## Panasonic air conditioner error codes

The self-diagnostics system of the air conditioners by Panasonic displays error codes on the display of the infrared remote control and on the wall-mounted remote control. The list of error codes, their interpretation, and the troubleshooting methods for each error code are specified.

Panasonic inverter air conditioner error codes

S01	Room temperature sensor failure	Refer to detailed diagnostic
S02	Indoor coil sensor failure	Check sensor for continuity
S03	Humidity sensor failure	Replace indoor board
S04	Comp. temperature sensor failure	Check sensor for continuity
S05	Outdoor coil sensor failure	Check sensor for continuity
S06	Outdoor air sensor failure	Check sensor for continuity
S07	Outdoor current sensor failure	Replace outdoor board
E01	Indoor/outdoor communication failure	Refer to detailed diagnostics
E02	HIC circuit failure (Compressor/Fan circuit)	Refer to detailed diagnostics
E03	Outdoor unit OTP rom failure	Refer to detailed diagnostics
E04	Peak current cut off	Refer to detailed diagnostics
E05	PAM or Active circuit failure	Refer to detailed diagnostics
E06	High compressor discharge temperature	Refer to detailed diagnostics
E07	Indoor fan operating failure	Refer to detailed diagnostics
E08	4 way valve switching failure (RV)	Refer to detailed diagnostics
E09	No refrigerant protection	Refer to detailed diagnostics
E10	DC compressor drive circuit failure	Refer to detailed diagnostics
E11	Outdoor fan operating failure	Refer to detailed diagnostics
E12	Error in outdoor unit	Refer to detailed diagnostics
E13	Freeze prevention activated	Refer to detailed diagnostics

DIAGNOSIS DISPLAY	ABNORMALITY / PROTECTION CONTROL	ABNORMALITY  JUDGEMENT	EMERGENCY OPERATION	PRIMARY LOCATION TO VERIFY
H00	No abnormality detected	-	Normal operation	-
H11	Indoor / Outdoor abnormal communication	> 1 min after starting operation	Indoor fan operation only	• Internal / external cable connections • Indoor / Outdoor PCB
H12	Connection capability rank abnormal	-	-	-
H14	Indoor intake air temperature sensor abnormality	Continue for 5 sec.	-	• Intake air temperature sensor (detective or disconnected)
H15	Outdoor compressor temperature sensor abnormality	Continue for 5 sec	-	Compressor temperature sensor (detective or disconnected)
H16	Outdoor Current Transformer open circuit	-	-	<ul><li>Outdoor PCB</li><li>IPM (Power transistor)</li><li>module</li></ul>
H19	Indoor fan motor mechanism locked	7 times occurance continuously	-	• Indoor PCB • Fan motor
H23	Indoor heat exchanger temperature sensor abnormality	-	O (Cooling only)	Heat exchanger temperature sensor (detective or disconnected)
H24	Indoor heat exchanger temperature sensor 2 abnormality	Continue for 5 sec.	-	Heat exchanger temperature sensor (detective or disconnected)
H27	Outdoor intake air temperature sensor abnormality	Continue for 5 sec.	0	Outdoor temperature sensor  (detective or disconnected)
H28	Outdoor heat exchanger temperature sensor abnormality	Continue for 5 sec.	0	Outdoor heat exchanger temperature sensor (detective or disconnected)

DIAGNOSIS DISPLAY	ABNORMALITY / PROTECTION CONTROL	ABNORMALITY  JUDGEMENT	EMERGENCY OPERATION	PRIMARY LOCATION TO VERIFY
H30	Outdoor discharge air temperature sensor abnormality	Continue for 5 sec.	-	Outdoor temperature sensor  (detective or disconnected)
Н33	Indoor / Outdoor wrong connection	-	-	• Indoor / Outdoor supply voltage
Н38	Indoor / Outdoor mismatch (brand code)	-	-	-
H50	Ventilation motor abnormality	7 times occurance continuously	-	• Indoor PCB • Ventilation motor
H51	Nozzle lock abnormality	2 times occurance continuously	-	•Nozzle
H52	Limit switch abnormality	-	-	• Indoor PCB
Н97	Outdoor fan motor mechanism locked	2 times occurance within 30 minutes	-	• Indoor PCB • Fan motor
H98	Indoor high pressure protection	-	-	• Air filter dirty • Air circulation short circuit
H99	Indoor heat exchanger anti-freezing protection	-	-	• Insufficient refrigerant • Air filter dirty
F11	Cooling / Heating cycle changeover abnormality	4 times occurance within 30 minutes	-	•4-way valve • V-coil
F90	PFC control	4 times occurance within 10 minutes	-	• Voltage at PFC
F91	Refrigerantion cycle abnormality	2 times occurance within 20 minutes	-	• No refrigerant (3-way valve is closed)
F93	Compressor rotation failure	4 times occurance within 20 minutes	-	• Compressor

DIAGNOSIS DISPLAY	ABNORMALITY / PROTECTION CONTROL	ABNORMALITY  JUDGEMENT	EMERGENCY OPERATION	PRIMARY LOCATION TO VERIFY
F95	Cool high pressure protection	4 times occurance within 20 minutes	-	Outdoor refrigerant circuit
F96	IPM (power transistor) overheating protection	4 times occurance within 30 minutes	-	<ul><li>Excess refrigerant</li><li>Improper heat radiation</li><li>IPM (Power transistor)</li></ul>
F97	Outdoor compressor overheating protection	4 times occurance within 10 minutes	-	Insufficient refrigerant     Compressor
F98	Total running current protection	3 times occurance within 20 minutes	-	Excess refrigerant     Improper heat radiation
F99	Outdoor Direct Current (DC) peak detection	7 times occurance continuously	-	<ul><li>Outdoor PCB</li><li>IPM (Power transistor)</li><li>Compressor</li></ul>