RK-09SKGI RK-09SKGIE
RK-12SKGI RK-12SKGIE

code	malfunction	Error display		Repair method	code	malfunction	Error display		Repair method
		Dual 8 display	LED				Dual 8 display	LED	
1	Storage slug	EE	Heating LED-pause 3s and blink 15 times	Replace indoor main board	15	Sync failure	H7	Heating LED-pause 3s and blink 7 times	Check if the resistance of com pressor and resistance to ground is normal. If the compressor is normal, the outdoor main board may be wrong.
2	Indoor PCB malfunctio n	EE	Heating LED-pause 3s and blink 15 times	Replace indoor main board	16	Current diction malfunction of complete unit	U5	Cooling LED-pause 3s and blink 13 times	Replace outdoor main board
3	Anti-freezi ng protection	E2	Running LED-pause 3s and blink 2 times	Outdoor ambient temperature is too low	17	Outdoor ambient temperature sensor malfunction	F3	Cooling LED-pause 3s and blink 3 times	Is it loose? Measure the resistance value with universal meter
4	Overload of system	H4	Heating LED-pause 3s and blink 4 times	System is abnormal, check if the evaporator and condenser is dirty and blocked	18	Discharge protection of compressor	E4	Running LED-pause 3s and blink 4 times	Is it loose? Measure the resistance value with universal meter
5	No motor of indoor unit feedback	H6	Running LED-pause 3 s and blink 11 times	Is electromotor mounted normally?	19	Break-circuit and short-circuit of outdoor discharge temperature sensor	F5	cooling LED-pause 3s and blink 5 times	Is it loose? Measure the resistance value with universal meter
6	Indoor pipe temperature sensor malfunction	F2	cooling LED- pause 3s and blink 2 times	Is it loose? Measure the resistance value with universal meter	20	Break-circuit and short-circuit of outdoor condenser temperature sensor	F4	cooling LED-pause 3s and blink 18 times	Is it loose? Measure the resistance value with universal meter
7	Internal ambient temperature sens or malfunction	F1	Cooling LED- pause 3s and blink 1 times	Is it loose? Measure the resistance value with universal meter	21	Overheat of carbon fin	P8	heating LED-pause 3s and blink 19 times	Is outdoor ambient temperature is too high? Is radiator mounted correctly?
8	Zero passage abnormal	UF	Heating and cooling LED blinks 7 times at the same time	Replace indoor main board	22	DC overcurrent	UU	Heating and cooling LED blink 11 times at the same time	
9	Overload of compressor	H3	heating LED- pause 3s and blink 3 times	Inspect connection state of the overload wire.	23	Temperature sensor malfunction of carbon fin	P7	heating LED-pause 3s and blink 18 times	Replace outdoor main board.
10	Startup failure	Lc	heating LED- pause 3s and blink 11 times	Check if the resistance of compressor and resistance to ground is normal. If the compressor is normal, the outdoor main board may be wrong.	24	Lack of Freon or block protection	F0	cooling LED-pause 3s a nd blink 10 times	
11	No motor of outdoor unit feedback	UH	Heating and cooling LED blink 8 times at the same time	This malfunction may happen when outdoor DC electromotor is used.	25	DC input voltage is too high	PH	cooling LED-pause 3s a nd blink 11 times	Is voltage of AC power supply normal?
12	Overcurrent protection	E5	Running LED-pause 3s and blink 5 times	Is electric network variable?	26	DC input voltage is too low	PL	Heating LED-pause 3s and blink 21 times	Is voltage of AC power supply normal?
13	4-way valve conversion abnormal	U7	cooling LED- pause 3s and blink 20 times	Replace 4-way valve.	27	Communication malfunction	E6	Running LED-pause 3s and blink 6 times	Is outdoor connecting wire reliably connected?
14	Phase current detection malfunction of compressor	U1	Heating LED- pause 3s and blink 13 times	Replace outdoor main board.	28	Setting error, indoor and outdoor unit abnormal	UA	Heating and cooling LED blink 12 t imes at the same time	Outdoor unit is not matched with indoor unit.

Troubleshooting

No.	Malfunction Name	Display Method of Indoor Unit				Display Method of Outdoor Unit (Indicator has 3 kinds of display status and they will be displayed circularly every 5s.) ☐ OFF ■ Illuminated ☆ Blink				A/C status	Possible Causes
		Dual-8 Code Display	Indicator Display (during blinking, ON 0.5s and OFF 0.5s)								
			Operation Indicator	Cool Indicator	Heating Indicator	D5 (D40)	D6 (D41)	D16 (D42)	D30 (D43)		
1	High pressure protection of system	E1	OFF 3s and blink once			☐	☆	☆	☆	During cooling and drying operation, except indoor fan operates, all loads stop operation. During heating operation, the complete unit stops.	Possible reasons: 1. Refrigerant was superabundant; 2. Poor heat exchange (including filth blockage of heat exchanger and bad radiating environment); Ambient temperature is too high.
2	Antifreezing protection	E2	OFF 3S and blink twice			■	☐	■	☐	During cooling and drying operation, compressor and outdoor fan stop while indoor fan operates.	1. Poor air-return in indoor unit; 2. Fan speed is abnormal; 3. Evaporator is dirty.
3	High discharge temperature protection of compressor	E4	OFF 3S and blink 4 times			■	☐	■	☆	During cooling and drying operation, compressor and outdoor fan stop while indoor fan operates. During heating operation, all loads stop.	Please refer to the malfunction analysis (discharge protection, overload).
4	Overcurrent protection	E5	OFF 3S and blink 5 times			☐	■	☆	☐	During cooling and drying operation, compressor and outdoor fan stop while indoor fan operates. During heating operation, all loads stop.	1. Supply voltage is unstable; 2. Supply voltage is too low and load is too high; 3. Evaporator is dirty.
5	Communi-cation Malfunction	E6	OFF 3S and blink 6 times			☐	☐	☐	☆	During cooling operation, compressor stops while indoor fan motor operates. During heating operation, the complete unit stops.	Refer to the corresponding malfunction analysis.
6	High temperature resistant protection	E8	OFF 3S and blink 8 times			■	☐	■	■	During cooling operation: compressor will stop while indoor fan will operate. During heating operation, the complete unit stops.	Refer to the malfunction analysis (overload, high temperature resistant).
7	Circuit PG motor (indoor fan) has circuit malfunction by zero cross detection	U8	OFF 3S and blink for 17 times							Operation of remote controller or control panel is available, but the unit wont act.	Control board is damaged.
8	PG motor (indoor fan motor) does not operate	H6	OFF 3S and blink 11 times							The complete unit will stop operation.	Poor connection for PGF in circuit diagram; Malfunction of indoor units control panel AP1; Malfunction of indoor units motor M1.
9	Malfunction protection of jumper cap	C5	OFF 3S and blink 15 times							The complete unit will stop operation.	Poor connection for the jumper cap on indoor units control panel AP1; please reinsert or replace the jumper cap;
10	Indoor ambient temperature sensor is open/short circuited	F1		OFF 3S and blink once						During cooling and drying operation, indoor unit operates while other loads will stop; during heating operation, the complete unit will stop operation.	1.Room temperature sensor hasnt been connected well with indoor units control panel AP1 (refer to the wiring diagram for indoor unit); 2.Room temperature sensor is damaged (please refer to the resistance table of temperature sensor)

Troubleshooting

No.	Malfunction Name	Display Method of Indoor Unit				Display Method of Outdoor Unit (Indicator has 3 kinds of display status and they will be displayed circularly every 5s.) ☐ OFF ■ Illuminated ☆ Blink				A/C status	Possible Causes
		Dual-8 Code Display	Indicator Display (during blinking, ON 0.5s and OFF 0.5s)			D5 (D40)	D6 (D41)	D16 (D42)	D30 (D43)		
			Operation Indicator	Cool Indicator	Heating Indicator						
11	Indoor evaporator temperature sensor is open/short circuited	F2		OFF 3S and blink twice						During cooling and drying operation, indoor unit will operate while other loads will stop; During heating operation, the complete unit will stop operation.	1.Room temperature sensor hasnt been connected well with indoor units control panel AP1 (refer to the wiring diagram for indoor unit); 2.Room temperature sensor is damaged (please refer to the resistance table of temperature sensor)
12	Outdoor ambient temperature sensor is open/short circuited	F3		OFF 3S and blink 3 times		☐	☐	☆	■	During cooling and drying operating, compressor stops while indoor fan operates; During heating operation, the complete unit will stop operation	Outdoor temperature sensor hasnt been connected well or is damaged. Please check it by referring to the resistance table for temperature sensor)
13	Outdoor condenser temperature sensor is open/short circuited	F4		OFF 3S and blink 4 times		☐	☐	☆	☐	During cooling and drying operation, compressor stops while indoor fan will operate; During heating operation, the complete unit will stop operation.	Outdoor temperature sensor hasnt been connected well or is damaged. Please check it by referring to the resistance table for temperature sensor)
14	Outdoor discharge temperature sensor is open/short circuited	F5		OFF 3S and blink 5 times		☐	☐	☆	☆	During cooling and drying operation, compressor will sop after operating for about 3 mins, while indoor fan will operate; During heating operation, the complete unit will stop after operating for about 3 mins.	1.Outdoor temperature sensor hasnt been connected well or is damaged. Please check it by referring to the resistance table for temperature sensor) 2.The head of temperature sensor hasnt been inserted into the copper tube
15	Limit/ decrease frequency due to overload	F6		OFF 3S and blink for 6 times		■	☐	☆	☆	All loads operate normally, while operation frequency for compressor is decreased	Refer to the malfunction analysis (overload, high temperature resistant)
16	Decrease frequency due to overcurrent	F8		OFF 3S and blink 8 times		■	■	☐	■	All loads operate normally, while operation frequency for compressor is decreased	The input supply voltage is too low; System pressure is too high and overload
17	Decrease frequency due to high air discharge	F9		OFF 3S and blink 9 times		■	■	☐	☐	All loads operate normally, while operation frequency for compressor is decreased	Overload or temperature is too high; Refrigerant is insufficient; Malfunction of electric expansion valve (EKV)
18	Voltage for DC bus-bar is too high	PH		OFF 3S and blink 11 times		☐	■	☐	☆	During cooling and drying operation, compressor will stop while indoor fan will operate; During heating operation, the complete unit will stop operation.	1. Measure the voltage of position L and N on wiring board (XT), if the voltage is higher than 265VAC, turn on the unit after the supply voltage is increased to the normal range. 2.If the AC input is normal, measure the voltage of electrolytic capacitor C on control panel (AP1), if its normal, theres malfunction for the circuit, please replace the control panel (AP1)
19	Malfunction of complete units current detection	U5		OFF 3S and blink 13 times		☐	■	☆	■	During cooling and drying operation, the compressor will stop while indoor fan will operate; During heating operating, the complete unit will stop operation.	Theres circuit malfunction on outdoor units control panel AP1, please replace the outdoor units control panel AP1.
20	Overcurrent protection of phase current for compressor	P5		OFF 3S and blink 15 times		☐	☆	☐	☐	During cooling and drying operation, compressor will stop while indoor fan will operate; During heating operation, the complete unit will stop operation.	Refer to the malfunction analysis (IPM protection, loss of synchronism protection and overcurrent protection of phase current for compressor.

No.	Malfunction Name	Display Method of Indoor Unit				Display Method of Outdoor Unit (Indicator has 3 kinds of display status and they will be displayed circularly every 5s.)				A/C status	Possible Causes
		Dual-8 Code Display	Indicator Display (during blinking, ON 0.5s and OFF 0.5s)			□ OFF ■ Illuminated ☆ Blink					
			Operation Indicator	Cool Indicator	Heating Indicator	D5 (D40)	D6 (D41)	D16 (D42)	D30 (D43)		
21	Defrosting	H1			OFF 3S and blink once					Defrosting will occur in heating mode. Compressor will operate while indoor fan will stop operation.	Its the normal state
22	Static dedusting protection	H2			OFF 3S and blink twice						/
23	Overload protection for compressor	H3			OFF 3S and blink 3 times	□	☆	☆	□	During cooling and drying operation, compressor will stop while indoor fan will operate; During heating operation, the complete unit will stop operation.	1. Wiring terminal OVC-COMP is loosened. In normal state, the resistance for this terminal should be less than 1ohm. 2.Refer to the malfunction analysis (discharge protection, overload)
24	System is abnormal	H4			OFF 3S and blink 4 times	■	□	■	■	During cooling and drying operation, compressor will stop while indoor fan will operate; During heating operation, the complete unit will stop operation.	Refer to the malfunction analysis (overload, high temperature resistant)
25	IPM protection	H5			OFF 3S and blink 5 times	□	☆	□	■	During cooling and drying operation, compressor will stop while indoor fan will operate; During heating operation, the complete unit will stop operation.	Refer to the malfunction analysis (IPM protection, loss of synchronism protection and overcurrent protection of phase current for compressor.
26	PFC protection	HC			OFF 3S and blink 6 times	□	■	☆	☆	During cooling and drying operation, compressor will stop while indoor fan will operate; During heating operation, the complete unit will stop operation.	Refer to the malfunction analysis
27	Desynchron-izing of compressor	H7			OFF 3S and blink 7 times	□	☆	■	☆	During cooling and drying operation, compressor will stop while indoor fan will operate; During heating operation, the complete unit will stop operation.	Refer to the malfunction analysis (IPM protection, loss of synchronism protection and overcurrent protection of phase current for compressor.
28	Decrease frequency due to high temperature resistant during heating operation	H0			OFF 3S and blink 10 times	■	□	☆	☆	All loads operate normally, while operation frequency for compressor is decreased	Refer to the malfunction analysis (overload, high temperature resistant)
29	Failure start-up	LC			OFF 3S and blink 11 times	□	☆	□	☆	During cooling and drying operation, compressor will stop while indoor fan will operate; During heating operation, the complete unit will stop operation.	Refer to the malfunction analysis
30	Malfunction of phase current detection circuit for compressor	U1			OFF 3S and blink 13 times	□	☆	■	□	During cooling and drying operation, compressor will stop while indoor fan will operate; During heating operation, the complete unit will stop	Replace outdoor control panel AP1

No.	Malfunction Name	Display Method of Indoor Unit				Display Method of Outdoor Unit (Indicator has 3 kinds of display status and they will be displayed circularly every 5s.)				A/C status	Possible Causes
		Dual-8 Code Display	Indicator Display (during blinking, ON 0.5s and OFF 0.5s)			□ OFF ■ Illuminated ☆ Blink					
			Operation Indicator	Cool Indicator	Heating Indicator	D5 (D40)	D6 (D41)	D16 (D42)	D30 (D43)		
31	EEPROM malfunction	EE			OFF 3S and blink 15 times	□	□	□	■	During cooling and drying operation, compressor will stop while indoor fan will operate; During heating operation, the complete unit will stop	Replace outdoor control panel AP1
32	Charging malfunction of capacitor	PU			OFF 3S and blink 17 times	□	■	□	■	During cooling and drying operation, compressor will stop while indoor fan will operate; During heating operation, the complete unit will stop	Refer to the part three—charging malfunction analysis of capacitor
33	Malfunction of module temperature sensor circuit	P7			OFF 3S and blink 18 times	□	□	■	☆	During cooling and drying operation, compressor will stop while indoor fan will operate; During heating operation, the complete unit will stop	Replace outdoor control panel AP1
34	Module high temperature protection	P8			OFF 3S and blink 19 times	■	□	☆	■	During cooling operation, compressor will stop while indoor fan will operate; During heating operation, the complete unit will stop	After the complete unit is de-energized for 20mins, check whether the thermal grease on IPM Module of outdoor control panel AP1 is sufficient and whether the radiator is inserted tightly. If its no use, please replace control panel AP1.
35	Malfunction of voltage dropping for DC bus-bar	U3			OFF 3S and blink 20 times	□	■	■	■	During cooling and drying operation, compressor will stop while indoor fan will operate; During heating operation, the complete unit will stop	Supply voltage is unstable
36	Voltage of DC bus-bar is too low	PL			OFF 3S and blink 21 times	□	■	■	□	During cooling and drying operation, compressor will stop while indoor fan will operate; During heating operation, the complete unit will stop	1. Measure the voltage of position L and N on wiring board (XT), if the voltage is higher than 150VAC, turn on the unit after the supply voltage is increased to the normal range. 2.If the AC input is normal, measure the voltage of electrolytic capacitor C on control panel (AP1), if its normal, theres malfunction for the circuit, please replace the control panel (AP1)
37	Limit/ decrease frequency due to high temperature of module	EU				■	■	■	☆	All loads operate normally, while operation frequency for compressor is decreased	Discharging after the complete unit is de-energized for 20mins, check whether the thermal grease on IPM Module of outdoor control panel AP1 is sufficient and whether the radiator is inserted tightly. If its no use, please replace control panel AP1.
38	The four-way valve is abnormal	U7				■	□	☆	□	If this malfunction occurs during heating operation, the complete unit will stop operation.	1.Supply voltage is lower than AC175V; 2.Wiring terminal 4V is loosened or broken; 3.4V is damaged, please replace 4V.
39	Zero-crossing malfunction of outdoor unit	U9				■	■	☆	□	During cooling operation, compressor will stop while indoor fan will operate; during heating,the complete unit will stop operation.	Replace outdoor control panel AP1
40	Limit/ decrease frequency due to antifreezing	FH				■	■	■	□	All loads operate normally, while operation frequency for compressor is decreased	Poor air-return in indoor unit or fan speed is too low

RK-07SEG	**RK-07SEGE**
RK-09SEG	**RK-09SEGE**
RK-12SEG	**RK-12SEGE**
RK-18SEG	**RK-18SEGE**
RK-24SEG	**RK-24SEGE**
RK-28SEG	**RK-28SEGE**

1. **Trouble C5:** Dual-8 Display displays C5 and running LED blinks 15 times and pauses 3s.
Troubleshooting:
Jumper cap is not firmly connected with the controller. Reinsert it or replace it with the same specification of jumper cap.
2. **Trouble E5:** Dual-8 Display on display board displays E5 and running LED blinks for 5 times and pauses 3s.
Troubleshooting:
When the voltage is too low or the system pressure is abnormal, please check the power supply voltage or the system pressure.
3. **Trouble F1:** Dual-8 Display on display board displays F1 and cooling LED blinks once and pause 3s.
Troubleshooting:
AC ambient sensor is not firmly connected with the controller. Please reinsert or replace it with an ambient temp sensor.
4. **Trouble F2:** Dual-8 Display on display board displays F2, the cooling LED blinks twice and pauses 3s.
Troubleshooting:
AC tube temperature sensor is not firmly connected with the controller. Please reinsert or replace it with another tube temperature sensor.
5. **Trouble H1:** Dual-8 Display on display board displays H1 and heating LED blinks once and pauses 3s.
Troubleshooting:
Because at this time the air conditioner is running in defrosting status, it's normal.
6. **Trouble H6:** Dual-8 Display on display board displays H6, and running LED blinks 11 times and pauses 3s.
Troubleshooting: The feedback wire of unit's indoor fan motor hasn't been reliably connected with the controller or the inner fan motor is broken, or the controller mainboard's fan motor has detected that circuit is damaged, please reinsert the inner fan motor's feedback wire or replace the mainboard of control board or replace the motor.
7. **Trouble E1:** Dual-8 Display on display board displays E1and running LED blinks once and pauses 3s.
Troubleshooting:
If high-pressure protection occurs and the system pressure is abnormal, please check the system pressure or repace the controller.
8. **Trouble E2:** Dual-8 Display on display board will display E2 and running LED blinks twice and pauses 3s.
Troubleshooting: It is normal, at this time, the AC is in Antifreezing status.

RK-07SDM3 RK-07SDM3E
RK-09SDM3 RK-09SDM3E
RK-12SDM3 RK-12SDM3E
RK-18SDM3 RK18SDM3E
RK-24SDM3 RK-24SDM3E
RK-28SDM3 RK-28SDM3E

For 7k,9k,18k models:

Operation lamp	Timer lamp	Failure
☆	X	Indoor fan speed has been out of control
☆	O	The T1 or T2 sensor is open circuit or short circuit
X	☆	Over current protection occurs 4 times.
O	☆	EEPROM error
☆	☆	Zero crossing detection error

For 21k,24k models:

Operation lamp	Timer lamp	Defrosting lamp	Auto lamp	Failure
☆	☆	☆	X	Over current protection occurs 4 times.
☆	X	X	X	The T2 sensor is open circuit or short circuit
X	☆	X	X	The T1 sensor is open circuit or short circuit
X	X	☆	X	The T3 sensor is open circuit or short circuit
☆	☆	X	X	EEPROM error
X	X	X	☆	Indoor / outdoor units communication error
X	X	☆	☆	Outdoor units protection

O （light） X （off） ☆ （flash）

RK-36SDM2N RK-36SDM2NE

Failure phenomenon	**Operation lamp**	**Timer lamp**	**Defrosting lamp**
Over current protection of the compressor occurs 4 times	☆	X	☆
Indoor fan speed has been out of control for over 1 minute	X	☆	☆
No over-zero signal	☆	☆	☆
Temp. sensor on indoor evaporator is open circuit or short circuit	X	X	☆
Indoor room temp. sensor is open circuit or short circuit	X	☆	X
EEROM error	On	☆	X

✕ Extinguish
☆ Flash at 5Hz

RK-07SRCN **RK-07SRCEN**
RK-09SRCN **RK-09SRCEN**
RK-12SRCN **RK-12SRCEN**
RK-18SRCN **RK-18SRCEN**
RK-24SRCN **RK-24SRCEN**

Self-check information	*Self-check code of luminotron/ (Self-check code of running lamp)*	*Digital self-check code/ (Polychrome screen self-check code)*
Hint to defrosting	Flicker 1 time/1s	Indicates "dF"or defrosting indicator displays
Hint to defense against cold wind	Flicker 1 time/3s	Fan motor picture not running
Failure of room temperature sensor	Flicker 2 times/4s (Flicker 2 times/8s)	E2/(L2)
Failure of coiled pipe sensor	Flicker 3 times/5s (Flicker 1 time/8s)	E3/(L1)
Abnormality of outdoor unit	Flicker 4 times/6s (luminating)	E4/(E5)
Without feedback of internal fan motor	Flicker 5 times/7s (Flicker 6 times/8s)	E5/(L6)
Zero crossing signal without current	Flicker 6 times/8s	E6
External feedback failure	Flicker 7 times/9s	E7
Overheat protection	Flicker 8 times/10s	E8
Water pump failure	Flicker 9 times/11s	E9

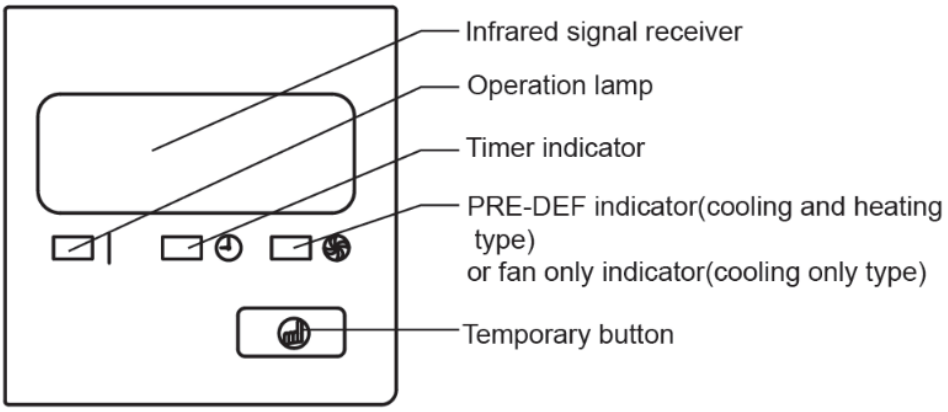
RK-07ENT **RK-07ENTE**
RK-09ENT **RK-09ENTE**
RK-12ENT **RK-12ENTE**
RK-18ENT **RK-18ENTE**
RK-24ENT **RK-24ENTE**

Failure	Running Light Flash	LED Display
RT Sensor Failure	Once / Period	E1
IPT Sensor Failure	Twice / Period	E2
Indoor Fan Motor Failure	6 times / Period	E6

RK-M09SEG
RK-M12SEG
RK-2M18SEGE
RK-2M21SEGE
RK-2M24SEGE

No.	Malfunction Name	Display Method of Indoor Unit				A/C Status	Possible Causes
		Error Code	Indicator lamp (During blinking, ON for 0.5S and OFF for 0.5 S)				
			Operation Lamp	COOL Lamp	HEAT Lamp		
1	Indoor ambient temperature sensor is open/short-circuited	F1		OFF 3S and blinks once		The unit will stop operation as it reaches the temperature point. During cooling and drying operation, except indoor fan operates, other loads（such as compressor, outdoor fan, 4-way valve） stop operation; During heating operation, the complete unit stops operation.	1. The wiring terminal between indoor ambient temperature sensor and controller is loosened or poorly contacted; 2. There's short circuit due to trip-over of the parts on controller; 3.Indoor ambient temperature sensor is damaged (Please check it by referring to the resistance table for temperature sensor) 4. Main board is broken.
2	Indoor evaporator temperature sensor is open/short-circuited	F2		OFF 3S and blinks twice		The unit will stop operation as it reaches the temperature point. During cooling and drying operation, except indoor fan operates, other loads stop operation; During heating operation, the complete unit stops operation.	1. The wiring terminal between indoor evaporator temperature sensor and controller is loosened or poorly contacted; 2. There's short circuit due to the trip-over of the parts on controller; 3.Indoor evaporator temperature sensor is damaged (Please check it by referring to the resistance table for temperature sensor) 4. Main board is broken.
3	PG motor (indoor fan motor) does not operate	H6	OFF 3S and blinks 11 times			Indoor fan, outdoor fan, compressor and electric heat tube stop operation. 2 minutes later, 4-way valve stops; horizontal louver stops at the current position.	1. The feedback terminal of PG motor is not connected tightly. 2. The control terminal of PG motor is not connected tightly. 3. Fan blade rotates unsmoothly due to improper installation. 4. Motor is not installed properly and tightly. 5. Motor is damaged. 6. Controller is damaged.
4	Malfunction protection of jumper cap	C5	OFF 3S and blinks 15 times			Operation of remote controller or control panel is available, but the unit won't act.	1. There's not jumper cap on the controller. 2. Jumper cap is not inserted properly and tightly. 3. Jumper cap is damaged. 4. Controller is damaged.
5	PG motor (indoor fan) circuit malfunction by zero cross detection	U8	OFF 3S and blinks 17 times			Operation of remote controller or control panel is available, but the unit won't act.	1. Controller is damaged.

Indoor Unit Malfunction



No.	Running lamp	Timer lamp	Defrosting lamp	Malfunction
1	☆	×	×	Room temp. sensor checking channel is abnormal
2	×	×	☆	Evaporator temp. sensor checking channel is abnormal
3	☆	☆	☆	Condenser temp. sensor checking channel is abnormal
4	×	☆	×	In-outdoor unit communication malfunction
5	☆	•	☆	DC Fan malfunction
6	☆	☆	•	EEPROM malfunction

Outdoor Unit Malfunction

No.	LED1	LED2	LED3	Malfunction
1	☆	×	☆	In-outdoor unit communication malfunction
2	×	☆	☆	T3 condenser pipe temp. sensor malfunction

× Extinguish, ☆ Flash

RK-18UHCN **RK-18UHCNE**
RK-24UHCN **RK-24UHCNE**
RK-36UHCN **RK-36UHCNE**
RK-48UHCN **RK-48UHCNE**
RK-60UHCN **RK-60UHCNE**

Self-test information	The flash condition of the red light	Self-test information	The flash condition of the red light
Defrost indication(the unit is in normal state)	Flash one time every second	The frost protection of the indoor eraporator	Flash five times every seven seconds
Second wind prevention indication(the unit is in normal state)	Flash one time every three seconds	The low voltage protection	Flash six times every eight seconds
Indoor temperature sensor fault	Flash two times every four seconds	The outdoor feedback fault	Flash seven times every nine seconds
Duct temperature sensor fault	Flash three times every five seconds	The superheating protection	Flash eight times every ten seconds
The outdoor unit is in abnormal state	Flash four times every six seconds	The water pump fault	Flash nine times every eleven seconds

RK-18UHC2N **RK-18UHCNE**
RK-24UHC2N **RK-24UHCNE**
RK-36UHC2N **RK-36UHCNE**
RK-48UHC2N **RK-48UHCNE**
RK-60UHC2N **RK-60UHCNE**

Error code for indoor unit:

Fault codes table

No.	Type	Content	LED Flashing	LCD display	Remark
1	Fault	Room temperature sensor fault	Timing lamp flashing/1Hz	E2	Automatic recovery after the problem resolved
2	Fault	Indoor coil temperature sensor fault	Running lamp flashing/1Hz	E3	
3	Fault	Outdoor coil temperature sensor fault	Defrosting lamp flashing/1Hz	E5	
4	Fault	Water full protection	Alarm lamp flashing/1Hz	F5	
5	Fault	Outdoor protection	Defrosting lamp and Alarm lamp both flashing/1Hz	F2	
6	Fault	Communication fault	Running lamp and Defrosting lamp both flashing/1Hz	E1	Manual eliminate
7	Fault	EEPROM communication fault	Running lamp and Timing lamp both flashing/1Hz	P6	Recovery after interruption of power supply
8	Indication	Enforced cooling	Running lamp and Alarm lamp both flashing/1Hz	NO	
9	Indication	Anti- cool air in heating mode	Defrosting preheat lamp ON	P1	
10	Indication	Defrosting	Defrosting preheat lamp ON	P3	

Error code for outdoor unit:

No.	Malfunction name	Outdoor LED
1	High pressure & low pressure protection	Flash once per five seconds
2	Outdoor coil temperature sensor fault	Flash twice per five seconds
3	Over current protection	Flash three times per five seconds
4	Phase sequence protection	Flash four times per five seconds
5	Communication fault	Flash five times per five seconds

RK-18CHCN **RK-18UHCNE**
RK-24CHCN **RK-24UHCNE**
RK-36CHCN **RK-36UHCNE**
RK-48CHCN **RK-48UHCNE**
RK-60CHCN **RK-60UHCNE**

Error code for indoor unit:

Fault code Table

No.	Type	Content	LED Flashing	Code	Remark
1	Fault	Room temperature sensor fault	Timing lamp flashing/5Hz	E2	Automatic recovery after the problem resolved
2	Fault	Indoor coil temperature sensor fault	Running lamp flashing/5Hz	E3	
3	Fault	Outdoor coil temperature sensor fault	Defrosting lamp flashing/5Hz	E5	
4	Fault	Water full protection	Alarm lamp flashing/5Hz	F5	
5	Fault	Outdoor protection	Defrosting lamp and Alarm lamp both flashing/5Hz	F2	
6	Fault	Communication fault	Running lamp and Defrosting lamp both flashing/5Hz	E1	Manual eliminate
7	Fault	EEPROM communication fault	Running lamp and Timing lamp both flashing/5Hz	P6	Recovery after interruption of power supply
8	Indication	Enforced cooling	Running lamp and Alarm lamp both flashing/5Hz	/	
9	Indication	Anti- cool air in heating mode	Defrosting preheat lamp ON	P1	
10	Indication	Defrosting	Defrosting preheat lamp ON	P3	

Error code for outdoor unit:

No.	Malfunction name	Outdoor LED
1	High pressure & low pressure protection	Flash once per five seconds
2	Outdoor coil temperature sensor fault	Flash twice per five seconds
3	Over current protection	Flash three times per five seconds
4	Phase sequence protection	Flash four times per five seconds
5	Communication fault	Flash five times per five seconds

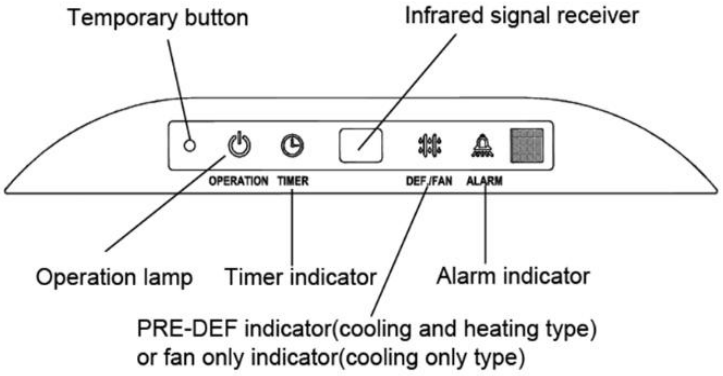
RK-18UHMN

RK-24UHM2N

RK-36UHM2N

RK-48UHM2N

RK-60UHM2N



NO.	MALFUNCTION & PROTECTION DEFINE	LED1 OPERATION	LED2 TIMER	LED3 DEF.FAN	LED4 ALARM	DISPLAY DIGITAL TUBE
1	Room temperature sensor checking channel is abnormal	●	◎	●	●	E2
2	Pipe temperature sensor checking channel is abnormal	◎	●	●	●	E3
3	Outdoor TEMP. sensor checking channel is abnormal	●	●	◎	●	E4
4	Outdoor malfunction	◎	◎	◎	◎	E6
5	EEPROM malfunction	◎	◎	●	●	E7
6	Water-level alarm malfunction	●	●	●	◎	E8

● Extinguish ◎ Flashing at 5HZ ○ Flashing at 1HZ

RK-18CHMN

RK-24CHMN

RK-36CHMN

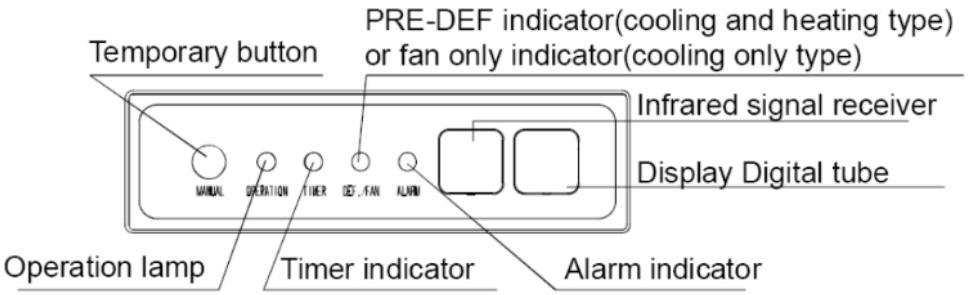
RK-48CHMN

RK-60CHMN

NO.	running lamp	timer lamp	defrosting lamp	Malfunction for unuit of 12000Btu/h	Malfunction for unuit of 18000Btu/h
1	☆	×	×	Room temperature sensor checking channel is abnormal	Room temperature sensor checking channel is abnormal
2	×	×	☆	Evaporator sensor checking channel is abnormal	Mode impact
3	☆	☆	☆	Condenser sensor checking channel is abnormal	————
4	×	☆	×	Room Circuit malfunction	Room Circuit malfunction
5	×	×	◎	————	Outdoor unit malfunction

（× Extinguish, ☆ Flash at 5Hz, ◎ Flash at 0.5Hz）

RK-18BHMN
RK-24BHMN
RK-36BHMN
RK-48KHM2N
RK-60KHM2N



NO.	MALFUNCTION & PROTECTION DEFINE	LED1 OPERATION	LED2 TIMER	LED3 DEF.FAN	LED4 ALARM	DISPLAY DIGITAL TUBE
1	Room temperature sensor checking channel is abnormal	●	◎	●	●	E2
2	Pipe temperature sensor checking channel is abnormal	◎	●	●	●	E3
3	Outdoor TEMP. sensor checking channel is abnormal	●	●	◎	●	E4
4	Outdoor malfunction	◎	◎	◎	◎	E6
5	EEPROM malfunction	◎	◎	●	●	E7
6	Water-level alarm malfunction	●	●	●	◎	E8

● Extinguish ◎ Flashing at 5HZ ○ Flashing at 1HZ

RK-18HMNE
RK-24HMNE
RK-36HMNE
RK-48HMNE
RK-60HMNE

LEDs' for the indication of outdoor trouble

Type	Contents	LED1	LED2	LED3
Trouble	Phase sequence	Flash	Off	Off
Trouble	Lack of phase(A,B)	Flash	Off	Off
Trouble	Lack of phase(C)	Off	Off	Off
Trouble	Protection of Low pressure	Flash	Flash	Off
Trouble	Overload of current	Off	Off	Flash
Trouble	Communication malfunction	Flash	Off	Flash
Trouble	Open-circuit and short-circuit trouble of T3	Off	Flash	Flash
Trouble	Open-circuit and short-circuit trouble of T4	Off	Flash	Off
Trouble	High temperature protection of condenser	Flash	Flash	Flash

Note:

1. If the LED1-LED3 are flashing slowly, means the system is stand-by.
2. T3: Outdoor condenser temperature sensor
3. T4: Outdoor ambient temperature sensor

RK-2M18HME
RK-3M27HME
RK-4M27HME
RK-4M36HME

Display	LED STATUS
E0	EEPROM error
E1	No A Indoor unit coil outlet temp. sensor or connector of sensor is defective
E2	No B Indoor unit coil outlet temp. sensor or connector of sensor is defective
E3	No C Indoor unit coil outlet temp. sensor or connector of sensor is defective
E6	No D Indoor unit coil outlet temp. sensor or connector of sensor is defective
E4	Open or short circuit of outdoor unit temperature sensor
E5	Compressor voltage protection
E7	Communication malfunction between outdoor main chip and compressor control chip
P0	Temperature protection of compressor discharge or compressor top. For RK - 4M36HME ,it only means compressor discharge temp. protection.
P1	High pressure protection(only for RK - 4M27HME, RK - 4M36HME)
P2	Low pressure protection(only for RK - 4M27HME, RK - 4M36HME)
P3	Compressor current protection
P4	IPM module protection
P6	Condenser high-temperature protection
P7	Inverter compressor drive protection

RK-5M36HME

Display	LED STATUS
E0	EEPROM error
E2	Communication malfunction between outdoor unit and indoor units
E3	Communication malfunction between outdoor main chip and compressor control chip.
E4	Outdoor unit temp. sensor or connector of temp. sensor is defective
E5	Compressor voltage protection
E6	PFC module protection
F1	No A Indoor unit coil outlet temp. sensor or connector of sensor is defective
F2	No B Indoor unit coil outlet temp. sensor or connector of sensor is defective
F3	No C Indoor unit coil outlet temp. sensor or connector of sensor is defective
F4	No D Indoor unit coil outlet temp. sensor or connector of sensor is defective
F5	No E Indoor unit coil outlet temp. sensor or connector of sensor is defective
P0	Compressor top. temperature protection
P1	High pressure protection
P2	Low pressure protection
P3	Compressor current protection
P4	Compressor discharge high-temperature protection
P5	Condenser high-temperature protection
P6	IPM module protection

RK-M07CC
RK-M09CC
RK-M12CC

Display	MALFUNCTION
E0	EEPROM parameter error
E1	Communication malfunction between outdoor unit and indoor units
E2	Zero-crossing signal error
E3	Fan speed out of control
E5	Open or short circuit of outdoor temperature sensor
E6	Open or short circuit of room or evaporator temperature sensor
P0	IPM module protection or IGBT over-strong current protection
P1	Over voltage or too under voltage protection
P2	Temperature protection of compressor top.
P4	Inverter compressor drive error

RK-M07Q4-AN
RK-M09Q4-AN
RK-M12Q4-AN
RK-M18Q4-AN

Cassette/Ceiling &Floor series:

Operation	Timer	De-frost	Alarm	LED STATUS
★	X	X	X	Open or short circuit of T1 temperature sensor
X	X	★	X	Open or short circuit of T2 temperature sensor
X	★	X	X	Communication malfunction between outdoor unit and indoor units
X	X	X	★	Water level alarm
★	★	X	X	EEPROM error
★	X	X	●	IPM module protection
★	●	X	X	Open or short circuit of T3 temperature sensor
★	●	X	●	Outdoor voltage protection
★	X	●	X	Compressor top temp. protection
★	X	●	●	Mode conflict
★	X	★	★	Outdoor current protection

★ flash, ● light, X extinguished.

RK-M07T3
RK-M09T3
RK-M07T3N
RK-M09T3N
RK-M12T3
RK-M18T3

A5 Duct:

Operation	Timer	De-frost	Alarm	LED STATUS	DISPLAY DIGITAL TUBE
★	X	X	X	Open or short circuit of T1 temperature sensor	E0
X	X	★	X	Open or short circuit of T2 temperature sensor	E1
X	★	X	X	Communication malfunction between outdoor unit and indoor units	E2
X	X	X	★	Water level alarm	E3
★	★	X	X	EEPROM error	E4
★	X	X	●	IPM module protection	E5
★	●	X	X	Open or short circuit of T3 temperature sensor	E6
★	●	★	X	Outdoor fan speed out of control	E7
★	●	X	●	Outdoor voltage protection	P0
★	★	★	★	Compressor top temp. protection	P3
★	◎	X	X	Compressor position. protection	P4
★	X	●	X	Mode conflict	P5

★ flash at 5Hz, ● light, X extinguished ◎flash at 0.5Hz

Console

Operation	Timer	De-frost	LED STATUS
★	X	X	Open or short circuit of T1 temperature sensor
X	X	★	Open or short circuit of T2 temperature sensor
X	★	X	Communication malfunction between outdoor unit and indoor units
★	★	X	EEPROM error
★	X	★	IPM module protection
★	★	★	Open or short circuit of T3 temperature sensor
★	●	X	Compressor top temp. protection
★	◎	X	Compressor position. protection
★	X	●	Mode conflict
★	●	★	Fan speed out of control

★ flash at 5Hz, ● light, X extinguished