



Original Instructions

Wired Controller XK117

Thank you for choosing this product. Please read this Owner's Manual carefully before operation and retain it for future reference.

EXPERT TTL SOLUTIONS, S. DE R.L. DE C.V.

To Users

Thank you for selecting Freyven product. Please read this instruction manual carefully before installing and using the product, so as to master and correctly use the product. In order to guide you to correctly install and use our product and achieve expected operating effect, we hereby instruct as below:

- (1) This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsibility for their safety. Children should be supervised to ensure that they do not play with the appliance.
- (2) This instruction manual is a universal manual, some functions are only applicable to particular product. All the illustrations and information in the instruction manual are only for reference, and control interface should be subject to actual operation.
- (3) In order to make the product better, we will continuously conduct improvement and innovation. If there is adjustment in the product, please subject to actual product.
- (4) If the product needs to be installed, moved or maintained, please contact our designated dealer or local service center for professional support. Users should not disassemble or maintain the unit by themselves, otherwise it may cause relative damage, and our company will bear no responsibilities.

Contents

1	Safety Notices (Please be sure to abide)	1
2	Installation	2
	2.1 Dimension and Components of Wired Controller	2
	2.2 Installing Position and Requirements of Wired Controller	3
	2.3 Installation of Wired Controller	4
	2.4 Disassembly of Wired Controller	6
3	Introduction to Display	6
	3.1 Outline of Wired Controller	
	3.2 Liquid Crystal Display of Wired Controller	7
	3.3 Instruction for Liquid Crystal Display of Wired Controller	7
4	Instruction for Operation	9
	4.1 Silkscreen of Buttons	9
	4.2 ON/OFF Setting	9
	4.3 Mode Setting	11
	4.4 Setting of Temperature	12
	4.5 Setting of Fan Speed	13
	4.6 Setting Swing Function	14
	4.7 Setting of Timer Function	15
	4.8 Setting of Functional Buttons	16
	4.9 Setting of Other Functions	21
5	Display of Errors	25

1 Safety Notices (Please be sure to abide)



WARNING: If not abide them strictly, it may cause severe damage to the unit or the people.



NOTE: If not abide them strictly, it may cause slight or medium damage to the unit or the people.

This sign indicates that the thems operation must be prohibited. Improper operation may cause severe damage or death to people.

This sign indicates that the items must be observed. Improper operation may cause damage to people or property.

WARNING!

This product can't be installed at corrosive, inflammable or explosive environment or the place with special requirements, such as kitchen. Otherwise, it will affect the normal operation or shorten the service life of the unit, or even cause fire hazard or serious injury. As for above special places, please adopt special air conditioner with anti-corrosive or anti-explosion function.

2 Installation

2.1 Dimension and Components of Wired Controller

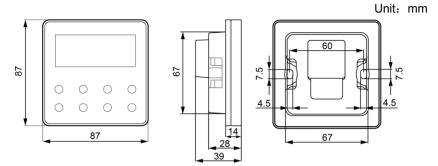


Figure 2-1 Dimension of Wired Controller

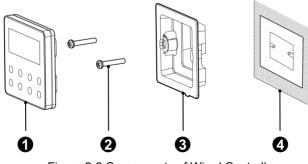


Figure 2-2 Components of Wired Controller

No.	1	2	3	4
Name	wired controller	screw M4×25	installing box of wired controller	junction box for installing inside the wall
Quantity	1	2	1	1(prepared by user)

Table 2.1.1 Introduction of Components

2.2 Installing Position and Requirements of Wired Controller

- Please do not install the wired controller in the position where is wet or is likely to be splashed with water;
- (2) Please do not install the wired controller near high-temperature objects or under direct sunlight;
- (3) Please do not install the wired controller in the position where facing the window, so as to avoid interference of neighbor's remote controller with the same model and cause malfunction;
- (4) Before installation, please cut off the power supply of strong current wire inside the wall, it is not allowed to install under electrified status;
- (5) In order to avoid malfunction due to electromagnetic interference and other causes, please pay attention to the following notices:
 - 1) Make sure that the interface of communication wire is correct, otherwise the communication cannot work;
 - Signal wire of wired controller should be separated from the power cord and indoor and outdoor connecting wire, the shortest distance should be over 20cm, otherwise the communication cannot work normally;

- 3) If the unit is installed in the position where is likely to be impacted by electromagnetic interface, signal wire of wired controller should be made of STP (shielded twisted pair).
- (6) The wired controller should only be installed indoors, and its working temperature range is 0°C ~ 50°C.

2.3 Installation of Wired Controller

First to select the right signal wire of wired controller: 2–core signal wire (wire diameter≥0.75mm, length<30m, recommendable length is 8m).

For installation steps of wired controller please refer to the following sketch map, brief instructions are as below:

- Before installation, please cut off the power supply of indoor unit, live working during installation is not allowed;
- (2) Pull out the 2-core STP inside the wall from the installing hole, thread the wire through the connecting hole in the back of soleplate of wired controller;
- (3) Stick the soleplate of wired controller on the wall, use screw M4×25 to fix the soleplate onto the installing hole of wall;
- (4) Connect the 2-core STP with the two wiring terminals in the back of wired controller respectively, and screw up the screw; no polarity for these two wiring terminals, but note that it should not be connected to strong current;

(5) Buckle the panel of wired controller with the soleplate, and then the installation is finished.

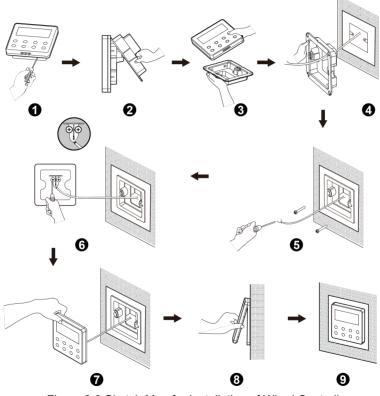


Figure 2-3 Sketch Map for Installation of Wired Controller

2.4 Disassembly of Wired Controller

Disassembly for wired controller is as below:

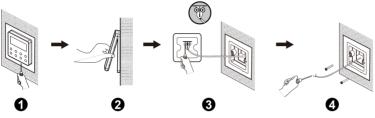


Figure 2-4 Sketch Map for Disassembly of Wired Controller

- 3 Introduction to Display
- 3.1 Outline of Wired Controller



Figure 3-1 Outline of Wired Controller



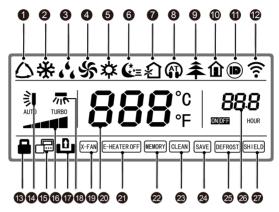


Figure 3-2 Liquid Crystal Display of Wired Controller

3.3 Instruction for Liquid Crystal Display of Wired Controller

Table 3.3.1 Instruction for Liquid Crystal Display of Wired Controller

No.	Display	Instruction of Display
1	Auto	Automatic mode (under auto mode, the indoor unit will select its operating mode according to the variation of room temperature)
2	Cool	Cooling mode
3	Dry	Dry mode
4	Fan	Fan mode
5	Heat	Heating mode

No.	Display	Instruction of Display
6	Sleep	Display when sleep function is set (only display sleep mode $\ II$)
7	Exchange	Display when air exchange function is set
8	Silent	Display when silent function is set (only display silent, no AT)
9	Health	Display when health function is set
10	Absent	Display when absent function is set
11	I-DEMAND	Display when I-DEMAND function is set
12	WiFi	Display when WiFi function is set
13	Child-lock	Child-lock status, display when child-lock function is set
14	Up & down swing	Display when up and down swing function is set
15	Slave wired controller	Icon of slave wired controller, it will display when slave wired controller is set
16	Fan speed	The fan speed set currently (including auto, low, medium and low, medium, medium and high, high, and turbo)
17	No card	No card in gate control system
18	Left & right swing	Display when left and right swing function is set
19	X-fan	Display when dry function is set
20	Temperature	It will display the setting temperature
21	E-heater	On/off switch of auxiliary heating
22	Memory	Memory status (After power failure and re-energizing the unit, it will resume to ON/OFF status of unit before the power failure)
23	Clean	Filter washing reminder
24	Save	Display when energy-saving function is set
25	Defrost	Defrosting status

No.	Display	Instruction of Display
26	Timer	Display when timer status is set
27	Shield	Shielding status

- 4 Instruction for Operation
- 4.1 Silkscreen of Buttons

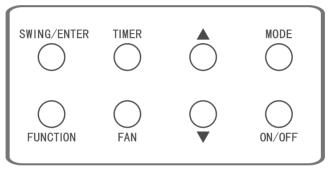


Figure 4-1 Silkscreen of Buttons

4.2 ON/OFF Setting

Press "ON/OFF" button to turn on the air conditioner, then the wired controller will display the setting temperature, fan speed, mode, etc. Press "ON/OFF" button again to stop the operation of air conditioner, then the wired controller only displays the setting temperature. ON and OFF status of unit will display as below.

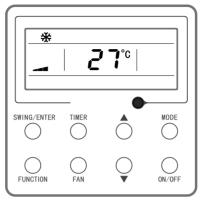


Figure 4-2 ON Status

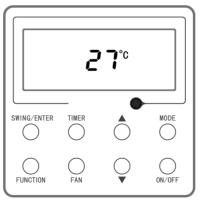


Figure 4-3 OFF Status

4.3 Mode Setting

Under on status, each time press the "MODE" button, the mode will switch circularly according to the following order, as shown in the figure.

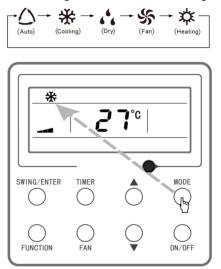


Figure 4-4 Mode Setting



Under auto mode, if the unit conducts auto cooling, " \bigtriangleup " and " \bigstar " are turned on; if the unit conducts auto heating, " \bigtriangleup " and " \ddag " are turned on.

4.4 Setting of Temperature

Under on status, press " \blacktriangle " or " \blacktriangledown " button, the setting temperature will increase or decrease at the unit of 1°C (°F); when press and hold the button, it will increase or decrease at the unit of 1°C (°F) in every 0.3 second. Operation is as below.

Temperature setting range under cooling, dry, fan and heating mode is 16° C $\sim 30^{\circ}$ C (61° F $\sim 86^{\circ}$ F). There are two statuses under auto mode. Status 1: the temperature can be adjusted in the range of 16° C $\sim 30^{\circ}$ C (61° F $\sim 86^{\circ}$ F); status 2: the temperature can't be adjusted. The status is decided by the unit model.

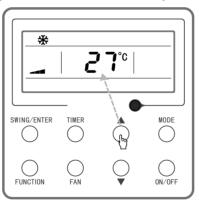


Figure 4-5 Setting of Temperature

4.5 Setting of Fan Speed

Under on status, press "FAN" button, the fan speed will switch circularly according to the following order, as shown below.

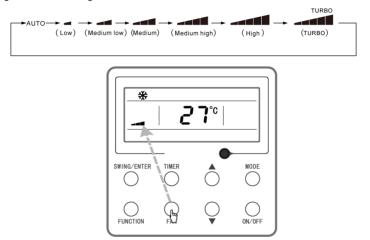


Figure 4-6 Setting of Fan Speed



- Under dry mode, the fan speed will automatically set as low speed, and the fan speed cannot be adjusted.
- (2) Under fan and auto mode, turbo speed cannot be set.

4.6 Setting Swing Function

There are two ways for swing mode: simple swing and fixed swing. Under off status, press "SWING/ENTER" button and " \blacktriangle " button simultaneously for 5 seconds, the up & down swing icon will flash, then switch for simple swing and fixed swing is done.

When it is set to be simple swing, under on status, press "SWING/ENTER" button, the up & down swing is activated, press the button again the up & down swing is turned off.

When it is set to be simple swing, under on status, press "FUNCTION" button to select left & right swing, press "SWING/ENTER" button to turn on or turn off left & right swing.

When it is set to be fixed swing, press "SWING/ENTER" button, the unit will circularly switch the up & down swing mode according to the order shown below:

Figure 4-7 Order for Up & Down Fixed Swing

When it is set to be fixed swing, press "FUNCTION" button to select left & right swing, then press " \blacktriangle " or " \blacktriangledown " button, the unit will circularly switch the left & right swing mode according to the order shown below. Press "SWING/ENTER" button, the setting is done.

$$\rightarrow \blacksquare(\mathsf{Off}) \rightarrow \varPi \rightarrow \checkmark \rightarrow \urcorner \rightarrow \varPi \rightarrow$$

Figure 4-8 Order for Left & Right Fixed Swing

Whether the fixed swing mode is successfully set depends on whether the unit model can support such function.

4.7 Setting of Timer Function

Under ON/OFF status, press "TIMER" button can set ON/OFF time of unit.

Timer-on setting: under off status and timer function has not been set, press "TIMER" button, the liquid crystal screen will display "xx.x hour", and "ON" and "hour" icons flash simultaneously, then press "▲" or "▼" button to adjust the on time. Press "TIMER" button, the setting is done. If before pressing "TIMER" button to finish the setting, press "MODE" button can switch to timer setting status, liquid crystal screen will display "xx.x hour", and "OFF" and "hour" icons flash simultaneously, then press "▲" or "▼" button to adjust the off time, and press "TIMER" button again to finish the setting, the timer area will display "xx.x hour ON/OFF", "xx.x hour" is the time for turning on the unit in setting time, and timer-off time is not displayed.

Timer-off setting: under on status and timer function has not been set, press "TIMER" button, the liquid crystal screen will display "xx.x hour", and "OFF" and "hour" icons flash simultaneously, then press " \blacktriangle " or " \blacktriangledown " button to adjust the off time. Press

"TIMER" button, the setting is done. If before pressing "TIMER" button to finish the setting, press "MODE" button can switch to timer setting status, liquid crystal screen will display "xx.x hour", and "ON" and "hour" icons flash simultaneously, then press "▲" or "▼" button to adjust the on time, and press "TIMER" button again to finish the setting, the timer area will display "xx.x hour ON/OFF", "xx.x hour" is the time for turning off the unit in setting time, and timer-on time is not displayed.

Cancel timer: after setting the timer function, press "TIMER" button, the liquid crystal screen will not display "xx.x hour" anymore, the timer function is canceled.

Timer area: $0.5\sim24$ hours. Each time press " \blacktriangle " or " \blacktriangledown " button, the setting time will increase/decrease 0.5 hour, press and hold the buttons the unit will automatically increase/decrease 0.5 hour in every 0.3 second.



Under on status, the timer-on time is counted from the time when the unit is turned off; under off status, the timer-off time is counted from the time when the unit is turned on.

4.8 Setting of Functional Buttons

Under on status, press "FUNCTION" button can select to set sleep (can be set under cooling, dry, heating modes), air exchange, silent (can be set under auto, cooling, heating modes), health, absent (can be set under heating mode), I-Demand (can be set under cooling mode), WiFi, left & right swing, turbo fan (can be set under cooling and heating modes), X-fan (can be set under cooling and dry mode), auxiliary heating (can be set under heating mode), and washing remind function. The selected functional icon will flash, then press "SWING/ENTER" button can activate or cancel such function(It needs to select the detailed item for WiFi setting, Please refer to the detailed instruction for details as below.). Before setting, if the function has not been activated, press "SWING/ENTER" can turn on such function; if the function is activated before setting, press "SWING/ENTER" button can turn off such function. When the function is activated, the corresponding icon will turn bright. After finishing setting one function, it will jump to the next functional setting.

Specific instructions for setting of the following functions:

(1) When setting air exchange function, there are a total 10 types of air exchange modes from 1 to 10, the temperature area will display the current mode, first press "▲" or "▼" button to select the mode, then press "SWING/ENTER" button to confirm. For details of air exchange mode are as below:

1——the unit runs for 60 minutes, fresh air valve opens for 6 minutes;

2-the unit runs for 60 minutes, fresh air valve opens for 12 minutes;

- 3——the unit runs for 60 minutes, fresh air valve opens for 18 minutes;
- 4——the unit runs for 60 minutes, fresh air valve opens for 24 minutes;
- 5——the unit runs for 60 minutes, fresh air valve opens for 30 minutes;

6——the unit runs for 60 minutes, fresh air valve opens for 36 minutes;

7——the unit runs for 60 minutes, fresh air valve opens for 42 minutes;

8-the unit runs for 60 minutes, fresh air valve opens for 48 minutes;

9-the unit runs for 60 minutes, fresh air valve opens for 54 minutes;

10—Both the unit and fresh air valve are turned on.

(2) When setting auxiliary heating function, press "▲" or "▼" button can select the three auxiliary heating modes of "E-HEATER", "E-HEATER, "E-HEATER", "E-HEATER, "E-HEATER,

Table 4.8.1 Auxiliary Heating Setting Instructions

No.	Display	Instruction of Display
1	E-HEATER	Auxiliary heating mode 1
2	E-HEATER	Auxiliary heating mode 2
3	E-HEATER OFF	Prohibited auxiliary heating

After selecting the mode, press "SWING/ENTER" button to confirm the setting. Different icons are displayed according to different states of auxiliary heat, as detailed in the following table:

Table 4.8.2 Description of Auxiliary Heating State

No.	Display	Instruction of Display
1	No display	
2	E-HEATER	Auxiliary heating is not running
3		
4	E-HEATER	Auxiliary heating is running
5	E-HEATER OFF	Prohibited auxiliary heating

This function is only available for the unit with auxiliary heating. Auxiliary heating will run according to the environment requirements and the safe reliability. The difference for auxiliary heating mode 1 and auxiliary heating mode 2 is that the auxiliary is not allowed to run when outdoor ambient temperature of auxiliary heating mode 2 is higher than 0°C. Other conditions for running the auxiliary heating mode are the same.

(3) When setting washing remind function, the timer area will display 2-bit number that means the pollution level, then press "▲" and "▼" buttons to select, and press "SWING/ENTER" button to confirm the setting. Conversion relation between the displayed pollution level and accumulative operating time are as the following list. After setting, when it reaches the washing time, "CLEAN" icon will flash and remind, if you press "▲" and "▼" buttons to adjust the level, and press "SWING/ENTER" button, then the accumulative time for filter washing remind will not be reset; if the time after adjustment is larger than the current accumulative time, then "CLEAN" icon will stop flashing; if the time after adjustment is less than the current accumulative time, then "CLEAN" icon will continue to flash. The only method for cancelling the remind function is to press "FUNCTION" button to switch to "CLEAN"

icon, and set the timer area to be "00", and then press "SWING/ENTER" button, then the accumulative time of filter washing remind is reset.

Pollution Level	Accumulative operating time (hour)	Pollution Level	Accumulative operating time (hour)	Pollution Level	Accumulative operating time (hour)
10	5500	20	1400	30	100
11	6000	21	1800	31	200
12	6500	22	2200	32	300
13	7000	23	2600	33	400
14	7500	24	3000	34	500
15	8000	25	3400	35	600
16	8500	26	3800	36	700
17	9000	27	4200	37	800
18	9500	28	4600	38	900
19	10000	29	5000	39	1000

Table 4.8.3 Pollution Level Parameter List

(4) When absent function is set, the setting temperature will display 8°C (46°F), the setting fan notch displays auto and cannot be adjusted.

- (5) When I-Demand function is set, the setting fan notch displays auto and cannot be adjusted.
- (6) When setting WiFi function, the temperature area will display the WiFi status. Press "▲" or "▼" button to turn on WiFi("on" is displayed), turn off WiFi ("off" is displayed) or reset WiFi ("rES" is displayed), and then press "SWING/ENTER" button to confirm it. Once WiFi is turned on, the icon of

WiFi is displayed; once WiFi is turned off, the icon of WiFi won't be displayed. If reset WiFi, WiFi is defaulted to be turned on.

The unit should support WiFi Function and the G-Cloud accessories should be purchase separately for installation.

4.9 Setting of Other Functions

4.9.1 Setting of Energy-saving Function

Under off status, press "TIMER" and " \blacktriangle " buttons simultaneously for 5 seconds to enter into energy-saving setting, then "SAVE" character or icon and cooling mode icon are displayed, the "SAVE" character or icon flashes, the temperature area displays the upper limit and lower limit temperature, press " \checkmark " or " \blacktriangledown " button can set the limit temperature, the setting range is 16°C ~ 30°C (61°F ~ 86°F).

Press "MODE" button can switch cooling or heating mode. For cooling only unit, it can only set the lower limit temperature of cooling under energy-saving mode. During the setting, press "SWING/ENTER" button at any time can save the setting temperature and energy-saving status of different modes, and then start up the energy-saving function.

After the energy-saving function is activated, under off status, press "TIMER" and " \blacktriangle " buttons simultaneously for 5 seconds again, the function is canceled.

4.9.2 Setting of Low-temperature Dry Function

Under dry mode, when the setting temperature is 16°C (61°F), press " $\mathbf{\nabla}$ " button for twice, the setting temperature becomes 12°C (54°F), then the unit enters into low-temperature dry function.

When low-temperature dry function is turned on, directly press " \blacktriangle " button or switch the mode can quit the function.

4.9.3 Setting of Child-lock Function

Without error, under ON or OFF status of unit, press " \blacktriangle " and " \blacktriangledown " buttons simultaneously for 5 seconds can enter into child-lock function, the liquid crystal screen will display " \blacksquare "; press " \blacktriangle " and " \blacktriangledown " buttons simultaneously again for 5 seconds can quit the child-lock function.

Under child-lock status, no response for pressing any buttons. The unit will memorize the child-lock status after power failure and re-energizing the unit.

4.9.4 Setting of Memory Function

Under off status, press "MODE" and " \blacktriangle " button simultaneously for 5 seconds can turn on or turn off memory function. When memory function is set, "MEMORY" displays.

If memory function has not been set, when the unit is re-energized after power failure, the unit is off status. If the memory function is set in wired controller, when the wired controller is re-energized after power failure, it will resume to the operating status before power failure.

4.9.5 Switch between Fahrenheit and Degree Celsius

Under off status, press "MODE" and "▼" buttons simultaneously for 5 seconds, display board will switch between degree Celsius and Fahrenheit.

4.9.6 Inquiry of Ambient Temperature

Under off or on status, press and hold "SWING/ENTER" button for 5 seconds to enter into ambient temperature inquiry interface, then timer area displays the ambient temperature type 01 or 02, and ambient temperature area displays the corresponding ambient temperature of corresponding type. In which, 01 refers to outdoor ambient temperature, 02 refers to indoor ambient temperature. Press "MODE" button can switch between type 01 and 02. Press buttons other than "MODE" or when the unit receives remote control signal, it will quit the inquiry status. If there is no any operation for 20 seconds, it will quit automatically.



①When the outdoor ambient temperature sensor detects the same temperature for 12 hours, it will shield the display of outdoor ambient temperature sensor.

2 When outdoor unit enters into low power consumption mode, the wired controller can't check valid outdoor ambient temperature.

4.9.7 Auto Clean Function

Under unit off status, hold "TIMER" and "MODE" buttons simultaneously for 5s to

turn on or turn off the internal clean function. When the internal clean function is turned on, temperature display area in liquid crystal panel will displays "CL".

During the self-cleaning process of evaporator, the unit will perform fast cooling or fast heating. There may be some noise, which is the sound of flowing liquid or thermal expansion or cold shrinkage. The air conditioner may blow cool or warm air, which is a normal phenomenon. During cleaning, please make sure the room is well ventilated to avoid affecting the degree of comfort.



- (1) The self-cleaning function can only work under normal ambient temperature. If the room is dusty, it is recommended to clean once a month; if not, it is recommended to clean once every three months. After the self-cleaning function is turned on, you may leave the room. When self-cleaning is finished, the air conditioner will enter standby mode.
- (2) This function is applicable for some models.

5 Display of Errors

When error occurs in the system, temperature display area in liquid crystal panel will display error code, when multiple errors occur simultaneously, it will circularly display error code. If the wired controller has been connected to multiple systems, when error occurs in a certain system, the first bit of number in temperature area will display the system number (it will not display system number when there is only one system).

When error occurs, please turn off the unit and seek for professional personnel to maintain.

The following figure refers to the high-pressure protection under on status.

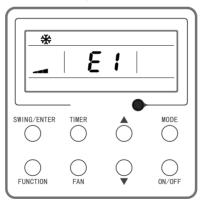


Figure 5-1 High-pressure Protection

Table 5.1 Error Code List

Error Code	Error
E1	Compressor high-pressure protection
E2	Indoor anti-freeze protection
E3	Compressor low-pressure protection, refrigerant lack protection, refrigerant collection mode
E4	Compressor air discharge high-temperature protection
E6	Communication error
E8	Indoor fan error
E9	Water-full protection
F0	Indoor ambient temperature sensor error
F1	Evaporator temperature sensor error
F2	Condenser temperature sensor error/Middle part of condenser temperature sensor error
F3	Outdoor ambient temperature sensor error
F4	Discharge temperature sensor error
F5	Wired controller temperature sensor error
C5	IDU jumper cap error
EE	IDU or ODU memory chip error
PF	Electric box sensor error
H3	Compressor overload protection
H4	Overload
H5	IPM protection
H6	DC fan error

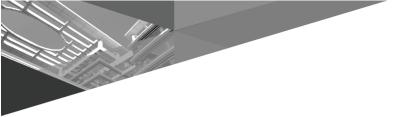
Error Code	Error
H7	Driver out-of-step protection
HC	PFC protection
Lc	Startup failure
Ld	Compressor phase-sequence protection
LF	Power protection
LP	IDU and ODU unmatched or Controller unmatched
U7	4-way valve switch-over error
P0	Driver reset protection
P5	Over-current protection
P6	Master control and driver communication error
P7	Driver module sensor error
P8	Driver module high temperature protection
P9	Zero-crossing protection
PA	AC current protection
Pc	Driver current error
Pd	Sensor connection protection
PE	Temperature drift protection
PL	Bus low-voltage protection
PH	Bus high-voltage protection
PU	Charging loop error
PP	Input voltage error
ee	Driver memory chip error

Error Code	Error
C4	ODU jumper cap error
dJ	Phase-loss and anti-phase protection
oE	ODU error, for specific error please see the status of ODU indicator
EL	Emergency stop
LE	Compressor stall protection
F6	Condenser medium pipe temperature sensor error
EH	Auxiliary heating protection
Un	Communication error between grid-connected drive board and main control board
CJ	DIP switch code error
Ud	Invalid configuration information of inverter
GE	High or low photovoltaic voltage protection
G8	Overcurrent protection at power grid side
G7	Voltage over/under frequency at power grid side
G9	Drive IPM module protection at power grid side
GL	Hardware overcurrent protection at power grid side
GC	Photovoltaic DC hardware overcurrent protection
GJ	Module high-temperature protection at power grid side
GP	Temperature sensor protection at power grid side
G6	Photovoltaic low voltage ride through
Gy	Drive beyond retrieve error at power grid side
G1	Photovoltaic Anti-islanding protection
G0	Photovoltaic reversed connection protection
GU	Charged circuit protection at power grid side

Error Code	Error
GA	Low/high input voltage protection at power grid side
G2	Photovoltaic DC overcurrent protection
Gb	Relay protection at power grid side
G3	Photovoltaic power generation overload
Gd	Current sensor protection at power grid side
GF	DC bus midpoint potential imbalance
Gn	Insulated impedance protection
G4	Photovoltaic leakage current protection
G5	Phase-lacking protection at power grid side
q0	Indoor fan bus low-voltage protection
q1	Indoor fan bus high-voltage protection
q2	Indoor fan AC current protection
q3	Indoor fan IPM protection
q4	Indoor fan PFC protection
q5	Indoor fan Startup failure
q6	Indoor fan phase-sequence protection
q7	Indoor fan driver reset protection
q8	Indoor fan over-current protection
q9	Indoor fan power protection
qA	Indoor fan driver current error
qb	Indoor fan driver out-of-step protection
qC	Master control and indoor fan driver communication error
qd	Indoor fan driver module high temperature protection
qE	Indoor fan driver module sensor error

Error Code	Error
qF	Indoor fan driver memory chip error
qH	Indoor fan charging loop error
qL	Indoor fan input voltage error
qo	Indoor fan electric box sensor error
qP	Indoor fan zero-crossing protection
dc	Suction temperature sensor error
CA	Evaporator inlet pipe temperature sensor error
Cb	Evaporator outlet pipe temperature sensor error
A5	Condenser inlet pipe temperature sensor error
e1	High pressure sensor error
e3	Low pressure sensor error
AL	Outdoor fan bus low-voltage protection
AH	Outdoor fan bus high-voltage protection
AA	Outdoor fan AC current protection
A1	Outdoor fan IPM protection
AF	Outdoor fan PFC protection
Ac	Outdoor fan Startup failure
Ad	Outdoor fan phase-sequence protection
A0	Outdoor fan driver reset protection
UL	Outdoor fan over-current protection
UP	Outdoor fan power protection
AE	Outdoor fan driver current error
AJ	Outdoor fan driver out-of-step protection
A6	Master control and outdoor fan driver communication error

Error Code	Error
A8	Outdoor fan driver module high temperature protection
A9	Outdoor fan driver module sensor error
An	Outdoor fan driver memory chip error
AU	Outdoor fan charging loop error
AP	Outdoor fan input voltage error
Ar	Outdoor fan electric box sensor error
U9	Outdoor fan zero-crossing protection



EXPERT TTL SOLUTIONS, S. DE R.L. DE C.V.

Av. José Eleuterio González #515 Col. Mitras Norte, Monterrey, Nuevo León, C.P. 64320 RFC: ETS2107013W3

