	For some big capacity motors
	14−FF	Actual fan speed = Display value turns to decimal value and then multiply by 10. The unit is RPM.	For some small capacity motors, display value is from 14−FF (hexadecimal), the corresponding fan speed range is from 200−2550RPM.
EXV opening angle	0−FF	Actual EXV opening value = Display value turns to decimal value and then multiply by 2.	
Compressor continuous running time	0−FF	0−255 minutes	If the actual value exceeds the range, it displays the maximum value or minimum value.
Compressor stop causes	0−99	For a detailed meaning, please consult with an engineer	Decimal display
Reserve	0−FF		
Reserve	0−FF		
Reserve	0−FF		
Reserve	0−FF		
Reserve	0−FF		
Reserve	0−FF		
Reserve	0−FF		
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