

10. Test Run

10.9 Self-Diagnosis Function

Error Indicator

- This function indicates types of failure in self-diagnosis and occurrence of failure for air condition.
- Error mark is displayed on display window of indoor units and wired remote controller, and 7-segment LED of outdoor unit control board as shown in the table.
- If more than two troubles occur simultaneously, lower number of error code is first displayed.
- After error occurrence, if error is released, error LED is also released simultaneously.

Error Display

1st,2nd LED of 7-segment indicates error number, 3rd LED indicates unit number.

- Ex) 211 : No.21 error of master unit
 213 : No.21 error of slave2
 011 → 051 : No.105 error of master unit

※ Refer to the DX-Ventilation manual for DX-Ventilation error code

Display			Title	Cause of Error	
Indoor unit related error	0	1	-	Air temperature sensor of indoor unit	Air temperature sensor of indoor unit is open or short
	0	2	-	Inlet pipe temperature sensor of indoor unit	Inlet pipe temperature sensor of indoor unit is open or short
	0	3	-	Communication error : wired remote controller ↔ indoor unit	Failing to receive wired remote controller signal in indoor unit PCB
	0	4	-	Drain pump	Malfunction of drain pump
	0	5	-	Communication error : outdoor unit ↔ indoor unit	Failing to receive outdoor unit signal in indoor unit PCB
	0	6	-	Outlet pipe temperature sensor of indoor unit	Outlet pipe temperature sensor of indoor unit is open or short
	0	9	-	Indoor EEPROM Error	In case when the serial number marked on EEPROM of Indoor unit is 0 or FFFFFFFF
	1	0	-	Poor fan motor operation	Disconnecting the fan motor connector/Failure of indoor fan motor lock
	1	7	-	Inlet Air temperature sensor of FAU	Air temperature sensor of indoor unit is open or short
Outdoor unit related error	2	1	1	Master Outdoor Unit Inverter Compressor IPM Fault	Master Outdoor Unit Inverter Compressor Drive IPM Fault
			2	Slave1 Outdoor Unit Inverter Compressor IPM Fault	Slave1 Outdoor Unit Inverter Compressor Drive IPM Fault
			3	Slave2 Outdoor Unit Inverter Compressor IPM Fault	Slave2 Outdoor Unit Inverter Compressor Drive IPM Fault
			4	Slave3 Outdoor Unit Inverter Compressor IPM Fault	Slave3 Outdoor Unit Inverter Compressor Drive IPM Fault
	2	2	1	Inverter Board Input Over Current(RMS) of Master Outdoor Unit	Master Outdoor Unit Inverter Board Input Current excess (RMS)
			2	Inverter Board Input Over Current(RMS) of Slave1 Outdoor Unit	Slave1 Outdoor Unit Inverter Board Input Current excess (RMS)
			3	Inverter Board Input Over Current(RMS) of Slave2 Outdoor Unit	Slave2 Outdoor Unit Inverter Board Input Current excess (RMS)
			4	Inverter Board Input Over Current(RMS) of Slave3 Outdoor Unit	Slave3 Outdoor Unit Inverter Board Input Current excess (RMS)

10. Test Run

Display			Title	Cause of Error
Outdoor unit related error	2	3	1 Master Outdoor Unit Inverter Compressor DC link Low Voltage1	DC charging is not performed at Master Outdoor Unit after starting relay turn on.
			2 Slave1 Outdoor Unit Inverter Compressor DC link Low Voltage	DC charging is not performed at Slave1 Outdoor Unit after starting relay turn on.
			3 Slave2 Outdoor Unit Inverter Compressor DC link Low Voltage	DC charging is not performed at Slave2 Outdoor Unit after starting relay turn on.
			4 Slave3 Outdoor Unit Inverter Compressor DC link Low Voltage	DC charging is not performed at Slave3 Outdoor Unit after starting relay turn on.
	2	4	1 Master Outdoor Unit High Pressure Switch	System is turned off by Master Outdoor Unit high pressure switch.
			2 Slave1 Outdoor Unit High Pressure Switch	System is turned off by slave1 Outdoor Unit high pressure switch.
			3 Slave2 Outdoor Unit High Pressure Switch	System is turned off by slave2 Outdoor Unit high pressure switch.
			4 Slave3 Outdoor Unit High Pressure Switch	System is turned off by slave3 Outdoor Unit high pressure switch.
	2	5	1 Master Outdoor Unit Input Voltage High/Low Voltage	Master Outdoor Unit input voltage is over 487V or below 270V
			2 Slave1 Outdoor Unit Input Voltage High/Low Voltage	Slave1 Outdoor Unit input voltage is over 487V or below 270V
			3 Slave2 Outdoor Unit Input Voltage High/Low Voltage	Slave2 Outdoor Unit input voltage is over 487V or below 270V
			4 Slave3 Outdoor Unit Input Voltage High/Low Voltage	Slave3 Outdoor Unit input voltage is over 487V or below 270V
	2	6	1 Master Outdoor Unit Inverter Compressor Start Failure	The First Start Failure by Master Outdoor Unit Inverter Compressor Abnormality
			2 Slave1 Outdoor Unit Inverter Compressor Start Failure	The First Start Failure by Slave1 Outdoor Unit Inverter Compressor Abnormality
			3 Slave2 Outdoor Unit Inverter Compressor Start Failure	The First Start Failure by Slave2 Outdoor Unit Inverter Compressor Abnormality
			4 Slave3 Outdoor Unit Inverter Compressor Start Failure	The First Start Failure by Slave3 Outdoor Unit Inverter Compressor Abnormality
	2	8	1 Master Outdoor Unit Inverter DC link High Voltage	System is turned off by Master Outdoor Unit DC Voltage Over Charging
			2 Slave1 Outdoor Unit Inverter DC link High Voltage	System is turned off by Slave1 Outdoor Unit DC Voltage Over Charging
			3 Slave2 Outdoor Unit Inverter DC link High Voltage	System is turned off by Slave2 Outdoor Unit DC Voltage Over Charging
			4 Slave3 Outdoor Unit Inverter DC link High Voltage	System is turned off by Slave3 Outdoor Unit DC Voltage Over Charging
2	9	1 Master Outdoor Unit Inverter Compressor Over Current	Master Outdoor Unit Inverter Compressor Fault OR Drive Fault	
		2 Slave1 Outdoor Unit Inverter Compressor Over Current	Slave1 Outdoor Unit Inverter Compressor Fault OR Drive Fault	
		3 Slave2 Outdoor Unit Inverter Compressor Over Current	Slave2 Outdoor Unit Inverter Compressor Fault OR Drive Fault	
		4 Slave3 Outdoor Unit Inverter Compressor Over Current	Slave3 Outdoor Unit Inverter Compressor Fault OR Drive Fault	

10. Test Run

Display			Title	Cause of Error
Outdoor unit related error	3	0	1 Master Outdoor Unit Constant Speed Compressor2 High Discharge Temperature	System is turned off by Master Outdoor Uunit Constant Speed Compressor2 High Discharge Temperature
			2 Slave1 Outdoor Unit Constant Speed Compressor2 High Discharge Temperature	System is turned off by Slave1 Outdoor Unit Constant Speed Compressor2 High Discharge Temperature
			3 Slave2 Outdoor Unit Constant Speed Compressor2 High Discharge Temperature	System is turned off by Slave2 Outdoor Unit Constant Speed Compressor2 High Discharge Temperature
			4 Slave3 Outdoor Unit Constant Speed Compressor2 High Discharge Temperature	System is turned off by Slave3 Outdoor Unit Constant Speed Compressor2 High Discharge Temperature
	3	2	1 Master Outdoor Unit Inverter Compressor High Discharge Temperature	System is turned off by Master Outdoor Unit Inverter Compressor High Discharge Temperature
			2 Slave1 Outdoor Unit Inverter Compressor High Discharge Temperature	System is turned off by Slave1 Outdoor Unit Inverter Compressor High Discharge Temperature
			3 Slave2 Outdoor Unit Inverter Compressor Discharge High Temperature	System is turned off by Slave2 Outdoor Unit Inverter Compressor High Discharge Temperature
			4 Slave3 Outdoor Unit Inverter Compressor High Discharge Temperature	System is turned off by Slave3 Outdoor Unit Inverter Compressor High Discharge Temperature
	3	3	1 Master Outdoor Unit Constant Speed Compressor1 High Discharge Temperature	System is turned off by Master Outdoor Uunit Constant Speed Compressor1 High Discharge Temperature
			2 Slave1 Outdoor Unit Constant Speed Compressor1 High Discharge Temperature	System is turned off by Slave1 Outdoor Unit Constant Speed Compressor1 High Discharge Temperature
			3 Slave2 Outdoor Unit Constant Speed Compressor1 High Discharge Temperature	System is turned off by Slave2 Outdoor Unit Constant Speed Compressor1 High Discharge Temperature
			4 Slave3 Outdoor Unit Constant Speed Compressor1 High Discharge Temperature	System is turned off by Slave3 Outdoor Unit Constant Speed Compressor1 High Discharge Temperature
	3	4	1 High Pressure of Master Outdoor Unit	System is turned off by excessive increase of high pressure of Master Outdoor Unit
			2 High Pressure of Slave1 Outdoor Unit	System is turned off by excessive increase of high pressure of Slave1 Outdoor Unit
			3 High Pressure of Slave2 Outdoor Unit	System is turned off by excessive increase of high pressure of Slave2 Outdoor Unit
			4 High Pressure of Slave3 Outdoor Unit	System is turned off by excessive increase of high pressure of Slave3 Outdoor Unit
	3	5	1 Low Pressure of Master Outdoor Unit	System is turned off by excessive decrease of low pressure of Master Outdoor Unit
			2 Low Pressure of Slave1 Outdoor Unit	System is turned off by excessive decrease of low pressure of Slave1 Outdoor Unit
			3 Low Pressure of Slave2 Outdoor Unit	System is turned off by excessive decrease of low pressure of Slave2 Outdoor Unit
			4 Low Pressure of Slave3 Outdoor Unit	System is turned off by excessive decrease of low pressure of Slave3 Outdoor Unit
3	6	1 Master Outdoor Unit Low Condensing Ratio Limited	Master Outdoor Unit stayed under low condensing limit for 3 minutes	
		2 Slave1 Outdoor Unit Low Condensing Ratio Limited	Slave1 Outdoor Unit stayed under low condensing limit for 3 minutes	
		3 Slave2 Outdoor Unit Low Condensing Ratio Limited	Slave2 Outdoor Unit stayed under low condensing limit for 3 minutes	
		4 Slave3 Outdoor Unit Low Condensing Ratio Limited	Slave3 Outdoor Unit stayed under low condensing limit for 3 minutes	

10. Test Run

Display		Title	Cause of Error
Outdoor unit related error	4 0	1 Master Outdoor Unit Inverter Compressor CT Sensor Fault	Master Outdoor Unit Inverter Compressor CT Sensor open or short
		2 Slave1 Outdoor Unit Inverter Compressor CT Sensor Fault	Slave1 Outdoor Unit Inverter Compressor CT Sensor open or short
		3 Slave2 Outdoor Unit Inverter Compressor CT Sensor Fault	Slave2 Outdoor Unit Inverter Compressor CT Sensor open or short
		4 Slave3 Outdoor Unit Inverter Compressor CT Sensor Fault	Slave3 Outdoor Unit Inverter Compressor CT Sensor open or short
	4 1	1 Master Outdoor Unit Inverter Compressor Discharge Temperature Sensor Fault	Master Outdoor Unit Inverter Compressor Discharge Temperature Sensor open or short
		2 Slave1 Outdoor Unit Inverter Compressor Discharge Temperature Sensor Fault	Slave1 Outdoor Unit Inverter Compressor Discharge Temperature Sensor open or short
		3 Slave2 Outdoor Unit Inverter Compressor Discharge Temperature Sensor Fault	Slave2 Outdoor Unit Inverter Compressor Discharge Temperature Sensor open or short
		4 Slave3 Outdoor Unit Inverter Compressor Discharge Temperature Sensor Fault	Slave3 Outdoor Unit Inverter Compressor Discharge Temperature Sensor open or short
	4 2	1 Master Outdoor Unit Low Pressure Sensor Fault	Master Outdoor Unit Low Pressure Sensor open or short
		2 Slave1 Outdoor Unit Low Pressure Sensor Fault	Slave1 Outdoor Unit Low Pressure Sensor open or short
		3 Slave2 Outdoor Unit Low Pressure Sensor Fault	Slave2 Outdoor Unit Low Pressure Sensor open or short
		4 Slave3 Outdoor Unit Low Pressure Sensor Fault	Slave3 Outdoor Unit Low Pressure Sensor open or short
	4 3	1 Master Outdoor Unit High Pressure Sensor Fault	Master Outdoor Unit High Pressure Sensor open or short
		2 Slave1 Outdoor Unit High Pressure Sensor Fault	Slave1 Outdoor Unit High Pressure Sensor open or short
		3 Slave2 Outdoor Unit High Pressure Sensor Fault	Slave2 Outdoor Unit High Pressure Sensor open or short
		4 Slave3 Outdoor Unit High Pressure Sensor Fault	Slave3 Outdoor Unit High Pressure Sensor open or short
4 4	1 Master Outdoor Unit Air Temperature Sensor Fault	Master Outdoor Unit Air Temperature Sensor open or short	
	2 Slave1 Outdoor Unit Air Temperature Sensor Fault	Slave1 Outdoor Unit Air Temperature Sensor open or short	
	3 Slave2 Outdoor Unit Air Temperature Sensor Fault	Slave2 Outdoor Unit Air Temperature Sensor open or short	
	4 Slave3 Outdoor Unit Air Temperature Sensor Fault	Slave3 Outdoor Unit Air Temperature Sensor open or short	

10. Test Run

Display		Title	Cause of Error	
Outdoor unit related error	4	5	1 Master Outdoor Unit Heat Exchanger Temperature Sensor (Front side) Fault	Master Outdoor Unit Heat Exchanger Temperature Sensor(Front side) open or short
			2 Slave1 Outdoor Unit Heat Exchanger Temperature Sensor (Front side) Fault	Slave1 Outdoor Unit Heat Exchanger Temperature Sensor (Front side) open or short
			3 Slave2 Outdoor Unit Heat Exchanger Temperature Sensor (Front side) Fault	Slave2 Outdoor Unit Heat Exchanger Temperature Sensor(Front side) open or short
			4 Slave3 Outdoor Unit Heat Exchanger Temperature Sensor (Front side) Fault	Slave3 Outdoor Unit Heat Exchanger Temperature Sensor(Front side) open or short
	4	6	1 Master Outdoor Unit Suction Temperature Sensor Fault	Master Outdoor Unit Suction Temperature Sensor open or short
			2 Slave1 Outdoor Unit Suction Temperature Sensor Fault	Slave1 Outdoor Unit Suction Temperature Sensor open or short
			3 Slave2 Outdoor Unit Suction Temperature Sensor Fault	Slave2 Outdoor Unit Suction Temperature Sensor open or short
			4 Slave3 Outdoor Unit Suction Temperature Sensor Fault	Slave3 Outdoor Unit Suction Temperature Sensor open or short
	4	7	1 Master Outdoor Unit Constant Speed Compressor1 Discharge Temperature Sensor Fault	Master Outdoor Unit Constant Speed Compressor1 Discharge Temperature Sensor open or short
			2 Slave1 Outdoor Unit Constant Speed Compressor1 Discharge Temperature Sensor Fault	Slave1 Outdoor Unit Constant Speed Compressor1 Discharge Temperature Sensor open or short
			3 Slave2 Outdoor Unit Constant Speed Compressor1 Discharge Temperature Sensor Fault	Slave2 Outdoor Unit Constant Speed Compressor1 Discharge Temperature Sensor open or short
			4 Slave3 Outdoor Unit Constant Speed Compressor1 Discharge Temperature Sensor Fault	Slave3 Outdoor Unit Constant Speed Compressor1 Discharge Temperature Sensor open or short
	4	8	1 Master Outdoor Unit Constant Speed Compressor2 Discharge Temperature Sensor Fault	Master Outdoor Unit Constant Speed Compressor 2 Discharge Temperature Sensor open or short
			2 Slave1 Outdoor Unit Constant Speed Compressor2 Discharge Temperature Sensor Fault	Slave1 Outdoor Unit Constant Speed Compressor 2 Discharge Temperature Sensor open or short
			3 Slave2 Outdoor Unit Constant Speed Compressor2 Discharge Temperature Sensor Fault	Slave2 Outdoor Unit Constant Speed Compressor 2 Discharge Temperature Sensor open or short
			4 Slave3 Outdoor Unit Constant Speed Compressor2 Discharge Temperature Sensor Fault	Slave3 Outdoor Unit Constant Speed Compressor 2 Discharge Temperature Sensor open or short
4	9	1 Master Outdoor Unit Faulty IPM Temperature Sensor	Master Outdoor Unit IPM Temperature Sensor short/open	
		2 Slave1 Outdoor Unit Faulty IPM Temperature Sensor	Slave1 Outdoor Unit IPM Temperature Sensor short/open	
		3 Slave2 Outdoor Unit Faulty IPM Temperature Sensor	Slave2 Outdoor Unit IPM Temperature Sensor short/open	
		4 Slave3 Outdoor Unit Faulty IPM Temperature Sensor	Slave3 Outdoor Unit IPM Temperature Sensor short/open	

10. Test Run

Display			Title	Cause of Error	
Outdoor unit related error	5	0	1	Omitting connection of R, S, T power of Master Outdoor Unit	Omitting connection of Master outdoor unit
			2	Omitting connection of R, S, T power of Slave1 Outdoor Unit	Omitting connection of Slave1 Outdoor Unit
			3	Omitting connection of R, S, T power of Slave2 Outdoor Unit	Omitting connection of Slave2 Outdoor Unit
			4	Omitting connection of R, S, T power of Slave3 Outdoor Unit	Omitting connection of Slave3 Outdoor Unit
	5	1	1	Excessive capacity of indoor units	Excessive connection of indoor units compared to capacity of Outdoor Unit
	5	2	1	Communication error : inverter PCB → Main PCB	Failing to receive inverter signal at main PCB of Master Outdoor Unit
			2	Communication error : inverter PCB → Main PCB	Failing to receive inverter signal at main PCB of Slave1 Outdoor Unit
			3	Communication error : inverter PCB → Main PCB	Failing to receive inverter signal at main PCB of Slave2 Outdoor Unit
			4	Communication error : inverter PCB → Main PCB	Failing to receive inverter signal at main PCB of Slave3 Outdoor Unit
	5	3	1	Communication error : indoor unit → main PCB of Outdoor Unit	Failing to receive indoor unit signal at main PCB of Outdoor Unit .
	5	4	1	Reverse connection of R, S, T power of Master Outdoor Unit	Reverse connection or omitting connection of R, S, T power of Master Outdoor Unit
			2	Reverse connection of R, S, T power of Slave1 Outdoor Unit	Reverse connection or omitting connection of R, S, T power of Slave1 Outdoor Unit
			3	Reverse connection of R, S, T power of Slave2 Outdoor Unit	Reverse connection or omitting connection of R, S, T power of Slave2 Outdoor Unit
			4	Reverse connection of R, S, T power of Slave3 Outdoor Unit	Reverse connection or omitting connection of R, S, T power of Slave3 Outdoor Unit
	5	7	1	Master Outdoor Unit Communication Error with Inverter Controller	Master Outdoor Unit Controller part cannot receive inverter control signals (usually happens after on-boarding)
			2	Slave1 Outdoor Unit Communication Error with Inverter Controller	Slave1 Outdoor Unit Controller part cannot receive inverter control signals (usually happens after on-boarding)
			3	Slave2 Outdoor Unit Communication Error with Inverter Controller	Slave2 Outdoor Unit Controller part cannot receive inverter control signals (usually happens after on-boarding)
			4	Slave3 Outdoor Unit Communication Error with Inverter Controller	Slave3 Outdoor Unit Controller part cannot receive inverter control signals (usually happens after on-boarding)
	5	9	1	Error of series installation	In the case of installing smaller outdoor unit as master unit

10. Test Run

Display		Title	Cause of Error
Outdoor unit related error	6 0	1 Inverter PCB EEPROM Error of Master Outdoor Unit	Access Error of Inverter PCB of Master Outdoor Unit
		2 Inverter PCB EEPROM Error of Slave1 Unit	Access Error of Inverter PCB of Slave1 Outdoor Unit
		3 Inverter PCB EEPROM Error of Slave2 Unit	Access Error of Inverter PCB of Slave2 Outdoor Unit
		4 Inverter PCB EEPROM Error of Slave3 Unit	Access Error of Inverter PCB of Slave3 Outdoor Unit
	6 7	1 Master Outdoor Unit Fan Lock	Restriction of Master Outdoor Unit
		2 Slave1 Outdoor Unit Fan Lock	Restriction of Slave1 Outdoor Unit
		3 Slave2 Outdoor Unit Fan Lock	Restriction of Slave2 Outdoor Unit
		4 Slave3 Outdoor Unit Fan Lock	Restriction of Slave3 Outdoor Unit
	6 9	1 Constant1 CT Sensor Error of Master Outdoor Unit	Constant1 CT Sensor open or short of Master Outdoor Unit
		2 Constant1 CT Sensor Error of Slave1 Outdoor Unit	Constant1 CT Sensor open or short of Slave1 Outdoor Unit
		3 Constant1 CT Sensor Error of Slave2 Outdoor Unit	Constant1 CT Sensor open or short of Slave2 Outdoor Unit
		4 Constant1 CT Sensor Error of Slave3 Outdoor Unit	Constant1 CT Sensor open or short of Slave3 Outdoor Unit
	7 0	1 Constant2 CT Sensor Error of Master Outdoor Unit	Constant2 CT Sensor open or short of Master Outdoor Unit
		2 Constant2 CT Sensor Error of Slave1 Outdoor Unit	Constant2 CT Sensor open or short of Slave1 Outdoor Unit
		3 Constant2 CT Sensor Error of Slave2 Outdoor Unit	Constant2 CT Sensor open or short of Slave2 Outdoor Unit
		4 Constant2 CT Sensor Error of Slave3 Outdoor Unit	Constant2 CT Sensor open or short of Slave3 Outdoor Unit
	7 3	1 Instant Over Current(Peak) of Master Outdoor Unit PFC	Instant Over Current(Peak) of Master Outdoor Unit PFC
		2 Instant Over Current(Peak) of Slave1 Outdoor Unit PFC	Instant Over Current(Peak) of Slave1 Outdoor Unit PFC
		3 Instant Over Current(Peak) of Slave2 Outdoor Unit PFC	Instant Over Current(Peak) of Slave2 Outdoor Unit PFC
		4 Instant Over Current(Peak) of Slave3 Outdoor Unit PFC	Instant Over Current(Peak) of Slave3 Outdoor Unit PFC
7 5	1 Master Outdoor Unit Fan CT Sensor Error	Master Outdoor Unit Fan CT Sensor open or short	
	2 Slave1 Outdoor Unit Fan CT Sensor Error	Slave1 Outdoor Unit Fan CT Sensor open or short	
	3 Slave2 Outdoor Unit Fan CT Sensor Error	Slave2 Outdoor Unit Fan CT Sensor open or short	
	4 Slave3 Outdoor Unit Fan CT Sensor Error	Slave3 Outdoor Unit Fan CT Sensor open or short	

10. Test Run

Display			Title	Cause of Error
Outdoor unit related error	7	6	1 Master Outdoor Unit Fan DC Link High Voltage Error	Master Outdoor Unit Fan DC Link High Voltage Error
			2 Slave1 Outdoor Unit Fan DC Link High Voltage Error	Slave1 Outdoor Unit Fan DC Link High Voltage Error
			3 Slave2 Outdoor Unit Fan DC Link High Voltage Error	Slave2 Outdoor Unit Fan DC Link High Voltage Error
			4 Slave3 Outdoor Unit Fan DC Link High Voltage Error	Slave3 Outdoor Unit Fan DC Link High Voltage Error
	7	7	1 Master Outdoor Unit Fan Over Current Error	Master Outdoor Unit Fan Current is over 5A
			2 Slave1 Outdoor Unit Fan Over Current Error	Slave1 Outdoor Unit Fan is over 5A
			3 Slave2 Outdoor Unit Fan Over Current Error	Slave2 Outdoor Unit Fan is over 5A
			4 Slave3 Outdoor Unit Fan Over Current Error	Slave3 Outdoor Unit Fan is over 5A
	7	9	1 Master Outdoor Unit Fan Start Failure Error	Master Outdoor Unit Fan First Position Sensing Failure
			2 Slave1 Outdoor Unit Fan Start Failure Error	Slave1 Outdoor Unit Fan First Position Sensing Failure
			3 Slave2 Outdoor Unit Fan Start Failure Error	Slave2 Outdoor Unit Fan First Position Sensing Failure
			4 Slave3 Outdoor Unit Fan Start Failure Error	Slave3 Outdoor Unit Fan First Position Sensing Failure
	8	6	1 Master Outdoor Unit Main PCB EEPROM Error	Communication Fail Between Master Outdoor Unit Main MICOM and EEPROM or omitting EEPROM
			2 Slave1 Outdoor Unit Main PCB EEPROM Error	Communication Fail Between Slave1 Outdoor Unit Main MICOM and EEPROM or omitting EEPROM
			3 Slave2 Outdoor Unit Main PCB EEPROM Error	Communication Fail Between Slave2 Outdoor Unit Main MICOM and EEPROM or omitting EEPROM
			4 Slave3 Outdoor Unit Main PCB EEPROM Error	Communication Fail Between Slave3 Outdoor Unit Main MICOM and EEPROM or omitting EEPROM
	8	7	1 Master Outdoor Unit Fan PCB EEPROM Error	Communication Fail Between Master Outdoor Unit Fan MICOM and EEPROM or omitting EEPROM
			2 Slave1 Outdoor Unit Fan PCB EEPROM Error	Communication Fail Between Slave1 Outdoor Unit Fan MICOM and EEPROM or omitting EEPROM
			3 Slave2 Outdoor Unit Fan PCB EEPROM Error	Communication Fail Between Slave2 Outdoor Unit Fan MICOM and EEPROM or omitting EEPROM
			4 Slave3 Outdoor Unit Fan PCB EEPROM Error	Communication Fail Between Slave3 Outdoor Unit Fan MICOM and EEPROM or omitting EEPROM

10. Test Run

Display				Title	Cause of Error	
Outdoor unit related error	1	0	4	1	Communication Error Between Master Outdoor Unit and Other Outdoor Unit	Failing to receive Slave Unit signal at main PCB of Master Outdoor Unit
				2	Communication Error Between Slave1 Outdoor Unit and Other Outdoor Unit	Failing to receive master and other Slave Unit signal at main PCB of Slave1 Outdoor Unit
				3	Communication Error Between Slave2 Outdoor Unit and Other Outdoor Unit	Failing to receive master and other Slave Unit signal at main PCB of Slave2 Outdoor Unit
				4	Communication Error Between Slave3 Outdoor Unit and Other Outdoor Unit	Failing to receive master and other Slave Unit signal at main PCB of Slave3 Outdoor Unit
	1	0	5	1	Master Outdoor Unit Fan PCB Communication Error	Failing to receive fan signal at main PCB of master unit.
				2	Slave1 Outdoor Unit Fan PCB Communication Error	Failing to receive fan signal at main PCB of Slave1 unit.
				3	Slave2 Outdoor Unit Fan PCB Communication Error	Failing to receive fan signal at main PCB of Slave2 unit.
				4	Slave3 Outdoor Unit Fan PCB Communication Error	Failing to receive fan signal at main PCB of Slave3 unit.
	1	0	6	1	Master Outdoor Unit FAN IPM Fault Error	Instant Over Current at Master Outdoor Unit Fan IPM
				2	Slave1 Outdoor Unit FAN IPM Fault Error	Instant Over Current at Slave1 Outdoor Unit Fan IPM
				3	Slave2 Outdoor Unit FAN IPM Fault Error	Instant Over Current at Slave2 Outdoor Unit Fan IPM
				4	Slave3 Outdoor Unit FAN IPM Fault Error	Instant Over Current at Slave3 Outdoor Unit Fan IPM
	1	0	7	1	Master Outdoor Unit Fan DC Link Low Voltage Error	Master Outdoor Unit Fan DC Link Input Voltage is under 380V
				2	Slave1 Outdoor Unit Fan DC Link Low Voltage Error	Slave1 Outdoor Unit Fan DC Link Input Voltage is under 380V
				3	Slave2 Outdoor Unit Fan DC Link Low Voltage Error	Slave2 Outdoor Unit Fan DC Link Input Voltage is under 380V
				4	Slave3 Outdoor Unit Fan DC Link Low Voltage Error	Slave3 Outdoor Uni Fan DC Link Input Voltage is under 380V
1	1	3	1	Master Outdoor Unit Liquid pipe Temperature Sensor Error	Liquid pipe temperature sensor of Master Outdoor Unit is open or short	
			2	Slave1 Outdoor Unit Liquid pipe Temperature Sensor Error	Liquid pipe temperature sensor of slave1 Outdoor Unit is open or short	
			3	Slave2 Outdoor Unit Liquid pipe Temperature Sensor Error	Liquid pipe temperature sensor of slave2 Outdoor Unit is open or short	
			4	Slave3 Outdoor Unit Liquid pipe Temperature Sensor Error	Liquid pipe temperature sensor of slave3 Outdoor Unit is open or short	

10. Test Run

Display				Title	Cause of Error	
Outdoor unit related error	1	1	5	1	Master Outdoor Unit Subcooling Outlet Temperature Sensor Error	Master Outdoor Unit Subcooling Outlet Temperature Sensor open or short
				2	Slave1 Outdoor Unit Subcooling Outlet Temperature Sensor Error	Slave1 Outdoor Unit Subcooling Outlet Temperature Sensor open or short
				3	Slave2 Outdoor Unit Subcooling Outlet Temperature Sensor Error	Slave2 Outdoor Unit Subcooling Outlet Temperature Sensor open or short
				4	Slave3 Outdoor Unit Subcooling Outlet Temperature Sensor Error	Slave3 Outdoor Unit Subcooling Outlet Temperature Sensor open or short
	1	5	1	1	Failure of operation mode conversion at Master Outdoor Unit	Pressure unbalance between Outdoor Units
				2	Failure of operation mode conversion at Slave1 Outdoor Unit	Pressure unbalance between Outdoor Units
				3	Failure of operation mode conversion at Slave2 Outdoor Unit	Pressure unbalance between Outdoor Units
				4	Failure of operation mode conversion at Slave3 Outdoor Unit	Pressure unbalance between Outdoor Units
	1	5	3	1	Master upper part heat exchanger temperature sensor error	Master Outdoor Unit upper part temperature sensor open/short
				2	Slave1 upper part heat exchanger temperature sensor error	Slave1 Outdoor Unit upper part temperature sensor open/short
				3	Slave2 upper part heat exchanger temperature sensor error	Slave2 Outdoor Unit upper part temperature sensor open/short
				4	Slave3 upper part heat exchanger temperature sensor error	Slave3 Outdoor Unit upper part temperature sensor open/short
	1	5	4	1	Master lower part heat exchanger temperature sensor error	Master Outdoor Unit lower part temperature sensor open/short
				2	Slave1 lower part heat exchanger temperature sensor error	Slave1 Outdoor Unit lower part temperature sensor open/short
				3	Slave2 lower part heat exchanger temperature sensor error	Slave2 Outdoor Unit lower part temperature sensor open/short
				4	Slave3 lower part heat exchanger temperature sensor error	Slave3 Outdoor Unit lower part temperature sensor open/short
	1	7	3	1	Master Outdoor Unit Constant Speed Compressor Fault	Comp locking, Check Valve leakage, comp dielectric break down at Master Outdoor Unit
				2	Slave1 Outdoor Unit Constant Speed Compressor Fault	Comp locking, Check Valve leakage, comp dielectric at Slave1 Outdoor Unit
				3	Slave2 Outdoor Unit Constant Speed Compressor Fault	Comp locking, Check Valve leakage, comp dielectric at Slave2 Outdoor Unit
				4	Slave3 Outdoor Unit Constant Speed Compressor Fault	Comp locking, Check Valve leakage, comp dielectric at Slave3 Outdoor Unit
1	7	4	1	Master outdoor unit rated speed 2 condenser over-current	Master Outdoor Unit rated speed 2 condenser burned / locked or fault by over-current	
			2	Slave1 outdoor unit rated speed 2 condenser over-current	Slave1 Outdoor Unit rated speed 2 condenser burned / locked or fault by over-current	
			3	Slave2 outdoor unit rated speed 2 condenser over-current	Slave2 Outdoor Unit rated speed 2 condenser burned / locked or fault by over-current	
			4	Slave3 outdoor unit rated speed 2 condenser over-current	Slave3 Outdoor Unit rated speed 2 condenser burned / locked or fault by over-current	

10. Test Run

				Display	Title	Cause of Error
Outdoor unit related error	1	8	2	1	Master outdoor unit Main Board Main-Sub Micom communication error	Master Outdoor Unit Main Board Main-Sub Micom communication failed
				2	Slave1 outdoor unit Main Board Main-Sub Micom communication error	Slave1 Outdoor Unit Main Board Main-Sub Micom communication failed
				3	Slave2 outdoor unit Main Board Main-Sub Micom communication error	Slave2 Outdoor Unit Main Board Main-Sub Micom communication failed
				4	Slave3 outdoor unit Main Board Main-Sub Micom communication error	Slave3 Outdoor Unit Main Board Main-Sub Micom communication failed
	1	9	3	1	Excessive increase of Master Outdoor Unit Fan PCB Heat Sink Temperature	Master Outdoor Unit Fan Inverter PCB Temperature is Over 95°C
				2	Excessive increase of Slave1 Outdoor Unit Fan PCB Heat Sink Temperature	Slave1 Outdoor Unit Fan Inverter PCB Temperature is Over 95°C
				3	Excessive increase of Slave2 Outdoor Unit Fan PCB Heat Sink Temperature	Slave2 Outdoor Unit Fan Inverter PCB Temperature is Over 95°C
				4	Excessive increase of Slave3 Outdoor Unit Fan PCB Heat Sink Temperature	Slave3 Outdoor Unit Fan Inverter PCB Temperature is Over 95°C
	1	9	4	1	Master Outdoor Unit Fan PCB Heat Sink Temperature Sensor Error	Master Outdoor Unit Fan PCB Heat Sink Temperature Sensor open or short
				2	Slave1 Outdoor Unit Fan PCB Heat Sink Temperature Sensor Error	Slave1 Outdoor Unit Fan PCB Heat Sink Temperature Sensor open or short
				3	Slave2 Outdoor Unit Fan PCB Heat Sink Temperature Sensor Error	Slave2 Outdoor Unit Fan PCB Heat Sink Temperature Sensor open or short
				4	Slave3 Outdoor Unit Fan PCB Heat Sink Temperature Sensor Error	Slave3 Outdoor Unit Fan PCB Heat Sink Temperature Sensor open or short