## **TOPBAND**

## Inverter AC Error Instruction

TOPBAND				inverter AC Error Inst		uction	
No.	IDU Display	ODU LED Flash	Error Details	Error Display Time	Error Recover	Machine Operating	Probable Trouble Location
1	EE	25	Indoor machine EE fault	Immediately displayed after error is detected	No automatic recover, disappear after power is switched off and on	Whole machine shutdown	Indoor main control board, component failure or faulty soldering
2	E1	26	Indoor fan fault	Immediately displayed if indoor fan speed is ≤ 240 rpm for 30s	No automatic recover, disappear after power is switched off and on	Whole machine shutdown	Connection wire of indoor fan motor, poor connection or broken     Indoor fan motor, broken     Socket faulty soldering or disconnection from PCB     4.Indoor main control board, component failure or faulty soldering
3	E2	27	Indoor fan zero-crossing detection fault	Immediately displayed after error detected	No automatic recover, disappear after power is switched off and on	Whole machine shutdown	Indoor main control board, component failure or faulty soldering
4	E3	28	Indoor coil temperature sensor fault	When an open or short circuit of the sensor is detected	Disappear after error recovered	Compressor maximum frequency is limited to 40-50Hz. When 2 sensors except discharge sensor are failed at the same time, the ODU will be shut down, while DU keeps running and displays the error code. (Priority:E3, E4, F5, F7, F8)	I.Indoor coil temperature sensor, open or short circuit 2.Connector of indoor coil temperature sensor, faulty soldering or disconnection from PCB 3.Indoor main control board, component failure or faulty soldering
5	E4	29	Indoor ambient temperature sensor fault	When an open or short circuit of the sensor is detected	Disappear after error recovered	Compressor maximum frequency is limited to 40–50Hz. When 2 sensors except discharge sensor are failed at the same time, the ODU will be shut down, while IDU keeps running and displays the error code. (Priority:E3, E4, F5, F7, F8)	I.Indoor ambient temperature sensor, open or short circuit     Connector of Indoor ambient temperature sensor, false soldering or disconnection from PCB     3.Indoor main control board, component failure or faulty soldering
6	E0	1	Outdoor EE fault	Immediately displayed after error is detected	No automatic recover, disappear after power is switched off and on	ODU machine shutdown, Indoor fan operating	Main outdoor control board, master chip is faulty
7	E6	2	Indoor and outdoor machine communication fault	Not receiving correct communication data for 2 minutes	Disappear immediately when communication is normal	ODU shut down, Indoor fan operating	Connection cable between indoor and outdoor, poor connection, broken or too long/ower 20 meters)     Wrong sequence of cable connection at the terminal of indoor or outdoor 3 indoor main control board, component failure or faulty soldering     4 Outdoor main control board, component failure or faulty soldering
8	F1	4	Compressor starting abnormal	After 3 consecutive fault is detected, ODU powered off and on. Displayed if two consecutive fault is detected again	No automatic recover, disappear after power is switched off and on	ODU shut down, Indoor fan operating	Connection wire of compressor, broken or poor connection     Compressor, broken     Soutdoor main control board, component failure or faulty soldering     Power voltage is too low
9	F2	5	Compressor drive fault	After 3 consecutive fault is detected, ODU powered off and on. Displayed if two consecutive fault is detected again	No automatic recover, disappear after power is switched off and on	ODU shut down, Indoor fan operating	Connection wire of compressor, broken or poor connection     Compressor, broken     Outdoor main control board, component failure or faulty soldering     Power voltage is too low
10	F3	6	IPM module fault	After 3 consecutive fault is detected, ODU powered off and on. Displayed if two consecutive fault is detected again	No automatic recover, disappear after power is switched off and on	ODU shut down, Indoor fan operating	Connection wire of compressor, broken or poor connection     Compressor, broken     Soudoor main control board, component failure or faulty soldering     Power voltage is too low
11	F5	8	Discharge temperature sensor fault	When an open or short circuit of the sensor is detected	Disappear immediately after error recovered	ODU shut down, Indoor fan operating	Discharge temperature sensor, open or short circuit     Connector of discharge temperature sensor, poor connection or broken     3.Outdoor main control board, component failure or faulty soldering
12	F6	9	Suction temperature sensor fault	When an open or short circuit of the sensor is detected	Disappear immediately after error recovered	Compressor maximum frequency is limited to 40–50Hz. When 2 sensors except discharge sensor are failed at the Same time, the ODU will be shut down, while IDU keeps running and displays the error code. (Priority:E3, E4, F5, F7, F8)	Discharge temperature sensor, open or short circuit     Connector of discharge temperature sensor, poor connection or broken     Outdoor main control board, component failure or faulty soldering
13	F7	10	Outdoor coil temperature sensor fault	When an open or short circuit of the sensor is detected	Disappear immediately after error recovered	Compressor maximum frequency is limited to 40–50Hz. When 2 sensors except discharge sensor are failed at the same time, the ODU will be shut down, while IDU keeps running and displays the error code. (Priority:E3, E4, F5, F7, F8)	Discharge temperature sensor, open or short circuit     Connector of discharge temperature sensor, poor connection or broken     Outdoor main control board, component failure or faulty soldering
14	F8	11	Outdoor ambient temperature sensor fault	When an open or short circuit of the sensor is detected	Disappear immediately after error recovered	Compressor maximum frequency is limited to 40-50Hz, When 2 sensors except discharge sensor are failed at the same time, the ODU will be shut down, while DU keeps turning and displays the error code. (Priority:E3, E4, F5, F7, F8)	Discharge temperature sensor, open or short circuit     Connector of discharge temperature sensor, poor connection or broken     Outdoor main control board, component failure or faulty soldering
15	F9	12	Outdoor DC fan fault	After 4 consecutive fault is detected, ODU powered off and on. Displayed if 4 consecutive fault is detected again	Disappear after 3 min	ODU shut down, Indoor fan operating	Connection wire of outdoor fan motor, poor connection or broken     Coutdoor fan motor, broken     Socket of outdoor fan motor, faulty soldering or disconnection from PCB     A.Outdoor main control board, component failure or faulty soldering
16	P1	13	Outdoor machine AC current protection	Displayed when outdoor AC overcurrent	Disappear after 2min	ODU shut down, Indoor fan operating	Outdoor fan motor or its capacitor, failure or speed too low     Poor ventilation of condensor, too dusty     System blockage     4.Compressor, failure     Soutdoor main control board, component failure or faulty soldering
17	P2	14	Compressor phase current protection	Displayed when compressor overcurrent	Disappear after 2min	ODU shut down, Indoor fan operating	Outdoor fan motor or its capacitor, failure leads to low fan speed     Prov vernitiätion of confensor, too dusty     System blooked     4 Compressor, failure     Outdoor main control board, component failure or faulty soldering
18	P3	15	Ourdoor unit over-high/over-low AC voltage protection	Displayed when outdoor AC voltage is ≥300V or ≤90V	If the protection occurs when compressor is on, displayed for at least 2 min; Otherwise, it disappears immediately when AC voltage is ≤290V and ≥100V.	ODU shut down, Indoor fan operating	Power voltage, less than 100V or higher than 300V     Outdoor main control board, component failure or faulty soldering
19	P4	16	DC overvoltage or undervoltage protection	Displayed when DC voltage is ≥ 440V or ≤110V	If the protection occurs when compressor is on, displayed for at least 2 min; Otherwise, it disappears immediately when DC voltage is $\leqslant$ 430V and $\geqslant$ 130V.	ODU shut down, Indoor fan operating	Nower voltage, less than 100V or higher than 300V     Outdoor main control board, component failure or faulty soldering
20	P5	17	IPM overheat protection	Displayed when IPM temperature is ≥105°C	If the protection occurs when compressor is on, displayed for at least 2 min; Otherwise, it disappears immediately when IPM temperature is $\leqslant 83\rm ^{\circ}C$	ODU shut down, Indoor fan operating	Outdoor fan motor or its capacitor, failure leads to low fan speed     Poor ventilation of condensor, too dusty     Noor contact between IPM and radiator     Outdoor main control board, component failure or faulty soldering
21	P6	18	Discharge temperature overheat protection	Displayed when discharge temperature is ≥112°C	If the protection occurs when compressor is on, displayed for at least 2 min; Otherwise, it disappears immediately when discharge temperature is $\leqslant 93\text{C}$	ODU shut down, Indoor fan operating	Discharge temperature sensor, failure     Z.Lack of refrigerant     3. Compressor, failure     4. Outdoor main control board, component failure or faulty soldering
22	P7	19	Cooling indoor coil anti-freezing protection	Displayed when indoor coil temperature is ≤0°C and last for 10s	Disappear immediately when indoor coil temperature is $\geqslant 7 \mathrm{C}$	ODU shut down, Indoor fan operating	I.Indoor fan motor or its capacitor, failure leads to low fan speed 2.Poor ventilation of ewaporator, too dusty 3.Indoor ambient temperature sensor, failure 4.Indoor main control board, component failure or faulty soldering
23	P8	20	Cooling outdoor coil overheat protection	Displayed when outdoor coil temperature is ≥68°C	If the protection occurs when compressor is on, displayed for at least 2 min; Otherwise, it disappears immediately when outdoor coil temperature is $\leqslant 54\%$	ODU shut down, Indoor fan operating	Outdoor fan motor or its capacitor, failure leads to low fan speed 2 Poor ventilation of condenser, too dusty 3 Outdoor ambient temperature sensor, failure 4 Outdoor main control board, component failure or faulty soldering
24	PC	22	Cooling outdoor ambient temperature over-low protection	Displayed when outdoor ambient temperature is ≤ -1°C	If the protection occurs when compressor is on, displayed for at least 2 min; Otherwise, it disappears immediately when outdoor ambient temperature is $\geqslant 1$ $\mathbb C$	ODU shut down, Indoor fan operating	1. Outdoor ambient temperature, <-1°C 2. Outdoor ambient temperature sensor, failure 3. Outdoor main control board, component failure or faulty soldering
25	РН	23	Heating outdoor ambient temperature over-high protection	Displayed when outdoor ambient temperature is ≥ 30°C	If the protection occurs when compressor is on, displayed for at least 2 min; Otherwise, it disappears immediately when outdoor ambient temperature is $\geqslant$ 30 $^{\circ}$	ODU shut down, Indoor fan operating	1.Outdoor ambient temperature, ≥ 30°C     2.Outdoor ambient temperature sensor, failure     3.Outdoor main control board, component failure or faulty soldering