

5.1 Failure code

Failure code description: (failure code of the whole system is showed as 8 bits, so totally 256 codes. Indoor failure code should be judged by the table and the unit number)

- Outdoor failure code exists in EEPROM, in which 5 failure codes can be kept.
- Indoor failure code exists in EEPROM, in which 5 failure codes can be kept.

Failure codes are distributed as following:

0 ~ 19: indoor failure code

20 ~ 99: outdoor failure code

100 ~ 109: DC motor failure code

110 ~ 125: inverter module failure code

126 ~ 127: software auto-check failure code

Physical master unit:

Dip switches SW9, SW10, SW11 are at 0, 0, 0, LD displays failure code 20 ~ 127, it is the master failure code.

Dip switches SW9, SW10, SW11 are 1, 0, 0, LD displays failure code 20 ~ 127, it is failure code of No. 1 slave unit.

Dip switches SW9, SW10, SW11 are 2, 0, 0, LD displays failure code 20 ~ 127, it is failure code of No. 2 slave unit.

Physical slave unit:

Dip switches SW9, SW10, SW11 are at 0, 0, 0, LD displays failure code 20 ~ 127, it is single slave unit failure code.

Outdoor failure code display principle on wired controller:

When outdoor compressor is running, indoor wired controller will display the failure code of outdoor with higher priority. When compressor stops, it displays all indoor failures. The indoor failures will be classified as below: sensor failure, inverter board failure, fan motor driving board failure, any protections etc.

Inverter outdoor unit failure code

LD indication on master unit	Indication on wired controller (hex)	Failure code definition	Failure description	Remarks
20	14	Defrosting temp. Sensor Tdef failure	AD value is below 11(open circuit) or over 1012(short circuit) for 60seconds, in cooling mode, if the sensor is abnormal, the unit does not deal with it, besides, in defrosting and within 3 minutes after defrosting, no alarm	Resumable
21	15	Ambient temp. Sensor Ta failure	AD value is below 11(open circuit) or over 1012(short circuit) for 60seconds, in defrosting and within 3 minutes after defrosting, no alarm	Resumable
22-0	16	Suction temp. Sensor Tsi failure	AD value is below 11(open circuit) or over 1012(short circuit) for 60seconds, in defrosting and within 3 minutes after defrosting, no alarm	Resumable

LD Indication On Master Unit	Indication On Wired Controller (hex)	Failure Code Definition	Failure Description	Remarks
22-1	16	Suction Temp. Sensor Ts Failure	AD value is below 11(open circuit) or over 1012(short circuit) for 60seconds, in defrosting and within 3 minutes after defrosting, no alarm	Resumable
22-2	16	Suction Temp. Sensor Tsuc Failure		
23-0	17	Discharging Temp. Sensor Tdi Failure	After compressor is running for 5 minutes, AD value is below 11(open circuit) or over 1012 (short circuit) for 60seconds, in course of startup, defrosting and within 3 minutes after defrosting, no alarm	Resumable
23-1	17	Discharging Temp. Sensor Td1 Failure		
23-2	17	Discharging Temp. Sensor Td2 Failure		
24-1	18	Oil Temp. Sensor Toilp Failure	AD value is below 11(open circuit) or over 1012(short circuit) for 60seconds, if Ta<=- 10degree or ET<=- 10degree, within 5 minutes, no alarm	Resumable
24-2	18	Oil Temp. Sensor Toil Failure		
25-1	19	Inlet Temp. of Heat Exchanger Toci1 Failure	AD value is below 11(open circuit) or over 1012(short circuit) for 60seconds, in cooling mode, if the sensor is abnormal, the unit does not deal with it, besides, in defrosting and within 3 minutes after defrosting, no alarm	Resumable
25-2	19	Inlet Temp. of Heat Exchanger Toci2 Failure		
26-0	1A	Indoor Communication Failure	For continuous 200 cycles, cannot find connected indoors	Resumable
26-1	1A		For continuous 270seconds, the searched indoor quantity is less than the set quantity.	
26-2	1A		For continuous 170seconds, the searched indoor quantity is more than the set quantity.	
27	18	Oil Temp. Too High Protection (toil)	Toil>=120degree(E) at interval of 25msec for twice continuously, and over the set value, then stop and alarm; 3 minutes later, resume automatically. If it occurs 3 times in an hour, confirm the failure.	Once confirmati on, un- resumable

Trouble shooting

LD Indication On Master Unit	indication On Wired Controller (hex)	Failure Code Definition	Failure Description	Remarks
28	1C	High pressure sensor Pd failure	AD value is below 11(open circuit) or over 1012(short circuit) for 30seconds, in defrosting and within 3 minutes after defrosting, no alarm	Resumable
29	1D	Low pressure sensor Ps failure	AD value is below 11(open circuit) or over 1012(short circuit) for 30seconds, in defrosting and within 3 minutes after defrosting, no alarm	Resumable
30-0	1E	High pressure switch Hpsi failure	If disconnect for 50ms continuously, alarm. If alarm 3 times in an hour, confirm the failure	Once confirmation, un-resumable
30-1	1E	High pressure switch Hps1 failure		
30-2	1E	High pressure switch Hps2 failure		
32-1	20	Outlet temp. Of subcooler Tsc0 failure	AD value is below 11(open circuit) or over 1012(short circuit) for 30seconds, in defrosting and within 3 minutes after defrosting, no alarm	Resumable
32-2	20	Liquid pipe sc temp. Of subcooler Tliqsc failure		
33-0	21	Eeprom (at24c04) failure	EEPROM communication failure	Once confirmation, un-resumable
34-1	21		EEPROM data check failure(model code, check sum etc.)	
34-2	21		EEPROM data check failure(data beyond limit, reverse sequence etc.)	
34-0	22	Discharging temp. Too High Protection (Tdi)	Toil>=120degree(E) at interval of 25msec for twice continuously, and over the set value, then stop and alarm; 3 minutes later, resume automatically. If it occurs 3 times in an hour, confirm the failure.	Once confirmation, un-resumable
34-1	22	Discharging temp. Too High Protection (Td1)		
34-2	22	Discharging temp. Too High Protection (Td2)		

LD Indication On Master Unit	Indication On Wired Controller (hex)	Failure Code Definition	Failure Description	Remarks
35	23	4-Way Valve Reversing Failure	After 4-way valve is electrified for 3 minutes, if the below conditions can be met for continuous 10 seconds, that is conversing successfully: This outdoor compressor is running normally $T_{suc} - T_{def} \leq 10^{\circ}C$ or $P_d - P_s \leq 0.6MPa$ Otherwise, the system alarms reversing failure.	Once confirmation, un-resumable
36	24	Oil Temp. Too Low Protection (toil)	In normal operation, if $T_d < CT + 10^{\circ}C$ for continuous 5 minutes, the unit stops and alarms. 2 minutes and 50 seconds later, resume automatically. If it occurs 3 times in an hour, confirm the failure	Once confirmation, un-resumable
37	25	Lack of Phase of 3n Power Supply or Wrong Phase Sequence	One or two phases of 3N power supply are disconnected or connected contrarily	Once confirmation, un-resumable
38	26	High Pressure Sensor P_d Too Low Protection	In normal operation, $P_d < 1.5Mpa$ for continuous 5 minutes, alarm and stop. 2 minutes and 50 seconds later, resume automatically, if it occurs 3 times in an hour, confirm the failure.	Once confirmation, un-resumable
39-0	27	Low Pressure Sensor P_s Too Low Protection	After compressor is running (except for residual operation), if in cooling, $P_s < 0.10Mpa$; in heating, $P_s < 0.05Mpa$; in oil return, $P_s < 0.035Mpa$ for continuous 5 minutes, alarm and stop. 2 minutes and 50 seconds later, resume automatically, if it occurs 3 times in an hour, confirm the failure.	Once confirmation, un-resumable
39-1	27	Compression Ratio Too High Protection	After compressor is running, compression ratio $\epsilon > 8$. for continuous 5 minutes stop and alarm. 2 minutes and 50 seconds later, resume automatically, if it occurs 3 times in an hour, confirm the failure.	Once confirmation, un-resumable
39-2	27	Compression Ratio Too Low Protection	In normal operation, compression ratio $\epsilon < 1$. for continuous 5 minute, s stop and alarm. 2 minutes and 50 seconds later, resume automatically, if it occurs 3 times in an hour, confirm the failure.	Once confirmation, un-resumable
40	28	High Pressure Sensor P_d Too High Protection	In normal operation, $P_d \geq 4.15Mpa$ for continuous 50ms, alarm and stop. 2 minutes and 50 seconds later, resume automatically, if it occurs 3 times in an hour, confirm the failure.	Once confirmation, un-resumable

Trouble shooting

LD Indication On Master Unit	Indication On wired Controller (hex)	Failure Code Definition	Failure Description	Remarks
43-0	28	Discharging temp. Sensor TdiToo Low Protection	In normal operation, if $T_d < CT + 10^*$ for continuous 5 minutes, the unit stops and alarms. 2 minutes and 50 seconds later, resume automatically. If it occurs 3 times in an hour, confirm the failure. After fixed frequency compressor alarms, inverter compressor will continue to run. If fixed frequency compressor has been locked for 3 times, the unit will stop and alarm.	Once confirmation, un-resumable
43-1	28	Discharging temp. Sensor Td1 Too Low Protection		
43-2	28	Discharging Temp. Sensor Td2 Too Low Protection		
44	2C	Low Pressure Sensor Ps Too High Protection	In normal operation, if $p_s > 1.05\text{Mpa}$ for continuous 5 minutes, unit stops and alarms, 2 minutes and 50 seconds later, resume automatically. If it occurs 3 times in an hour, alarm and confirm the failure.	Once confirmation, un-resumable
45	2D	Communication among Outdoors Failure	No communication within 3 minutes continuously	Resumable
46	2E	Communication with Inverter Board Failure	No communication within 30 seconds continuously	Resumable
48	30	Unloading Valve sv1 Failure	Before startup, SV1 opens for 2 minutes, if $P_d - P_s \geq 0.2\text{MPa}$, display failure code, when $P_d - P_s < 0.2\text{MPa}$, resume.	Resumable
53-1	35	Current Detector CT1 Failure	Fixed frequency compressor is OFF, if $CT > 4.0(\text{EE})3.0\text{A}$ for 2s(not detecting in 90s after fixed frequency compressor is from ON to OFF); fixed frequency compressor is ON, if $CT \leq 2.0(\text{EE})$ for 2s(not detecting in 90s after fixed frequency compressor is from OFF to ON), it alarms failure of CT in short circuit.	Resumable
53-2	35	Current Detector CT2 Failure		
64-1	40	CT1 Over Current	Current of fixed frequency compressor is over the limitation twice at the interval of 25msecond, unit will stop, but 3 minutes later, resume to be normal automatically. If it occurs 3 times in an hour, alarm and stop. 8Ut, in 4 seconds after startup, not detect.	Once confirmation, un-resumable
64-2	40	CT2 Over Current		

LD Indication On Master Unit	Indication On wired Controller (hex)	Failure code definition	Failure Description	Remarks
67	43	Communication with Motor Driving Board Failure	Without communication for 4 minutes	
71-1	47	Left DC Motor Blocked	Running at speed below 20rpm for 30s, or at speed of 70% lower than the target for 2 minutes, 2 minutes and 50 seconds later after stop, resume automatically. It occurs 3 times in an hour, confirm the failure.	Once confirmation, un-resumable
71-2	47	Right DC Motor Blocked		
75-0	48	No Pressure Drop Between High Pressure and Low One	In 1 minute after inverter compressor starts up, $p_{dp} < 0.1 \text{MPa}$. 2 Minutes and 50 seconds later after unit stops, resume automatically, if it occurs twice continuously, confirm the failure.	Once confirmation, un-resumable
76-1	4C	Incorrect Outdoor Address or Capacity Setting	Slave unit quantity/address/horse power are not in conformance with data in EEPROM of master unit: quantity incorrect.	Reset
76-2	4C		Slave unit quantity/address/horse power are not in conformance with data in EEPROM of master unit: address incorrect.	
76-3	4C		Slave unit quantity/address/horse power are not in conformance with data in EEPROM of master unit: horse power incorrect.	
77	4D	Oil Equalization Protection Among Outdoors	$Toi1A - Toi18 \leq 10 \text{degree}$, unit alarms and stops, not detecting in the course of startup, defrosting and oil return control, and in 10 minutes after oil return finishes. 2 minutes and 50 seconds later after unit stops, resume automatically. If it alarms twice continuously, confirm the failure.	Once confirmation, un-resumable
78	4E	Lack of Refrigerant	Compressor running in cooling mode, $P_s < 0.1 \text{MPa}$ for 30 minutes; compressor running in heating mode, $T_{si} - ET > 20$; LEV will fully open for 60 minutes, the unit will output lack of refrigerant alarm, unit will not stop.	--
79	4F	Incorrect Wiring	30 minutes later after incorrect wiring is inspected, outdoor: if $T_{di} \leq T_{ao} + 30K$, display failure code. indoor: if in cooling, $T_{c2} \geq T_{ai} - 20K$, display failure code; in heating, $T_{c1} \leq T_{ai} + 20K$, display failure code.	Resumable

Trouble shooting

LD Indication On Master Unit	Indication On wired Controller (hex)	Failure Code Definition	Failure Description	Remarks
100	64	DC Motor Driving Board IPM Alarm	DC motor driving board alarms because of over current or modular temperature too high, resume automatically 2 minutes and 50 seconds later after unit stops.It occurs 3 times in an hour, confirm the failure.	Once confirmati on, un- resumable
101	65	DC Motor Driving Board Detecting Out Of Control	Resume automatically 2 minutes and 50 seconds later after unit stops.It occurs 3 times in an hour, confirm the failure.	Once confirmati on, un- resumable
102	66	DC Motor Driving Board EEPROM Faulty	Resume automatically 2 minutes and 50 seconds later after unit stops.It occurs 3 times in an hour, confirm the failure.	Once confirmati on, un- resumable
103	67	DC Motor Driving Board Over Current or Current Detector Damaged	If current of DC motor driving board is over 5A, unit alarms. 2 minutes and 50 seconds later after unit stops, resume automatically, if it occurs three times in an hour, confirm the failure.	Once confirmati on, un- resumable
104	68	Voltage Too Low Protection of DC Motor Driving Board	If voltage of DC motor driving board is below280V, unit alarms. 2 minutes and 50 seconds later after unit stops, resume automatically, if it occurs three times in an hour, confirm the failure.	Once confirmati on, un- resumable
105	69	Voltage Too High Protection of DC Motor Driving Board	If voltage of DC motor driving board is over 400V, unit alarms. 2 minutes and 50 seconds later after unit stops, resume automatically, if it occurs three times in an hour, confirm the failure.	Once confirmati on, un- resumable
106	6A	Dc Motor Driving Board Blocked	Fanmotor rate cannot be detected. 2 minutes and 50 seconds later after unit stops, resume automatically, if it occurs three times in an hour, confirm the failure.	Once confirmati on, un- resumable
107	68	Protection of Motor Rate Over Limitation	Fan motor rate is higher than1100 for 5 seconds, unit alarms.	Once confirmati on, un- resumable

LD Indication On Master Unit	Indication On wired Controller (hex)	Failure Code Definition	Failure Description	Remarks
110	6E	IPM Modular Protection (F0)	IPM modular over current, in short circuit, over heat, voltage too low of control circuit.	3 times in anhour, confirm failure; once confirmation, un- resumable
111	6F	Compressor Out Of Control	In the course of compressor startup or running, the unit cannot detect the rotor position, or not connecting compressor.	
112	70	Radiator of Transducer Temp. Too High	Radiator temp. Too high	
113	71	Transducer Overload	Output current of transducer is too high	
114	72	Voltage Too Low of DC Bus Line of Transducer	Voltage of power source is too low	
115	73	Voltage Too High of DC Bus Line of Transducer	Voltage of power source is too high	Resumable
116	74	Communication Abnormal Between Transducer And Control pc8	Communication is disconnected	
117	75	Current Detecting Circuit Abnormal Of Transducer	Instant current of transducer is too high	3 Times in anhour, confirm failure; once confirmation, un- resumable
118	76	Transducer Over Current (software)	Compressor startup fails for 5 times continuously, or compressor is running down till stops caused by over current or over heat	
119	77	Compressor Startup Failure	The sensor used for current detecting of transducer is abnormal, disconnected or incorrectly connection	
120	78	Power Supply of Transducer Abnormal	Power supply of transducer is broken down instantly	

Trouble shooting

LD Indication On Master Unit	Indication On wired Controller (hex)	Failure Code Definition	Failure Description	Remarks
121	79	Power Supply Of Inverter Board is Abnormal	Power supply of inverter board is broken down instantly	3 Times in an hour, confirm failure; once confirmation, un-resumable
122	7A	Radiator Temp. Sensor of Transducer Abnormal	Resistor of temp. Sensor abnormal or temp. Sensor disconnected	
126	7E	Software Abnormal	If it occurs three times in an hour, confirm the failure.	
127	7F	MCU Reset Abnormal	If master unit inspects that MCU of slave unit is reset, and the slave unit is running, master unit will alarm MCU reset failure, then the whole system will stop; if in heating mode, whenre start up, 4-way valve will be not electrified, the whole system will execute 4-way valve reversing operation again. If it occurs three times in an hour, alarm and confirm the failure.	Once confirmati on, un- resumable

When there is no failure, if the starting condition cannot be met, digital tube on master unit will display stand-by code:

555.0	Standby State Of Capacity Overmatch	When capacity is over 135% or lower than50%, the system is standby.
555.1	Standby State of 26 Degree Heating Mode	When it is in heating mode with ambient temperature over 26 degree, the system is standby.
555.2	Standby State of Super Low Pressure (lack of refrigerant)	When the unit starts in cooling with ps<0.23Mpa or heating with ps<0.12Mpa, the system is standby.

Indoor unit code

Indication On master Unit	Indication On wired Controller	Flash Times of LED5 On indoor PC8/timer LED on Remote Receiver	Failure Code Definition
1	1	1	Indoor ambient temp. sensor Ta failure
2	2	2	Indoor coil temp. sensor Tc1 failure
3	3	3	Indoor coil temp. sensor Tc2 failure
4	4	4	Indoor TES sensor failure
5	5	5	Indoor EEPROM failure
6	6	6	Communication between indoor and outdoor failure
7	7	7	Communication between indoor and wired controller failure
8	8	8	Indoor drainage failure
9	9	9	Indoor repeated address
0A	0A	10	Indoor repeated central control address
Outdoor Failure Code	Outdoor Failure Code	20	Outdoor corresponding failure

Trouble shooting

YV4VXH140-280WAR--GX

Wired controller fault code	PCB LED5(Indoor Units)/Receiving Window Health Lamp (Remote controller)	Failure code definition
01	1	Indoor ambient temp. sensor TA(Tas) failure
02	2	Indoor coil pipe temp. sensor TC1(1) failure
03	3	Indoor coil pipe temp. sensor TC2(1) failure
04	4	Indoor coil pipe temp. sensor TC2(2) failure
05	5	Indoor EEPROM failure
06	6	Communication between indoor and outdoor failure
07	7	Communication between indoor and wired controller failure
08	8	Indoor float switch failure
09	9	Indoor address repeated failure
0C	12	No 50Hz zero passage signal
0E	14	Indoor coil pipe temp. sensor TC1(2) failure
0F	15	Indoor ambient temp. sensor TA(Taf) failure
Outdoor failure code	20	Outdoor failure code

YVHVXH022-071WAR--FX

PCB led flash times	Digital tube display	Fault description
1	E1	Fault in ambient temperature sensor ta
2	E2	Fault in coil temperature sensor tc1
3	E3	Fault in coil temperature sensor tc2
5	E5	Fault in eeprom date
6	E6	Fault in communication between indoor unit with outdoor unit
7	E7	Communication between indoor and wired controller failure
8	E8	Indoor float switch failure
9	E9	Fault in repeat of indoor unit address
12	E12	No 50Hz zero passage signal or wired controller DCSHORT protect
14	E14	Fault in dc fan motor
20	E20	Fault in outdoor unit

YV8VXH028-056WAR--GX

Error code	Timer Lights/LED5 flick times	Failure code defination
01	1	Indoor ambient temp. sensor TA failure
02	2	Indoor coil pipe temp. sensor TC1 failure
03	3	Indoor coil pipe temp. sensor TC2 failure
04	4	Heat source sensor failure
05	5	Indoor EEPROM failure
06	6	Communication between indoor and outdoor failure
07	7	Communication between indoor and wired controller failure
08	8	Drainage malfunction
09	9	Indoor address repeated failure
0A	10	Central control address repeated failure
0D	13	Dehumidification Sensor TC3
Outdoor	20	Outdoor failure code