

# AIR CONDITIONER MULTI BRAND ERROR CODE LIST

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**Error Code**

		0	1	2	3	4	5	6	7	8	9	A	H	C	J	E	F	
INDOOR	A	External protection device	PCB defect	Interlock for fan motor	Abnormal drain water level	Abnormal temp for heat exchanger(1)	Abnormal temp for heat exchanger(2)	Fan motor lock, overload	Malfunction of air swing motor	AC input over current	Malfunction of moving part of electric expansion valve	Abnormal temp of heater	Air cleaner defect, dirty	Kindling process fault	Capacity determination device	Not enough water supply	Malfunction of humidifier	
	C	Thermistor fault			Malfunction of drain water level sensor	Malfunction of thermistor for heat exchanger(1)	Malfunction of thermistor for heat exchanger(2)	Fan motor lock, overload sensor error	Error of lock sensor of air swing motor	Malfunction of AC input sensor	Malfunction of thermistor for suction air	Malfunction of thermistor for supply air	Malfunction of dirt sensor	Malfunction of humidity sensor	Malfunction of thermistor (for remote)	Malfunction of radiation sensor	Malfunction of high pressure switch	
OUTDOOR	E	Actuation of safety device	PCB defect	Detection of earth leakage by leak detection PC board ass'y (P4V6P3P1A)	High pressure switch	Low pressure switch	Compressor over load	Compressor overload, over current, lock	Fan motor overload, lock	AC input over current	Malfunction of moving part of EEV		Pump over current, lock	Abnormal water temp	Actuation of additional protective device	Abnormal drain water level	Error of heat accommodation unit	
	H	Thermistor fault	Malfunction of air thermistor	Malfunction of sensor for power supply	Malfunction of high pressure switch	Malfunction of low pressure switch	Malfunction of sensor for compressor over load	Malfunction of sensor for comp overload, over current	Malfunction of sensor for fan motor overload, over current	Malfunction of AC input sensor	Malfunction of thermistor for ambient temp	Malfunction of thermistor for discharge air	Malfunction of sensor for pump over current, lock	Malfunction of sensor for boiled water		Malfunction of drain water level sensor	Alarm for heat accommodation unit	
	F	No 1 & 2. Actuation of common safety device	Actuation of safety device in No1 cycle	Actuation of safety device in No2 cycle	Abnormal discharge pipe temp.			Abnormal temp for heat exchanger(1)					Abnormal discharge pressure	Abnormal high oil temp	Abnormal suction pressure		Abnormal oil pressure	Abnormal oil level
	J	Malfunction of refrigerant temperature sensor	Malfunction of pressure sensor	Malfunction of sensor for power supply	Malfunction of discharge pipe sensor	Malfunction of low pressure saturation temp sensor	Malfunction of thermistor for suction pipe	Malfunction of thermistor for heat exchanger(1)	Malfunction of thermistor for heat exchanger(2)	Malfunction of thermistor for liquid pipe	Malfunction of thermistor for gas pipe	Discharge pressure sensor	Oil temp sensor	Suction pressure sensor			Oil pressure sensor	Oil level sensor
	L	Inverter fault			Abnormal temp for switch box	Inverter radiating fin temp rise	Inverter DC output over current	Inverter AC output over current	Total input over current	Inverter thermostat sensor, comp over load	Inverter stall prevention, comp lock	Power transistor fault			Malfunction of transmission between inverter and control			
	P	Gas shortage	Loose phase, unbalance, inverter over-ripple protection			Malfunction of switch box temp sensor	Malfunction of sensor for inverter radiating fin temp rise	Malfunction of sensor for inverter DC output	Malfunction of sensor for inverter AC or DC output	Malfunction of sensor for total input amps							Capacity determination device	
SYSTEM	U	Gas shortage	Reverse phase	Power supply failure	Check Operation not completed	Signal transmission error between IDU & ODU	Signal transmission error between IDU & remote	Signal transmission error between IDU	Signal transmission error between ODU	Signal transmission error between remote	Signal transmission error between IDU & ODU in same system	Excessive number of IDU	Address duplication of IDU	Address duplication of central remote	Signal transmission error between IDU & option	Signal transmission error between central remote	Miss wiring / piping	
	M		PCB defect for Centerized controller							Transmission error of centerized controller		Improper combination of optional controllers for centerized		Address duplication, improper setting for central remote				
OTHERS	3		Indoor humidity sensor fault	Outdoor humidity sensor fault	Malfunction of thermistor of supply air	Malfunction of thermistor of circulate air	Malfunction of thermistor of outdoor ambient air					Malfunction of sensor for water leakage (1)	Malfunction of sensor for water leakage (2)	Malfunction of sensor for sweat				
	4	Malfunction of humidifier valve	Malfunction of cold water valve	Malfunction of hot water valve	Malfunction of heat exchanger of cold water	Malfunction of heat exchanger of hot water												
	5		Fan motor over load for air supply	Fan motor over load for air circulation	Inverter fault for air inlet side	Inverter fault for air outlet side												
	6	Malfunction lamp	PCB defect	Ozone density	Dirt sensor	Sensor for indoor air temp	Sensor for outdoor air temp			Malfunction of high voltage side		Damper	Door swith open	Humidifier element	High efficiency filter		Easy remote control	

SR NO	CAUSE	ERROR IDENTIFICATION	CHECK POINTS
1	INDOOR UNIT NOT START	UNIT NOT START	1) CHECK THE INPUT POWER SUPPLY
			2) CHECK THE PCB CONNECTION INSIDE THE INDOOR CONTROLLER
			3) CHECK THE FUSE CONDITION
2	2 TIMES OF LED	FORCED OPERATION DUE TO TEMPORARY KEY OFF CONTINUESLY	1) CHECK THE DECO PANEL FITTMENT
			2) CHECK THE FRONT COVER FITMENT
			3) CHECK THE TACT SWITCH OPERATION IN DISPLAY PCB
3	3 TIMES BLINKS OF LED	COMMUNICATION ERROR DUE TO THERMAL FUSE OPEN	1) CHECK THE FITMENT OF THERMAL FUSE CONNECTOR
			2) CHECK THE POWER SUPPLY FROM INDOOR TO OUTDOOR
			3) CHECK THE CONDITION OF THERMAL FUSE
4	4 TIMES BLINKS OF LED	SOME ERROR AT OUTDOOR	1) CHECK THERE IS SOME ERROR IN OUTDOOR UNIT
5	5 TIMES BLINK OF LED	POWER RELAY DEFECTIVE	1) CHECK THE INPUT POWER SUPPLY
			2) CHECK VOLTAGE BETWEEN INDOOR TO OUTDOOR
			3) IF ABOVE 2 POINTS FOUND OK THEN CHECK RESISTANCE BETWEEN RELAY CONTACT
6	9 TIMES BLINK OF LED	THERMISTER ERROR	1) CHECK THE CONNECTION OF THERMISTER SENSOR
			2) CHECK NO WIRE OF SENSOR DAMAGE
			3) CHECK THE RESISTANCE OF THERMISTER SENSOR
7	10 TIMES BLINK OF LED	DC FAN MOTOR DEFECTIVE	1) CHECK THE CONNECTION OF IDU MOTOR
			2) CHECK NO HARNESS DAMAGE OF IDU MOTOR
			3) CHECK RESISTANCE BETWEEN IDU MOTOR TERMINAL
8	12 TIMES BLINK OF LED	IDU TO ODU COMMUNICATION	1) CHECK THE CONNECTION BETWEEN IDU TO ODU
			2) CHECK THERE IS NO LOOSE CONNECTION BETWEEN IDU TO ODU
			3) CHECK WIRE HARNESS JOINTS
			3) CHECK REACTOR CONNECTION

# HITACHI

SR NO	CAUSE	ERROR IDENTIFICATION	CHECK POINTS
1	OUTDOOR NOT START	UNIT NOT START	1) CHECK THE PROPER CONNECTION - A,B,C OF INDOOR UNIT TO OUTDOOR UNIT. 2) CHECK THE INPUT SUPPLY VOLTAGE BY MULTIMETER AND ENSURE THAT SUPPLY VOLTAGE SHOULD BE HEALTHY ( 230VAC + / - 15 VAC ). 3) CHECK THE OUTPUT SUPPLY GENERATED FROM INDOOR TO OUTDOOR. 4) CHECK THE FUSE CONDITION IN OUTDOOR CONTROLLER. 5) CHECK THE REACTOR CONNECTION .
2	2 TIMES / 3 TIMES / 4 TIMES BLINKS OF LED 301	HIGH CURRENT CUT / ABNORMAL LOAD ERROR	1) CHECK GAS PRESSOR AND IT SHOULD BE WITHIN RANGE. 2) CHECK THE SERVICE VALVE OPERATION . 3) CHECK THE COMPRESSOR CONNECTION . 4) CHECK THE TERMINAL RESISTANCE OF COMPRESSOR.
3	5 TIMES BLINKS OF LED 301 AT OUT -DOOR CONTROLLER	OVER LOAD LOWER LIMIT CUT ERROR	1) CHECK THE FREE SPACE SURROUND THE OUTDOOR UNIT AND NOT ANY OBSTACLE AVAILABILITY 2) CHECK THE TERMINAL RESISTANCE OF COMPRESSOR
4	6 TIMES BLINKS OF LED 301 AT OUTDOOR CONTROLLER	HIGH TEMPERATURE CUT / OH THERMISTER ERROR	1) CHECK CONNECTION OF OH THERMISTER SENSOR 2) CHECK HARNESS OF OH THERMISTER 3) CHECK THE GAS LEAKAGE 4) CHECK THE OPERATION OF SERVICE VALVE 5) CHECK THE COMPRESSOR CONNECTION 6) CHECK THE TERMINAL RESISTANCE OF COMPRESSOR
5	7 TIMES BLINKS OF LED 301 AT OUTDOOR CONTROLLER	THERMISTER ERROR	1) CHECK THE CONNECTION OF THERMISTER SENSOR 2) CHECK NO WIRE OF SENSOR DAMAGE 3) CHECK THE RESISTANCE OF THERMISTER SENSOR
6	9 TIMES BLINKS OF LED 301 AT OUTDOOR CONTROLLER	IDU TO ODU COMMUNICATION	1) CHECK CONTINUITY OF COMMUNICATION WIRE 'C' 2) CHECK PROPER CONNECTION OF A,B,&C CONNECTION FROM IDU TO ODU
7	10 TIMES BLINKS OF LED 301 AT OUTDOOR CONTROLLER	ABNORMAL SUPPLY VOLTAGE	1) CHECK THE INPUT SUPPLY VOLTAGE BY MULTIMETER AND ENSURE THAT SUPPLY VOLTAGE SHOULD BE HEALTHY ( 230VAC + / - 15 VAC )
8	11 TIMES / 12 TIMES BLINKS OF LED 301 AT OUTDOOR CONTROLLER	ODU FAN ERROR	1) CHECK THE MOVEMENT OF OUTDOOR FAN BY HAND 2) CHECK THE MOTOR TERMINAL RESISTANCE BY MULTIMETER 3) OUTDOOR STOP BY STRONG REVERSE WIND
9	13 TIMES BLINKS OF LED 301 AT OUTDOOR CONTROLLER	EEPROM ERROR	EEPROM ERROR
10	14 TIMES BLINKS OF LED 301 AT OUTDOOR CONTROLLER	ABNORAL ACTIVE VOLTAGE	1) CHECK THE INPUT SUPPLY VOLTAGE BY MULTIMETER AND ENSURE THAT SUPPLY VOLTAGE SHOULD BE HEALTHY ( 230VAC + / - 15 VAC ) 2) CHECK THE COMPRESSOR CONNECTION 3) CHECK THE TERMINAL RESISTANCE OF COMPRESSOR
11	15 TIMES BLINKS OF LED 301 AT OUTDOOR CONTROLLER	CONTROLLER DEFECT	OUTDOOR CONTROLLER DEFECTIVE
12	16 TIMES BLINKS OF LED 301 AT OUTDOOR CONTROLLER	ABNORMAL LOAD	1) CHECK THE OPERATION OF SERVICE VALVE 2) CHECK THE CONDITION OF INDOOR FILTER 3) CHECK THE MOVEMENT OF OUTDOOR FAN 4) CHECK ANY OBSTACLE SURROUND OUTDOOR UNIT

DURING STOP SELF-DIAGNOSIS BLINKING MODE		
LD301	SELF DIAGNOSIS CONTENTS	MAIN CHECK POINT
OFF	FAILURE TO INPUT THE POWER SOURCE	ABNORMAL INPUT VOLTAGE AT BETWEEN TERMINAL A AND B F CABLE MISS CONNECTION RECTOR MISS CONNECTION NOT ANY MALFUNCTION
	NORMAL STOP	DURING INDOOR UNIT AIR PURIFIER OPERATION(*1)AND TILL COMPRESSOR START
ONCE	AIR PURIFIER OPERATION RESET STOP	OTHER CASE
2 TIMES	PEAK CURRENT CUT	SERVICE VALVE CLOSE
3 TIMES	ABNORMAL LOW SPEED ROTATION	COMPRESSOR CONNECTOR OPEN
4 TIMES	SWITCHING FAILURE	OBSTACLE SURROUND OUTDOOR MAY CAUSE OTHER CASE
5 TIMES	OVERLOAD LOWER LIMIT CUT	OUTDOOR FAN DOES NOT OPERATE PROPELLER FAN LOCK PROPELLER FAN LOCK PERFORM (OUTDOOR UNIT FAN MOTOR LOCK)
		SERVICE VALVE CLOSE LEAKAGE OF REFRIGERANT DUE TO OPEN CONNECTOR OUTDOOR UNIT CIRCUIT IS MALFUNCTION DUE TO OPEN CONNECTOR
6 TIMES	TEMPERATION RISING OF THE COMPRESSOR	DISCONNECTION OR SHORT CIRCUIT OF THERMISTOR WIRE OUTDOOR UNIT CIRCUIT IS MALFUNCTION F CABLE MISS CONNECTION F CABLE WIRE CUT
7 TIMES	THERMISTER ABNORMAL	COMMUNICATE CIRCUIT IS MALFUNCTION
9 TIMES	COMMUNICATION ERROR	AC INPUT IN ABNORMAL (OUTSIDE + 15% OF RATED VOLTAGE) AC INPUT IN ABNORMAL (WITHIN + 15% OF RATED VOLTAGE) CHANGE THE OUTDOOR ELECTRIC BOX CHECK THE POWER VOLTAGE DIRECT VOLTAGE IS NORMAL ABNORMAL COMPRESSOR LOAD CHANGE THE OUTDOOR ELECTRIC BOX
10 TIMES	ABNORMAL POWER SOURCE	(THERE IS A MODEL WHICH DOES NOT HAVE BLINK 15 TIMES)
13 TIMES	EEPROM READING ERROR	SERVICE VALVE CLOSE
14 TIMES	DC VOLTAGE ABNORMAL	OBSTACLE SURROUND OUTDOOR UNIT MAY CAUSE CLOGGED FILTER IN OUTDOOR UNIT CAUSE OUTDOOR UNIT DOES NOT OPERATE
15 TIMES	OUTDOOR CIRCUIT DEFECTIVE	
16 TIMES	HIGH LOAD STOP	

# HITACHI

Model Code	Model Name	Error Indication	Error Code
RAT518HUD series	QUADRICOOL (SM/TM/SUMMER)	7-Segment Display 	'E1' display on Display PCB 'E6' display on Display PCB 'E9' display on Display PCB 'EE' display on Display PCB
RAW018KTH series RAW511KUD series	KAZE PLUS / KAZE HP	7-Segment Display 	'E1' display on Display PCB 'E7' display on Display PCB 'E8' display on Display PCB 'EE' display on Display PCB
312 KUDI	KAMPA WAC (Compact)	7-Segment Display 	Er' display on display PCB En 'display on display PCB Ed 'display on display PCB
RAU518HUDD series RAU518EUDA series RAU518HUD series RAU518IUD series RAU318HUD series	ACE CO / FMS/ Kaze Plus / i-Clean / ACE CO HP(Raiden-RAU518HTH) / Sugoi / KAMPA (new)	Filter LED (red) 	Blinking 4 times Blinking 5 times Blinking 7 times Blinking 8 times Blinking 9 times Blinking 15 times
KSDI series	KAMPA - HHAW	TIMER LED (Green) 	Blinking for 13 times Blinking for 14 times Blinking for 15 times
(SE018CP008) series	LOGICOOL SAC (LED) ( OLD model)	Operation LED ( yellow) 	Blinking for 5 times Blinking for 9 times Blinking continuously
RAU230HUD RAU390HUD	Star SUMO / ATOM-XL	Timer LED (green) 	Blinking 15 times Blinking 14 times Blinking 10 times Blinking 13 times Blinking 2 times

Indoor display	Outdoor (LED1 flash times)	Transmission time	fault description
E7	15	Less than 1 min	Communication fault between indoor and outdoor units
E1	--	Less than 1 min	Room temperature sensor failure
E2	--	Less than 1 min	Heat-exchange sensor failure
E4	--	Less than 1 min	Indoor EEPROM error
E14	--	Less than 1 min	Indoor fan motor malfunction

Above mention Error Code Accept E -7 Error may cause of Defect in IDU or ODU wiring or part .

E-1,E-2,E-4,E-14 Belong to IDU side problem.

Indoor display	Outdoor (LED1 flash times)	Transmission time	fault description
F12	1	Less than 1 min	Outdoor EEPROM error
F1	2	10 mins	The protection of Power module
F22	3	30 mins	Over current protection of outdoor model
F3	4	30 mins	Communication fault between the Power module and outdoor PCB
F19	6	Less than 1 min	Power voltage is too high or low
F4	8	Less than 1 min	Overheat protection for Discharge temperature
F27	7	10 mins	Compressor blocked
F8	9	30 mins	Outdoor DC fan motor fault
F21	10	Less than 1 min	Defrost temperature sensor failure
F7	11	Less than 1 min	Suction temperature sensor failure
F6	12	Less than 1 min	Ambient temperature sensor failure
F25	13	30 mins	Discharge temperature sensor failure

Indoor display	Outdoor (LED1 flash times)	Transmission time	fault description
F13	16	Less than 1 min	Less gas charge
F14	17	Less than 1 min	4-way-valve fault
F11	18	Less than 1 min	Compressor running abnormal
F28	19	10mins	Compressor loss of synchronism detection
F2	24	Less than 1 min	Over current of the compressor
F23	25	Less than 1 min	Over current protection of compressor
E9	21	Less than 1 min	Indoor unit overload in heating mode

1. Above mention Error F-11 & F-28 for common cause Compressor running abnormal .

2. Above mention Error F-2 & F-23 for common cause Over current of the compressor.

Operation Lamp	Timer Lamp	LED Display	Error Information	Solution
1 time	OFF	EH 00	Indoor unit EEPROM parameter error	TS18
2 times	OFF	EL 01	Indoor / outdoor unit communication error	TS19
3 times	OFF	EH 02	Zero-crossing signal detection error(for some models)	TS21
4 times	OFF	EH 03	The indoor fan speed is operating outside of the normal range	TS22
5 times	OFF	EC 51	Outdoor unit EEPROM parameter error(for some models)	TS18
5 times	OFF	EC 52	Condenser coil temperature sensor T3 is in open circuit or has short circuited	TS25
5 times	OFF	EC 53	Outdoor room temperature sensor T4 is in open circuit or has short circuited	TS25
5 times	OFF	EC 54	Compressor discharge temperature sensor TP is in open circuit or has short circuited	TS25
6 times	OFF	EH 60	Indoor room temperature sensor T1 is in open circuit or has short circuited	TS25

Operation Lamp	Timer Lamp	LED Display	Error Information	Solution
6 times	OFF	EH 6i	Evaporator coil temperature sensor T2 is in open circuit or has short circuited	TS25
12 times	OFF	EC 01	The outdoor fan speed is operating outside of the normal range(for some models)	TS22
9 times	OFF	EH 0b	Indoor PCB / Display board communication error	TS26
8 times	OFF	EL 0C	Refrigerant leak detected	TS27
7 times	FLRSH	PC 00	IPM malfunction or IGBT over-strong current protection	TS29
2 times	FLRSH	PC 0i	Over voltage or over low voltage protection	TS30
3 times	FLRSH	PC 02	High temperature protection of IPM module or High pressure protection(for some models)	TS31
5 times	FLRSH	PC 04	Inverter compressor drive error	TS33
1 time	FLRSH	PC 08	Current overload protection(for some models)	TS28
7 times	FLRSH	PC 03	Low pressure protection(for some models)	TS34

No.	Problem	LED(GREEN)	LED(RED)	Solution
1	Standby normally	ON	OFF	-
2	Operate normally	OFF	ON	-
3	Compressor driven chip EEPROM parameter error	ON	FLASH	TS18
4	IPM malfunction or IGBT over-strong current protection	FLASH	OFF	TS29
5	Over voltage or too low voltage protection	ON	ON	TS30
6	Inverter compressor drive error	OFF	FLASH	TS33
7	Inverter compressor drive error	FLASH	LIGHT	TS33
8	Communication error between outdoor main chip and compressor driven chip	FLASH	FLASH	TS18

Part requiring replacement	Error Code								
	EH 00	EL 01	EH 02	EH 03	EH 60	EH 61	EH 0b	EL 0C	PC 08
Indoor PCB	✓	✓	✓	✓	✓	✓	✓	✓	x
Outdoor PCB	x	✓	x	x	x	x	x	x	✓
Display board	x	x	x	x	x	x	✓	x	x
Indoor fan motor	x	x	x	✓	x	x	x	x	x
T1 sensor	x	x	x	x	✓	x	x	x	x
T2 Sensor	x	x	x	x	x	✓	x	✓	x
Reactor	x	✓	x	x	x	x	x	x	x
Compressor	x	x	x	x	x	x	x	x	✓
Additional refrigerant	x	x	x	x	x	x	x	✓	x

Part requiring replacement	EC 53	EC 52	EC 54	EC 51	EC 07	PC 00	PC 01	PC 02	PC 03	PC 04
Indoor PCB	x	x	x	x	x	x	x	x	x	x
Outdoor PCB	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Indoor fan motor	x	x	x	x	x	x	x	x	x	x
Outdoor fan motor	x	x	x	x	✓	✓	x	✓	x	✓
T3 Sensor	x	✓	x	x	x	x	x	x	x	x
T4 Sensor	✓	x	x	x	x	x	x	x	x	x
TP Sensor	x	x	✓	x	x	x	x	x	x	x
Reactor	x	x	x	x	x	x	✓	x	x	x
Compressor	x	x	x	x	x	✓	x	x	x	✓
IPM module board	x	x	x	x	x	✓	✓	✓	x	✓
High pressure protector	x	x	x	x	x	x	x	✓	x	x
Low pressure protector	x	x	x	x	x	x	x	x	✓	x
Additional refrigerant	x	x	x	x	x	x	x	x	✓	x

## INDOOR UNIT ERROR

Code	Description
1	Indoor unit room temperature sensor error
2	Indoor unit inlet pipe sensor error
3	Wired remote control error
4	Float switch error(Optional)
5	Communication Error between indoor and outdoor units
6	Indoor unit outlet pipe sensor erro
9	Indoor unit EEPROM erro
10	Indoor unit BLDC motor fan lock
12	Indoor unit middle pipe Sensor Error

## OUTDOOR UNIT ERROR

21	DC Peak (IPM Fault)
22	CT 2 (Max CT)
23	DC Link low Volt
26	DC Comp Position Error
27	PSC fault
29	Comp Phase over Current
32	Inverter Compressor D-Pipe Overheat
34	High Pressure Sensor high
35	Low Pressure Sensor Low
36/38	Refrigerant Leakage Detection
37	Exceed the Compression Ratio Limit
40	CT Sensor Error
41	Discharge pipe Sensor Error
42	Low Pressure Sensor Error
43	High Pressure Sensor Error
44	Outdoor Air Sensor Error
45	Cond. Middle pipe sensor Error
46	Suction pipe sensor Error
51	Excess Capacity (Mismatching between IDU and ODU unit)
53	Communication Error (IN-OUT)
61	Cond. Pipe high
62	Heat Sink sensor Temp. high
67	BLDC Motor fan Lock
72	Detect 4-way valve transfer Failure
93	Communication Error (IN-OUT)

Category	Outdoor Light Flashes	Indoor Display	Fault Details
Fault	25	EE	Indoor machine EE fault
	26	E1	Indoor fan fault
	27	E2	Indoor fan zero-crossing detection abnormal
	28	E3	Indoor coil fault and sensor fault
	29	E4	Indoor ambient temperature sensor fault
	?	E5	No Cooling /No Gas detection
	/	E9	WIFI module fault
	/	EH	Humidity sensor fault
	1	E0	Outdoor EE fault
	2	E6	Indoor and outdoor machine communication fault
	4	F1	Compressor starting abnormal (phase failure, reverse)
	5	F2	Compressor out-of-step fault
	6	F3	IPM module fault
	7	F4	Compressor shell roof fault/protection
	8	F5	Discharge temperature sensor fault
	9	F6	Suction temperature sensor fault
	10	F7	Outdoor coil temperature sensor fault
	11	F8	Outdoor ambient temperature sensor fault
	12	F9	Outdoor DC fan fault
	33	L3	Drive phase current overload fault
34	L4	Phase current sampling abnormal	
/	CL	Indoor filter cleaning reminder	
/	nF	Indoor filter replacement reminder	

## Category Outdoor Light Flashes Indoor Display Fault Details

Protection	13	P1	Outdoor machine AC current protection
	14	P2	Compressor phase current protection
	15	P3	Outdoor unit over-high/over-low AC voltage protection
	16	P4	DC voltage over-high or over-low voltage protection
	17	P5	IPM over-high temperature protection
	18	P6	Discharge temperature overheat protection
	19	P7	Cooling indoor coil anti-freezing protection
	20	P8	Cooling outdoor coil overheat protection
	21	P9	Heating indoor coil overheat protection
	22	PC	Cooling outdoor ambient temperature over-low protection
	23	PH	Heating outdoor ambient temperature over-high protection
	31	L1	Drive bus voltage over-high protection
	32	L2	Drive bus voltage over-low protection

## Error Codes : AXGT18FHTC-B, AXGT24FHTC-B

### Error Codes

If you use a wireless remote controller, the lamp on the photodetector unit will output error codes by way of blinking patterns. See the Indicator blinking patterns and error codes in the table below. An error display is displayed only during operation.

Error display			Description
OPERATION Indicator (green)	TIMER Indicator (orange)	SUPER WAVE Indicator (green)	
●(3)	●(5)	◇	Manual auto switch error
●(4)	●(1)	◇	Room temperature sensor error
●(4)	●(2)	◇	Heat exchanger temperature sensor error

• Display mode ● : 0.5s ON / 0.5s OFF, ( ) : Number of flashing, ◇ : 0.1s ON / 0.1s OFF

## Error Codes : AKGB09FAWA-B, AMGB12FAWA-B

NO.	Malfunction name	Display on dual-8 nixie tube	A/C Status	Possible reasons
1	Malfunction of indoor ambient temperature sensor	F1	Under heating, cooling or SE mode, the unit will stop operation as it reaches the temperature point. Under fan mode, the unit operates according to the original status.	<ol style="list-style-type: none"> <li>1. The wiring terminal between indoor ambient temperature sensor and controller is loosened or poorly contacted;</li> <li>2. There's short circuit due to trip-over of the parts on controller;</li> <li>3. Indoor ambient temperature sensor is damaged (Please check it by referring to the resistance table for temperature sensor)</li> <li>4. Main board is broken.</li> </ol>
2	Malfunction of indoor tube temperature sensor	F2	Under heating, cooling or SE mode, the unit will stop operation as it reaches the temperature point. Under fan mode, the unit operates according to the original status.	<ol style="list-style-type: none"> <li>1. The wiring terminal between indoor tube temperature sensor and controller is loosened or poorly contacted;</li> <li>2. There's short circuit due to trip-over of the parts on controller;</li> <li>3. Indoor tube temperature sensor is damaged (Please check it by referring to the resistance table for temperature sensor)</li> <li>4. Main board is broken.</li> </ol>
3	Malfunction of outdoor tube temperature sensor	F4	Under heating, cooling or SE mode, the unit will stop operation as it reaches the temperature point. Under fan mode, the unit operates according to the original status.	<ol style="list-style-type: none"> <li>1. The wiring terminal between outdoor tube temperature sensor and controller is loosened or poorly contacted;</li> <li>2. There's short circuit due to trip-over of the parts on controller;</li> <li>3. Indoor tube temperature sensor is damaged (Please check it by referring to the resistance table for temperature sensor)</li> <li>4. Main board is broken.</li> </ol>
4	Insufficient fluorine protection	F0	Indoor fan runs according to set fan and other loads will stop.	<ol style="list-style-type: none"> <li>1. Heat exchangers are too dirty or the air inlet/outlet is blocked.</li> <li>2. Compressor doesn't work normally. Strange noise or leakage occurs. Temperature of the shell is too high.</li> <li>3. System is blocked inside(dirt block, ice block, oil block, Y-valve not fully open).</li> <li>4. The refrigerant is leaking.</li> </ol>
5	Overload protection for compressor	H3	Indoor fan runs according to set fan and other loads will stop.	<ol style="list-style-type: none"> <li>1. Heat exchangers are too dirty or the air inlet/outlet is blocked.</li> <li>2. Fan motor is not working Abnormal fan speed; fan speed is too low or the fan doesn't run.</li> <li>3. Compressor doesn't work normally. Strange noise or leakage occurs. Temperature of the shell is too high.</li> <li>4. System is blocked inside(dirt block, ice block, oil block, Y-valve not fully open).</li> <li>5. Draw-water motor can't operate normally.</li> <li>6. Water outlet hasn't been blocked well by rubber cork .</li> <li>7. The refrigerant is leaking and cause overheating protection to compressor.</li> </ol>

## Error Codes : AKGB09FAWA-B, AMGB12FAWA-B

NO.	Malfunction name	Display on dual-8 nixie tube	A/C Status	Possible reasons
6	Overload malfunction	E8	During cooling or drying operation, indoor fan operates, while compressor, outdoor fan and water-striking motor stop. "E8" is displayed.	<ol style="list-style-type: none"> <li>1. The environment is formidable.</li> <li>2. Heat exchangers are too dirty or the air inlet/outlet is blocked.</li> <li>3. Fan motor is not working Abnormal fan speed; fan speed is too low or the fan doesn't run.</li> <li>4. Compressor doesn't work normally. Strange noise or leakage occurs. Temperature of the shell is too high.</li> <li>5. System is blocked inside(dirt block, ice block, oil block, Y-valve not fully open).</li> <li>6. Temperature sensor of main board can't detect correctly.</li> </ol>
7	Malfunction of temperature sensor at air outlet	FJ	Under heating, cooling or SE mode, the unit will stop operation as it reaches the temperature point. Under fan mode, the unit operates according to the original status.	<ol style="list-style-type: none"> <li>1. The wiring terminal between temperature sensor at air outlet and controller is loosened or poorly contacted;</li> <li>2. There's short circuit due to trip-over of the parts on controller;</li> <li>3. indoor tube temperature sensor is damaged (Please check it by referring to the resistance table for temperature sensor)</li> <li>4. Main board is broken.</li> </ol>
8	Malfunction of indoor ambient temperature sensor or indoor tube temperature sensor	EP	Compressor stops operation. The fan operates according to setting status.	<ol style="list-style-type: none"> <li>1. The wiring terminal between indoor tube temperature sensor or indoor ambient temperature sensor and controller is loosened or poorly contacted;</li> <li>2. There's short circuit due to trip-over of the parts on controller;</li> <li>3. indoor tube temperature sensor or indoor ambient temperature sensor is damaged (Please check it by referring to the resistance table for temperature sensor)</li> <li>4. Main board is broken.</li> </ol>

## Error Codes : ASGA18JCC-B, ASGA24JCC-B, ASGA30JCC-B

Error	Display		Error
	Operation LED	Timer LED	
Serial signal error	Off	2 flash	Serial signal (reverse) error, at operation start up
		3 flash	Serial signal (reverse) error, during operation
		4 flash	Serial signal (forward) error, at operation start up
		5 flash	Serial signal (forward) error, during operation
		8 flash	Wired remote controller error
Indoor unit thermistor error	2 flash	2 flash	Indoor temperature thermistor open / short
		3 flash	Heat exchanger middle thermistor open / short
Outdoor unit thermistor error	3 flash	2 flash	Discharge thermistor open / short
		3 flash	Heat exchanger thermistor open
		4 flash	Outdoor temperature thermistor open / short
		8 flash	Compressor temperature thermistor open / short
Indoor unit control error	4 flash	2 flash	Forced automatic SW welded
		3 flash	Main relay welded
		4 flash	Power interruption error
		7 flash	VDD permanent stop protection
		8 flash	Reverse VDD permanent stop protection

## Error Codes : ASGA18JCC-B, ASGA24JCC-B

Error	Display		Error
	Operation LED	Timer LED	
Outdoor unit control error	5 flash	2 flash	Current trip error
		3 flash	CT abnormal
		5 flash	Compressor location detection error
		6 flash	Outdoor unit fan drive system abnormal
Indoor fan motor error	6 flash	2 flash	Abnormal lock
		3 flash	Abnormal rotation
Refrigerant cycle error	7 flash	2 flash	Discharge Temperature abnormal
		3 flash	Cooling high pressure abnormal rise
		4 flash	4-way valve error
		5 flash	Pressure switch trouble
Optional function error	8 flash	2 flash	Active filter voltage trouble (second time)
		3 flash	Active filter voltage trouble (first time)
		4 flash	PFC circuit error
Model information error	0.1 sec on/off	0.1 sec on/off	Model information error

## Error Codes : AOGA18JCC-B, AOGA24JCC-B

LED	ERROR
0.5 second on / 0.5 second off	Overload protection
on	Discharge temperature abnormal
0.1 second on / 0.1 second off	Thermistor abnormal
2.0 second on / 2.0 second off	CT abnormal
0.1 second on / 2.0 second off	Compressor location abnormal
5.0 second on / 5.0 second off	Fan abnormal

## Error Codes : ASGG12CGTA-B, ASGG14CGTA-B, ASGG14CLCA-B, ASGG18CLCA-B & ASGG24CLCA-B

Error display			Error code	Description
OPERATION lamp (green)	TIMER lamp (orange)	ECONOMY lamp (green)		
●(1)	●(1)	◇	<b>11</b>	Serial communication error
●(1)	●(2)	◇	<b>12</b>	<ul style="list-style-type: none"> <li>Wired remote controller communication error</li> <li>Server room control communication error</li> </ul>
●(1)	●(5)	◇	<b>15</b>	Check run unfinished Automatic airflow adjustment error
●(1)	●(8)	◇	<b>16</b>	Peripheral unit transmission PCB connection error
●(1)	●(8)	◇	<b>18</b>	External communication error
●(2)	●(1)	◇	<b>21</b>	Unit number or Refrigerant circuit address setting error [Simultaneous Multi]
●(2)	●(2)	◇	<b>22</b>	Indoor unit capacity error
●(2)	●(3)	◇	<b>23</b>	Combination error
●(2)	●(4)	◇	<b>24</b>	<ul style="list-style-type: none"> <li>Connection unit number error (indoor slave unit) [Simultaneous Multi]</li> <li>Connection unit number error (indoor unit or branch unit) [Flexible Multi]</li> </ul>
●(2)	●(6)	◇	<b>26</b>	Indoor unit address setting error
●(2)	●(7)	◇	<b>27</b>	Primary unit, secondary unit setup error [Simultaneous Multi]
●(2)	●(9)	◇	<b>29</b>	Connection unit number error in wired remote controller system
●(3)	●(1)	◇	<b>31</b>	Power supply interruption error

Error display			Error code	Description
OPERATION lamp (green)	TIMER lamp (orange)	ECONOMY lamp (green)		
●(3)	●(1)	◇	<b>31</b>	Power supply interruption error
●(3)	●(2)	◇	<b>32</b>	Indoor unit PCB model information error
●(3)	●(3)	◇	<b>33</b>	Indoor unit motor electricity consumption detection error
●(3)	●(5)	◇	<b>35</b>	Manual auto switch error
●(3)	●(9)	◇	<b>39</b>	Indoor unit power supply error for fan motor
●(3)	●(10)	◇	<b>3A</b>	Indoor unit communication circuit (wired remote controller) error
●(4)	●(1)	◇	<b>41</b>	Room temp. sensor error
●(4)	●(2)	◇	<b>42</b>	Indoor unit heat ex. middle temp. sensor error
●(4)	●(4)	◇	<b>44</b>	Human sensor error
●(5)	●(1)	◇	<b>51</b>	Indoor unit fan motor error
●(5)	●(3)	◇	<b>53</b>	Drain pump error
●(5)	●(4)	◇	<b>54</b>	Electric air cleaner reverse VDD error
●(5)	●(5)	◇	<b>55</b>	Filter set error
●(5)	●(7)	◇	<b>57</b>	Damper error
●(5)	●(8)	◇	<b>58</b>	Intake grille error
●(5)	●(9)	◇	<b>59</b>	Indoor unit fan motor 2 error (Left side fan)
●(5)	●(10)	◇	<b>5A</b>	Indoor unit fan motor 3 error (Right side fan)

## Error Codes : ASGG12CGTA-B, ASGG14CGTA-B, ASGG14CLCA-B, ASGG18CLCA-B & ASGG24CLCA-B

Error display			Error code	Description
OPERATION lamp (green)	TIMER lamp (orange)	ECONOMY lamp (green)		
●(5)	●(15)	◇	<b>5U</b>	Indoor unit error
●(6)	●(1)	◇	<b>61</b>	Outdoor unit reverse/missing phase and wiring error
●(6)	●(2)	◇	<b>62</b>	Outdoor unit main PCB model information error or communication error
●(6)	●(3)	◇	<b>63</b>	Inverter error
●(6)	●(4)	◇	<b>64</b>	Active filter error, PFC circuit error
●(6)	●(5)	◇	<b>65</b>	Trip terminal L error
●(6)	●(8)	◇	<b>68</b>	Outdoor unit rush current limiting resistor temp. rise error
●(6)	●(10)	◇	<b>6A</b>	Display PCB microcomputers communication error
●(7)	●(1)	◇	<b>71</b>	Discharge temp. sensor error
●(7)	●(2)	◇	<b>72</b>	Compressor temp. sensor error
●(7)	●(3)	◇	<b>73</b>	Outdoor unit Heat Ex. liquid temp. sensor error
●(7)	●(4)	◇	<b>74</b>	Outdoor temp. sensor error
●(7)	●(5)	◇	<b>75</b>	Suction Gas temp. sensor error
●(7)	●(6)	◇	<b>76</b>	• 2-way valve temp. sensor error • 3-way valve temp. sensor error
●(7)	●(7)	◇	<b>77</b>	Heat sink temp. sensor error

Error display			Error code	Description
OPERATION lamp (green)	TIMER lamp (orange)	ECONOMY lamp (green)		
●(8)	●(2)	◇	<b>82</b>	• Sub-cool Heat Ex. gas inlet temp. sensor error • Sub-cool Heat Ex. gas outlet temp. sensor error
●(8)	●(3)	◇	<b>83</b>	Liquid pipe temp. sensor error
●(8)	●(4)	◇	<b>84</b>	Current sensor error
●(8)	●(6)	◇	<b>86</b>	• Discharge pressure sensor error • Suction pressure sensor error • High pressure switch error
●(9)	●(4)	◇	<b>94</b>	Trip detection
●(9)	●(5)	◇	<b>95</b>	Compressor rotor position detection error (permanent stop)
●(9)	●(7)	◇	<b>97</b>	Outdoor unit fan motor 1 error
●(9)	●(8)	◇	<b>98</b>	Outdoor unit fan motor 2 error
●(9)	●(9)	◇	<b>99</b>	4-way valve error
●(9)	●(10)	◇	<b>9A</b>	Coil (expansion valve) error
●(10)	●(1)	◇	<b>A1</b>	Discharge temp. error
●(10)	●(3)	◇	<b>A3</b>	Compressor temp. error
●(10)	●(4)	◇	<b>A4</b>	High pressure error
●(10)	●(5)	◇	<b>A5</b>	Low pressure error
●(13)	●(2)	◇	<b>J2</b>	Branch boxes error [Flexible Multi]

## Error Codes : ASGG12JLCA-B

(0.5s on / 0.5s off)

	OPERATION	TIMER	ECONOMY
Serial communication error	1 flash	1 flash	Rapid flash (0.1s on / 0.1s off)
Indoor unit PCB model information error	3	2	
Manual auto switch error	3	5	
Room temp. sensor error	4	1	
Indoor unit Heat Ex. Middle temp. sensor error	4	2	
Indoor unit fan motor error	5	1	
Indoor unit error	5	15	
Outdoor unit main PCB model information error or communication error	6	2	
Inverter error	6	3	
Active filter error, PFC circuit error	6	4	
Trip terminal L error	6	5	
Display PCB microcomputers communication error	6	10	
Discharge temp. sensor error	7	1	
Outdoor unit Heat Ex. liquid temp. sensor error	7	3	
Outdoor temp. sensor error	7	4	
Current sensor error	8	4	
Trip detection	9	4	
Compressor rotor position detection error	9	5	
4-way valve error	9	9	
Discharge temp. error	10	1	

ODU LIGHT FLASH	IDU DISPLAY	FAULT DETAILS	ODU LIGHT FLASH	IDU DISPLAY	FAULT DETAILS
/	H00	No fault			
1	E00	Outdoor EEPROM fault	18	F97	Compressor discharge temperature overheat protection
2	H11	Indoor to Outdoor communication fault	19	H99	Cooling Indoor unit coil anti-freezing protection
4	F93	Compressor starting abnormal	20	P07	Cooling outdoor coil overheat protection
5	F02	Compressor out-of-step abnormal	21	P08	Heating indoor coil overheat protection
6	F03	IPM module fault			
7	F04	Compressor shell temperature overheat protection	22	P09	Cooling outdoor ambient temperature over-low protection
8	H15	Compressor discharge temperature sensor fault			
9	F06	Compressor Suction temperature sensor fault	23	PA	Heating outdoor ambient temperature over-high protection
10	H28	Outdoor condenser temperature sensor fault			
11	H27	Outdoor ambient temperature sensor fault			
12	F09	Outdoor DC fan motor fault	31	H25	Nanoe-G air purifying system abnormal
/	E08	Outdoor communication error	25	EE	Indoor unit EEPROM fault
30	F91	Refrigeration cycle abnormality	26	E01	Indoor fan motor fault
24	F11	4-way valve switching failure	27	E02	Indoor PCB zero-crossing fault
			28	H23	Indoor evaporator temperature sensor fault
			29	H14	Indoor room temperature sensor fault
13	F98	Outdoor AC current protection	Error code is searchable in use of remote control 1) When error or protection happen, if IDU have "88" display, error code will appear on display automatically, but protection code can be seen only after manual checking by remote control. In the same time, customer can check each error codes by pressing "CHECK" button, and turn codes page by pressing "△" and "▽" for page turn. Buzzer will beep for 4 times in case that any fault occurs. 2) In error searching mode, if fault occurs, "TIMER" LED will blink. ACXF22-08650		
14	F99	Compressor phase current protection			
15	P02	Outdoor unit over-high/over-low AC voltage protection			
16	P03	Outdoor unit over-high or over-low DC voltage protection			
17	F96	IPM overheat temperature protection			



## Error Codes – A3050 Inverter

LED PATTERN			7SEG	DESCRIPTION
YEL	GRN	RED	DISPLAY	
○	○	○	-	POWER OFF / VDD NG
●	●	●	-	Power ON reset (1sec)
○	◎	●	-	NORMAL OPERATION
○	○	●	-	Abnormal Communication (Indoor ↔ Outdoor)
○	●	●	-	
○	○	◎	E464	IPM Over Current(O.C) Error
○	◎	○	E461	Comp.Starting Error
○	●	○	E470	EEPROM Data Error (no data)
○	●	◎	E466	DC-Link Voltage Under / Over Error
			E484	PFC Over Load Error
			E483	Over Voltage Protection Error
◎	○	◎	E221	OUT-TH (Outdoor Temperature) Sensor Error
◎	○	●	E416	DIS-TH (Discharge Temperature) Over Error
◎	◎	○	E251	DIS-TH (Discharge Temperature) Sensor Error
◎	◎	●	E468	Current Sensor Error
			E474	Heatsink Sensor Error
			E485	Input Current Sensor Error

LED PATTERN			7SEG	DESCRIPTION
YEL	GRN	RED	DISPLAY	
◎	●	○	E465	Comp V <sub>limit</sub> / <sub>limit</sub> Error
◎	●	○	E500	Heatsink Over Temperature Error
◎	●	◎	E231	CON-TH (Cond Temperature) Sensor Error
◎	●	●	E203	Time out Comm, (Inv Micom ↔ Main Micom)
●	○	○	E458	Fan Error
●	○	◎	E471	EEPROM Data Error (Main Micom ↔ Inv Micom)
●	○	●	E467	Comp Wire Missing Error
●	◎	○	E440	Prohibit Operation Condition Error (Heating)
			E441	Prohibit Operation Condition Error (Cooling)
●	◎	◎	E469	DC-Link Voltage Sensor Error
			E488	AC Input Voltage Sensor Error
●	◎	●	E462	AC Input <sub>limit</sub> Trip Error
●	●	○	E554	Gas Leak Error
			E422	EEV or Valve Close error-self diagnosis
◎	○	●	E463	Outdoor OLP over temperature error
○	◎	◎	-	Test Operation at Cooling Mode
◎	◎	◎	-	Test Operation at Heating Mode

● LED ON    ○ LED OFF    ◎ LED BLINKING

## Error Codes – S Inverter

ERROR MODE(INDOOR)				DESCRIPTION
7-SEG	OPERATION	TIMER	SMART SAVER	
E121	○	●	○	INDOOR TEMPERATURE SENSOR ERROR
E122, E123	●	●	○	INDOOR MID, INDOOR IN PIPE-TH SENSOR ERROR
E154	○	○	●	INDOOR FAN ERROR
E162	●	●	●	EEPROM ERROR
E163	●	●	●	OPTION ERROR
FROM E200	●	○	●	OUTDOOR ERROR DISPLAY
E422	●	○	●	EEV OR VALVE CLOSE ERROR(SELF DIAGNOSIS)
● LED ON   ○ LED OFF   ● LED BLINKING				

ERROR MODE (OUTDOOR)				DESCRIPTION
7-SEG	LED PATTERN			
	YEL	GRN	RED	
-	○	○	○	POWER OFF
-	●	●	●	RESET
-	○	●	●	NORMAL OPERATION
-	○	○	●	ABNORMAL COMMUNICATION
E464	○	○	●	IPM OVER CURRENT(O,C)
E461	○	●	○	COMP STARTING ERROR
E474	○	○	●	HEATSINK SENSOR ERROR
E500	○	●	○	HEATSINK OVER HEAT
E466	○	○	○	DC-LINK VOLTAGE UNDER/OVER ERROR
E483	○	●	○	OVER VOLTAGE PROTECTION ERROR
E463	●	○	●	OLP-TH OVER TEMPREATURE ERROR
E320	●	●	○	OLP-TH SENSOR ERROR
E468	●	○	○	CURRENT SENSOR ERROR
E485	●	○	●	INPUT CURRENT SENSOR ERROR
E465	●	●	○	COMP V LIMIT/ I LIMIT ERROR
E102	●	●	●	TIME OUT COMM(INDDOOR <-> OUTDOOR)
E471	●	○	○	EEPROM DATA ERROR
E467	●	○	●	COMP WIRE MISSING ERROR
E469	●	○	○	DC-LINK VOLTAGE SENSOR ERROR
E462	●	○	●	AC INPUT I LIMIT TRIP ERROR
● LED ON   ○ LED OFF   ● LED BLINKING				

## Error Codes – ON – OFF

7-SEG	LED 1	LED 2	LED 3	DESCRIPTION
	OPERATION	TIMER	SMART SAVER	
E121	○	◐	○	INDOOR TEMPERATURE SENSOR ERROR
E122	◐	◐	○	INDOOR HEAT EXCHANGER TEMPERATURE SENSOR ERROR
E154	◐	○	◐	INDOOR FAN MOTOR SPEED DETECTING ERROR
E162	◐	◐	◐	EEPROM ERROR
E163	◐	◐	◐	OPTION ERROR
E422	●	○	◐	EEV OR VALVE CLOSE ERROR(SELF DIAGNOSIS)
● LED ON   ○ LED OFF   ◐ LED BLINKING				



Operation Lamp	Timer Lamp	LED Display	Error Information	Solution
1 time	OFF	EH 00	Indoor unit EEPROM parameter error	TS18
2 times	OFF	EL 01	Indoor / outdoor unit communication error	TS19
3 times	OFF	EH 02	Zero-crossing signal detection error(for some models)	TS21
4 times	OFF	EH 03	The indoor fan speed is operating outside of the normal range	TS22
5 times	OFF	EC 51	Outdoor unit EEPROM parameter error(for some models)	TS18
5 times	OFF	EC 52	Condenser coil temperature sensor T3 is in open circuit or has short circuited	TS25
5 times	OFF	EC 53	Outdoor room temperature sensor T4 is in open circuit or has short circuited	TS25
5 times	OFF	EC 54	Compressor discharge temperature sensor TP is in open circuit or has short circuited	TS25
6 times	OFF	EH 60	Indoor room temperature sensor T1 is in open circuit or has short circuited	TS25
6 times	OFF	EH 61	Evaporator coil temperature sensor T2 is in open circuit or has short circuited	TS25
12 times	OFF	EC 07	The outdoor fan speed is operating outside of the normal range(for some models)	TS22
9 times	OFF	EH 0b	Indoor PCB / Display board communication error	TS26
8 times	OFF	EL 0C	Refrigerant leak detected	TS27
7 times	FLASH	PC 00	IPM malfunction or IGBT over-strong current protection	TS29
2 times	FLASH	PC 01	Over voltage or over low voltage protection	TS30
3 times	FLASH	PC 02	High temperature protection of IPM module	TS31
5 times	FLASH	PC 04	Inverter compressor drive error	TS33
1 time	FLASH	PC 0B	Current overload protection(for some models)	TS28
7 times	FLASH	PC 03	Low pressure protection	TS34



Part requiring replacement	Error Code								
	Eh00	Eh01	Eh02	Eh03	Eh60	Eh61	Eh0b	Eh0c	PC08
Indoor PCB	✓	✓	✓	✓	✓	✓	✓	✓	✗
Outdoor PCB	✗	✓	✗	✗	✗	✗	✗	✗	✓
Display board	✗	✗	✗	✗	✗	✗	✓	✗	✗
Indoor fan motor	✗	✗	✗	✓	✗	✗	✗	✗	✗
T1 sensor	✗	✗	✗	✗	✓	✗	✗	✗	✗
T2 Sensor	✗	✗	✗	✗	✗	✓	✗	✓	✗
Reactor	✗	✓	✗	✗	✗	✗	✗	✗	✗
Compressor	✗	✗	✗	✗	✗	✗	✗	✗	✓
Additional refrigerant	✗	✗	✗	✗	✗	✗	✗	✓	✗

Part requiring replacement	EC 53	EC 52	EC 54	EC 51	EC 07	PC 00	PC 01	PC 02	PC 03	PC 04
Indoor PCB	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Outdoor PCB	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Indoor fan motor	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Outdoor fan motor	✗	✗	✗	✗	✓	✓	✗	✓	✗	✓
T3 Sensor	✗	✓	✗	✗	✗	✗	✗	✗	✗	✗
T4 Sensor	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗
TP Sensor	✗	✗	✓	✗	✗	✗	✗	✗	✗	✗
Reactor	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗
Compressor	✗	✗	✗	✗	✗	✓	✗	✗	✗	✓
IPM module board	✗	✗	✗	✗	✗	✓	✓	✓	✗	✓
High pressure protector	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗
Low pressure protector	✗	✗	✗	✗	✗	✗	✗	✗	✓	✗
Additional refrigerant	✗	✗	✗	✗	✗	✗	✗	✗	✓	✗



## Error Codes for Inverter (IDU Unit)

SL No.	ERROR CODE	SELFRESTRAINT INVERTER
1	E0	INDOOR CURRENT TRANSFORMER OVER CURRENT PROTECTION
2	E1	INDOOR TEMP SENSOR ERROR
3	E2	OUTDOOR COIL SENSOR ERROR
4	E3	INDOOR COIL SENSOR ERROR
5	E4	PG MOTOR OR DC MOTOR ERROR( SPLIT AC) / SLIDE DOOR ERROR(FLR)
6	E5	INDOOR/OUTDOOR COMMUNICATION ERROR
7	E6	SLIDE DOOR ERROR(L SERIAL)
8	E8	INVERTER FLR DISPLAY BOARD AND MAIN PCB COMMUNICATION ERROR
9	E9	HUMIDITY SENSOR ERROR
10	EA	INDOOR FAN MOTOR ZERO-CROSS DETECTION ERROR
11	Eb	INDOOR EE ERROR
12	F0	OUTDOOR FAN MOTOR ERROR



SL No.	ERROR CODE	SELFRESTRAINT INVERTER
13	F1	MOULD PROTECTION ERROR
14	F2	PFC PROTECTION ERROR
15	F3	COMPRESSOR STARTING FAILURE OR OPERATING FAILURE
16	F4	OUTDOOR EXHAUST SENSOR FAILURE
17	F5	COMPRESSOR TOP COVER PROTECTION ERROR
18	F6	OUTDOOR LOOP TEMP SENSOR ERROR
19	F7	UNDERVOLTAGE PROTECTION ERROR
20	F8	OUTDOOR MAIN PCB AND MOULD COMMUNICATION ERROR
21	F9	OUTDOOR EE ERROR
22	FA	RETURNING AIR SENSOR ERROR
23	Fb	INDOOR DC MOTOR ERROR(FLR)
24	FC	FOUR WAY VALVE TRANSFERING ERROR
25	Fd	OUTDOOR FAN MOTOR ZERON-CROSSING DETECTION ERROR
26	P2	HIGH VOLTAGE PROTECTION
27	P3	LACKING GAS PROTECTION
28	P4	THE BASE OVERLOADED PROTECTION (COOLING ONLY)
29	P5	EXHAUST PROTECTION



30	P6	INDOOR ANTI-HIGH TEMPERATURE PROTECTION (HEAT PUMP)
31	P7	INDOOR ANTI-FREEZE PROTECTION(COOLING ONLY
32	P8	OUTDOOR OVER CURRENT PROTECTION
33	P9	DISPLAY BOARD AND TOUCH TABLET COMMUNICATION ERROR (L SERIAL)
34	L0	DC UNDERVOLTAGE EEROR
35	L1	COMPRESSOR PHRASE CURRECT OVER CURRENT PROTECTION
36	L2	COMPRESSOR FALL-OUT-STEP ERROR
37	L3	COMPRESSOR DEFAULT PHRASE ERROR
38	L4	COMPRESSOR DRIVING MOULD IPM ERROR
39	L5	PFC OVERCURRENT HARDWARE PROTECTION
40	L6	PFC OVERCURRENT SOFTWARE PROTECTION
41	L7	CURRENT DETECTION AND ABNORMAL PROTECTION
42	L8	SHUNT RESISTANCE UNBALANCE ERROR
43	L9	IPM TEMP SENSOR ERROR
44	LA	COMPRESSOR STARTING FAILURE
45	LC	PFC CURRENT DETECTION AD ABNORMAL PROTECTON
46	Ld	DC FANMOTOR CURRENT DETECTION AD ABNORMAL PROTECTION
47	LE	DC FANMOTOR DEFAULT PHRASE PROTECTION
48	LF	DC FANMOTOR DEFAULT STEP PROTECTION
49	LH	DC FAN MOTOR IPM PROTECTION



○ OFF   ● ON   ★ BLINKING			
LED 1	LED 2	LED 3	Name of Fault
○	○	○	Normal (ODU: Standby)
★	★	★	Normal (Compressor: In Operation)
●	●	●	Compulsory operation (Test Mode)
★	★	●	Fault of IPM protection
★	●	★	Loss step of Compressor
★	○	★	Fault of Discharge temp sensor
●	★	★	Fault of Outdoor PIPE temp sensor
○	★	★	Fault of outdoor ambient temp sensor
★	●	●	Communication Fault between IDU and ODU
★	●	○	Communication Fault of outdoor main control board and IPM Board
★	○	●	ODU EE Fault
○	○	★	Over Current Protection
●	●	○	Fault of Discharge temp sensor
●	○	●	System overload protection
○	●	●	Indoor Heating high-Temperature
○	●	●	Indoor Heating high-Temperature Protection
●	○	○	Indoor refrigeration freezing protection
○	○	●	Fault of over/under-voltage protection

<b>Non-Inverter Acs</b>		
No.	Error Code	Problem
1	E1	Room temperature Sensor fault
2	E2	Outdoor coil temperature sensor fault
3	E3	Indoor coil temperature sensor fault
4	E4	Indoor fan motor feedback fault
<b>Non-Inverter Acs - RHSAB1509</b>		
1	F1	Room temperature Sensor fault
2	F2	Outdoor coil temperature sensor fault
3	F3	Indoor coil temperature sensor fault
4	F4	Indoor fan motor feedback fault

Window AC RHWAG1001 & RHWAG1503	
E <sub>r</sub>	Indicates a malfunction of the indoor room temperature sensor
E <sub>n</sub>	Indicates a malfunction of the evaporator temperature sensor
E <sub>o</sub>	Indicates a malfunction of the Outdoor condenser temperature sensor
E <sub>d</sub>	Indicates frosting protection (Turn off the unit and restart it to return to normal operation)
E <sub>i</sub>	Indicates the requirement of a filter check after 720 hours of fan operation. Disconnect/unplug from the power supply. Clean the filter, then restore the power, the unit will return to normal operation.

Applicable Models	IDU Code
1.0T Voltas SAC 123V Dyb	4551992
1.5T Voltas SAC 183V Dyb	4551993
SAC 123V DZU	4552240
SAC 183V DZU	4552241

Operation lamp	Timer lamp	Display	LED STATUS
☆ 1 time	X	E0	Indoor unit EEPROM parameter error
☆ 2 times	X	E1	Indoor / outdoor units communication error
☆ 3 times	X	E2	Zero-crossing signal detection error
☆ 4 times	X	E3	Indoor fan speed has been out of control
☆ 5 times	X	E4	Indoor room temperature sensor T1 open circuit or short circuit
☆ 6 times	X	E5	Evaporator coil temperature sensor T2 open circuit or short circuit
☆ 7 times	X	EC	Refrigerant leakage detection
☆ 1 times	O	F0	Overload current protection
☆ 2 times	O	F1	Outdoor ambient temperature sensor T4 open circuit or short circuit
☆ 3 times	O	F2	Condenser coil temperature sensor T3 open circuit or short circuit
☆ 4 times	O	F3	Compressor discharge temperature sensor T5 open circuit or short circuit
☆ 5 times	O	F4	Outdoor unit EEPROM parameter error
☆ 1 times	☆	P0	IPM malfunction or IGBT over-strong current protection
☆ 2 times	☆	P1	Over voltage or over low voltage protection
☆ 3 times	☆	P2	High temperature protection of compressor top diagnosis and solution
☆ 5 times	☆	P4	Inverter compressor drive error

O (light)

X (off)

☆ (flash)

1.0T Voltas SAC 123V MY	4552005
Voltas SAC 123V MZ02	4552227
Voltas SAC 183V MZ02	4552230
SAC 123V MZM	4552226
SAC 125V MZM	4552228
Voltas SAC 12V MY	4551880
Voltas SAC 18V MY	4551881
1.5T Voltas SAC 183V MY	4552006

SAC 183V MZM	4552229
SAC 185V MZM	4552231
Voltas SAC 123V Eya	4552096
Voltas SAC 183V Eya	4552097
Voltas SAC 243V Eya	4552098
SAC 103V EZL	4552209
SAC 123V EZL	4552210
SAC 183V EZL	4552215
SAC 243V EZL	4552220

Error name	Error definition	Nixie tube display
Refrigerant reclaiming mode	Operation status, immediate display	F0
IDU fan motor error	Hardware error	H6
Error of indoor evaporator middle temperature sensor	Hardware error	F2
Error of indoor ambient temperature sensor	Hardware error	F1
IDU and ODU communication error	Hardware error	E6
Jumper cap error	Hardware error	C5
Error of outdoor ambient temperature sensor	Hardware error	F3
Error of outdoor condenser temperature sensor	Hardware error	F4
Error of module temperature sensor circuit	Hardware error	P7
Compressor overload protection	Other error	H3
Discharge protection	Other error	E4
Overload protection	Other error	E8
ODU AC current protection	Other error	E5
Module current protection	Other error	H5
Module temperature protection	Other error	P8
Anti-freezing protection	Other error	E2
High power protection	Other error	L9
Phase loss or reverse protection of compressor	Other error	U2
PFC overcurrent error	Other error	HC
DC bus high voltage protection	Other error	PH
DC bus low voltage protection	Other error	PL
Refrigerant lacking protection	Other error	F0

Refrigerant lacking protection	Other error	F0
Mode conflict	Hardware error	E7
IDU and ODU models do not match	Hardware error	LP
Memory chip read&write error	Hardware error	EE
Abnormal zero-cross signal	Hardware error	U8
4-way valve is abnormal	Hardware error	U7
Error of ODU fan motor 2	Hardware error	LA
Error of ODU fan motor 1	Hardware error	L3
System low pressure protection	Other error	E3
System high pressure protection	Other error	E1
Drop error of DC bus voltage	Other error	U3
Complete unit current detection error	Hardware error	U5
Capacitor charging error	Hardware error	PU
Compressor phase current detection error	Hardware error	U1
Desynchronizing of compressor	Other error	H7
Compressor demagnetization protection	Other error	HE
Compressor startup failure	Other error	Lc
Overcurrent of compressor phase current	Other error	P5
ODU refrigerant heater relay adhesion error	Hardware error	A2
ODU refrigerant heater failure error	Remote control display	A3
Refrigerant heater temperature sensor error	Hardware error	A4
Condenser tube-in temperature sensor error	Hardware error	A5

Oil return	Operation status	F7
Nominal cooling&heating (capacity test code)	Operation status, immediate display	P1
Maximum cooling&heating (capacity test code)	Operation status, immediate display	P2
Medium cooling&heating (capacity test code)	Operation status, immediate display	P3
Minimum cooling&heating (capacity test code)	Operation status, immediate display	P0

Voltas SAC 18V EY-W Cool Only	4551811
Voltas SAC 18V EY-W All Weather	4551808
Voltas SAC 24V EY-W All Weather	4551809

## Error Display (Indoor Unit)

Operation Lamp	Timer Lamp	Display	Error Information	Solution
1 time	OFF	E0	Indoor unit EEPROM parameter error	TS19
2 times	OFF	E1	Indoor / outdoor unit communication error	TS20
3 times	OFF	E2	Zero-crossing signal detection error(for some models)	TS22
4 times	OFF	E3	The indoor fan speed is operating outside of the normal range	TS23
5 times	OFF	E4	Indoor room temperature sensor T1 is in open circuit or has short circuited	TS26
6 times	OFF	E5	Evaporator coil temperature sensor T2 is in open circuit or has short circuited	TS26
9 times	OFF	E7	Indoor PCB / Display board communication error(for some models)	TS27
7 times	OFF	EC	Refrigerant leak detected	TS28
1 times	ON	F0	Current overload protection	TS29
2 times	ON	F1	Outdoor room temperature sensor T4 is in open circuit or has short circuited	TS26
3 times	ON	F2	Condenser coil temperature sensor T3 is in open circuit or has short circuited	TS26
4 times	ON	F3	Compressor discharge temperature sensor TP is in open circuit or has short circuited	TS26
5 times	ON	F4	Outdoor unit EEPROM parameter error	TS19
6 times	ON	F5	The outdoor fan speed is operating outside of the normal range(for some models)	TS23
1 times	FLASH	P0	IPM malfunction or IGBT over-strong current protection	TS30
2 times	FLASH	P1	Over voltage or over low voltage protection	TS31
3 times	FLASH	P2	High temperature protection of IPM module or High pressure protection	TS32
5 times	FLASH	P4	Inverter compressor drive error	TS34
7 times	FLASH	P6	Low pressure protection(for some models)	TS35

Operation Lamp	Timer Lamp	LED Display	Error Information	Solution
1 time	OFF	EH00	Indoor unit EEPROM parameter error	TS19
2 times	OFF	EH01	Indoor / outdoor unit communication error	TS20
3 times	OFF	EH02	Zero-crossing signal detection error(for some models)	TS22
4 times	OFF	EH03	The indoor fan speed is operating outside of the normal range	TS23
5 times	OFF	EC51	Outdoor unit EEPROM parameter error(for some models)	TS19
5 times	OFF	EC52	Condenser coil temperature sensor T3 is in open circuit or has short circuited	TS26
5 times	OFF	EC53	Outdoor room temperature sensor T4 is in open circuit or has short circuited	TS26
5 times	OFF	EC54	Compressor discharge temperature sensor TP is in open circuit or has short circuited	TS26
6 times	OFF	EH60	Indoor room temperature sensor T1 is in open circuit or has short circuited	TS26
6 times	OFF	EH61	Evaporator coil temperature sensor T2 is in open circuit or has short circuited	TS26
12 times	OFF	EC07	The outdoor fan speed is operating outside of the normal range(for some models)	TS23
9 times	OFF	EH0b	Indoor PCB / Display board communication error(for some models)	TS27
8 times	OFF	EL0C	Refrigerant leak detected	TS28
7 times	FLASH	PC00	IPM malfunction or IGBT over-strong current protection	TS30
2 times	FLASH	PC01	Over voltage or over low voltage protection	TS31
3 times	FLASH	PC02	High temperature protection of IPM module or High pressure protection	TS32
5 times	FLASH	PC04	Inverter compressor drive error	TS34
1 time	FLASH	PC08	Current overload protection(for some models)	TS29
7 times	FLASH	PC03	Low pressure protection(for some models)	TS35

No.	Problem	LED(GREEN)	LED(RED)	Solution
1	Standby normally	ON	OFF	-
2	Operate normally	OFF	ON	-
3	Compressor driven chip EEPROM parameter error	ON	FLASH	TS19
4	IPM malfunction or IGBT over-strong current protection	FLASH	OFF	TS30
5	Over voltage or too low voltage protection	ON	ON	TS31
6	Inverter compressor drive error	OFF	FLASH	TS34
7	Inverter compressor drive error	FLASH	LIGHT	TS34
8	Communication error between outdoor main chip and compressor driven chip	FLASH	FLASH	TS19

Voltas SAC 12V EY-W Cool Only	4551810
Voltas SAC 15V EY-W Cool Only	4552020
Voltas SAC 12V EY-W All Weather	4551807

Name of malfunction	Display of indoor unit	state of the lamps of outdoor unit PCB			Reasons
	ERROR CODE	GREEN-LED2	RED-LED3	YELLOW-LED4	
Stop for anti-freezing protection of indoor-unit	E2			blink-3times	refrigerant leakage 、 indoor unit air flow blocked up 、 filter duty
Stop for exhaust protection	E4			blink-7 times	less refrigerant 、 capillary blocked up 、 ambient temperature is abominable
Overcurrent protection	E5			blink-5 times	low voltage 、 ambient temperature is abominable
Stop for communication malfunction	E6	do not blink			communication line failure 、 main PCB failure 、 interfere source 、 connect line wrong
Stop for compressor overload protection	H3			blink-8 times	compressor shell over heat 、 lessrefrigerant 、 capillary blocked up
Overload protection	H4			blink-6 times	ambient temperature is abominable 、 heat exchanger blocked up
Stop for IPModule protection	H5			blink-4 times	IPM module over heat 、 low voltage 、 silica gel
PG motor (indoor fan motor) does not operate	H6				PG motor control terminal does not contact well; Blade does not rotate fluently due to incorrect installation; motor or control panel is damaged
Indoor ambient temperature sensor malfunction	F1				terminal connect not reliable 、 temperature sensor malfunction
Indoor tube temperature sensor malfunction	F2				terminal connect not reliable 、 temperature sensor malfunction
Outdoor ambient temperature sensor malfunction	F3		blink-6 times		terminal connect not reliable 、 temperature sensor malfunction

Outdoor tube temperature sensor malfunction	F4		blink-5 times		terminal connect not reliable、 temperature sensor malfunction
Outdoor exhaust temperature sensor malfunction	F5		blink-7 times		terminal connect not reliable、 temperature sensor malfunction
Jumper cap malfunction protection	C5				theres no jumper cap on the controller、 jumper cap is not inserted properly and tightly、 jumper cap is damaged、 corresponding circuit on mainboard has malfunction
Indoor and outdoor units cant match with each other	LP			blink-16times	Indoor unit and outdoor units cant match with each other
PG motor(indoor fan) zero-cross detection circuit malfunction	U8				abnormal of zero-cross detection circuit of controller mainboard.
PFC overcurrent malfunction	HC			blink-14times	Overcurrent of PFC
High protection of power	L9			blink-9times	Complete units power is too high
High voltage protection	PH			blink-13times	DC side voltage is too high
low voltage protection	PL			blink-12times	DC side voltage is too low
Automatic defrosting	H1			blink-2 times	H1is not error code,it is noemal operation. Just heat pump has this fuction
REMARK:	<p>1.Error codes only can be seen in the type which has the temperature display pcb.maybe some type has not this function,the lamps on the outdoor pcb are avaiable</p> <p>2.Normally,the communication between indoor unit and outdoor unit is successful, the gree lam</p>				

Voltas SAC 123V LY	4552095
SAC 123V LZK	4552211

No.	Operation status or error name	ODU mainboard indicator			IDU display
		Yellow	Red	Green	
1	Compressor startup	Blink once			
2	Anti-freezing protection	Blink 3 times			E2
3	IPM protection	Blink 4 times			H5
4	Overcurrent protection	Blink 5 times			E5
5	Overload protection	Blink 6 times			H4
6	Discharge protection	Blink 7 times			E4
7	Overload protection	Blink 8 times			H3
8	High power protection	Blink 9 times			L9
9	Module current protection	Blink 10 times			H5
10	EEPROM read&write error	Blink 11 times			
11	Low voltage protection	Blink 12 times			PL
12	High voltage protection	Blink 13 times			PH
13	PFC overcurrent protection	Blink 14 times			HC
14	DU and ODU models do not match	Blink 16 times			LP
15	Limit frequency (current)		Blink once		
16	Limit frequency (discharge)		Blink twice		
17	Limit frequency (overload)		Blink 3 times		

18	Limit frequency (anti-freezing prevention)		Blink 4 times		
19	Error of outdoor ambient temperature sensor		Blink 6 times		F3
20	Error of outdoor tube temperature sensor		Blink 5 times		F4
21	Error of outdoor discharge temperature sensor		Blink 7 times		F5
22	Reach unit on temperature		Blink 8 times		
23	Limit frequency (frequency)		Blink 13 times		
24	ODU fan motor error		Blink 14 times		
25	Normal communication			Blink continuously	
26	Communication error			Off	E6
27	Error of indoor ambient temperature sensor				F1
28	Error of indoor tube temperature sensor				F2
29	Jumper cap error				C5
30	Memory chip read&write error				EE
31	Error of radiating fin or IPM, PFC module temperature sensor				P7
32	Zero cross detection error				U8
33	No ODU motor feedback				UH
34	IDU fan motor error				H6

125V Crown AW	4552024
SAC 125VH CROWN	4552214
185V Crown AW	4552025
SAC 185VH CROWN	4552218

Display table for error status

Error name	Error definition	Dual-8 code display
Freon recovery mode	Operation status is displayed immediately	Fo
Malfunction of indoor fan	Malfunction of hardware	H6
Malfunction of middle temperature sensor of indoor evaporator	Malfunction of hardware	F2
Malfunction of indoor ambient temperature sensor	Malfunction of hardware	F1
Communication malfunction between indoor unit and outdoor unit	Malfunction of hardware	E6
Malfunction of jumper cap	Malfunction of hardware	C5
Limit/decrease frequency due to module current protection	Display through adjustment with remote controller	En
Limit/decrease frequency due to module temperature protection	Display through adjustment with remote controller	EU
Limit/decrease frequency due to overload protection	Display through adjustment with remote controller	F6
Limit/decrease frequency due to freeze prevention protection	Display through adjustment with remote controller	FH
Limit/decrease frequency due to discharge protection	Display through adjustment with remote controller	F9
Limit/decrease frequency due to AC current protection of outdoor unit	Display through adjustment with remote controller	F8
Malfunction overload temperature sensor	Malfunction of hardware	FE
Malfunction of outdoor discharge temperature	Malfunction of hardware	F5
Malfunction of outdoor ambient temperature sensor	Malfunction of hardware	F3
Malfunction of outdoor condenser temperature sensor	Malfunction of hardware	F4
Circuit malfunction of module temperature sensor	Malfunction of hardware	P7
Overload protection of compressor	Other malfunction	H3
Discharge protection	Other malfunction	E4
Overload protection	Other malfunction	E8
AC current protection of outdoor unit	Other malfunction	E5
Module current protection	Other malfunction	H5
Module temperature protection	Other malfunction	P8
Freeze prevention protection	Other malfunction	E2

Freeze prevention protection	Other malfunction	E2
High power protection	Other malfunction	L9
Lacking/inverse phase protection of compressor	Other malfunction	U2
PFC current malfunction	Other malfunction	HC
High DC bus bar voltage protection	Other malfunction	PH
Low DC bus bar voltage protection	Other malfunction	PL
Freon-lacking protection	Other malfunction	F0
Mode shock	Malfunction of hardware	E7
Non-matching between indoor unit and outdoor unit	Malfunction of hardware	LP
Read-write malfunction of memory chip	Malfunction of hardware	EE
Abnormal changeover for 4-way valve	Malfunction of hardware	U7
Malfunction of outdoor fan 2	Malfunction of hardware	LA
Malfunction of outdoor fan 1	Malfunction of hardware	L3
Low pressure protection	Other malfunction	E3
High pressure protection	Other malfunction	E1
Drop malfunction of DC bus bar voltage	Other malfunction	U3
Current detection malfunction for the complete unit	Malfunction of hardware	U5
Charing malfunction for capacity	Malfunction of hardware	PU
Phase current detection malfunction of compressor	Malfunction of hardware	U1
Desynchronizing of compressor	Other malfunction	H7
Demagnetizing protection of compressor	Other malfunction	HE
Failure startup of compressor	Other malfunction	Lc
High peak current of compressor	Other malfunction	P5
Conglutination malfunction of relay of refrigerant electric heater of outdoor unit	Malfunction of hardware	A2
Refrigerator heater of outdoor unit is invalid	Display through adjustment with remote controller	A3
Malfunction of temperature sensor of refrigerant heater	Malfunction of hardware	A4
Malfunction exit tube temperature sensor for condenser	Malfunction of hardware	A5
Oil return	Display through adjustment with remote controller	F7
Normal cooling and heating (capacity test code)	Operation status is displayed immediately	P1
Maximum cooling and heating (capacity test code)	Operation status is displayed immediately	P2
Medium cooling and heating (capacity test code)	Operation status is displayed immediately	P3
Minimum cooling and heating (capacity test code)	Operation status is displayed immediately	P0

Voltas SAC 173V IY	4552124
Voltas SAC 18V LY	4551719
Voltas SAC 18V IY	4551918
1.5T Voltas SAC 183V IY	4551937
1.5T Voltas SAC 183V IY-R	4552026
1.0T Voltas SAC 125V DYe	4551958
1.5T Voltas SAC 185V DYe	4551960

Sr.No	UNIT TYPE	ERROR CODES	ERROR CODES DESCRIPTIONS
1	IDU	E1	Room Temperature Sensor Error.
2		E2	Coil Temperature Sensor Error.
3		E3	Memory Error.
4		E4	Communication Error.
5		E5	Fan Operation Error.
6		E6	Zero Crossing Error.
7	ODU	A5	Compressor Motor Current Sensor Error Protection.
8		A7	Discharge Temperature Sensor Error Protection.
9		A8	Heat Sink Temperature Sensor Error Protection.
10		U1	IPM Over current Protection.
11		U3	Compressor Over Current Protection.
12		U4	Over Voltage Protection.
13		U5	Low Voltage Protection.
14		U7	Over Speed Protection.
15		U9	Overheating Protection of Heat Sink.
16		F2	Compressor Over Current Protection(Cooling).
17		F4	Communication Error Protection.
18		F5	BLDC Compressor Motor Synchronization Error.
19		F8	Compressor Low Pressure.

VoltaS SAC 183V SY	4552140
VoltaS SAC183V Sya	4552182
VoltaS SAC 183V JY	4552191
VoltaS SAC 183V Gys	4552183
VoltaS SAC 183V SZS	4552233
VoltaS SAC 183V SZS2	4552278
VoltaS SAC 183V JZJ	4552234
VoltaS SAC 183V MZJ3	4552252
VoltaS SAC 183V MZJ2	4552253
VoltaS SAC 183V JZJ4	4552279
VoltaS SAC 184V SZS	4552254
VoltaS CU 183V Jyg	4552180
SAC 183V GZS2 (DGS&D)	4552299
VoltaS SAC 183V JZCT	4552317
VoltaS SAC 183V SZFT	4552314
VoltaS SAC 184V JZCT	4552318
VoltaS SAC 184V SZFT	4552315
VoltaS SAC 124V SZS	4552269
VoltaS SAC 124V SZS2	4552311
VoltaS SAC 125V ZZS1	4552271
VoltaS SAC 153V JZJ	4552245
VoltaS SAC 173V JZJ	4552272
VoltaS SAC 125V DZV	4552236
VoltaS SAC 185V DZV	4552237
VoltaS SAC 244V DZV	4552221
VoltaS SAC 185V ZZV1	4552273
VoltaS SAC 123V DZX(R-410A)	4552306
VoltaS SAC 123V DZW-VIVE(R-410A)	4552362
VoltaS SAC 183V SZS4	4552344
VoltaS SAC 183V MZJ2(R32)	4552372
VoltaS SAC 183V MZJ3(R32)	4552373
VoltaS SAC 183V MZSC (R32)	4552445
VoltaS SAC 183V MZSB (R32)	4552446

VoltaS SAC 153V DZX (R-410A)	4552494
VoltaS SAC 173V JZJ(R32)	4552401
VoltaS SAC 183V JZJ(R32)	4552407
VoltaS SAC 183V CZJ(R32)	4552405
VoltaS SAC 183V IZJ-Jewel (R-410A)	4552363
VoltaS SAC 183V SZS(R32)	4552408
VoltaS SAC 243V DZV(R-410A)	4552419
VoltaS SAC 124V DZX(R-32)	4552393
VoltaS SAC 124V DZX-Floral (R32)	4552394
VoltaS SAC 184V SZS(R32)	4552409
VoltaS SAC 184V SZS Floral(R32)	4552410
VoltaS SAC 244V DZV(R-410A)	4552221
VoltaS SAC 125V DZV(R-410A)	4552236
VoltaS SAC 185V DZV2(R-410A)	4552348
VoltaS SAC 125V DZX(R-32)	4552495
VoltaS SAC 125V DZW(R-32)	4552396
VoltaS SAC 155V DZW (R32)	4552399
VoltaS SAC 185V JZJ (R32)	4552411
VoltaS SAC 185V ADS (R32)	4552449
VoltaS SAC 185V ADS-Floral (R32)	4552493
VoltaS SAC 185V ZZY-IMR (R32)	4552416
VoltaS SAC 245V DZV (R32)	4552420
VoltaS SAC 245V ZZV(R32)	4552421
VoltaS SAC 123V MZV-CHAMPAGNE(R-410A)	4552392
VoltaS SAC 123V MZX-BLUE(R-410A)	4552391
VoltaS SAC 173V WZJ Smart Voice AC(R32)	4552403
VoltaS SAC 183V SZS5	4552345
VoltaS SAC 155V JZJ5	4552353

IDU DISPLAY	FAULT DETAILS	IDU DISPLAY	FAULT DETAILS
EE	Indoor machine EE fault	P4	DC voltage over-high or over-low voltage protection
E1	Indoor fan fault	P5	IPM over-high temperature protection
E2	Indoor fan zero-crossing detection abnormal	P6	Discharge temperature overheat protection
E3	Indoor coil fault and sensor fault	P7	Cooling indoor coil anti-freezing protection
E4	Indoor ambient temperature sensor fault	P8	Cooling outdoor coil overheat protection
		P9	Heating indoor coil overheat protection
E0	Outdoor EE fault	PC	Cooling outdoor ambient temperature over-low protection
E6	Indoor and outdoor machine communication fault	PH	Heating outdoor ambient temperature over-high protection
F1	Compressor starting abnormal (phase failure,reverse)	Pb	PFC software over-current Error
F2	Compressor out-of-step fault	Pd	PFC hardware over current protection(PFC Fo)
F3	IPM module fault		
F4	Compressor shell roof fault/protection		
F5	Discharge temperature sensor fault		
F6	Suction temperature sensor fault		
F7	Outdoor coil temperature sensor fault	L1	Drive bus voltage over-high protection
F8	Outdoor ambient temperature sensor fault	L2	Drive bus voltage over-low protection
F9	Outdoor DC fan fault	L3	Drive phase current overload fault
E8	Outdoor communication fault	L4	Phase current sampling abnormal
		Fault codes will show on display board once occur. Protection codes will not show on the display board directly. But customer can check these protection codes by pressing the "WIFI" button 8 times in 10 seconds constantly. If there no protection is activated, "00" exhibits on the display board.	
P1	Outdoor machine AC current protection		
P2	Compressor phase current protection		
P3	Outdoor unit over-high/over-low AC voltage protection		

## Applicable Models

Voltas SAC 12V DY	4551741
Voltas SAC 18V DY	4551742
Voltas SAC 12V CY	4551798
Voltas SAC 18V CY	4551799
Voltas SAC 24V CY	4551800
Voltas SAC 12V DYa	4551877
Voltas SAC 18V DYa	4551878
Voltas SAC 24V DYa	4551879
Voltas SAC 18V DYe All Weather	4552022
Voltas SAC 24V DYe All Weather	4552023

No.	Error Code	Problem
1	E1	Room temperature sensor fault
2	E2	Outdoor coil temperature sensor fault
3	E3	Indoor coil temperature sensor fault
4	E4	Indoor fan motor or DC motor feedback fault
5	E5	Indoor & outdoor communication fault
6	F0	Outdoor DC Fan motor fault
7	F1	IPM modular fault
8	F2	PFC modular fault
9	F3	Compressor operation fault
10	F4	Exhaust Temperature sensor fault
11	F5	Compressor top cover protection
12	F6	Outdoor ambient temp sensor fault
13	F7	Over/under voltage protection
14	F8	Outdoor modular communication fault
15	F9	Outdoor E <sup>2</sup> PROM fault
16	FA	Suction temperature sensor fault (4-way valve switch failure)

## Applicable Models

VOLTAS SAC 183VCZT	4552239
VOLTAS SAC 123VCZT	4552238
VOLTAS SAC 183VDZU	4552241
VOLTAS SAC 123VDZU	4552240
Voltas SAC 125V DZV	4552236
Voltas SAC 185V DZV	4552237
Voltas SAC 123V CZT3(R32)	4552365
Voltas SAC 183V CZT3(R32)	4552370
Voltas SAC 123V CZTT(R32)	4552366
Voltas SAC 183V CZTT(R32)	4552371
Voltas SAC 153V DZV (R32)	4552369

Operation Lamp	Timer Lamp	Display	Error Information	Solution
1 time	OFF	E0	Indoor unit EEPROM parameter error	TS19
2 times	OFF	E1	Indoor / outdoor unit communication error	TS20
3 times	OFF	E2	Zero-crossing signal detection error(for some models)	TS22
4 times	OFF	E3	The indoor fan speed is operating outside of the normal range	TS23
5 times	OFF	E4	Indoor room temperature sensor T1 is in open circuit or has short circuited	TS26
6 times	OFF	E5	Evaporator coil temperature sensor T2 is in open circuit or has short circuited	TS26
9 times	OFF	E7	Indoor PCB / Display board communication error(for some models)	TS27
7 times	OFF	EC	Refrigerant leak detected	TS28
1 times	ON	F0	Current overload protection	TS29
2 times	ON	F1	Outdoor room temperature sensor T4 is in open circuit or has short circuited	TS26
3 times	ON	F2	Condenser coil temperature sensor T3 is in open circuit or has short circuited	TS26
4 times	ON	F3	Compressor discharge temperature sensor TP is in open circuit or has short circuited	TS26
5 times	ON	F4	Outdoor unit EEPROM parameter error	TS19
6 times	ON	F5	The outdoor fan speed is operating outside of the normal range(for some models)	TS23
1 times	FLASH	P0	IPM malfunction or IGBT over-strong current protection	TS30
2 times	FLASH	P1	Over voltage or over low voltage protection	TS31
3 times	FLASH	P2	High temperature protection of IPM module or High pressure protection	TS32
5 times	FLASH	P4	Inverter compressor drive error	TS34
7 times	FLASH	P6	Low pressure protection(for some models)	TS35

Operation Lamp	Timer Lamp	LED Display	Error Information	Solution
1 time	OFF	EH 00	Indoor unit EEPROM parameter error	TS19
2 times	OFF	EL 01	Indoor / outdoor unit communication error	TS20
3 times	OFF	EH 02	Zero-crossing signal detection error(for some models)	TS22
4 times	OFF	EH 03	The indoor fan speed is operating outside of the normal range	TS23
5 times	OFF	EC 51	Outdoor unit EEPROM parameter error(for some models)	TS19
5 times	OFF	EC 52	Condenser coil temperature sensor T3 is in open circuit or has short circuited	TS26
5 times	OFF	EC 53	Outdoor room temperature sensor T4 is in open circuit or has short circuited	TS26
5 times	OFF	EC 54	Compressor discharge temperature sensor TP is in open circuit or has short circuited	TS26
6 times	OFF	EH 60	Indoor room temperature sensor T1 is in open circuit or has short circuited	TS26
6 times	OFF	EH 61	Evaporator coil temperature sensor T2 is in open circuit or has short circuited	TS26
12 times	OFF	EC 01	The outdoor fan speed is operating outside of the normal range(for some models)	TS23
9 times	OFF	EH 0b	Indoor PCB / Display board communication error(for some models)	TS27
8 times	OFF	EL 0c	Refrigerant leak detected	TS28
7 times	FLRSH	PC 00	IPM malfunction or IGBT over-strong current protection	TS30
2 times	FLRSH	PC 01	Over voltage or over low voltage protection	TS31
3 times	FLRSH	PC 02	High temperature protection of IPM module or High pressure protection	TS32
5 times	FLRSH	PC 04	Inverter compressor drive error	TS34
1 time	FLRSH	PC 08	Current overload protection(for some models)	TS29
7 times	FLRSH	PC 03	Low pressure protection(for some models)	TS35

No.	Problem	LED(GREEN)	LED(RED)	Solution
1	Standby normally	ON	OFF	-
2	Operate normally	OFF	ON	-
3	Compressor driven chip EEPROM parameter error	ON	FLASH	TS19
4	IPM malfunction or IGBT over-strong current protection	FLASH	OFF	TS30
5	Over voltage or too low voltage protection	ON	ON	TS31
6	Inverter compressor drive error	OFF	FLASH	TS34
7	Inverter compressor drive error	FLASH	LIGHT	TS34
8	Communication error between outdoor main chip and compressor driven chip	FLASH	FLASH	TS19

ODU LIGHT FLASH	IDU DISPLAY	FAULT DETAILS	ODU LIGHT FLASH	IDU DISPLAY	FAULT DETAILS
/	H00	No fault	19	H99	Cooling indoor unit coil anti-freezing protection
1	E00	Outdoor EEPROM fault	20	P07	Cooling outdoor coil overheat protection
2	H11	Indoor to Outdoor communication fault	21	P08	Heating indoor coil overheat protection
4	F93	Compressor starting abnormal	22	P09	Cooling outdoor ambient temperature over-low protection
5	F02	Compressor out-of-step abnormal			
6	F03	IPM module fault	23	PA	Heating outdoor ambient temperature over-high protection
7	F04	Compressor shell temperature overheat protection			
8	H15	Compressor discharge temperature sensor fault			
9	F06	Compressor Suction temperature sensor fault			
10	H28	Outdoor condenser temperature sensor fault			
11	H27	Outdoor ambient temperature sensor fault			
12	F09	Outdoor DC fan motor fault			
/	E08	Outdoor communication error	25	EE	Indoor unit EEPROM fault
			26	E01	Indoor fan motor fault
13	F98	Outdoor AC current protection	27	E02	Indoor PCB zero-crossing fault
14	F99	Compressor phase current protection	28	H23	Indoor evaporator temperature sensor fault
15	P02	Outdoor unit over-high/over-low AC voltage protection	29	H14	Indoor room temperature sensor fault
16	P03	Outdoor unit over-high or over-low DC voltage protection	Error code is searchable in use of remote control 1) Press "CHECK" button to check error codes when fault or protection occurs. Press "Δ" and "▽" for page turn. Buzzer will beep for 4 times in case that any fault occurs. 2) In error searching mode, if fault occurs, "TIMER" LED will blink.		
17	F96	IPM overheat temperature protection	ACPF22-04740		
18	F97	Compressor discharge temperature overheat protection			