

LED		Item	Trouble contents	Diagnostic method
F	R			
81	88	FZ-Sensor Error	Display error : separation of sensor housing part, contact error, disconnection, short circuit. Display error of detecting temperature of sensor : more than 149°F(+65°C) or less than -58°F(-50°C)	When measuring the voltage between the Main PCB CN30-"4" ↔ CN76-"1", it should read between 4.5V~1.0V.
82		FF-Sensor Error		When measuring the voltage between the Main PCB CN30-"5" ↔ CN76-"1", it should read between 4.5V~1.0V.
84		FZ-DEF-Sensor Error		The voltage of MAIN PCB CN30- "5" ↔ N76-"1": shall be between 4.5V~1.0V
85		FF-DEF-Sensor Error		When measuring the voltage between the Main PCB CN30-"8" ↔ CN76-"1", it should read between 4.5V~1.0V.
86		Ambient-Sensor Error		The voltage of MAIN PCB CN78- "8" ↔ CN78-"12": shall be between 4.5V~1.0V
88		Ice Maker(FZ) Sensor Error	Display error : separation of sensor housing part, contact error, disconnection, short circuit Display error of detecting temperature of sensor: more than 149°F(+65°C) or less than -58°F(-50°C)	The Voltage of MAIN PCB CN90 #8(-)#9: Shall be between 4.5v ~ 1.0v
89		Humidity-Sensor Error	Separation of sensor housing part, contact error, disconnection, short circuit	When measuring the voltage between the Main PCB CN30-"3" ↔ CN76-"1", it should read between 4.5V~1.0V.
81		FZ-FAN Error	Display error during operation of applicable fan motor : Feed back signal line contact error, motor wire separation, motor error	The voltage of MAIN PCB CN76- "3"(Yellow) ↔ CN76-"1"(Gray): shall be between 7V~12V
82		FF-FAN Error	Display error during operation of applicable fan motor : Feed back signal line contact error, motor wire separation, motor error	The voltage of MAIN PCB CN76- "4"(Orange) ↔ CN76-"1"(Gray): shall be between 7V~12V
83		C-FAN Error	Display error during operation of applicable fan motor : Feed back signal line contact error, motor wire separation, motor error	The voltage of MAIN PCB CN76- "5"(Sky-blue) ↔ CN76-"1"(Gray): shall be between 7V~12V
84		FZ-DEF Error	Separation of freezer compartment defrost heater housing part, contact error, disconnection, short circuit or temperature fuse error. Display error : the defrosting does not finish though freezer compartment defrost is heating continuously for more than 80 minutes.	After separating MAIN PCB CN70 wire from PCB, resistance value between CN70 Brown ↔ CN70 Gray shall be 63(230) ohm ± 7%.(Resistance value is varied by input power) 0 ohm : heater short, ∞ ohm : wire/bimetal open (Must power off)
85		FF-DEF Error	Separation of fresh food compartment defrost heater housing part, contact error, disconnection, short circuit or temperature fuse error. Display error : the defrosting does not finish though fresh food compartment defrost is heating continuously for more than 80 minutes.	After separating MAIN PCB CN70 wire from PCB, resistance value between CN70 White ↔ CN70 Gray shall be 120(440) ohm ± 7%.(Resistanc e value is varied by input power) 0 ohm : heater short, ∞ ohm : wire/bimetal open (Must power off)
86		Ice Maker(FZ) Function Error	When the Freezer Ice Maker error occurs more than 3 times, the error will be displayed.	After replacing the Ice Maker, check if it operates normal.

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88		FZ-Ice Pipe Heater Error	The error occurs when there is a wire connector slip-out of the Water Supply Pipe Heater, a contact error or a breakage in the wiring.	When measuring the resistance of the Main PCB CN79 Yellow-Pink wires, it should be within $102\Omega \pm 7\%$. 0 Ω : heater short, $\infty\Omega$: Check for Wire Open or Connector Slip-out
48		Panel ↔ Main Communication Error	Display pc – Er in the panel with alarm : MICOM MAIN ↔ PANEL communication error.	Actually, If there is not a problem, it is desirable to replace Main and Panel PCB With the oscilloscope after a cable problem confirming.
88		Comp starting Failure Error	When the Compressor fails starting	Check if there is a short between compressor terminals. Check IPM Voltage [Under 13.5V]
88		IPM Fanlt Error	When there is a IPM Fault error	Check if there is a short between IPM Pins [#1~33] Check the Compressor and the Cycle
88		Comp Abnormal current Detection Error	When ther is abnormal crrunt detected at the Compressor	Check the Compressor connections Check the voltage of Resistance of R308 [0.09Ohm] Check the Compressor and the Cycle
84		Motor Locked Over RPM Error	When there is a Compressor restriction error	Check the voltage of Resistance of R308 [Short/Open] Check the voltage of both of C103 terminals [Unstable Voltage] Check the Compressor and the Cycle
88		Comp under voltage Error	When there is a low voltage error	Check the voltage of Resistance of R513 [Short/Open]
88		Comp over voltage Error	When there is a over voltage error	Check the voltage of Resistance of R501, R505, R509 [Short/Open]