

MAINTENANCE

1 List of Unit Errors

1.1 List of Error Display on Wired Controller

Error Code	Error Description	Source of Error Signal	Notes on Control
E1	Compressor high-pressure protection	High-pressure Switch	The high pressure protection value is 4.2MPa. When it is detected three times successively that a compressor is under high pressure, this compressor will be stopped. In this case, error code E1 will be displayed and the run indicator will blink.
E2	Indoor antifreeze protection	Evaporator sensor	When it is detected for 10 minutes successively that $T_{\text{evap.}}$ is $\leq -2^{\circ}\text{C}$ (varying with indoor unit), the antifreeze protection will be activated, in which case the outdoor unit will immediately shut off the indoor electronic expansion valve and the capacity will be set to "0".
E3	Compressor low-pressure protection	Low-pressure Switch	When the low pressure reaches the protection value (absolute pressure: 0.15MPa), the low pressure switch will be cut off, in which case the low pressure protection will be displayed.
E4	Compressor exhaust temperature protection	Exhaust temperature sensor	When the exhaust temperature ($T_{\text{exhau.}}$) is equal to and higher than 113°C , the compressor will be stopped. Upon the first occurrence of exhaust protection, the error code E4 will be displayed. When the exhaust temperature is lower than $TR^{\circ}\text{C}$, the compressor will resume to operation after it has been stopped for 3 minutes. The compressor can resume to operation for the first two times. But if this occurs three times successively in 1 hour, the unit must be disconnected from power supply before it can restarted.
E5	Frequency converter overcurrent protection	Compressor drive	The drive board of variable frequency compressor is incurred to error. For details on the error message, please refer to the Display Code on Digital Tube of Outdoor Unit.
E6	Communication error	Communication	The mainboard of indoor unit or the wired control is incurred to communication error with outdoor unit. The indoor unit incurred to communication error will be stopped and display the error code.
E7	Mode conflict	User operation	The run mode of the unit that is started later is inconsistent to the mode that is started earlier. Only the cooling and dry mode has possible mode conflict against the heat mode. For fan mode, there is no mode conflict against the cooling, dry or heat mode. In case mode conflict occurs, the indoor unit with mode conflict will display E7 and be stopped.
E9	Water-full protection	Water pump	When water full is detected for 8 seconds successively, the system will enter into water-full protection state, in which case the wired controller will display E9 and give out alarm. In case of water-full protection under each mode, the other loads of the indoor unit will be stopped, except that the water pump will remain working and give out alarm. In this case, the outdoor unit shall adjust the capacity output accordingly
F0	Indoor ambient temperature sensor error	Indoor room sensor	The indoor unit incurred to sensor error will display error code and be stopped.
F1	Indoor coil inlet temperature sensor error	Indoor coil-inlet temperature sensor	The indoor unit incurred to sensor error will display error code and be stopped.
F2	Indoor coil middle temperature sensor error	Indoor coil-middle temperature sensor	The indoor unit incurred to sensor error will display error code and be stopped.
F3	Outdoor coil inlet temperature sensor error	Indoor coil-exit temperature sensor	The indoor unit incurred to sensor error will display error code and be stopped.

F4	Outdoor ambient temperature sensor error	Outdoor environment sensor	Test for 30 seconds successively to check if the temperature sensor is disconnected. If yes, alarm will be sent; otherwise no processing will be made. If the controller of outdoor unit detects failure of outdoor sensor under open circuit, short circuit and excess of test value, the outdoor unit will execute the following default actions, that is, the error message will be sent to each indoor unit and the error code will be displayed via error indicator or wired controller. When the outdoor ambient temperature is lower than -5℃, the disconnection failure of outdoor inlet, middle and exit sensors in shield room will be processed as under -30℃.
F7	Outdoor defrost temperature sensor error	Outdoor Defrost Sensor	Test for 30 seconds successively to check if the temperature sensor is disconnected. If yes, alarm will be sent; otherwise no processing will be made. If the controller of outdoor unit detects failure of outdoor sensor under open circuit, short circuit and excess of test value, the outdoor unit will execute the following default actions, that is, the error message will be sent to each indoor unit and the error code will be displayed via error indicator or wired controller. When the outdoor ambient temperature is lower than -5℃, the disconnection failure of outdoor inlet, middle and exit sensors in shield room will be processed as under -30℃.
F9	Exhaust temperature sensor error	Exhaust temperature sensor	Test for 30 seconds successively to check if the temperature sensor is disconnected. If yes, alarm will be sent; otherwise no processing will be made. If the controller of outdoor unit detects failure of outdoor sensor under open circuit, short circuit and excess of test value, the outdoor unit will execute the following default actions, that is, the error message will be sent to each indoor unit and the error code will be displayed via error indicator or wired controller. When the outdoor ambient temperature is lower than -5℃, the disconnection failure of outdoor inlet, middle and exit sensors in shield room will be processed as under -30℃.

Error Code of Duct-type Unit

Error	Error Code	Error	Error Code
Prevention against low temperature	E2	Error with oil temperature sensor 2 (digital)	Fb
Outdoor ambient temperature sensor error	F4	Indoor ambient temperature sensor error	F0
Indoor tube-inlet sensor error	F5	Exhaust overtemperature	E4
Outdoor tube-middle sensor error	F6	Low-pressure protection	E3
Outdoor tube-exit sensor error	F7	Overcurrent Protection	E5
Error with exhaust temperature sensor 1 (fixed-frequency)	F8	High-pressure protection	E1
Indoor tube-inlet sensor error	F1	Communication error	E6
Indoor tube-middle sensor error	F2	High-pressure valve error	Fc
Indoor tube-exit sensor error	F3	Low-pressure valve error	Fd
Error with exhaust temperature sensor 2 (fixed-frequency)	F9	Water-full protection (Cassette)	Eb
Error with oil temperature sensor 1 (fixed-frequency)	FA		

King Series

Error	Tube-inlet sensor error	Tube-middle sensor error	Tube-exit sensor error	Room sensor error	Defrost	Antifreeze	Mode conflict	Communication error	Outdoor unit failure
Power Lamp	Bright	Bright	Bright	Bright	Bright	Dark	Dark	Blink	Blink
Test lamp	Dark	Blink	Blink	Bright	Blink	Dark	Blink	Blink	Dark
Timer lamp	Blink	Blink	Bright	Blink	Dark	Blink	Bright	Blink	Dark

Feng Yun and Feng Xia series

Error	Tube-inlet sensor error	Tube-middle sensor error	Tube-exit sensor error	Room sensor error	Defrost	Antifreeze	Mode conflict	Communication error	Outdoor unit failure
Test lamp	Blink (1)				Bright	Dark	Blink	Blink (2)	Blink
Timer lamp	Blink				Blink	Blink	Bright	Blink	Dark

Notes: (1) Bright and dark intermittently (2) Bright and dark simultaneously

Floor Standing: Lantianshi, qingliangwangzi, fengsheng series

Error	Error Code	Error	Error Code
Indoor tube-inlet sensor error	F1	Indoor tube-middle sensor error	F2
Indoor tube-exit sensor error	F3	Outdoor ambient temperature sensor error	F4
Outdoor tube-inlet sensor error	F5	Outdoor ambient temperature sensor error	F6
Outdoor tube-exit sensor error	F7	Error with exhaust temperature sensor 1 (fixed-frequency)	F8
Error with exhaust temperature sensor 2 (digital)	F9	Error with exhaust temperature sensor 2 (digital)	FA
Error with oil temperature sensor 2 (digital)	Fb	Indoor ambient temperature sensor error	F0
Prevention against low temperature	E2	High-pressure protection	E1
Low-pressure protection	E3	Exhaust overtemperature	E4
Overcurrent Protection	E5	Communication error	E6
Mode conflict	E7	High-pressure valve error	Fc
Low-pressure valve error	Fd		

