

6.6 Alarm codes for the outdoor and indoor units

Alarm Code	Retry stop code	Outdoor Unit			Indoor Unit			Origin	Detail of Abnormality	Main Factors
		Split	Mono-bloc	Hy-drosplit	S/SC	S80	H/HC			
2	-	o	o	o	-	-	-	Outdoor Unit	Activation of protection device (high pressure switch)	<p>Activation of PSH, locked motor, abnormal operation in the power supply phase.</p> <p>Failure of fan motor, drain discharge, PCB, relay, float switch activated.</p> <p>(Pipe clogging, excessive refrigerant, inert gas mixing, fan motor locking at cooling operation)</p>
3	-	o	o	o	o	o	o	Transmission	Transmission Alarm (Not outdoor unit detected)	Loose, disconnected, broken or short-circuited connector
4	-	o	o	o	-	-	-		Abnormal transmission between inverter PCB and RAS unit PCB	Transmission failure between inverter PCBs. (Loose Connector, Wire Breaking, Blowout of Fuse).
5	-	o	o	o	-	-	-	Power supply	Reception of abnormal operation code for detection of power source phase	Power source with abnormal wave pattern. Main power supply phase is reversely connected or one phase is not connected.
6	-	o	o	o	-	-	-	Voltage	Excessively low voltage or excessively high voltage for the inverter	Voltage drop in power supply. Incorrect wiring or insufficient capacity of power supply wiring.
7	-	o	o	o	-	-	-	Cycle	Decrease in discharge gas superheat	Excessive Refrigerant Charge, Failure of Thermistor, Incorrect Wiring, Incorrect Piping Connection, Expansion Valve Locking at Opened Position (Disconnected Connector).
8	-	o	o	o	-	-	-		Excessively high discharge gas temperature at the top of compressor	Insufficient refrigerant charge, refrigerant leakage. Expansion valve closed or clogged.
10	-	-	-	-	-/o	-	-/o	Indoor	Domestic hot water temperature (THM _{DHWT2}) top thermistor anomaly	Loose, disconnected, broken or short-circuited connector

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11	-	-	-	o	o	o	o	Indoor	Water inlet thermistor anomaly (THMwi)	Loose, disconnected, broken or short-circuited connector
12	-	-	-	o	o	o	o	Indoor	Water outlet thermistor anomaly (THMwo)	Loose, disconnected, broken or short-circuited connector
13	-	-	-	o	o	o	o	Indoor	Indoor Liquid Pipe Temp Thermistor anomaly (THM _l)	Loose, disconnected, broken or short-circuited connector
14	-	-	-	o	o	o	o	Indoor	Indoor Gas Pipe Temp. Thermistor anomaly (THMg)	Loose, disconnected, broken or short-circuited connector
15	-	-	-	(o)	(o)	(o)	(o)	Indoor	Water Circuit 2 thermistor anomaly (THMwo2)	Loose, disconnected, broken or short-circuited connector
16	-	-	-	(o)	(o)/o	(o)	(o)/o	Indoor	Water DHW thermistor anomaly (THMdhwt)	Loose, disconnected, broken or short-circuited connector
17	-	-	-	(o)	(o)	(o)	(o)	Indoor	Auxiliary temperature sensor 2 (THMaux2) thermistor anomaly	Loose, disconnected, broken or short-circuited connector
18	-	-	-	(o)	(o)	(o)	(o)	Indoor	Auxiliary temperature sensor 1 (THMaux1) thermistor anomaly	Loose, disconnected, broken or short-circuited connector
19	-	-	-	-	o	-	o	Indoor	Water Plate HEX pipe thermistor anomaly (THMwohp)	Loose, disconnected, broken or short-circuited connector
19	-	-	-	-	-	o	-	Indoor	Compressor suction temperature thermistor anomaly (THMs)	Loose, disconnected, broken or short-circuited connector
20	-	o	o	o	-	-	-		Thermistor for discharge gas temperature (THM9)	
21	-	o	o	-	-	-	-	OU sensor	Abnormality of high pressure sensor	Incorrect wiring, disconnected wiring, broken cable, short circuit.
22	-	o	o	o	-	-	-		Thermistor for outdoor ambient temperature (THM7)	
23	-	-	-	-	-	o	-	Indoor	Abnormal operation of the thermistor for the discharge gas (Td) (THM9)	Loose, disconnected, broken or short-circuited connector
24	-	o	o	o	-	-	-	OU sensor	Thermistor for evaporation / condensation temperature (THM8)	Incorrect wiring, disconnected wiring, broken cable, short circuit.

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25	-	-	-	(o)	(o)	(o)	(o)	Indoor	Auxiliary sensor 3 thermistor anomaly (THMaux3)	Loose, disconnected, broken or short-circuited connector
26	-	-	-	-	o	-	o	Indoor	Water pressure sensor (WPS) anomaly	Incorrect wiring, disconnected wiring, broken cable, short circuit
27	-	-	o	-	-	-	-	Outdoor	Economizer thermistor abnormality	
28	-	-	o	-	-	-	-	Outdoor	Failure of suction gas thermistor	
29	-	-	o	-	-	-	-	1st cycle	Low pressure sensor	
31	-	o	o	o	-	-	-		Incorrect capacity setting or combined capacity between indoor and outdoor units	Incorrect Capacity Code Setting, Excessive or Insufficient Indoor Unit Total Capacity Code.
35	-	o	o	o	-	-	-	System	Incorrect indoor unit number setting	Duplication of indoor unit number, number of indoor units over specifications.
36	-	o	o	o	-	-	-		Indoor unit combination error	
38	-	o	o	o	-	-	-		Anomaly at picking up circuit for protection (Outdoor Unit)	Failure of indoor unit PCB, incorrect wiring, connection to PCB in indoor unit.
40	-	-	-	o	o	o	o	Indoor	Incorrect Unit controller setting	Current Unit controller configuration does not allow proper operation
42	-	-	o	-	-	-	-	Outdoor	Pressure ratio increase	
43	-	-	o	-	-	-	-	Outdoor	Pressure ratio decrease	
44	-	-	o	-	-	-	-	Outdoor	Low pressure increase abnormality	
45	-	o	o	-	-	-	-		Activation of the safety device from excessively high discharge pressure	Overload (obstruction of HEX, short circuit) mixture of inert gas, Excessive Refrigerant.
47	-	o	o	-	-	-	-	Protection Device	Activation of the safety device from excessively low suction pressure (protection from vacuum operation)	Shortage or leakage of refrigerant, piping clogging, expansion valve close-locked, fan motor locked.
48	-	o	o	-	-	-	-		Activation of overcurrent protection	Overload, overcurrent. Failure of Inverter PCB, heat exchanger clogged, locked compressor. EVI/EVO failure.

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		Split	Mono-bloc	Hy-drosplit	S/SC	S80	H/HC			
51	-	o	o	-	-	-	-	Inverter	Abnormal operation of the current sensor	Incorrect wiring of current sensor. Failure of control PCB or Inverter PCB.
53	-	o	o	-	-	-	-		Inverter fin temperature increase	Inverter module (IPM, DIP-IPM) and Inverter PCB abnormality. Failure of compressor, clogging of heat exchanger.
54	-	o	o	-	-	-	-		Abnormality of inverter fin temperature	Heat Exchanger Clogging. Fan Motor Failure.
55	-	o	o	-	-	-	-		Abnormality of inverter module	Failure of DIP-IPM, IPM or Inverter PCB.
57	-	o	o	o	-	-	-	Outdoor	Fan motor protection	Abnormality of fan motor protection (DC fan motor)
5b	-	o	o	o	-	-	-	Outdoor fan	Activation of over current protection	Fan consumption abnormality
5c	-	o	o	o	-	-	-	Outdoor fan	Abnormality in current detection circuit	Abnormality in fan current detection circuit
70	P70	-	-	o	o	o	o	Indoor	Hydraulic alarm flow & Water Pump malfunction	Water flow is not detected in the hydraulic cycle or Pump defective
72	-	-	-	-	o	-	o	Indoor	Thermostat Heater Alarm	High temperature is detected in Electric Heater
73	-	-	-	(o)	(o)	o	(o)	Indoor	Mixing over-temperature limit protection for Mixed circuit.	Circuit 2 supply temperature > Target temperature + offset
74	P74	-	-	o	o	o	o	Indoor	Unit over-temperature limit protection	Two > Tmax +5K
75	-	-	-	o	o	o	o	Indoor	Freeze Protection by Cold water inlet, outlet temperature detection	
76	-	-	-	o	o	o	o	Indoor	Freeze Protection Stop by indoor liquid temperature thermistor	
77	-	-	-	(o)	(o)	o	(o)	Indoor-Unit controller	Receiver Communication failure	No Opentherm/H-Link communication for a continuous period of 10 minutes.

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78	-	-	-	(o)	(o)	o	(o)	Indoor - Unit controller	RF Communication failure	There is no communication for 1 hour with on or two RF receives which are bound to the RF-Bridge.
79	-	-	-	o	o	o	o	Indoor - outdoor	Unit Capacity setting Error	There is no concordance between indoor outdoor unit capacity
80	-	-	-	(o)	(o)	o	(o)	Indoor- Unit controller	Unit controller - H-Link - RCS transmission error (if no H-LINK, RCS has no power)	No H-Link communication for a continuous period of 1 minute between Indoor and Unit controller. User control by connection wiring (breaking, wiring error, etc.)
81	P81	-	-	o	o	o	o	Indoor	"Momentary Power interruption" or "Low voltage detected"	
83	P83	-	-	o	o	o	o	Indoor	Hydraulic alarm pressure	Water pressure is not detected in the hydraulic cycle
84	-	-	-	-	o	-	o	Indoor	High Water pressure	Water pressure > 3.6 bar
101	-	-	-	-	-	o	-	Indoor	Activation of high pressure switch	
102	P12	-	-	-	-	o	-	Indoor	Activation of protection control for excessively high pressure	Stop after P12 retry due to discharge pressure Pd ≥ 2.78 MPa continued for 10 seconds.
104	P06	-	-	-	-	o	-	Indoor	Activation of low control	Stop after P06 retry due to Ps ≤ 0.15 MPa continued for 90 seconds Immediate stop with Ps ≤ 0.1 MPa
105	P11	-	-	-	-	o	-	Indoor	Excessive low pressure difference	Stop after P11 retry due to pressure ratio ε < 1.8 continued for 3 minutes.
106	-	-	-	-	-	o	-	Indoor	Excessive high discharge gas temperature	Td ≥ 120 °C continued for 10 minutes, Td ≥ 140 °C continued for 5 seconds
129	-	-	-	-	-	o	-	Indoor	Failure of discharge gas pressure sensor	Loose, disconnected, broken or short-circuited connector

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130	-	-	-	-	-	o	-	Indoor	Failure of suction gas pressure sensor	Loose, disconnected, broken or short-circuited connector
132	-	-	-	-	-	o	-	Indoor	Transmission error between Inverter PCB and Main PCB	Described in inverter abnormal stop control
134	-	-	-	-	-	o	-	Indoor	Power Supply Phase Anomaly	Reverse/Open Phase
135	-	-	-	-	-	o	-	Indoor	Incorrect PCB Setting	Wrong DSW setting in the case of Co041
151	-	-	-	-	-	o	-	Indoor	Excessively low voltage or excessively high voltage for the inverter	Described in inverter abnormal stop control
152	-	-	-	-	-	o	-	Indoor	Abnormal operation of the current sensor	Described in inverter abnormal stop control
153	-	-	-	-	-	o	-	Indoor	Activation of protection for inverter instantaneous over current	Described in inverter abnormal stop control
154	-	-	-	-	-	o	-	Indoor	Transistor module protection activation	Described in inverter abnormal stop control
155	-	-	-	-	-	o	-	Indoor	Increase in the inverter fin temperature or abnormality	Described in inverter abnormal stop control
156	-	-	-	-	-	o	-	Indoor	Inverter non operation	Described in inverter abnormal stop control
157	-	-	-	-	-	o	-	Indoor	Other abnormalities	Described in inverter abnormal stop control
202	-	(o)	(o)	(o)	(o)	(o)	(o)	Indoor	Wrong settings of PC-ARFH2E	
203	-	(o)	(o)	(o)	(o)	(o)	(o)	Indoor	Slave PC-ARFHE stops answering to Master PC-ARFH2E	Loose, disconnected, broken or short-circuited connector
204	-	(o)	(o)	(o)	(o)	(o)	(o)	Indoor	Indoor unit stops answering to Master PC-ARFH2E	Loose, disconnected, broken or short-circuited connector
205	-	-	-	-	-	(o)	-	Indoor	Central Alarm, no Central message	Loose, disconnected, broken or short-circuited connector
EE	-	o	o	-	-	-	-	Compressor	Compressor protection	Compressor failure. This alarm code appears when the following alarms: 02, 07, 08, 45, 47 occur three times within 6 hours.

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		Split	Mono-bloc	Hy-drosplit	S/SC	S80	H/HC			
b0	-	o	-	-	-	-	-	IU model setting	Incorrect setting of unit model	No setting of unit capacity or incorrect setting of unit capacity.

(o): Option configurable from Unit controller. This alarm will be displayed if the system has been configured.

o: Default. This alarm will be displayed in the Unit controller.

–: No applicable.