Contents

Part 1 Light commercial air conditioner

1.1 Fault code table

1.1.1 Fault code table 1

Fault code table 1

Fault Code	Fault Code definition	Possible cause	Solution
E5	Communication fault between indoor unit and outdoor unit	1、Outdoor unit is power off 2、The communicate wire of units loose 3、The communication wire is open or short circuit 4、Indoor unit control board malfunction 5、Outdoor unit control board malfunction	1、Turn on power for outdoor unit 2、Reconnect firmly 3、Replace a normal communicate wire 4、Replace control board 5、Replace control board
E4	Drainage system fault	1、Float switch short-circuit or unconnected 2、Power line of water pump loose 3、Water pump is broken 4、Drain pipe is blocked 5、Indoor PCB is broken	1、Repace float switch or reconnect it 2、Rreconnect power line of water pump 3、Replace water pump 4、Clean the drain pipe 5、Replace PCB
E6	Input power supply phase sequence protection（Outdoor uint）	1、Phase loss 2、Low voltage 3、Phase dislocation	1、Reconnect the wires firmly 2、Check if power supply is consistent with the nameplate 3、Exchange two phase sequence of the power supply
E1	Indoor ambient temperature sensor fault (TA)	1、Sensor directly contact with the heat exchanger 2、Sensor plug insert unfirmly 3、Sensor is open or short circuit 4、The indoor unit control board malfunction	1、Refix the sensor correctly 2、Reinsert 3、Replace the the sensor 4、Replace the indoor unit control board
E3	Indoor coil temperature sensor fault (TE)	1、Sensor separatefrom the coil 2、Sensor plug insert unfirmly 3、Sensor is open or short circuit 4、The indoor unit control board malfunction	1、Refix the sensor correctly 2、Reinsert 3、Replace the the sensor 4、Replace the indoor unit control board
E2	Outdoor coil temperature sensor fault (TW)	1、Sensor separatefrom the coil 2、Sensor plug insert unfirmly 3、Sensor is open or short circuit 4、The outdoor unit control board malfunction	1、Refix the sensor correctly 2、Reinsert 3、Replace the the sensor 4、Replace the outdoor unit control board
E0	Refrigerant lackprotection /4-way valve fault	1、 Refrigerant leak 2、4-way valve coil open or short circuit	1、Find out the leak point,repair the weldings,refill the unit after vacuumizing it 2、Replace the 4-way valve coil 3、Replace the 4-way valve

		3、Valve block can not get the designated position or Valve blow-by	

1.1.2 Fault code table 2

Fault code table 2

Fault Code	Fault Code definition	Possible cause	Solution
F1	Communication fault between indoor unit and outdoor unit	1、Outdoor unit is power off 2、The communicate wire of units loose 3、The communication wire is open or short circuit 4、Indoor unit control board malfunction 5、Outdoor unit control board malfunction	1、Turn on power for outdoor unit 2、Reconnect firmly 3、Replace a normal communicate wire 4、Replace control board 5、Replace control board
E5	Wired controller communication fault	1、The connection loose 2、Wired controller malfunction 3、The communication wire is open or short circuit 4、Indoor unit control board malfunction	1、Reconnect firmly 2、Replace a new one 3、Replace a normal one 4、Replace a new one
E4	Drainage system fault	1、Float switch short-circuit or unconnected 2、Power line of water pump loose 3、Water pump is broken 4、Drain pipe is blocked 5、Indoor PCB is broken	1、Repace float switch or reconnect it 2、Rreconnect power line of water pump 3、Replace water pump 4、Clean the drain pipe 5、Replace PCB
E6	Input power supply phase sequence protection（Outdoor uint）	1、Phase loss 2、Low voltage 3、Phase dislocation	1、Reconnect the wires firmly 2、Check if power supply is consistent with the nameplate 3、Exchange two phase sequence of the power supply
EA	Discharge temperature protection	1、The outdoor fan blade broken 2、The connection between the fan blade and outdoor fan motor loose 3、The outdoor fan stop working 4、The outdoor ventilation insufficient 5、The outdoor exchanger is dirty or sticky 6、Discharge temperature sensor deviation 7、Refrigerant leak 8、The capillary or the filter is blocked	1、Replace the fan blade 2、Tighten or replace the sleeve 3、Eliminate the malfunction cause 4、Improve or enhance the ventilation 5、Clean the heat exchanger 6、Replace the sensor 7、Find out the leak point,repair the weldings, refill the unit after vacuumizing it 8、Replace the capillary or filter

E9	HIgh pressure protection	1、The globe valve is closed 2、The outdoor fan blade broken 3、The connection between the fan blade and outdoor fan motor loose 4、The outdoor fan stop working 5、The outdoor ventilation insufficient 6、The connection between high pressure switch and control board loose 7、High pressure switch malfunction 8、The outdoor exchanger is dirty or sticky 9、There are some air in the refrigerant line 10、The capillary or the filter is blocked	1、Open the globe valve 2、Replace the fan blade 3、Tighten or replace the sleeve 4、Eliminate the malfunction cause 5、Improve or enhance the ventilation 6、Reconnect the wire to control board 7、Replace the high pressure switch 8、Clean the heat exchanger 9、Refill the unit after vacuumizing it 10、Replace the capillary or filter
E9	Low pressure protection	1、The globe valve is closed 2、The indoor fan blade broken 3、The connection between the fan blade and indoor fan motor loose 4、The outdoor fan stop working 5、Filter net is dirty 6、Refrigerant leak 7、The connection between low pressure switch and control board loose 8、Low pressure switch malfunction 9、The capillary or the filter is blocked	1、Open the globe valve 2、Tighten or replace the sleeve 3、The indoor fan blade broken 4、Eliminate the malfunction cause 5、Clean the filter 6、Find out the leak point,repair the weldings,refill the unit after vacuumizing it 7、Reconnect the wire to control board 8、Replace the low pressure switch 9、Replace the capillary or filter
E1	Indoor ambient temperature sensor fault (TA)	1、Sensor directly contact with the heat exchanger 2、Sensor plug insert unfirmly 3、Sensor is open or short circuit 4、The indoor unit control board malfunction	1、Refix the sensor correctly 2、Reinsert 3、Replace the the sensor 4、Replace the indoor unit control board
E3	Indoor coil temperature sensor fault (TE)	1、Sensor separatefrom the coil 2、Sensor plug insert unfirmly 3、Sensor is open or short circuit 4、The indoor unit control board malfunction	1、Refix the sensor correctly 2、Reinsert 3、Replace the the sensor 4、Replace the indoor unit control board
E2	Outdoor coil temperature sensor fault (TW)	1、Sensor separatefrom the coil 2、Sensor plug insert unfirmly 3、Sensor is open or short circuit 4、The outdoor unit control board malfunction	1、Refix the sensor correctly 2、Reinsert 3、Replace the the sensor 4、Replace the outdoor unit control board
E7	Outdoor ambient emperature sensor fault (TL)	1、Sensor directly contact with the heat exchanger 2、Sensor plug insert unfirmly 3、Sensor is open or short circuit 4、The outdoor unit control board malfunction	1、Refix the sensor correctly 2、Reinsert 3、Replace the the sensor 4、Replace the outdoor unit control board

E8	Discharging temperature. sensor fault (TP)	1、sensor separatefrom the copper tube 2、Sensor plug insert unfirmly 3、Sensor is open or short circuit 4、The outdoor unit control board malfunction	1、Refix the sensor correctly 2、Reinsert 3、Replace the the sensor 4、Replace the outdoor unit control board
E0	Refrigerant lackprotection /4-way valve fault	1、 Refrigerant leak 2、4-way valve coil open or short circuit 3、Valve block can not get the designated position or Valve blow-by	1、Find out the leak point,repair the weldings,refill the unit after vacuumizing it 2、Replace the 4-way valve coil 3、Replace the 4-way valve

1.1.3 Fault code table 3

Fault code table 3

Fault Code	Fault Code definition	Possible cause	Solution
F1	Communication fault between indoor unit and outdoor unit	1、Outdoor unit is power off 2、The communicate wire of units loose 3、Insert wrong plug on the indoor or outdoor unit control board 4、The communication wire is open or short circuit 5、Indoor unit control board malfunction 6、Outdoor unit control board malfunction	1、Turn on power for outdoor unit 2、Reconnect firmly 3、Loosen and insert the right plug 4、Replace a normal communicate wire 5、Replace control board 6、Replace control board
E6	Input power supply phase sequence protection（Outdoor uint）	1、Phase loss 2、Low voltage 3、Phase dislocation	1、Reconnect the wires firmly 2、Check if power supply is consistent with the nameplate 3、Exchange two phase sequence of the power supply
E1	Indoor ambient temperature sensor fault	1、Sensor directly contact with the heat exchanger 2、Sensor plug insert unfirmly 3、Sensor is open or short circuit 4、The indoor unit control board malfunction	1、Refix the sensor correctly 2、Reinsert 3、Replace the the sensor 4、Replace the indoor unit control board
F3	outdoor fan protection	1、The outdoor unit ventilation insufficient 2、Fan motor stuck	1、Improve or enhance the ventilation 2、Replace fan motor
F2	Discharge temperature protection	1、the outdoor fan blade broken 2、the connection between the fan blade and outdoor fan motor loose 3、the outdoor fan stop working 4、the outdoor ventilation insufficient 5、the outdoor exchanger is dirty or sticky 6、discharge temperature sensor deviation 7、Refrigerant leak 8、The capillary or the filter is blocked	1、Replace the fan blade 2、Tighten or replace the sleeve 3、Eliminate the malfunction cause 4、Improve or enhance the ventilation 5、Clean the heat exchanger 6、Replace the sensor 7、Find out the leak point,repair the weldings,refill the unit after vacuumizing it 8、Replace the capillary or filter
EH	High pressure protection	1、the globe valve is closed 2、the outdoor fan blade broken 3、the connection between the fan blade and outdoor fan motor loose 4、the outdoor fan stop working 5、the outdoor ventilation insufficient 6、the connection between high pressure switch and control board loose	1、Open the globe valve 2、Replace the fan blade 3、tighten or replace the sleeve 4、Eliminate the malfunction cause 5、Improve or enhance the ventilation 6、Reconnect the wire to control board

		7、High pressure switch malfunction 8、the outdoor exchanger is dirty or sticky 9、there are some moisture in the refrigerant line 10、The capillary or the filter is blocked	7、Replace the high pressure switch 8、Clean the heat exchanger 9、Refill the unit after vacuumizing it 10、Replace the capillary or filter
EL	Low pressure protection	1、the globe valve is closed 2、the indoor fan blade broken 3、the connection between the fan blade and indoor fan motor loose 4、the outdoor fan stop working 5、filter net is dirty 6、Refrigerant leak 7、the connection between low pressure switch and control board loose 8、Low pressure switch malfunction 9、The capillary or the filter is blocked	1、open the globe valve 2、tighten or replace the sleeve 3、the indoor fan blade broken 4、Eliminate the malfunction cause 5、Clean the filter 6、Find out the leak point,repair the weldings,refill the unit after vacuumizing it 7、Reconnect the wire to control board 8、Replace the low pressure switch 9、Replace the capillary or filter
E0	Refrigerant lack protection/4-way valve fault protection	1、Refrigerant leak 2、4-way valve coil open or short circuit 3、Valve block can not get the designated position or Valve blow-by	1、Find out the leak point,repair the weldings,refill the unit after vacuumizing it 2、Replace the 4-way valve coil 3、Replace the 4-way valve
E3	Indoor coil temperature sensor fault (TE)	1、Sensor separatefrom the coil 2、Sensor plug insert unfirmly 3、Sensor is open or short circuit 4、The indoor unit control board malfunction	1、Refix the sensor correctly 2、Reinsert 3、Replace the the sensor 4、Replace the indoor unit control board
E2	Outdoor coil temperature sensor fault (TW)	1、Sensor separatefrom the coil 2、Sensor plug insert unfirmly 3、Sensor is open or short circuit 4、The outdoor unit control board malfunction	1、Refix the sensor correctly 2、Reinsert 3、Replace the the sensor 4、Replace the outdoor unit control board
E8	Discharge temperature （TP） sensor fault	1、sensor separatefrom the copper tube 2、Sensor plug insert unfirmly 3、Sensor is open or short circuit 4、The outdoor unit control board malfunction	1、Refix the sensor correctly 2、Reinsert 3、Replace the the sensor 4、Replace the outdoor unit control board
E9	Electric heating protection	1、 Electric heater is open or short circuit 2、 The blower malfunction	1、 Replace a normal one 2、 Replace a normal one

1.1.4 Fault code table 4

Fault code table 4

Fault code	Fault code definition	Possible cause	Solution
E5	Wired controller communication fault	1、 The connection loose 2、 Wired controller malfunction 3、 The communication wire is open or short circuit 4、 Indoor unit control board malfunction	1、 reconnect firmly 2、 replace a new one 3、 replace a normal one 4、replace a new one
E4	Drainage system fault	1、 Drain pipe is blocked 2、 Float switch short-circuit or unconnected 3、 Power line of water pump loose 4、 Water pump is broken 5、Indoor PCB is broken	1、 Clean the drain pipe 2、 Repace float switch or reconnect it 3、 Rreconnect power line of water pump 4、Replace water pump 5、Replace PCB
E1	Indoor ambient temperature sensor fault	1、Sensor directly contact with the heat exchanger 2、Sensor plug insert unfirmly 3、Sensor is open or short circuit 4、The indoor unit control board malfunction	1、Refix the sensor correctly 2、Reinsert 3、Replace the the sensor 4、Replace the indoor unit control board
E3	Indoor coil temperature sensor fault (TE)	1、Sensor separatefrom the coil 2、Sensor plug insert unfirmly 3、Sensor is open or short circuit 4、The indoor unit control board malfunction	1、Refix the sensor correctly 2、Reinsert 3、Replace the the sensor 4、Replace the indoor unit control board
E2	Outdoor coil temperature sensor fault (TW)	1、Sensor separatefrom the coil 2、Sensor plug insert unfirmly 3、Sensor is open or short circuit 4、The outdoor unit control board malfunction	1、Refix the sensor correctly 2、Reinsert 3、Replace the the sensor 4、Replace the outdoor unit control board
E7	Outdoor ambient temperature sensor fault (TL)	1、Sensor directly contact with the heat exchanger 2、Sensor plug insert unfirmly 3、Sensor is open or short circuit 4、The outdoor unit control board malfunction	1、Refix the sensor correctly 2、Reinsert 3、Replace the the sensor 4、Replace the outdoor unit control board
E0	Refrigerant lack protection/4-way valve fault protection	1、Refrigerant leak 2、4-way valve coil open or short circuit 3、Valve block can not get the designated position or Valve blow-by	1、Find out the leak point,repair the weldings,refill the unit after vacuumizing it 2、Replace the 4-way valve coil 3、Replace the 4-way valve

1.1.5 Fault code table 5

Fault code table 5

Fault code	Fault code definition	Possible cause	Solution
F1	Communication fault between indoor unit and outdoor unit	1、Outdoor unit is power off 2、The communicate wire of units loose 3、Insert wrong plug on the indoor or outdoor unit control board 4、The communication wire is open or short circuit 5、Indoor unit control board malfunction 6、Outdoor unit control board malfunction	1、Turn on power for outdoor unit 2、Reconnect firmly 3、Loosen and insert the right plug 4、Replace a normal communicate wire 5、Replace control board 6、Replace control board
E5	Wired controller communication fault	1、The connection loose 2、Wired controller malfunction 3、The communication wire is open or short circuit 4、Indoor unit control board malfunction	1、Reconnect firmly 2、Replace a new one 3、Replace a normal one 4、Replace a new one
E4	Drainage system fault	1、Drain pipe is blocked 2、Float switch short-circuit or unconnected 3、Power line of water pump loose 4、Water pump is broken 5、Indoor PCB is broken	1、Clean the drain pipe 2、Repace float switch or reconnect it 3、Rreconnect power line of water pump 4、Replace water pump 5、Replace PCB
E6	Input power supply phase sequence protection（Outdoor uint）	1、Phase loss 2、Low voltage 3、Phase dislocation	1、Reconnect the wires firmly 2、Check if power supply is consistent with the nameplate 3、Exchange two phase sequence of the power supply
EA	Discharge temperature protection	1、the outdoor fan blade broken 2、the connection between the fan blade and outdoor fan motor loose 3、the outdoor fan stop working 4、the outdoor ventilation insufficient 5、the outdoor exchanger is dirty or sticky 6、discharge temperature sensor deviation 7、Refrigerant leak 8、The capillary or the filter is blocked	1、Replace the fan blade 2、Tighten or replace the sleeve 3、Eliminate the malfunction cause 4、Improve or enhance the ventilation 5、Clean the heat exchanger 6、Replace the sensor 7、Find out the leak point,repair the weldings,refill the unit after vacuumizing it 8、Replace the capillary or filter
E9	High pressure protection	1、the globe valve is closed 2、the outdoor fan blade broken	1、Open the globe valve 2、Replace the fan blade

		3、the connection between the fan blade and outdoor fan motor loose 4、the outdoor fan stop working 5、the outdoor ventilation insufficient 6、the connection between high pressure switch and control board loose 7、High pressure switch malfunction 8、the outdoor exchanger is dirty or sticky 9、there are some moisture in the refrigerant line 10、The capillary or the filter is blocked	3、tighten or replace the sleeve 4、Eliminate the malfunction cause 5、Improve or enhance the ventilation 6、Reconnect the wire to control board 7、Replace the high pressure switch 8、Clean the heat exchanger 9、Refill the unit after vacuumizing it 10、Replace the capillary or filter
E9	Low pressure protection	1、The globe valve is closed 2、The indoor fan blade broken 3、Tthe connection between the fan blade and indoor fan motor loose 4、The outdoor fan stop working 5、Filter net is dirty 6、Refrigerant leak 7、The connection between low pressure switch and control board loose 8、Low pressure switch malfunction 9、The capillary or the filter is blocked	1、Open the globe valve 2、Tighten or replace the sleeve 3、Tthe indoor fan blade broken 4、Eliminate the malfunction cause 5、Clean the filter 6、Find out the leak point,repair the weldings,refill the unit after vacuumizing it 7、Reconnect the wire to control board 8、Replace the low pressure switch 9、Replace the capillary or filter
E1	Indoor ambient temperature sensor fault	1、Sensor directly contact with the heat exchanger 2、Sensor plug insert unfirmly 3、Sensor is open or short circuit 4、The indoor unit control board malfunction	1、Refix the sensor correctly 2、Reinsert 3、Replace the the sensor 4、Replace the indoor unit control board
E3	Indoor coil temperature sensor fault (TE)	1、Sensor separatefrom the coil 2、Sensor plug insert unfirmly 3、Sensor is open or short circuit 4、The indoor unit control board malfunction	1、Refix the sensor correctly 2、Reinsert 3、Replace the the sensor 4、Replace the indoor unit control board
E2	Outdoor coil temperature sensor fault (TW)	1、Sensor separatefrom the coil 2、Sensor plug insert unfirmly 3、Sensor is open or short circuit 4、The outdoor unit control board malfunction	1、Refix the sensor correctly 2、Reinsert 3、Replace the the sensor 4、Replace the outdoor unit control board
E7	Outdoor ambient temperature.sensor abnormal(TL)	1、Sensor directly contact with the heat exchanger 2、Sensor plug insert unfirmly 3、Sensor is open or short circuit 4、the outdoor unit control board malfunction	1、Refix the sensor correctly 2、Reinsert 3、Replace the the sensor 4、Replace the outdoor unit control board
E8	Discharge temperature （TP）sensor fault	1、sensor separatefrom the copper tube 2、Sensor plug insert unfirmly	1、Refix the sensor correctly 2、Reinsert

		3、Sensor is open or short circuit 4、The outdoor unit control board malfunction	3、Replace the the sensor 4、Replace the outdoor unit control board
E11	Refrigerant lack protection/4-way valve fault protection	1、Refrigerant leak 2、4-way valve coil open or short circuit 3、Valve block can not get the designated position or Valve blow-by	1、Find out the leak point,repair the weldings,refill the unit after vacuumizing it 2、Replace the 4-way valve coil 3、Replace the 4-way valve

1.1.6 Fault code table 6

Fault code table 6

Fault code	Fault code definition	Possible cause	Solution
E5	Wired controller communication fault	1、The connection loose 2、Wired controller malfunction 3、The communication wire is open or short circuit 4、Indoor unit control board malfunction	1、Reconnect firmly 2、Replace a new one 3、Replace a normal one 4、Replace a new one
E6	Input power supply phase sequence protection（Outdoor uint）	1、Phase loss 2、Low voltage 3、Phase dislocation	1、Reconnect the wires firmly 2、Check if power supply is consistent with the nameplate 3、Exchange two phase sequence of the power supply
F2	Discharge temperature protection	1、The outdoor fan blade broken 2、The connection between the fan blade and outdoor fan motor loose 3、The outdoor fan stop working 4、The outdoor ventilation insufficient 5、The outdoor exchanger is dirty or sticky 6、Tischarge temperature sensor deviation 7、Refrigerant leak 8、The capillary or the filter is blocked	1、Replace the fan blade 2、Tighten or replace the sleeve 3、Eliminate the malfunction cause 4、Improve or enhance the ventilation 5、Clean the heat exchanger 6、Replace the sensor 7、Find out the leak point,repair the weldings,refill the unit after vacuumizing it 8、Replace the capillary or filter
EH	High pressure protection	1、The globe valve is closed 2、The outdoor fan blade broken 3、The connection between the fan blade and outdoor fan motor loose 4、The outdoor fan stop working 5、The outdoor ventilation insufficient 6、The connection between high pressure switch and control board loose 7、High pressure switch malfunction 8、The outdoor exchanger is dirty or sticky 9、There are some moisture in the refrigerant line 10、The capillary or the filter is blocked	1、Open the globe valve 2、Replace the fan blade 3、Tighten or replace the sleeve 4、Eliminate the malfunction cause 5、Improve or enhance the ventilation 6、Reconnect the wire to control board 7、Replace the high pressure switch 8、Clean the heat exchanger 9、Refill the unit after vacuumizing it 10、Replace the capillary or filter
EL	Low pressure protection	1、The globe valve is closed 2、The indoor fan blade broken 3、The connection between the fan blade and indoor fan motor loose	1、open the globe valve 2、tighten or replace the sleeve 3、the indoor fan blade broken

		4、The outdoor fan stop working 5、Filter net is dirty 6、Refrigerant leak 7、The connection between low pressure switch and control board loose 8、Low pressure switch malfunction 9、The capillary or the filter is blocked	4、Eliminate the malfunction cause 5、Clean the filter 6、Find out the leak point,repair the weldings,refill the unit after vacuumizing it 7、Reconnect the wire to control board 8、Replace the low pressure switch 9、Replace the capillary or filter
E1	Indoor ambient temperature sensor fault	1、Sensor directly contact with the heat exchanger 2、Sensor plug insert unfirmly 3、Sensor is open or short circuit 4、The indoor unit control board malfunction	1、Refix the sensor correctly 2、Reinsert 3、Replace the the sensor 4、Replace the indoor unit control board
E3	Indoor coil temperature sensor fault (TE)	1、Sensor separatefrom the coil 2、Sensor plug insert unfirmly 3、Sensor is open or short circuit 4、The indoor unit control board malfunction	1、Refix the sensor correctly 2、Reinsert 3、Replace the the sensor 4、Replace the indoor unit control board
E2	Outdoor coil temperature sensor fault (TW)	1、Sensor separatefrom the coil 2、Sensor plug insert unfirmly 3、Sensor is open or short circuit 4、The outdoor unit control board malfunction	1、Refix the sensor correctly 2、Reinsert 3、Replace the the sensor 4、Replace the outdoor unit control board
E8	Discharge temperature （TP） sensor fault	1、Sensor separatefrom the copper tube 2、Sensor plug insert unfirmly 3、Sensor is open or short circuit 4、The outdoor unit control board malfunction	1、Refix the sensor correctly 2、Reinsert 3、Replace the the sensor 4、Replace the outdoor unit control board
E7	Outdoor ambient temperature.sensor abnormal(TL)	1、Sensor directly contact with the heat exchanger 2、Sensor plug insert unfirmly 3、Sensor is open or short circuit 4、The outdoor unit control board malfunction	1、Refix the sensor correctly 2、Reinsert 3、Replace the the sensor 4、Replace the outdoor unit control board

1.2 Working condition: T1

1.2.1 Power supply:220-240V～,1Ph,50Hz

Corresponding relations between fault code table and unit mode

Series		Model		Fault code table
		indoor	outdoor	
Four-way Cassette Type	R22	ALCA-C12/4	AL-C12/4(U)	Fault code table 1
		ALCA-H12/4	AL-H12/4(U)	
		ALCA-C18/4	AL-C18/4(U)	
		ALCA-H18/4	AL-H18/4(U)	
		ALCA-C24/4	AL-C24/4(U)	
		ALCA-H24/4	AL-H24/4(U)	
		ALCA-C30/4	AL-C30/4(U)	
		ALCA-H30/4	AL-H30/4(U)	
		ALCA-H36/4	AL-H36/4(U)	
		ALCA-C36/4	AL-C36/4(U)	
	R410A	ALCA-C12/4R1	AL-C12/4R1(U)	
		ALCA-H12/4R1	AL-H12/4R1(U)	
		ALCA-C18/4R1	AL-C18/4R1(U)	
		ALCA-H18/4R1	AL-H18/4R1(U)	
		ALCA-C24/4R1	AL-C24/4R1(U)	
		ALCA-H24/4R1	AL-H24/4R1(U)	
		ALCA-H12/4DR1	AL-H12/4DR1(U)	
		ALCA-H18/4DR1	AL-H18/4DR1(U)	
		ALCA-H24/4DR1	AL-H24/4DR1(U)	
Ceiling&floor Type	R22	ALCF-C12/4	AL-C12/4(U)	Fault code table 1
		ALCF-H12/4	AL-H12/4(U)	
		ALCF-C18/4	AL-C18/4(U)	
		ALCF-H18/4	AL-H18/4(U)	
		ALCF-C24/4	AL-C24/4(U)	

		ALCF-H24/4	AL-H24/4(U)	
		ALCF-C30/4	AL-C30/4(U)	
		ALCF-H30/4	AL-H30/4(U)	
		ALCF-C36/4	AL-C36/4(U)	
		ALCF-H36/4	AL-H36/4(U)	
	R410A	ALCF-C12/4R1	AL-C12/4R1(U)	
		ALCF-H12/4R1	AL-H12/4R1(U)	
		ALCF-C18/4R1	AL-C18/4R1(U)	
		ALCF-H18/4R1	AL-H18/4R1(U)	
		ALCF-C24/4R1	AL-C24/4R1(U)	
		ALCF-H24/4R1	AL-H24/4R1(U)	
		ALCF-H18/4DR1	AL-H18/4DR1(U)	
		ALCF-H24/4DR1	AL-H24/4DR1(U)	
		ALCF-H36/4DR1	AL-H36/4DR1(U)	
Low ESP Duct Type	R22	ALLD-C12/4	AL-C12/4(U)	**Fault code table 1**
		ALLD-H12/4	AL-H12/4(U)	
		ALLD-C18/4	AL-C18/4(U)	
		ALLD-H18/4	AL-H18/4(U)	
		ALLD-C24/4	AL-C24/4(U)	
		ALLD-H24/4	AL-H24/4(U)	
		ALLD-C30/4	AL-C30/4(U)	
		ALLD-H30/4	AL-H30/4(U)	
		ALLD-C36/4	AL-C36/4(U)	
		ALLD-H36/4	AL-H36/4(U)	
	R410A	ALLD-C12/4R1	AL-C12/4R1(U)	
		ALLD-H12/4R1	AL-H12/4R1(U)	
		ALLD-H18/4DR1	AL-H18/4DR1(U)	
		ALLD-H24/4DR1	AL-H24/4DR1(U)	
		ALLD-H36/4DR1	AL-H36/4DR1(U)	

Mid ESP Duct type	R22	ALMD-C18/4	AL-C18/4(U)	**Fault code table 1**
		ALMD-H18/4	AL-H18/4(U)	
		ALMD-C24/4	AL-C24/4(U)	
		ALMD-H24/4	AL-H24/4(U)	
		ALMD-C30/4	AL-C30/4(U)	
		ALMD-H30/4	AL-H30/4(U)	
		ALMD-C36/4	AL-C36/4(U)	
		ALMD-H36/4	AL-H36/4(U)	
	R410A	ALMD-C18/4R1	AL-C18/4R1(U)	
		ALMD-H18/4R1	AL-H18/4R1(U)	
		ALMD-C24/4R1	AL-C24/4R1(U)	
		ALMD-H24/4R1	AL-H24/4R1(U)	
		ALMD-H18/4DR1	AL-H18/4DR1(U)	
		ALMD-H24/4DR1	AL-H24/4DR1(U)	
		ALMD-H36/4DR1	AL-H36/4DR1(U)	
High ESP Duct type	R22	ALHD-C24/4	AL-C24/4 (U)	**Fault code table 1**
		ALHD-H24/4	AL-H24/4 (U)	
	R410A	ALHD-C24/4R1	AL-C24/4R1(U)	
		ALHD-H24/4R1	AL-H24/4R1(U)	
		ALHD-H24/4DR1	AL-H24/4DR1(U)	
		ALHD-H36/4DR1	AL-H36/4DR1(U)	
Slim Duct	R22	ALSD-C12/4	AL-C12/4(SD)	**Fault code table 1**
		ALSD-H12/4	AL-H12/4(SD)	
		ALSD-C18/4	AL-C18/4(SD)	
		ALSD-H18/4	AL-H18/4(SD)	
		ALSD-C24/4	AL-C24/4(SD)	
		ALSD-H24/4	AL-H24/4(SD)	
	R410A	ALSD-H18/4DR1	AL-H18/4DR1(U)	
		ALSD-H24/4DR1	AL-H24/4DR1(U)	

1.2.2 Power supply:380-415V～,3Ph,50Hz

Corresponding relations between fault code table and unit mode

Series		Model		Fault code table
		indoor	Outdoor	
Four-way Cassette Type	R22	ALCA-C36/5	AL-C36/5(U)	Fault code table 2
		ALCA-H36/5	AL-H36/5(U)	
		ALCA-C48/5	AL-C48/5(U)	
		ALCA-H48/5	AL-H48/5(U)	
		ALCA-C60/5	AL-C60/5(U)	
		ALCA-H60/5	AL-H60/5(U)	
	R410A	ALCA-C36/5R1	AL-C36/5R1(U)	
		ALCA-H36/5R1	AL-H36/5R1(U)	
		ALCA-C42/5R1	AL-C42/5R1(U)	
		ALCA-H42/5R1	AL-H42/5R1(U)	
		ALCA-C48/5R1	AL-C48/5R1(U)	
		ALCA-H48/5R1	AL-H48/5R1(U)	
		ALCA-C60/5R1	AL-C60/5R1(U)	
		ALCA-H60/5R1	AL-H60/5R1(U)	
		ALCA-H36/5DR1	AL-H36/5DR1(U)	
		ALCA-H48/5DR1	AL-H48/5DR1(U)	
		ALCA-H60/5DR1	AL-H60/5DR1(U)	
Ceiling&floor type	R22	ALCF-C36/5	AL-C36/5(U)	Fault code table 2
		ALCF-H36/5	AL-H36/5(U)	
		ALCF-C48/5	AL-C48/5(U)	
		ALCF-H48/5	AL-H48/5(U)	
		ALCF-C60/5	AL-C60/5(U)	
		ALCF-H60/5	AL-H60/5(U)	
	R410A	ALCF-C36/5R1	AL-C36/5R1(U)	
		ALCF-H36/5R1	AL-H36/5R1(U)	
		ALCF-C48/5R1	AL-C48/5R1(U)	
		ALCF-H48/5R1	AL-H48/5R1(U)	
		ALCF-C60/5R1	AL-C60/5R1(U)	

		ALCF-H60/5R1	AL-H60/5R1(U)	
		ALCF-H36/5DR1	AL-H36/5DR1(U)	
		ALCF-H48/5DR1	AL-H48/5DR1(U)	
		ALCF-H60/5DR1	AL-H60/5DR1(U)	
Low ESP Duct Type	R22	ALLD-C36/5	AL-C36/5(U)	**Fault code table 2**
		ALLD-H36/5	AL-H36/5(U)	
		ALLD-C48/5	AL-C48/5(U)	
		ALLD-H48/5	AL-H48/5(U)	
	R410A	ALLD-H36/5DR1	AL-H36/5DR1(U)	
		ALLD-H48/5DR1	AL-H48/5DR1(U)	
Mid DSP Duct Type	R22	ALMD-C36/5	AL-C36/5(U)	**Fault code table 2**
		ALMD-H36/5	AL-H36/5(U)	
		ALMD-C48/5	AL-C48/5(U)	
		ALMD-H48/5	AL-H48/5(U)	
		ALMD-C60/5	AL-C60/5(U)	
		ALMD-H60/5	AL-H60/5(U)	
	R410A	ALMD-C36/5R1	AL-C36/5R1(U)	
		ALMD-H36/5R1	AL-H36/5R1(U)	
		ALMD-C42/5R1	AL-C42/5R1(U)	
		ALMD-H42/5R1	AL-H42/5R1(U)	
		ALMD-C48/5R1	AL-C48/5R1(U)	
		ALMD-H48/5R1	AL-H48/5R1(U)	
		ALMD-C60/5R1	AL-C60/5R1(U)	
		ALMD-H60/5R1	AL-H60/5R1(U)	
		ALMD-H36/5DR1	AL-H36/5DR1(U)	
		ALMD-H48/5DR1	AL-H48/5DR1(U)	
		ALMD-H60/5DR1	AL-H60/5DR1(U)	
High ESP Duct Type	R22	AHD-C36/5	AL-C36/5(U)	**Fault code table 2**
		ALHD-H36/5	AL-H36/5(U)	

		ALHD-C48/5	AL-C48/5(U)	
		ALHD-H48/5	AL-H48/5(U)	
		ALHD-C60/5	AL-C60/5(U)	
		ALHD-H60/5	AL-H60/5(U)	
	R410A	ALHD-C36/5R1	AL-C36/5R1(U)	
		ALHD-H36/5R1	AL-H36/5R1(U)	
		ALHD-C48/5R1	AL-C48/5R1(U)	
		ALHD-H48/5R1	AL-H48/5R1(U)	
		ALHD-C60/5R1	AL-C60/5R1(U)	
		ALHD-H60/5R1	AL-H60/5R1(U)	
		ALHD-H36/5DR1	AL-H36/5DR1(U)	
		ALHD-H48/5DR1	AL-H48/5DR1(U)	
		ALHD-H60/5DR1	AL-H60/5DR1(U)	
Commercial High ESP Duct	R22	ALHD-C90/5A	AL-C90/5(HD)A	**Fault code table 2**
		ALHD-H90/5A	AL-H90/5(HD)A	
		ALHD-C90/5	AL-C90/5(HD)	
		ALHD-H90/5	AL-H90/5(HD)	
		ALHD-C110/5	AL-C110/5(HD)	
		ALHD-H110/5	AL-H110/5(HD)	
		ALHD-C150/5	AL-C150/5(HD)	
		ALHD-H150/5	AL-H150/5(HD)	
		ALHD-C185/5	AL-C185/5(HD)	
		ALHD-H185/5	AL-H185/5(HD)	
		ALHD-C220/5	AL-C220/5(HD)	
		ALHD-H220/5	AL-H220/5(HD)	
Commercial Floor Standing	R22	ALFS-C100/5	AL-C100/5(FS)	**Fault code table 3**
		ALFS-H100/5	AL-H100/5(FS)	

1.3 Working condition：T3

1.3.1 Power supply:208-230V～,1Ph,60Hz

Corresponding relations between fault code table and unit mode

Series	Model		Fault code table
	indoor	outdoor	
Four-way Cassette	ALTCA-C18/2	ALT-C18/2(U)	Fault code table 1
	ALTCA-H18/2	ALT-H18/2(U)	
	ALTCA-C24/2	ALT-C24/2(U)	
	ALTCA-H24/2	ALT-H24/2(U)	
	ALTCA-C36/2	ALT-C36/2(U)	
	ALTCA-C48/2	ALT-C48/2(U)	
	ALTCA-H36/2	ALT-H36/2(U)	Fault code table 4
	ALTCA-H48/2	ALT-H48/2(U)	
Ceiling&Floor Type	ALTCF-C18/2	ALT-C18/2(U)	Fault code table 1
	ALTCF-H18/2	ALT-H18/2(U)	
	ALTCF-C24/2	ALT-C24/2(U)	
	ALTCF-H24/2	ALT-H24/2(U)	
	ALTCF-C36/2	ALT-C36/2(U)	
	ALTCF-C48/2	ALT-C48/2(U)	
	ALTCF-C60/2	ALT-C60/2(U)	
	ALTCF-H36/2	ALT-H36/2(U)	Fault code table 4
	ALTCF-H48/2	ALT-H48/2(U)	
	ALTCF-H60/2	ALT-H60/2(U)	
Low ESP Duct Type	ALTLD-C18/2	ALT-C18/2(U)	Fault code table 1
	ALTLD-H18/2	ALT-H18/2(U)	
	ALTLD-C24/2	ALT-C24/2(U)	
	ALTLD-H24/2	ALT-H24/2(U)	
	ALTLD-C24/2*	ALT-C24/2(U)*	
	ALTLD-H24/2*	ALT-H24/2(U)*	

	ALTLD-C36/2	ALT-C36/2(U)	
	ALTLD-H36/2	ALT-H36/2(U)	
	ALTLD-C48/2	ALT-C48/2(U)	
	ALTLD-H48/2	ALT-H48/2(U)	
	ALTLD-H36/2	ALT-H36/2(U)	**Fault code table 4**
	ALTLD-H48/2	ALT-H48/2(U)	
Middle ESP Duct Type	ALTMD-C18/2	ALT-C18/2(U)	**Fault code table 1**
	ALTMD-H18/2	ALT-H18/2(U)	
	ALTMD-C24/2	ALT-C24/2(U)	
	ALTMD-H24/2	ALT-H24/2(U)	
	ALTMD-C24/2*	ALT-C24/2(U)*	
	ALTMD-H24/2*	ALT-H24/2(U)*	
	ALTMD-C30/2	ALT-C30/2(U)	
	ATLMD-C36/2	ALT-C36/2(U)	
	ATLMD-C48/2	ALT-C48/2(U)	
	ATLMD-C60/2	ALT-C60/2(U)	
	ALTMD-H30/2	ALT-H30/2(U)	**Fault code table 4**
	ALTMD-H36/2	ALT-H36/2(U)	
	ALTMD-H48/2	ALT-H48/2(U)	
	ALTMD-H60/2	ALT-H60/2(U)	
High ESP Duct Type	ALTHD-C48/2	ALT-C48/2(U)	**Fault code table 1**
	ALTHD-H48/2	ALT-H48/2(U)	**Fault code table 4**

1.3.2 Power supply:380V～,3Ph,60Hz

Corresponding relations between fault code table and unit mode

Series	Model		Fault code table
	indoor	Outdoor	
Middle ESP Duct Type	ALTMD-C48/6	ALT-C48/6(U)	Fault code table 5
	ALTMD-H48/6	ALT-H48/6(U)	
	ALTMD-C60/6	ALT-C60/6(U)	
	ALTMD-H60/6	ALT-H60/6(U)	
High ESP Duct Type	ALTHD-C60/6	ALT-C60/6(U)	Fault code table 5
	ALTHD-H60/6	ALT-H60/6(U)	

1.3.3 Power supply:208-230V～,3Ph,60Hz

Corresponding relations between fault code table and unit mode

Series	Model	Fault code table
Package Unit	ART-C50/9	Fault code table 6
	ART-C75/9	
	ART-C100/9	
	ART-C125/9	
	ART-C150/9	
	ART-C200/9	

1.3.4 Power supply:220-240V～,1Ph,50Hz

Corresponding relations between fault code table and unit mode

Series		Model		Fault code table
		indoor	outdoor	
Four-way Cassette	R22	ALTCA-C18/4	ALT-C18/4(U)	Fault code table 1
		ALTCA-H18/4	ALT-H18/4(U)	
		ALTCA-C24/4	ALT-C24/4(U)	
		ALTCA-H24/4	ALT-H24/4(U)	
		ALTCA-C30/4	ALT-C30/4(U)	
		ALTCA-H30/4	ALT-H30/4(U)	
		ALTCA-C36/4	ALT-C36/4(U)	
		ALTCA-H36/4	ALT-H36/4(U)	
`Ceiling&floor type	R22	ALTCF-C12/4	ALT-C12/4(U)	Fault code table 1
		ALTCF-H12/4	ALT-H12/4(U)	
		ALTCF-C18/4	ALT-C18/4(U)	
		ALTCF-H18/4	ALT-H18/4(U)	
		ALTCF-C24/4	ALT-C24/4(U)	
		ALTCF-H24/4	ALT-H24/4(U)	
		ALTCF-C30/4	ALT-C30/4(U)	
		ALTCF-H30/4	ALT-H30/4(U)	
		ALTCF-C36/4	ALT-C36/4(U)	
		ALTCF-H36/4	ALT-H36/4(U)	
Low ESP Duct Type	R22	ALTLD-C18/4	ALT-C18/4(U)	Fault code table 1
		ALTLD-H18/4	ALT-H18/4(U)	
		ALTLD-C24/4	ALT-C24/4(U)	
		ALTLD-H24/4	ALT-H24/4(U)	
		ALTLD-C30/4	ALT-C30/4(U)	
		ALTLD-H30/4	ALT-H30/4(U)	
		ALTLD-C36/4	ALT-C36/4(U)	

		ALTLD-H36/4	ALT-H36/4(U)	
Middle ESP Duct Type	R22	ALTMD-C18/4	ALT-C18/4(U)	**Fault code table 1**
		ALTTMD-H18/4	ALT-H18/4(U)	
		ALTMD-C24/4	ALT-C24/4(U)	
		ALTMD-H24/4	ALT-H24/4(U)	
		ALTMD-H30/4	ALT-H30/4(U)	
		ALTMD-C36/4	ALT-C36/4(U)	
		ALTMD-H36/4	ALT-H36/4(U)	

1.3.5 Power supply:380-415V～,3Ph,50Hz

Corresponding relations between fault code table and unit mode

Series		**Model**		**Fault code table**
		indoor	Outdoor	
Four-way Cassette	R22	ALCA-H36/5	AL-H36/5(U)	**Fault code table 2**
		ALCA-C48/5	AL-C48/5(U)	
		ALCA-H48/5	AL-H48/5(U)	
Low ESP Duct Type	R22	ALLD-H36/5	AL-H36/5(U)	**Fault code table 2**
		ALLD-H42/5	AL-H42/5(U)	
		ALLD-C48/5	AL-C48/5(U)	
		ALLD-H48/5	AL-H48/5(U)	
Middle ESP Duct Type	R22	ALMD-H36/5	AL-H36/5(U)	**Fault code table 2**
		ALMD-H48/5	AL-H48/5(U)	
		ALMD-H60/5	AL-H60/5(U)	

Part 2 DC inverter VRF A/C System

2.1 ARV Ⅱ

2.1.1 Indoor unit power supply:220-240V～,1Ph,50Hz;Outdoor unit power supply:380-450V～,3Ph,50Hz.

Corresponding relations between fault code table and unit mode

Series	Model		Fault code table
	indoor	outdoor	
Four-way Cassette	ARVCA-H028/4R1	ARV-H220/5R1M ARV-H250/5R1M ARV-H280/5R1M ARV-H330/5R1M ARV-H400/5R1M ARV-H450/5R1M	**Fault code table 7**
	ARVCA-H036/4R1		
	ARVCA-H045/4R1		
	ARVCA-H056/4R1		
	ARVCA-H071/4R1		
	ARVCA-H080/4R1		
	ARVCA-H090/4R1		
	ARVCA-H100/4R1		
	ARVCA-H112/4R1		
	ARVCA-H125/4R1		
	ARVCA-H140/4R1		
Ceiling&Floor Type	ARVCF-H028/4R1	ARV-H220/5R1M ARV-H250/5R1M ARV-H280/5R1M ARV-H330/5R1M ARV-H400/5R1M ARV-H450/5R1M	**Fault code table 7**
	ARVCF-H036/4R1		
	ARVCF-H045/4R1		
	ARVCF-H056/4R1		
	ARVCF-H071/4R1		
	ARVCF-H080/4R1		
	ARVCF-H090/4R1		
	ARVCF-H100/4R1		
	ARVCF-H112/4R1		
	ARVCF-H125/4R1		
Low ESP Duct Type	ARVLD-H022/4R1	ARV-H220/5R1M ARV-H250/5R1M ARV-H280/5R1M ARV-H330/5R1M ARV-H400/5R1M ARV-H450/5R1M	**Fault code table 7**
	ARVLD-H028/4R1		
	ARVLD-H036/4R1		
	ARVLD-H045/4R1		

	ARVLD-H056/4R1		
	ARVLD-H071/4R1		
	ARVLD-H080/4R1		
	ARVLD-H090/4R1		
	ARVLD-H100/4R1		
	ARVLD-H112/4R1		
	ARVLD-H125/4R1		
	ARVLD-H140/4R1		
Middle ESP Duct Type	ARVMD-H045/4R1	ARV-H220/5R1M ARV-H250/5R1M ARV-H280/5R1M ARV-H330/5R1M ARV-H400/5R1M ARV-H450/5R1M	**Fault code table 7**
	ARVMD-H056/4R1		
	ARVMD-H071/4R1		
	ARVMD-H080/4R1		
	ARVMD-H090/4R1		
	ARVMD-H100/4R1		
	ARVMD-H112/4R1		
	ARVMD-H125/4R1		
	ARVMD-H140/4R1		
	ARVMD-H150/4R1		
High ESP Duct Type	ARVHD-H071/4R1	ARV-H220/5R1M ARV-H250/5R1M ARV-H280/5R1M ARV-H330/5R1M ARV-H400/5R1M ARV-H450/5R1M	**Fault code table 7**
	ARVHD-H080/4R1		
	ARVHD-H090/4R1		
	ARVHD-H100/4R1		
	ARVHD-H112/4R1		
	ARVHD-H125/4R1		
	ARVHD-H140/4R1		
	ARVHD-H150/4R1		
Slim Duct Type	ARVSD-H022/4R1	ARV-H220/5R1M ARV-H250/5R1M ARV-H280/5R1M ARV-H330/5R1M ARV-H400/5R1M ARV-H450/5R1M	**Fault code table 7**
	ARVSD-H028/4R1		
	ARVSD-H036/4R1		
	ARVSD-H045/4R1		
	ARVSD-H056/4R1		
	ARVSD-H071/4R1		

Wall Mounted Type	ARVWM-H022/4R1	ARV-H220/5R1M ARV-H250/5R1M ARV-H280/5R1M ARV-H330/5R1M ARV-H400/5R1M ARV-H450/5R1M	**Fault code table 7**
	ARVWM-H028/4R1		
	ARVWM-H036/4R1		
	ARVWM-H045/4R1		
	ARVWM-H056/4R1		
	ARVWM-H071/4R1		
HRV-Heat Recovery Ventilator	AHRV-200/4	ARV-H220/5R1M ARV-H250/5R1M ARV-H280/5R1M ARV-H330/5R1M ARV-H400/5R1M ARV-H450/5R1M	**Fault code table 7**
	AHRV-300/4		
	AHRV-400/4		
	AHRV-500/4		
	AHRV-600/4		
	AHRV-800/4		
	AHRV-1000/4		

2.1.2 Indoor unit power supply:208-230V～,1Ph,60Hz;Outdoor unit power supply:208-230V～,3Ph,60Hz

Corresponding relations between fault code table and unit mode

Series	Model		Fault code table
	indoor	outdoor	
Four-way Cassette Type	ARVCA-H028/2R1	ARV-H220/9R1M ARV-H250/9R1M ARV-H280/9R1M ARV-H330/9R1M ARV-H400/9R1M ARV-H450/9R1M	**Fault code table 7**
	ARVCA-H036/2R1		
	ARVCA-H045/2R1		
	ARVCA-H056/2R1		
	ARVCA-H071/2R1		
	ARVCA-H080/2R1		
	ARVCA-H090/2R1		
	ARVCA-H100/2R1		
	ARVCA-H112/2R1		
	ARVCA-H125/2R1		
	ARVCA-H140/2R1		
Ceiling&Floor Type	ARVCF-H028/2R1	ARV-H220/9R1M ARV-H250/9R1M ARV-H280/9R1M ARV-H330/9R1M ARV-H400/9R1M ARV-H450/9R1M	**Fault code table 7**
	ARVCF-H036/2R1		
	ARVCF-H045/2R1		
	ARVCF-H056/2R1		
	ARVCF-H071/2R1		
	ARVCF-H080/2R1		
	ARVCF-H090/2R1		
	ARVCF-H100/2R1		
	ARVCF-H112/2R1		
	ARVCF-H125/2R1		
Low ESP Duct Type	ARVLD-H022/2R1	ARV-H220/9R1M ARV-H250/9R1M ARV-H280/9R1M ARV-H330/9R1M ARV-H400/9R1M ARV-H450/9R1M	**Fault code table 7**
	ARVLD-H028/2R1		
	ARVLD-H036/2R1		
	ARVLD-H045/2R1		
	ARVLD-H056/2R1		

	ARVLD-H071/2R1		
	ARVLD-H080/2R1		
	ARVLD-H090/2R1		
	ARVLD-H100/2R1		
	ARVLD-H112/2R1		
	ARVLD-H125/2R1		
	ARVLD-H140/2R1		
Middle ESP Duct Type	ARVMD-H045/2R1	ARV-H220/9R1M ARV-H250/9R1M ARV-H280/9R1M ARV-H330/9R1M ARV-H400/9R1M ARV-H450/9R1M	**Fault code table 7**
	ARVMD-H056/2R1		
	ARVMD-H071/2R1		
	ARVMD-H080/2R1		
	ARVMD-H090/2R1		
	ARVMD-H100/2R1		
	ARVMD-H112/2R1		
	ARVMD-H125/2R1		
	ARVMD-H140/2R1		
	ARVMD-H150/2R1		
High ESP Duct Type	ARVHD-H071/2R1	ARV-H220/9R1M ARV-H250/9R1M ARV-H280/9R1M ARV-H330/9R1M ARV-H400/9R1M ARV-H450/9R1M	**Fault code table 7**
	ARVHD-H080/2R1		
	ARVHD-H090/2R1		
	ARVHD-H100/2R1		
	ARVHD-H112/2R1		
	ARVHD-H125/2R1		
	ARVHD-H140/2R1		
	ARVHD-H150/2R1		
Slim Duct Type	ARVSD-H022/2R1	ARV-H220/9R1M ARV-H250/9R1M ARV-H280/9R1M ARV-H330/9R1M ARV-H400/9R1M ARV-H450/9R1M	**Fault code table 7**
	ARVSD-H028/2R1		
	ARVSD-H036/2R1		
	ARVSD-H045/2R1		
	ARVSD-H056/2R1		
	ARVSD-H071/2R1		

Wall-mounted Type	ARVWM-H022/2R1	ARV-H220/9R1M ARV-H250/9R1M ARV-H280/9R1M ARV-H330/9R1M ARV-H400/9R1M ARV-H450/9R1M	**Fault code table 7**
	ARVWM-H028/2R1		
	ARVWM-H036/2R1		
	ARVWM-H045/2R1		
	ARVWM-H056/2R1		
	ARVWM-H071/2R1		

Fault Code Table 7 (ARVⅡ)

Fault code	Fault code definition	Possible cause	Solution
A1	Indoor ambient temperature sensor fault	1、Temperature sensor broken 2、Sensor connection is not well connection 3、Outdoor main control board is broken	1、Replace the sensor 2、Reconnect the sensor firmly 3、Replace outdoor main control board
A2	Middle position of indoor exchanger temperature sensor fault	1、Temperature sensor broken 2、Sensor connection is incorrect. 3、Outdoor main control board is broken	1、Replace the sensor 2、Reconnect the sensor firmly 3、Replace outdoor main control board
A3	Indoor heat exchanger inlet temperature sensor fault	1、Temperature sensor broken , or exceed test limit 2、Sensor connection is incorrect. 3、Outdoor main control board is broken	1、Replace the sensor 2、Reconnect the sensor firmly 3、Replace outdoor main control board
A4	Indoor coil pipe outlet temperature sensor failure	1、Temperature sensor broken , or exceed test limit 2、Sensor connection is incorrect. 3、Outdoor main control board is broken	1、Replace the sensor 2、Reconnect the sensor firmly 3、Replace outdoor main control board
A5	Indoor unit drainage system fault	1、Drain pipe is blocked 2、Float switch short-circuit or unconnected 3、Power line of water pump loose 4、Water pump is broken 3、Outdoor main control board is broken	1、Clean the drain pipe 2、Repace float switch or reconnect it 3、Rreconnect power line of water pump 4、Replace water pump 5、Replace PCB
A6	Indoor PG fan fault	1、Fan motor is open or short-circuit 2、The connection between main control board and fan motor loose. 3、Fan motor get stuck	1、Replace fan motor 2、Reconnect firmly 3、Replace fan motor
A7	Reversible synchronous motor malfunction	1、 Step motor failure 2、The connection between main control board and fan motor loose.	1、Replace step motor 2、Reconnect firml
A8	Indoor unit EEPROM module failure	1、EEPROM communicaton failure 2、EEPROM data validation error (model identification, calibration, etc.) 3、EEPROM data logic errors (superkingdom data range, order, etc.)	Replcae indoor unit EEPROM module
A9	The communication fault between indoor unit and outdoor unit	1、Outdoor unit is power off 2、The communicate wire plug of units loose 3、Indoor unit power off 4、The communication wire is open or short circuit 5、Indoor unit control board malfunction 6、Outdoor unit control board malfunction 7、electromagnetic interference	1、Turn on power for outdoor unit 2、Loosen and insert the right plug 3、Turn on power for indoor unit 4、Replace a normal communicate wire 5、Replace control board 6、Replace control board 7、Add electromagnet loop

AE	Operation mode conflict	Some indoor units operation mode setting cooling，but some indoor units operation mode setting heating	Reset the indoor unit operating mode uniformly
AH(AB)	Two or more indoor unit address repeat	Indoor unit address setting incorrect	Reset the indoor unit address
AJ	Indoor coil anti-freezing protection	1、The blower motor is open or short circuit 2、The blower impeller is broken 3、Sensor directly contact with the heat exchanger 4、The filter net is too dirty	1、Replace the blower motor 2、Replace the blower impeller 3、Refix the heat exchanger temperature sensor 4、Clean the filter net
AF	The indoor EXV fault	1、EXV is blocked 2、The EXV leak 3、Indoor unit temperature sensor malfunction. 4、Evaporator inlet sensor failure.	1、Clean the EXV 2、Replace the EXV 3、Replace Indoor unit temperature sensor 4、Replace evaporator inlet sensor
C1	Ambient temperature sensor “Tao” fault	1、Temperature sensor broken 2、Sensor connection is incorrect. 3、Outdoor PCB is broken	1、Replace the sensor 2、Reconnect the sensor firmly 3、Replace outdoor main control board
C2	Defrosting temperature sensor “Tdef1” fault	1、Temperature sensor broken 2、Sensor connection is incorrect. 3、Outdoor PCB is broken	1、Replace the sensor 2、Reconnect the sensor firmly 3、Replace outdoor main control board
C3	Discharge temperature sensor of variable frequency compressor "Tdi" fault	1、Temperature sensor broken 2、Sensor connection is incorrect. 3、Outdoor PCB is broken	1、Replace the sensor 2、Reconnect the sensor firmly 3、Replace outdoor main control board
C4	Discharge temperature sensor of fixed frequency compressor No.1 "Td1"fault	1、Temperature sensor broken 2、Sensor connection is incorrect. 3、Outdoor PCB is broken	1、Replace the sensor 2、Reconnect the sensor firmly 3、Replace outdoor main control board
C5	Discharge temperature sensor of fixed frequency compressor No.2 "Td2"fault	1、Temperature sensor broken 2、Sensor connection is incorrect. 3、Outdoor PCB is broken	1、Replace the sensor 2、Reconnect the sensor firmly 3、Replace outdoor main control board
C6	Suction pipe temperature sensor of fixed frequency compressor compressor "Ts" fault	1、Temperature sensor broken 2、Sensor connection is incorrect. 3、Outdoor PCB is broken	1、Replace the sensor 2、Reconnect the sensor firmly 3、Replace outdoor main control board
C7	Suction pipe temperature sensor of variable frequency compressor "Tsi" fault	1、Temperature sensor broken 2、Sensor connection is incorrect. 3、Outdoor PCB is broken	1、Replace the sensor 2、Reconnect the sensor firmly 3、Replace outdoor main control board
C8	Outdoor unit condenser middle position sensor "Tc" fault	1、Temperature sensor broken 2、Sensor connection is incorrect. 3、Outdoor PCB is broken	1、Replace the sensor 2、Reconnect the sensor firmly 3、Replace outdoor main control board
C9	Suction pipe temperature sensor of variable frequency compressor "Tsi" fault	1、Temperature sensor broken 2、Sensor connection is incorrect. 3、Outdoor PCB is broken	1、Replace the sensor 2、Reconnect the sensor firmly 3、Replace outdoor main control board

E1	4-way valve fault	1、4-way valve coil open or short circuit 2、Valve block can not get the designated position or Valve blow-by 3、The connection of 4-way valve and main PCB incorrect 4、Main PCB failure	1、Replace valve coil 2、Replace valve body 3、Reconnect correctly 4、Replace PCB
E3	DC inverter compressor discharge temperature "Tdi" protection	1、EXV open degree is small 2、Outdoor exchanger is dirty or sticky 3、Outdoor ventilation insufficient 4、EXV blocked 5、Refrigerant filter blocked 6、Gas pipe stop valve closed 7、Liquid pipe stop valve closed 8、System exhaust sensor fault 9、System lack refrigerant 10、Outdoor unit PCB fault 11、DC inverter compressor fault	
E4	Fixed frequency compressor NO1.discharge temperature "Td1" protection(shut down)	1、EXV open degree is small 2、Outdoor exchanger is dirty or sticky 3、Outdoor ventilation insufficient 4、EXV blocked 5、Refrigerant filter blocked 6、Gas pipe stop valve closed 7、Liquid pipe stop valve closed 8、System exhaust sensor fault 9、System lack refrigerant 10、Outdoor unit PCB fault 11、Fixed frequency compressor fault	
E5	Fixed frequency compressor NO2 discharge temperature "Td2" protection(shut down)		
E7	Limit frequency protection cause by middle position of condenser Temperature too high	1、Compressor rotate speed is too high 2、Outdoor ambient temperature is too high 3、Refrigerant overcharge 4、Outdoor exchanger is dirty or sticky	
E8	Condenser middle position Temperature sensor "Tc" protection (shut down)	1、Outdoor exchanger is dirty or sticky 2、Outdoor ambient temperature is too high 3、The pipe from condenser to exhaust port block 4、Outdoor unit fan motor stop or low speed 5、Refrigerant overcharge 6、Oil temperature is too low	
H1(B1)	high pressure protection	1、The outdoor ventilation insufficient 2、The outdoor fan blade broken	1、Improve or enhance the ventilation 2、Replace fan blade

		3、The connection between the fan blade and outdoor fan motor loose 4、The outdoor fan stop working 5、The connection between high pressure switch and main control board loose 6、High pressure switch malfunction 7、The outdoor exchanger is dirty or sticky 8、There are some air in the refrigerant line 9、The capillary or the filter is blocked 10、Instantaneous power-off	3、Tighten or replace the sleeve 4、Eliminate the malfunction cause 5、Reconnect the wire plug to main control board 6、Replace the high pressure switch 7、Clean the heat exchanger 8、Refill the unit after vacuumizing it 9、Replace the capillary or filter 10、Restart the unit
H4(B4)	Low pressure protection	1、Refrigerant leak 2、Low pressure switch failure 3、Instantaneous power-off 4、Stop valve closed 5、In cooling mode indoor unit EXV close or block 6、In heating mode outdoor unit EXV close or block 7、In heating mode outdoor unit fan stop 8、In heating mode outdoor unit air outlet block	1、Find out the leak point,repair the weldings,refill the unit after vacuumizing it 2、Replace the low pressure switch 3、Restart the unit 4、open the stop valve 5、Refill the unit after vacuumizing it 6、Refill the unit after vacuumizing it
H6(B6)	DC inverter compressor over-current limit frequency protection	1、Outdoor unit fan motor malfunction 2、The outdoor ventilation insufficient 3、Power supply incorrect	1、Replace the fan motor 2、Improve or enhance the ventilation 3、Change the power supply
H7(B7)	DC inverter compressor overload shutdown protection		
H8(B8)	Fix speed compressor 1 overcurrent protection	1、The stop valve closed 2、The outdoor ventilation insufficient 3、System supply power voltage exceed limit (Rated voltage 15%) 4、Compressor failure 5、Replace compressor failure	1、Open the stop valve 2、Improve or enhance the ventilation 3、Install a voltage stabilizer 4、Replace compressor 5、Replace replace compressor
H9(B9)	Fix speed compressor 2 overcurrent protection		
HA(BA)	Input power supply overvoltage &undervoltage protection	1、System supply power voltage exceed limit (Rated voltage 15%) 2、Instantaneous power-off 3、Electrical wiring incorrect 4、Main control board malfunction	1、Install a voltage stabilizer 2、Restart the unit 3、Reconnect 4、Replace main control board
HC(BB)	Input power supply phase dislocation protection	1、 Input power supply phase dislocation 2、Outdoor unit PCB failure	1、Exchange two phases sequence of the Input power supply 2、Replace the outdoor unit PCB
J1(D1)	The communication fault between outdoor units	1、The communication wire between outdoor units is short circuit or connect incorrect. 2、Outdoor unit main control board failure 3、Outdoor unit quantity setting incorrect 4、Outdoor unit main power failed	1、Replace the communication wire 2、Replace the main control board 3、Reset outdoor unit quantity setting dip switch 4、Power on the outdoor unit main power

J2(D2)	The communication fault between outdoor unit and indoor unit	1、The communication wire between indoor unit and outdoor unit open circuit, short circuit or connect incorrect. 2、Indoor unit power off 3、Indoor unit PCB failure	1、Replace the communication wire 2、power on indoor unit 3、Replace indoor unit PCB
J3(D3)	The communication fault between control board and INV module	1、The connection between driving module and main PCB failure 2、The communication part of outdoor unit control PCB failure 3、Frequency driving board failure 4、INV compressor failure	1、Replace the communication wire 2、Replace control PCB 3、Replace Frequency driving board 4、Replace INV compressor
J4(D4)	The communicationfault between control board and fan driving module	1、The communication wire is open circuit or short circuit 2、The communication part of outdoor unit control PCB failure 3、Fan driving module failure 4、Outdoor fan failure	1、Replace communication wire 2、Replace control PCB 3、Replace fan driving module 4、Replace outdoor fan
J5(D5)	Outdoor unit address &capacity parameter setting incorrect	1、Outdoor unit address dip switch setting incorrect 2、Outdoor unit capacity dip switch setting incorrect	1、Reset address dip switch 2、Reset capacity dip switch
31	Module protection (F0)	1、Supply voltage exceed limit 2、Outdoor fan stop or low speed 3、Module malfunction	1、Install a voltage stabilizer 2、Improve or enhance the ventilation 3、Replace Module
32	Module hardware protection	Module malfunction	Replace Module
33	Module software protection	Module malfunction	Replace Module
34	DC inverter compressor unconnected	1、The connect of driving module and DC inverter compressor incorrect 2、Driving module failure 3、DC inverter compressor fault	1、Reconnect correctly 2、Replace the driving module 3、Replace compressor
35	DC inverter compressor over-current protection	1、Compressor overload 2、Compressor coil disconnect 3、Inverter driving board failure 4、Compressor failure	1、Eliminate overload causes 2、Replace compressor 3、Replace the driving module 4、Replace compressor
36	Driving module overvoltage & undervoltage protection	1、Supply voltage exceed limit 2、Driving module failure	1、Install a voltage stabilizer 2、Replace the driving module
37	Driving module radiator temperature sensor fault	1、Driving module PCB failure 2、Temperature sensor broken	1、Replace the driving module PCB 2、Replace the temperature sensor
38	Radiator high temperature protection (frequency reduction)	1、Driving module failure 2、Compressor failure 3、Outdoor unit fan stop or low speed	1、Replace the driving module 2、Replace compressor 3、Improve or enhance the ventilation
39	Driving module high temperature shutdown protection	1、Driving module failure 2、Compressor overload or compressor is blocked 3、Outdoor unit fan stop or low speed	1、Replace the driving module 2、Improve or enhance the ventilation or replace compressor 3、Improve or enhance the ventilation
3A	Module protection of DC fan	1、Driving module failure	1、Replace the driving module

		2、DC fan motor overload 3、DC fan motor stuck	2、Improve or enhance the ventilation 3、Replace fan motor
3C	Over-current protection of DC fan	1、DC fan motor overload 2、DC fan motor short circuit or stuck	1、Improve or enhance the ventilation 2、Replace fan motor
3H	Startup failure or out-of-step operation of DC fan module	Driving module failure	Replace the driving module
3J	DC overvoltage and undervoltage protection of DC fan	Driving module failure (the module output voltage abnormal)	Replace the driving module

2.2 MINI ARV Ⅱ

2.2.1 Indoor unit power supply:220-240V～,1Ph,50Hz;Outdoor unit power supply:220-240V～,1Ph,50Hz or 380-415V～,3Ph,50Hz

Corresponding relations between fault code table and unit mode

Series	Model		Fault code table
	indoor	outdoor	
Four-way Cassette	ARVCA-H028/4R1	ARV-H080/4R1 ARV-H100/4R1 ARV-H120/4R1 ARV-H140/4R1 ARV-H160/4R1 ARV-H080/5R1 ARV-H100/5R1 ARV-H120/5R1 ARV-H140/5R1 ARV-H160/5R1	**Fault code table 7**
	ARVCA-H036/4R1		
	ARVCA-H045/4R1		
	ARVCA-H056/4R1		
	ARVCA-H071/4R1		
	ARVCA-H080/4R1		
	ARVCA-H090/4R1		
	ARVCA-H100/4R1		
	ARVCA-H112/4R1		
	ARVCA-H125/4R1		
	ARVCA-H140/4R1		
Ceiling&floor Type	ARVCF-H045/4R1	ARV-H080/4R1 ARV-H100/4R1 ARV-H120/4R1 ARV-H140/4R1 ARV-H160/4R1 ARV-H080/5R1 ARV-H100/5R1 ARV-H120/5R1 ARV-H140/5R1 ARV-H160/5R1	**Fault code table 7**
	ARVCF-H056/4R1		
	ARVCF-H071/4R1		
	ARVCF-H080/4R1		
	ARVCF-H090/4R1		
	ARVCF-H100/4R1		
	ARVCF-H112/4R1		
	ARVCF-H125/4R1		
	ARVCF-H140/4R1		
Low ESP DuctType	ARVLD-H022/4R1	ARV-H080/4R1 ARV-H100/4R1 ARV-H120/4R1 ARV-H140/4R1 ARV-H160/4R1 ARV-H080/5R1	**Fault code table 7**
	ARVLD-H028/4R1		
	ARVLD-H036/4R1		
	ARVLD-H045/4R1		

	ARVLD-H056/4R1	ARV-H100/5R1 ARV-H120/5R1 ARV-H140/5R1 ARV-H160/5R1	
	ARVLD-H071/4R1		
	ARVLD-H080/4R1		
	ARVLD-H090/4R1		
	ARVLD-H100/4R1		
	ARVLD-H112/4R1		
	ARVLD-H125/4R1		
	ARVLD-H140/4R1		
Middle ESP Duct Type	ARVMD-H045/4R1	ARV-H080/4R1 ARV-H100/4R1 ARV-H120/4R1 ARV-H140/4R1 ARV-H160/4R1 ARV-H080/5R1 ARV-H100/5R1 ARV-H120/5R1 ARV-H140/5R1 ARV-H160/5R1	**Fault code table 7**
	ARVMD-H056/4R1		
	ARVMD-H071/4R1		
	ARVMD-H080/4R1		
	ARVMD-H090/4R1		
	ARVMD-H100/4R1		
	ARVMD-H112/4R1		
	ARVMD-H125/4R1		
	ARVMD-H140/4R1		
	ARVMD-H150/4R1		
High ESP Duct Type	ARVHD-H071/4R1	ARV-H080/4R1 ARV-H100/4R1 ARV-H120/4R1 ARV-H140/4R1 ARV-H160/4R1 ARV-H080/5R1 ARV-H100/5R1 ARV-H120/5R1 ARV-H140/5R1 ARV-H160/5R1	
	ARVHD-H080/4R1		
	ARVHD-H090/4R1		
	ARVHD-H100/4R1		
	ARVHD-H112/4R1		
	ARVHD-H125/4R1		
	ARVHD-H140/4R1		
	ARVHD-H150/4R1		
Slim Duct Type	ARVSD-H022/4R1	ARV-H080/4R1 ARV-H100/4R1 ARV-H120/4R1 ARV-H140/4R1 ARV-H160/4R1 ARV-H080/5R1	**Fault code table 7**
	ARVSD-H028/4R1		
	ARVSD-H036/4R1		
	ARVSD-H045/4R1		

	ARVSD-H056/4R1	ARV-H100/5R1 ARV-H120/5R1 ARV-H140/5R1 ARV-H160/5R1	
	ARVSD-H071/4R1		
Wall Mounted Type	ARVWM-H022/4R1	ARV-H080/4R1 ARV-H100/4R1 ARV-H120/4R1 ARV-H140/4R1 ARV-H160/4R1 ARV-H080/5R1 ARV-H100/5R1 ARV-H120/5R1 ARV-H140/5R1 ARV-H160/5R1	**Fault code table 7**
	ARVWM-H028/4R1		
	ARVWM-H036/4R1		
	ARVWM-H045/4R1		
	ARVWM-H056/4R1		
	ARVWM-H071/4R1		

Part 3 Air cooled modular Chiller

3.1 Kingkong type chiller

Corresponding relations between fault code table and unit mode

Model	Fault code table
ACMK-H65/5	**Fault code table 8**
ACMK-H130/5	

Fault code table 8(Kingkong Type)

Fault code	Fault code definition	possible cause	Solution
E01	Water flow switch protection	1、Water flow switch power supply wires not well connected 2、Water flow switch malfunction 3、Circulating water pump malfunction 4、The water filter clogging 5、The evaporator tubes exist dirty plugging phenomenon	1、reconnect the wires firmly 2、Replace a normal water flow switch 3、Repair or replace the circulating water pump 4、Clean or replace the water filter 5、Clean the evaporator tubes
E05	Power supply phase sequence protection	1、Phase loss 2、Phase dislocation	1、reconnect the wires firmly 2、change two phase sequence of the power supply
E07	Return water temperature sensorfault	1、The temperature sensor broken 2、Sensor plug insert unfirmly to PCB 3、The main control board malfunction	1、Replace the sensor 2、Reconnect the sensor firmly 3、Replace main control board
E08	Water outlet temperaturesensor fault	1、The temperature sensor broken 2、Sensor plug insert unfirmly to PCB 3、The main control board malfunction	1、Replace the sensor 2、Reconnect the sensor firmly 3、Replace main control board
E09	Outdoor ambient temperature sensor fault	1、The temperature sensor broken 2、Sensor plug insert unfirmly to PCB 3、The main control board malfunction	1、Replace the sensor 2、Reconnect the sensor firmly 3、Replace main control board
E12	Anti-hyperthermal protection in heating mode	1、The temperature sensor broken 2、Circulating water pump malfunction 3、The water filter clogging 4、The evaporator tubes exist dirty plugging phenomenon	1、 Replace temperature sensor 2、Repair or replace the circulating water pump 3、 Clean or replace the water filter 4、Clean the evaporator tubes
E13	Water flow shortage protection (Chilled water big temperature difference)	1、The return water temperature or water inlet sensor broken 2、The water filter clogging 3、Circulating water pump malfunction 4、The evaporator tubes exist dirty plugging phenomenon	1、 Replace temperature sensor 2、Clean or replace the water filter 3、 Repair or replace the circulating water pump 4、Clean the evaporator tubes
E15	Communication fault between wired controller and PCB	1、The connection plug loose 2、Wired controller malfunction 3、The communication wire is open or short circuit 4、Main control board malfunction	1、reconnect firmly 2、replace a new one 3、replace a normal one 4、replace a new one
E30	Communication fault between different modules	1、The connection plug loose 2、The communication wire between modules is short circuit or open circuit 3、The communication wire is open or short circuit 4、Main control board malfunction	1、reconnect firmly 2、replace a new one 3、replace a normal one 4、replace a new one

E18	Subsystem 1#high pressure protection	1、the outdoor ventilation insufficient 2、the outdoor fan blade broken 3、the connection between the fan blade and outdoor fan motor loose 4、the outdoor fan stop working 5、the connection between high pressure switch and main control board loose 6、High pressure switch malfunction 7、the outdoor exchanger is dirty or sticky 8、there are some air in the refrigerant line 9、The capillary or the filter is blocked	1、Improve or enhance the ventilation 2、Replace fan blade 3、Tighten or replace the sleeve 4、Eliminate the malfunction cause 5、Reconnect the wire plug to main control board 6、Replace the high pressure switch 7、Clean the heat exchanger 8、Refill the unit after vacuumizing it 9、Replace the capillary or filter
E19	Subsystem 2#high pressure protection		
E20	Subsystem 3#high pressure protection		
E21	Subsystem 4#high pressure protection		
E22	Subsystem 1#low pressure protection	1、Circulating water pump malfunction 2、The water filter clogging 3、The evaporator tubes exist dirty plugging phenomenon 4、The connection between low pressure switch and main control board loose 5、Low pressure switch malfunction 6、Refrigerant leak 7、The capillary or the filter is blocked	1、Repair it or change a normal one 2、Clean water filter 3、Clean the evaporator tubes 4、Reconnect the wire to main control board 5、Replace the low pressure switch 6、Find out the leak point,repair the weldings,refill the unit after vacuumizing it 7、Replace the capillary or filter
E23	Subsystem 2#low pressure protection		
E24	Subsystem 3#low pressure protection		
E25	Subsystem 4#low pressure protection		
E26	Subsystem 1# air discharge temperature overhigh protection	1、the outdoor ventilation insufficient 2、the outdoor fan blade broken 3、the connection between the fan blade and outdoor fan motor loose 4、the outdoor fan stop working 5、the connection between discharge temperature sensor and main control board loose 6、the outdoor exchanger is dirty or sticky 7、discharge temperature sensor deviation 8、Refrigerant leak 9、The indoor capillary or the filter is blocked 10、there are some air in the refrigerant line	1、Improve or enhance the ventilation 2、Replace fan blade 3、Tighten or replace the sleeve 4、Eliminate the malfunction cause 5、Reconnect the wire plug to main control board 6、Clean the heat exchanger 7、Replace the sensor 8、Find out the leak point,repair the weldings,refill the unit after vacuumizing it 9、Replace the capillary or filter 10、Find out the leak point,repair the weldings,refill the unit after vacuumizing it
E27	Subsystem 2# air discharge temperature overhigh protection		
E28	Subsystem 3# air discharge temperature overhigh protection		
E29	Subsystem 4# air discharge temperature overhigh protection		
E33	Anti-freezing protection in cooling mode	1、water outlet temperature sensor malfunction 2、Circulating water pump malfunction 3、The water filter clogging 4、The evaporator tubes exist dirty plugging phenomenon 5、Refrigerant leak	1、Replace a normal one 2、Repair it or change a normal one 3、Clean water filter 4、Clean the evaporator tubes 5、Find out the leak point,repair the weldings,refill the unit after vacuumizing it

E34	Subsystem 1# compressor overcurrent protection	1、The outdoor ventilation insufficient 2、The connection between the fan blade and outdoor fan motor loose 3、the outdoor fan stop working 4、The outdoor fan blade broken 5、The outdoor exchanger is dirty or sticky 6、Pipeline ice blocking or dirty 7、Refrigerant overcharged	1、Improve or enhance the ventilation 2、Tighten or replace the sleeve 3、Eliminate the malfunction cause 4、Replace the fan blade 5、Clean the heat exchanger 6、Replace the capillary or filter 7、Release some refrigerant
E35	Subsystem 2# compressor overcurrent protection		
E36	Subsystem 3# compressor overcurrent protection		
E37	Subsystem 4# compressor overcurrent protection		
E38	Subsystem 1# 4-way valve fault	1、4-way valve coil open or short circuit 2、Valve block can not get the designated position or Valve blow-by 3、Outdoor ambient temperature sensor or exchanger coil temperature sensor malfunction 4、Main PCB failure	1、Replace valve coil 2、Replace valve body 3、Replace a normal one 4、Replace the main PCB board
E39	Subsystem 2# 4-way valve fault		
E40	Subsystem 3# 4-way valve fault		
E41	Subsystem 4# 4-way valve fault		
E42	Subsystem 1# discharge temperature sensor fault	1、Sensor is open or short circuit 2、Sensor plug insert unfirmly 3、The main control board malfunction	1、Replace the sensor 2、Reinsert firmly 3、Replace the main control board
E43	Subsystem 2# discharge temperature sensor fault		
E44	Subsystem 3# discharge temperature sensor fault		
E45	Subsystem 4# discharge temperature sensor fault		
E46	Subsystem 1# exchanger coil temperature sensor fault	1、Sensor is open or short circuit 2、Sensor plug insert unfirmly 3、The main control board malfunction	1、Replace the sensor 2、Reinsert firmly 3、Replace the main control board
E47	Subsystem 2# exchanger coil temperature sensor fault		
E48	Subsystem 3# exchanger coil temperature sensor fault		
E49	Subsystem 4# exchanger coil temperature sensor fault		
E53	Module type dip switch setting incorrect	Module type dip switch setting incorrect	Reset Module type dip switch setting with reference to the wiring diagram
E54	Module address repeat	Module address dip switch setting incorrect	reset address setting dip switch with reference to wiring diagram as needed

3.2 X Type chiller

Corresponding relations between fault code table and unit model

Series	Model	Fault code table
X Type	ACMX-H65/5	**Fault code table 9**
	ACMX-H95/5	
	ACMX-H130/5	
	ACMX-H65/5R1	

Fault code table 9

fault code	fault code definition	possible cause	Solution
E01	Water flow switch protection	1、Water flow switch power supply wires not well connected 2、Water flow switch malfunction 3、Circulating water pump malfunction 4、The water filter clogging 5、The evaporator tubes exist dirty plugging phenomenon	1、reconnect the wires firmly 2、Replace a normal water flow switch 3、Repair or replace the circulating water pump 4、Clean or replace the water filter 5、Clean the evaporator tubes
E03	Outdoor fan NO1.&NO3.overload protection	1、The outdoor unit ventilation insufficient 2、Fan motor stuck	1、Improve or enhance the ventilation 2、Replace fan motor
E04	Outdoor fan NO2. overload protection		
E05	Input power supply phase sequence protection	1、Phase loss 2、Phase dislocation	1、reconnect the wires firmly 2、change two phase sequence of the power supply
E07	Return water temperature fault	1、The temperature sensor broken 2、Sensor plug insert unfirmly to PCB 3、The main control board malfunction	1、Replace the sensor 2、Reconnect the sensor firmly 3、Replace main control board
E08	Water outlet temperature fault	1、The temperature sensor broken 2、Sensor plug insert unfirmly to PCB 3、The main control board malfunction	1、Replace the sensor 2、Reconnect the sensor firmly 3、Replace main control board
E12	Anti-hyperthermal protection in heating mode	1、The temperature sensor broken 2、Circulating water pump malfunction 3、The water filter clogging 4、The evaporator tubes exist dirty plugging phenomenon	1、 Replace temperature sensor 2、Repair or replace the circulating water pump 3、 Clean or replace the water filter 4、Clean the evaporator tubes
E13	Water flow shortage protection (Chilled water big temperature difference)	1 The return water temperature or water inlet sensor broken 2、The water filter clogging 3、Circulating water pump malfunction 4、The evaporator tubes exist dirty plugging phenomenon	1、 Replace temperature sensor 2、Clean or replace the water filter 3、 Repair or replace the circulating water pump 4、Clean the evaporator tubes
E15	Communication fault between wired controller and PCB	1、The connection plug loose 2、Wired controller malfunction 3、The communication wire is open or short circuit 4、Main control board malfunction	1、Reconnect firmly 2、Replace a new one 3、Replace a normal one 4、Replace a new one
E16	Circulating water anti-freezing protection in winter	1、 Outdoor ambient temperature is too low 2、Outdoor ambient temperature sensor malfunction	1、Start the heating mode 2、Replace Outdoor ambient temperature sensor

E26	High discharge temperature protection of compressor 1#	1、The outdoor ventilation insufficient 2、The outdoor fan blade broken 3、The connection between the fan blade and outdoor fan motor loose 4、The outdoor fan stop working 5、The connection between discharge temperature sensor and main control board loose 6、The outdoor exchanger is dirty or sticky 7、Discharge temperature sensor deviation 8、Refrigerant leak 9、The indoor capillary or the filter is blocked 10、There are some air in the refrigerant line	1、Improve or enhance the ventilation 2、Replace fan blade 3、Tighten or replace the sleeve 4、Eliminate the malfunction cause 5、Reconnect the wire plug to main control board 6、Clean the heat exchanger 7、Replace the sensor 8、Find out the leak point,repair the weldings,refill the unit after vacuumizing it 9、Replace the capillary or filter 10、Find out the leak point,repair the weldings,refill the unit after vacuumizing it
E27	High discharge temperature protection of compressor 2#		
E28	High discharge temperature protection of compressor 3#		
E30	Communication fault between different modules	1、The connection plug loose 2、The communication wire between modules is short circuit or open circuit 3、The communication wire is open or short circuit 4、Main control board malfunction	1、Reconnect firmly 2、Replace a new one 3、Replace a normal one 4、Replace a new one
E33	Anti-freezing protection in cooling mode	1、Water outlet temperature sensor malfunction 2、Circulating water pump malfunction 3、The water filter clogging 4、The evaporator tubes exist dirty plugging phenomenon 5、Refrigerant leak	1、Replace a normal one 2、Repair it or change a normal one 3、Clean water filter 4、Clean the evaporator tubes 5、Find out the leak point,repair the weldings,refill the unit after vacuumizing it
E34	Over-current protection of compressor 1#	1、The outdoor ventilation insufficient 2、The connection between the fan blade and outdoor fan motor loose 3、The outdoor fan stop working 4、The outdoor fan blade broken 5、The outdoor exchanger is dirty or sticky 6、Pipeline ice blocking or dirty 7、Refrigerant overcharged	1、Improve or enhance the ventilation 2、Tighten or replace the sleeve 3、Eliminate the malfunction cause 4、Replace the fan blade 5、Clean the heat exchanger 6、Replace the capillary or filter 7、Release some refrigerant
E35	Over-current protection of compressor 2#		
E36	Over-current protection of compressor 3#		
E38	Four-way valve malfunction	1、4-way valve coil open or short circuit 2、Valve block can not get the designated position or Valve blow-by 3、Outdoor ambient temperature sensor malfunction or exchanger coil temperature sensor 4、Main PCB failure	1、Replace valve coil 2、Replace valve body 3、Replace a normal one 4、Replace the main PCB board

E39	High pressure protection	1、The outdoor ventilation insufficient 2、The outdoor fan blade broken 3、The connection between the fan blade and outdoor fan motor loose 4、The outdoor fan stop working 5、The connection between high pressure switch and main control board loose 6、High pressure switch malfunction 7、The outdoor exchanger is dirty or sticky 8、There are some air in the refrigerant line 9、The capillary or the filter is blocked	1、Improve or enhance the ventilation 2、Replace fan blade 3、Tighten or replace the sleeve 4、Eliminate the malfunction cause 5、Reconnect the wire plug to main control board 6、Replace the high pressure switch 7、Clean the heat exchanger 8、Refill the unit after vacuumizing it 9、Replace the capillary or filter
E40	Low pressure protection	1、Circulating water pump malfunction 2、The water filter clogging 3、The evaporator tubes exist dirty plugging phenomenon 4、The connection between low pressure switch and main control board loose 5、Low pressure switch malfunction 6、Refrigerant leak 7、The capillary or the filter is blocked	1、Repair it or change a normal one 2、Clean water filter 3、Clean the evaporator tubes 4、Reconnect the wire to main control board 5、Replace the low pressure switch 6、Find out the leak point,repair the weldings,refill the unit after vacuumizing it 7、Replace the capillary or filter
E41	Exchanger coil bottom temperature sensor fault	1、Sensor is open or short circuit 2、Sensor separatefrom the copper tube 3、Sensor plug insert unfirmly 4、The main control board malfunction	1、Replace the sensor 2、Refix the sensor correctly 3、Reinsert firmly 4、Replace the main control board
E42	Discharge temperature sensor fault of compressor 1#	1、Sensor is open or short circuit 2、Sensor separatefrom the copper tube 3、Sensor plug insert unfirmly 4、The main control board malfunction	1、Replace the sensor 2、Refix the sensor correctly 3、Reinsert firmly 4、Replace the main control board
E43	Discharge temperature sensor fault of compressor 2#		
E44	Discharge temperature sensor fault of compressor 3#		
E50	Suction temperature sensor fault	1、Sensor is open or short circuit 2、Sensor separatefrom the copper tube 3、Sensor plug insert unfirmly 4、The main control board malfunction	1、Replace the sensor 2、Refix the sensor correctly 3、Reinsert firmly 4、Replace the main control board
E51	Evaporator temperature sensor fault	1、Sensor is open or short circuit 2、Sensor separatefrom the copper tube 3、Sensor plug insert unfirmly 4、The main control board malfunction	1、Replace the sensor 2、Refix the sensor correctly 3、Reinsert firmly 4、Replace the main control board
E52	Cooling overload protection	1、The outdoor ventilation insufficient 2、The outdoor fan blade broken	1、Improve or enhance the ventilation 2、Replace fan blade 3、Tighten or replace the sleeve

		3、The connection between the fan blade and outdoor fan motor loose 4、The outdoor fan stop working 5、Exchanger coil bottom temperature sensor malfunction 6、The outdoor exchanger is dirty or sticky 7、 There are some air in the refrigerant line 8、The capillary or the filter is blocked	4、Eliminate the malfunction cause 5、Replace the sensor 6、Clean the heat exchanger 7、Refill the unit after vacuumizing it 8、Replace the capillary or filter
E53	Module type dip switch setting incorrect	Module type dip switch setting incorrect	Reset Module type dip switch setting with reference to the wiring diagram
E54	Module address repeat	Module address dip switch setting incorrect	Reset address setting dip switch with reference to wiring diagram as needed

3.3 Mini household chiller

Corresponding relations between fault code table and unit mode

Model	Fault code table
ACMI-H12/4	**Fault code table 10**
ACMI-H16/5	
ACMI-H28/5	
ACMI-H42/5	

Fault code table 10 (Mini chiller)

Fault code	Fault code definition	Possible cause	solution
Eo：00	Communication fault	1、The connection plug loose 2、The communication wire is open or short circuit 3、Main control board malfunction	1、Reconnect firmly 2、Replace a normal one 3、Replace a new one
Eo：01	Water flow switch protection	1、Water flow switch power supply wires not well connected 2、Water flow switch malfunction 3、Circulating water pump malfunction 4、The water filter clogging 5、The evaporator tubes exist dirty plugging phenomenon	1、reconnect the wires firmly 2、Replace a normal water flow switch 3、Repair or replace the circulating water pump 4、Clean or replace the water filter 5、Clean the evaporator tubes
Eo：02	Outdoor fan motor overload	1、The outdoor unit ventilation insufficient 2、Fan motor stuck	1、Improve or enhance the ventilation 2、Replace fan motor
Eo：03	Input power supply phase sequence protection	1、Phase loss 2、Phase dislocation	1、reconnect the wires firmly 2、change two phase sequence of the power supply
Eo：04	Water flow shortage protection (Chilled water big temperature difference)	1 The return water temperature or water inlet sensor broken 2、The water filter clogging 3、Circulating water pump malfunction 4、The evaporator tubes exist dirty plugging phenomenon	1、 Replace temperature sensor 2、Clean or replace the water filter 3、 Repair or replace the circulating water pump 4、Clean the evaporator tubes
Eo：06	Freezing point protection switch	Freezing point protection switch is off	Press reset key to reset
Eo：07	Anti-hyperthermal protection in heating mode	1、The temperature sensor broken 2、Circulating water pump malfunction 3、The water filter clogging 4、The evaporator tubes exist dirty plugging phenomenon	1、 Replace temperature sensor 2、Repair or replace the circulating water pump 3、 Clean or replace the water filter 4、Clean the evaporator tubes
Er：03	High discharge temperature protection of subsystem 1#	1、The outdoor ventilation insufficient 2、The outdoor fan blade broken 3、The connection between the fan blade and outdoor fan motor loose	1、Improve or enhance the ventilation 2、Replace fan blade 3、Tighten or replace the sleeve

Er：13	High discharge temperature protection of subsystem 2#	4、The outdoor fan stop working 5、The connection between discharge temperature sensor and main control board loose 6、The outdoor exchanger is dirty or sticky 7、Discharge temperature sensor deviation 8、Refrigerant leak 9、The indoor capillary or the filter is blocked 10、There are some air in the refrigerant line	4、Eliminate the malfunction cause 5、Reconnect the wire plug to main control board 6、Clean the heat exchanger 7、Replace the sensor 8、Find out the leak point,repair the weldings,refill the unit after vacuumizing it 9、Replace the capillary or filter 10、Find out the leak point,repair the weldings,refill the unit after vacuumizing it
Er：04	High pressure protection of subsystem 1#	1、The outdoor ventilation insufficient 2、The outdoor fan blade broken 3、The connection between the fan blade and outdoor fan motor loose 4、The outdoor fan stop working 5、The connection between high pressure switch and main control board loose 6、High pressure switch malfunction 7、The outdoor exchanger is dirty or sticky 8、There are some air in the refrigerant line 9、The capillary or the filter is blocked	1、Improve or enhance the ventilation 2、Replace fan blade 3、Tighten or replace the sleeve 4、Eliminate the malfunction cause 5、Reconnect the wire plug to main control board 6、Replace the high pressure switch 7、Clean the heat exchanger 8、Refill the unit after vacuumizing it 9、Replace the capillary or filter
Er：14	High pressure protection of subsystem 2#		
Er：05	low suction pressure protection of Subsystem 1#	1、Circulating water pump malfunction 2、The water filter clogging 3、The evaporator tubes exist dirty plugging phenomenon 4、The connection between low pressure switch and main control board loose 5、Low pressure switch malfunction 6、Refrigerant leak 7、The capillary or the filter is blocked	1、Repair it or change a normal one 2、Clean water filter 3、Clean the evaporator tubes 4、Reconnect the wire to main control board 5、Replace the low pressure switch 6、Find out the leak point,repair the weldings,refill the unit after vacuumizing it 7、Replace the capillary or filter
Er：15	low suction pressure protection of Subsystem 2#		
Po：01	Return water temperature fault	1、The temperature sensor broken 2、Sensor plug insert unfirmly to PCB 3、The main control board malfunction	1、Replace the sensor 2、Reconnect the sensor firmly 3、Replace main control board
Po：02	Outdoor ambient temperature sensor fault	1、The temperature sensor broken 2、Sensor plug insert unfirmly to PCB 3、The main control board malfunction	1、Replace the sensor 2、Reconnect the sensor firmly 3、Replace main control board

Po：03	Anti-freezing protection in cooling mode	1、Water outlet temperature sensor malfunction 2、Circulating water pump malfunction 3、The water filter clogging 4、The evaporator tubes exist dirty plugging phenomenon 5、Refrigerant leak	1、Replace a normal one 2、Repair it or change a normal one 3、Clean water filter 4、Clean the evaporator tubes 5、Find out the leak point,repair the weldings,refill the unit after vacuumizing it
Po：06	Water outlet temperature fault	1、The temperature sensor broken 2、Sensor plug insert unfirmly to PCB 3、The main control board malfunction	1、Replace the sensor 2、Reconnect the sensor firmly 3、Replace main control board
Po：07	Circulating water anti-freezing protection in winter	Outdoor ambient temperature is too low	Start the heating mode
Pr：02	Exchanger coil temperature sensor fault of subsystem 1#	1、Sensor is open or short circuit 2、Sensor separatefrom the copper tube 3、Sensor plug insert unfirmly 4、The main control board malfunction	1、Replace the sensor 2、Refix the sensor correctly 3、Reinsert firmly 4、Replace the main control board
Pr：12	Exchanger coil temperature sensor fault of subsystem 2#		
Pr：03	Discharge temperature sensor fault of subsystem 1#	1、Sensor is open or short circuit 2、Sensor separatefrom the copper tube 3、Sensor plug insert unfirmly 4、The main control board malfunction	1、Replace the sensor 2、Refix the sensor correctly 3、Reinsert firmly 4、Replace the main control board
Pr：13	Discharge temperature sensor fault of subsystem 2#		
Pr：04	Cooling overload protection of subsystem 1#	1、The outdoor ventilation insufficient 2、The outdoor fan blade broken 3、The connection between the fan blade and outdoor fan motor loose 4、The outdoor fan stop working 5、Exchanger coil bottom temperature sensor malfunction 6、The outdoor exchanger is dirty or sticky 7、 There are some air in the refrigerant line 8、The capillary or the filter is blocked	1、Improve or enhance the ventilation 2、Replace fan blade 3、Tighten or replace the sleeve 4、Eliminate the malfunction cause 5、Replace the sensor 6、Clean the heat exchanger 7、Refill the unit after vacuumizing it 8、Replace the capillary or filter
Pr：14	Cooling overload protection of subsystem 2#		