

16. Troubleshooting Guide

16.1 Self Diagnosis Function

Diagnosis display	Abnormality or protection control	Abnormality judgment	Protection operation	Problem	Check location
H11	Indoor/outdoor abnormal communication	After operation for 1 minutes	Indoor fan only operation can start by entering into force cooling operation	Indoor/outdoor communication not establish	<ul style="list-style-type: none"> Indoor/outdoor wire terminal Indoor/outdoor PCB Indoor/outdoor connection wire
H12	Indoor unit capacity unmatched	90s after power supply	-	Total indoor capability more than maximum limit or less than minimum limit, or number of indoor unit less than two	<ul style="list-style-type: none"> Indoor/outdoor connection wire Indoor/outdoor PCB Specification and combination table in catalogue
H15	Compressor temperature sensor abnormality	Continuous for 5s	-	Compressor temperature sensor open or short circuit	<ul style="list-style-type: none"> Compressor temperature sensor lead wire and connector
H16	Outdoor current transformer (CT) abnormality	-	-	Current transformer faulty or compressor faulty	<ul style="list-style-type: none"> Outdoor PCB faulty or compressor faulty
H27	Outdoor air temperature sensor abnormality	Continuous for 5s	-	Outdoor air temperature sensor open or short circuit	<ul style="list-style-type: none"> Outdoor air temperature sensor lead wire and connector
H28	Outdoor heat exchanger temperature sensor 1 abnormality	Continuous for 5s	-	Outdoor heat exchanger temperature sensor 1 open or short circuit	<ul style="list-style-type: none"> Outdoor heat exchanger temperature sensor 1 lead wire and connector
H32	Outdoor heat exchanger temperature sensor 2 abnormality	Continuous for 5s	-	Outdoor heat exchanger temperature sensor 2 open or short circuit	<ul style="list-style-type: none"> Outdoor heat exchanger temperature sensor 2 lead wire and connector
H33	Indoor/outdoor misconnection abnormality	-	-	Indoor and outdoor rated voltage different	<ul style="list-style-type: none"> Indoor and outdoor units check
H36	Outdoor gas pipe temperature sensor abnormality	Continuous for 5s	Heating protection operation only	Outdoor gas pipe temperature sensor open or short circuit	<ul style="list-style-type: none"> Outdoor gas pipe temperature sensor lead wire and connector
H37	Outdoor liquid pipe temperature sensor abnormality	Continuous for 5s	Cooling protection operation only	Outdoor liquid pipe temperature sensor open or short circuit	<ul style="list-style-type: none"> Outdoor liquid pipe temperature sensor lead wire and connector
H64	Outdoor high pressure sensor abnormality	Continuous for 1 minute	-	High pressure sensor open circuit during compressor stop	<ul style="list-style-type: none"> High pressure sensor Lead wire and connector
H67	Nanoe abnormality	Nanoe stop for 5 minutes for 3 times	-	Nanoe faulty	<ul style="list-style-type: none"> PCB Nanoe system High voltage
H70	Light sensor abnormality	Continuous for 24 hours, 15 days	-	Light sensor open or short circuit	<ul style="list-style-type: none"> Light sensor (defective or disconnect)
H97	Outdoor fan motor mechanism lock	2 times happen within 20 minutes	-	Outdoor fan motor lock or feedback abnormal	<ul style="list-style-type: none"> Outdoor fan motor lead wire and connector Fan motor lock or block
H98	Indoor high pressure protection	-	-	Indoor high pressure protection (Heating)	<ul style="list-style-type: none"> Check indoor heat exchanger Air filter dirty Air circulation short circuit
H99	Indoor operating unit freeze protection	-	-	Indoor freeze protection (Cooling)	<ul style="list-style-type: none"> Check indoor heat exchanger Air filter dirty Air circulation short circuit
F11	4-way valve switching abnormality	4 times happen within 30 minutes	-	4-way valve switching abnormal	<ul style="list-style-type: none"> 4-way valve Lead wire and connector

Diagnosis display	Abnormality or protection control	Abnormality judgment	Protection operation	Problem	Check location
F17	Indoor standby units freezing abnormality	3 times happen within 40 minutes	-	Wrong wiring and connecting pipe, expansion valve leakage	<ul style="list-style-type: none"> • Check indoor/outdoor connection wire and pipe • Indoor heat exchanger sensor lead wire and connector • Expansion valve lead wire and connector
F90	Power factor correction (PFC) circuit protection	4 times happen within 20 minutes	-	Power factor correction circuit abnormal	<ul style="list-style-type: none"> • Outdoor PCB faulty
F91	Refrigerant cycle abnormality	4 times happen within 60 minutes	-	Refrigeration cycle abnormal	<ul style="list-style-type: none"> • Insufficient refrigerant or valve close
F93	Compressor abnormal revolution	4 times happen within 20 minutes	-	Compressor abnormal evolution	<ul style="list-style-type: none"> • Power transistor module faulty or compressor lock
F94	Compressor discharge pressure overshoot protection	4 times happen within 20 minutes	-	Compressor discharge pressure overshoot	<ul style="list-style-type: none"> • Check refrigeration system
F95	Outdoor cooling high pressure protection	4 occurrences within 20 minutes	-	Cooling high pressure protection	<ul style="list-style-type: none"> • Check refrigeration system • Outdoor air circuit
F96	Power transistor module overheating protection	4 times happen within 30 minutes	-	Power transistor module overheat	<ul style="list-style-type: none"> • PCB faulty • Outdoor air circuit (fan motor)
F97	Compressor overheating protection	3 times happen within 30 minutes	-	Compressor overheat	<ul style="list-style-type: none"> • Insufficient refrigerant
F98	Total running current protection	3 times happen within 20 minutes	-	Total current protection	<ul style="list-style-type: none"> • Check refrigeration system • Power source or compressor lock
F99	Outdoor direct current (DC) peak detection	Continuous happen for 7 times	-	Power transistor module current protection	<ul style="list-style-type: none"> • Power transistor module faulty or compressor lock