

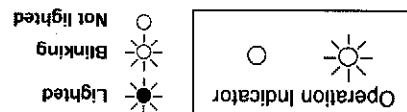
C.1.8 TROUBLESHOOTING

C.1.8.1 Cooling Only/Fixed Speed Heat Pump

Troubleshooting check table

- Before taking measures, make sure that the symptom reappears for accurate troubleshooting.
- When the indoor unit has started operation and the following detection method has detected an abnormality (the first detection after the power ON), the indoor electronic control P.C. board turns OFF the indoor fan motor with the OPERATION INDICATOR lamp flashing.

Flashing of the OPERATION INDICATOR lamp (the left-hand side lamp) indicates possible abnormalities.



MSC-GE20VB MSC-GE25VB MSC-GE35VB

No.	Abnormal point	Operation indicator lamp	Symptom	Condition
1	MXZ MUH-CA/ Mts-wiring/ or Serial signal	0.5-second ON 0.5-second OFF	Outdoor unit does not run.	Serial signal from outdoor unit stops for 4 to 5 seconds.
2	Indoor coil thermometer Room thermometer	2-time flash 2.5-second OFF	Outdoor unit does not operate.	Indoor coil/room temperature thermometer detects short or open circuit every 8 seconds during operation.
3	Indoor fan motor	3-time flash 2.5-second OFF	Indoor fan repeats 12 seconds ON and 3minutes OFF. When the indoor fan breaks, the fan keeps stopping.	The rotational frequency feedback signal is not emitted for 12 seconds after indoor fan motor is operated.
4	Indoor control system	4-time flash 2.5-second OFF	Outdoor unit does not operate.	It cannot properly read data in the nonvolatile memory of the indoor electronic control P.C. board.
5	MXZ Outdoor power system	5-time flash 2.5-second OFF	Outdoor unit does not run.	The compressor operation is continuously three times interrupted by over current protection within 1 minute after start-up, it stops operation.
6	MUH/ MXZ Outdoor thermometer	6-time flash 2.5-second OFF	Outdoor unit does not operate.	<Thermistor short> <Thermistor are abnormal when they short after compressor start-up.> <Thermistor open> <Thermistor are abnormal when they open after compressor start-up.> However, discharge temperature thermistor is abnormal when open circuit is detected more than 10 minutes after compressor start-up.
7	MUH/ MXZ Outdoor control system	7-time flash 2.5-second OFF	Outdoor unit does not operate.	It cannot properly read data in the nonvolatile memory of the outdoor P.C. board, outdoor unit stops.
8	MXZ Outdoor refrigerant system error	10-time flash 2.5-second OFF	Outdoor unit does not run.	The compressor operation has been interrupted by LEV protection continuously 5 minutes, the compressor stops operation.

Operation indicator

Lighted Blinking Not lighted

Flashing of OPERATION INDICATOR lamp (right-hand side lamp) indicates abnormality.

OPERATION INDICATOR lamp (left-hand side lamp) is lighted.

No.	Abnormal point	Operation indicator lamp	Symptom	Condition
1	MXZ Operation mode setting	Right lamp flash 2.5-second OFF	Outdoor unit operates but indoor unit does not run.	The operation mode of each indoor unit is differently set to COOL(includes DRY) and HEAT at same time, the operation mode of indoor unit that has operated at first has the priority.

MUZ-HC25VA
MUZ-HC35VA
MUZ-HC35VAB

MUZ-GE60VA
MUZ-GE71VA

MUZ-GE42VA
MUZ-GE42VAB
MUZ-GE50VA
MUZ-GE50VAB

MUZ-GE25VA
MUZ-GE25VAB
MUZ-GE35VA
MUZ-GE35VAB

MUZ-FD25VA
MUZ-FD25VAB
MUZ-FD35VA
MUZ-FD35VAB

Outdoor unit failure mode table
NOTE: Blinking patterns of this mode differ from the ones of "Troubleshooting check table".
* OPERATION INDICATOR lamp
POWER lamp (MSZ-FD)
Upper lamp (MSZ-FD)
Upper lamp (MSZ-GE, MSZ-HC)

Condition	Indoor/outdoor unit failure mode recall function	Outdoor unit failure mode recall function
—	—	—
Outdoor power system	2-time flash 2.5 seconds OFF	—
Discharge temperature thermistor	3-time flash 2.5 seconds OFF	—
Defrost thermistor	3-time flash 2.5 seconds OFF	—
Fin temperature thermistor	3-time flash 2.5 seconds OFF	—
P.C. board temperature thermistor	4-time flash 2.5 seconds OFF	—
MSZ-FD, GE Ambient temperature thermistor	2-time flash 2.5 seconds OFF	—
Outdoor heat exchanger thermistor	2-time flash 2.5 seconds OFF	—
Overcurrent	11-time flash 2.5 seconds OFF	Large current flows into intelligent power module.
Compressor synchronous abnormally (compressor start-up failure protection)	12-time flash 2.5 seconds OFF	Waveform of compressor current is distorted.
Discharge temperature exceeds	116°C, compressor stops. Compressor can restart if discharge temperature thermistor reads 100°C or less 3 minutes later.	—
High pressure	Temperature of indoor coil thermistor exceeds 70°C in HEAT mode. Temperature of defrost thermistor exceeds 70°C in COOL mode.	—
7-time flash 2.5 seconds OFF	Temperature of fin temperature thermistor on the inverter (MUZ-HC25)/83°C (MUZ-HC35), or temperature of P.C. board exceeds 75°C - 80°C (MUZ-FD, MUZ-GE)/82°C (MUZ-HC25)/83°C (MUZ-HC35), or temperature of P.C. board exceeds 70°C - 75°C (MUZ-FD, MUZ-GE)/81°C (MUZ-HC25)/85°C (MUZ-HC35).	—
Outdoor fan motor	—	Outdoor fan has stopped 3 times in a row within 30 seconds after outdoor fan start-up.
8-time flash 2.5 seconds OFF	—	—
Nonvolatile memory data	5-time flash 2.5 seconds OFF	Nonvolatile memory data cannot be read properly.
MUZ-GE Power module	6-time flash 2.5 seconds OFF	The interphase short circuit occurs in the output of the intelligent power module (IPM). The compressor winding shorts circuit.
10-time flash 2.5 seconds OFF	Discharge temperature	Temperature of discharge temperature thermistor has been 50°C or less for 20 minutes.
11-time flash 2.5 seconds OFF	DC voltage	8-time flash 2.5 seconds OFF
Each phase current of compressor	9-time flash 2.5 seconds OFF	Each phase current of compressor cannot be detected normally.
12-time flash 2.5 seconds OFF	Overcurrent Compressor open-phase	Large current flows into intelligent power module (IPM). The open-phase operation of compressor is detected. The interphase short circuit occurs in the output of the intelligent power module (IPM).
14-time flash 2.5 seconds OFF	Stop valve (Closed valve)	14-time flash 2.5 seconds OFF
14-time flash 2.5 seconds OFF	Stop valve (Closed valve)	Closed valve is detected by compressor current. The compressor winding shorts circuit.

MUZ-FD50VA
MUZ-FD50VAH

Outdoor unit failure mode table

Power lamp (indoor unit)	Abnormal point (failure mode/protection)	LED indication (Outdoor P.C. board)	Condition	Indoor/outdoor unit failure mode recall function
OFF	None (Normal)	Lighting		
2-time flash	Outdoor power system	Lighting	Overcurrent protection stop is continuously performed 3 times within 1 minute after the compressor gets started, or when converter protection stop or bus-bar voltage protection stop is continuously performed 3 times within 3 minutes after start-up.	○
3-time flash	Discharge temperature thermistor	Lighting	Once	○
	Ambient temperature thermistor	Lighting	Twice	
	Fin temperature thermistor	Lighting	3 times	
	P.C. board temperature thermistor	Lighting	4 times	
	Outdoor heat exchanger temperature thermistor	Lighting	9 times	
	Over current	Once	Goes out	
4-time flash			28A current flows into intelligent power module.	—
5-time flash	Discharge temperature	Lighting	Discharge temperature exceeds 116°C during operation. Compressor can restart if discharge temperature thermistor reads 100°C or less 3 minutes later.	—
6-time flash	High pressure	Lighting	The outdoor heat exchanger temperature exceeds 70°C during cooling or the indoor gas pipe temperature exceeds 70°C during heating.	—
7-time flash	Fin temperature	3 times	Goes out	—
	P.C. board temperature	4 times	Goes out	
8-time flash	Outdoor fan motor	Lighting	Failure occurs continuously 3 times within 30 seconds after the fan gets started.	—
9-time flash	Nonvolatile memory data	Lighting	5 times	○
10-time flash	Discharge temperature	Lighting	The frequency of the compressor is kept 80Hz or more and the discharge temperature is kept under 39°C for more than 20 minutes.	—

MUZ-FD50VA
MUZ-FD50VAH



NOTE : Blinking patterns of this mode differ from the ones of "Troubleshooting check table".

Power lamp (Indoor unit)	Abnormal point (Failure mode/protection)	LED indication (Outdoor P.C. board)	Condition	Indoor/outdoor unit failure mode recall function
11-time flash	Communication error between P.C. boards	Lighting 6 times	Communication error occurs between the electronic control P.C. board and power board for more than 10 seconds.	—
			The communication between boards protection stop is continuously performed twice.	○
	Current sensor	Lighting 7 times	A short or open circuit is detected in the current sensor during compressor operating.	—
			Current sensor protection stop is continuously performed twice.	○
	Zero cross detecting circuit	5 times Goes out	Zero cross signal cannot be detected while the compressor is operating.	—
			The protection stop of the zero cross detecting circuit is continuously performed 10 times.	○
	Converter	5 times Goes out	A failure is detected in the operation of the converter during operation.	—
	Bus-bar voltage (1)	5 times Goes out	The bus-bar voltage exceeds 400V or falls to 200V or below during compressor operating.	—
	Bus-bar voltage (2) *Even if this protection stop is performed continuously 3 times, it does not mean the abnormality in outdoor power system.	6 times Goes out	The bus-bar voltage exceeds 400V or falls to 50V or below during compressor operating.	—

M series

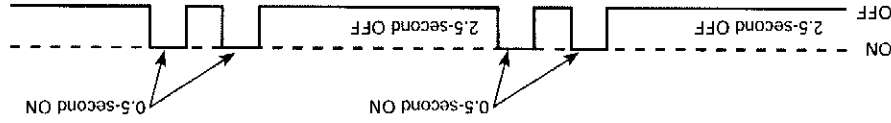
MUZ-FD25VA	MUZ-GE25VA	MUZ-GE42VA	MUZ-GE60VA	MUZ-HC25VA	MUZ-HC35VA	MUZ-FD35VABH	MUZ-GE35VA	MUZ-GE50VA	MUZ-FD35VABH	MUZ-GE35VABH	MUZ-GE50VAH
MUZ-FD25VABH	MUZ-GE25VABH	MUZ-GE42VAH	MUZ-GE71VA	MUZ-HC35VAB	MUZ-HC35VAB	MUZ-FD35VABH	MUZ-GE35VAH	MUZ-GE50VAH	MUZ-FD35VABH	MUZ-GE35VAH	MUZ-GE50VAH

Troubleshooting check table

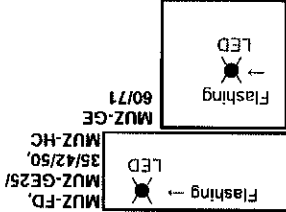
No.	Symptom	LED indication	Abnormal point	Condition
1	Outdoor unit does not operate.	1-time flash every 2.5 seconds	Outdoor power system	Overcurrent protection stop is continuously performed 3 times within 1 minute after the compressor gets started, for failure of restart of compressor has repeated 24 times (MUZ-HC).
2			Outdoor thermistors	Discharge temperature thermistor, fin temperature thermistor, defrost thermistor, P.C. board temperature thermistor, outdoor heat exchanger thermistor or ambient temperature thermistor shorts or opens during compressor running.
3			Outdoor control system	Nonvolatile memory data cannot be read properly. (POWER (MSZ-FD)/the upper (MSZ-GE, MSZ-HC) lamp of OPERATION INDICATOR lamp of the indoor unit lights up or flashes 7-time.)
4		6-time flash 2.5 seconds OFF	Serial signal	The communication fails between the indoor and outdoor unit for 3 minutes.
5		Stop valve 2.5 seconds OFF	Stop valve	Closed valve is detected by compressor current.
6		14-time flash 2.5 seconds OFF	Outdoor unit	Outdoor unit is defective.
7	Outdoor unit stops and restarts 3 minutes later	2-time flash 2.5 seconds OFF	Overcurrent protection	Large current flows into intelligent power module. * When overcurrent protection occurs within 10 seconds after compressor starts, compressor restarts after 15 seconds (MUZ-HC).
8		3-time flash 2.5 seconds OFF	Discharge temperature thermistor	Temperature of discharge temperature thermistor exceeds 116°C, compressor stops. Compressor can restart if discharge temperature thermistor reads 100°C or less 3 minutes later.
9		4-time flash 2.5 seconds OFF	Fin temperature thermistor	Temperature of fin temperature thermistor on the heat sink exceeds 75°C ~ 80°C (MUZ-FD, MUZ-GE/82°C (MUZ-HC25)/83°C (MUZ-HC35) or temperature of P.C. board temperature thermistor on the inverter P.C. board exceeds 70°C ~ 75°C (MUZ-FD, MUZ-GE/81°C (MUZ-HC25)/85°C (MUZ-HC35).
10		5-time flash 2.5 seconds OFF	High pressure protection	Indoor coil thermistor exceeds 70°C in HEAT mode. Defrost thermistor exceeds 70°C in COOL mode.
11		8-time flash 2.5 seconds OFF	Compressor synchronous abnormality	The waveform of compressor current is distorted.
12		10-time flash 2.5 seconds OFF	Outdoor fan motor	Outdoor fan has stopped 3 times in a row within 30 seconds after outdoor fan start-up.
13		12-time flash 2.5 seconds OFF	Each phase current of compressor	Each phase current of compressor cannot be detected normally.
14		13-time flash 2.5 seconds OFF	DC voltage	DC voltage of inverter cannot be detected normally.
15	Outdoor unit operates.	1-time flash 2.5 seconds OFF	Frequency drop by current protection	Frequency drop by PFC module stops due to overcurrent (MUZ-GE60/71)
16		3-time flash 2.5 seconds OFF	Frequency drop by high pressure protection	Temperature of indoor coil thermistor exceeds 55°C in HEAT mode, compressor frequency lowers.
17		4-time flash 2.5 seconds OFF	Frequency drop by defrosting in COOL mode	Indoor coil thermistor reads 8°C or less in COOL mode, compressor frequency lowers.
18	Outdoor unit operates.	7-time flash 2.5 seconds OFF	Low discharge temperature protection	Temperature of discharge temperature thermistor exceeds 111°C, compressor frequency lowers.
19		8-time flash 2.5 seconds OFF	PAM: Pulse Amplifier protection	The overcurrent flows into IGBT (Insulated Gate Bipolar transistor: TR821) or the bus-bar voltage reaches 320 V or more, PAM stops and restarts.
20		9-time flash 2.5 seconds OFF	Inverter check mode	Zero cross signal for PAM control cannot be detected.
			Inverter check mode	The connector of compressor is disconnected, inverter check mode starts.

NOTE: 1. The location of LED is illustrated at the right figure.

2. LED is lighted during normal operation.
The flashing frequency shows the number of times the LED blinks after every 2.5-second OFF.
(Example) When the flashing frequency is "2".



Inverter P.C. board



MUZ-FD50VA
MUZ-FD50VAH

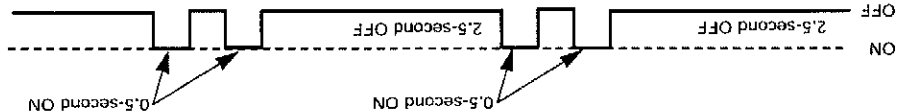
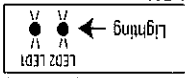
Troubleshooting check table

No.	Symptom	Indication LED1(Red) LED2(Yellow)	Abnormal point/Condition	Condition
1	Outdoor unit does not operate.	Lighting Twice	Outdoor power system	Overcurrent protection stop is continuously performed 3 times within 1 minute after the compressor gets started, or when converter protection stop or bus-bar voltage protection stop is continuously performed 3 times within 3 minutes after start-up.
2	Lighting	3 times	Discharge temperature thermistor	A short circuit is detected in the thermistor during operation, or an open circuit is detected in the thermistor after 10 minutes of compressor start-up.
3	Lighting	4 times	Fin temperature thermistor P.C board temperature thermistor	A short or open circuit is detected in the thermistor during operation.
4	Lighting	5 times	Outdoor heat exchanger temperature thermistor Defrost thermistor	A short circuit is detected in the thermistor during operation, or an open circuit is detected in the thermistor after 5 minutes of compressor start-up.
5	Lighting	6 times	Sensal signal	The communication fails between the indoor and outdoor unit for 3 minutes.
6	Lighting	7 times	Nonvolatile memory data	The nonvolatile memory data cannot be read properly.
7	Lighting	8 times	Current sensor	Current sensor protection stop is continuously performed twice.
8	Lighting	11 times	Communication error between P.C. boards	The communication protection stop between boards is continuously performed twice.
9	Lighting	12 times	Zero cross detecting circuit	The protection stop of the zero cross detecting circuit is continuously performed 10 times.
10	Outdoor unit stops and restarts 3 minutes later is repeated.	Twice	IPM protection	Overcurrent is detected after 30 minutes of compressor start-up.
11	3 times	Goes out	Discharge temperature protection	Discharge temperature exceeds 115°C during operation and compressor stops. Compressor can restart if discharge temperature thermistor reads 100°C or less 3 minutes later.
12	4 times	Goes out	Fin temperature protection	The fin temperature exceeds 87°C during operation.
13	5 times	Goes out	High-pressure protection	The outdoor heat exchanger temperature exceeds 70°C during cooling or indoor gas pipe temperature exceeds 70°C during heating.
14	8 times	Goes out	Converter protection	A failure is detected in the operation of the converter during operation.
15	9 times	Goes out	Bus-bar voltage protection (1)	The bus-bar voltage exceeds 400V or falls to 200V or below during compressor operation.
16	13 times	Goes out	Outdoor fan motor	Failure occurs continuously 3 times within 30 seconds after the fan gets started.
17	Lighting	8 times	Current sensor protection	A short or open circuit is detected in the current sensor during compressor operation.
18	Lighting	11 times	Communication between P.C. boards protection	Communication error occurs between the outdoor electronic control P.C. board and power board for more than 10 seconds.
19	Lighting	12 times	Zero cross detecting circuit protection	Zero cross signal cannot be detected while the compressor is operating.

NOTE 1. The location of LED is illustrated at the right figure.

2. LED is lighted during normal operation.

The flashing frequency shows the number of times the LED blinks after every 2.5-second OFF.



MUZ-FD50VA
MUZ-FD50VAH

No.	Symptom	Indication	Abnormal point/Condition	Condition
20	Outdoor unit operates.	Once	Lighting	Primary current protection The input current exceeds 15A.
21	Outdoor unit operates.	Twice	Lighting	High-pressure protection The indoor gas pipe temperature exceeds 45°C during heating.
22		3 times	Lighting	Discharge temperature protection The discharge temperature exceeds 100°C during operation.
23		4 times	Lighting	Low discharge temperature protection The frequency of the compressor is kept 80Hz or more and the discharge temperature is kept under 39°C for more than 20 minutes.
24		5 times	Lighting	Cooling high-pressure protection The outdoor heat exchanger temperature exceeds 58°C during operation.
25	Outdoor unit operates 9 times	Lighting	Inverter check mode	The unit is operated with emergency operation switch.
26	Lighting	Lighting	Normal	—



TROUBLESHOOTING

2. Outdoor unit failure mode table

MXZ-2A

Upper or left lamp of OPERATION INDICATOR lamp (indoor unit)	Abnormal point (Failure mode / protection)	LED indication (Outdoor P.C. board)		Condition	Correspondence	Indoor/outdoor unit failure mode recall function
		LED 1	LED 2			
OFF	None (Normal)	—	—	—	—	—
2-time flash	Outdoor power system	Lighting	Lighting	Overcurrent protection stop is continuously performed three times within 1 minute after the compressor gets started.	• Check the connection of the compressor connecting wire. • Refer to 13-6.⑤ "How to check inverter/compressor". • Check the stop valve.	—
3-time flash	Discharge temperature thermistor	Lighting	Once	Thermistor shorts or opens during compressor running.	• Refer to 13-6.⑤ "Check of outdoor thermistors".	○
	Defrost thermistor	Lighting	Once			
	Ambient temperature thermistor	Lighting	Twice			
	Fin temperature thermistor	Lighting	Twice			
	P.C. board temperature thermistor	Lighting	4 times			
	Outdoor heat exchanger temperature thermistor	Lighting	9 times			
4-time flash	Overcurrent	Once	Goes out	23 A (MXZ-2A30VA-②), MXZ-2A40VA, MXZ-2A52VA/ 14 A (MXZ-2A30VA-②)	• Reconnect compressor connector. • Refer to 13-6.⑤ "How to check inverter/compressor".	—
Compressor		Twice	Goes out	The possibility of intercepting the overcurrent by the compressor lock is high.	• Check the connection of the compressor connecting wire. • Refer to 13-6.⑤ "How to check inverter/compressor". • Check the stop valve.	—
		9 times	Goes out	The compressor doesn't synchronize with the operating power.		
5-time flash	Discharge temperature	Lighting	Lighting	Discharge temperature exceeds 116°C or Compressor can restart if discharge temperature thermistor reads 100°C or less 3 minutes later.	• Check refrigerant amount and refrigerant amount of LEV. • Refer to 13-6.⑤ "Check of LEV".	—
6-time flash	High pressure	Lighting	Lighting	The outdoor heat exchanger temperature exceeds 70°C during cooling or the indoor gas pipe temperature exceeds 70°C during heating.	• Check refrigerant circuit and refrigerant amount. • Check the stop valve.	—
7-time flash	Fin temperature	3 times	Goes out	The fin temperature exceeds 90°C during operation.	• Check around outdoor unit. • Check outdoor unit air passage. • Refer to 13-6.⑤ "Check of outdoor fan motor".	—
	P.C. board temperature	4 times	Goes out	The P.C. board temperature exceeds 78°C during operation.		
8-time flash	Outdoor fan motor	Lighting	Lighting	Failure occurs continuously three times within 30 seconds after the fan gets started.	• Refer to 13-6.⑤ "Check of outdoor fan motor".	—
9-time flash	Nonvolatile memory data	Lighting	5 times	Nonvolatile memory data cannot be read properly.	• Replace the outdoor electronic control P.C. board.	○
10-time flash	Discharge temperature	Lighting	Lighting	The frequency of the compressor is kept 68 Hz (MXZ-2A30VA, MXZ-2A40VA-②) / 80Hz (MXZ-2A40VA-②) / MXZ-2A52VA) or more and the discharge temperature is kept under 50°C (COOL mode) / 40°C (HEAT mode) for more than 40 minutes.	• Check refrigerant circuit and refrigerant amount. • Refer to 13-6.⑤ "Check of LEV".	—

NOTE: Blinking patterns of this mode differ from the ones of Troubleshooting check table (13-4).

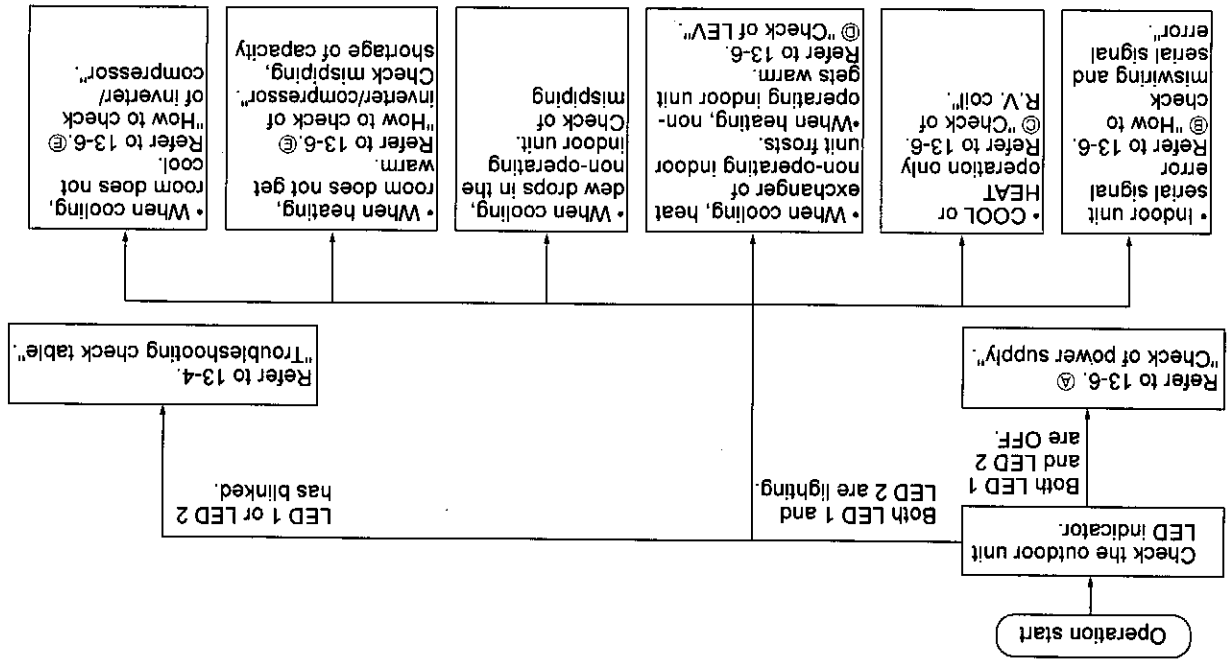


Upper or left lamp of OPERATION INDICATOR lamp (indoor unit)	Abnormal point (Failure mode / protection)	LED indication (Outdoor P.C. board)		Condition	Correspondence indoor/outdoor unit failure mode recall function
		LED 1	LED 2		
11-time flash	Current sensor	8 times	Goes out	A short or open circuit is detected in the current sensor during compressor operating.	• Replace the power board.
	Bus-bar voltage	6 times	Goes out	The bus-bar voltage exceeds 430 V or falls to 50 V or below during compressor operating.	• Replace the power board.
14-time flash	Power module	7 times	Goes out	There is a high possibility that the power module is out of order.	• Refer to 13-6.⑤ "How to check inverter/compressor".
	Stop valve (Closed valve)	Lighting	12 times	Closed valve is detected by compressor current. (MXZ-2A30VA, MXZ-2A40VA - E2)	• Check the stop valve.
15-time flash	LEV for drain	Lighting	Lighting	The indoor unit detects any abnormalities in the LEV for drain.	• Refer to 13-6.⑥ "Check of LEV". • Check the drain pump of the indoor unit.

NOTE: Blinking patterns of this mode differ from the ones of Troubleshooting check table (13-4).

Upper or left lamp of OPERATION INDICATOR lamp (indoor unit)	Abnormal point (Failure mode / protection)	LED 1 (Outdoor P.C. board)	LED 2 (Indoor P.C. board)	Condition	Correspondence	Indoor/outdoor unit failure mode recall function
OFF	None (Normal)	—	—	—	—	—
2-time flash	Outdoor power system	Lighting	Lighting	Overcurrent protection stop is continuously performed three times within 1 minute after the compressor gets started, or converter protection stop or bus-bar voltage protection stop is continuously performed three times within 3 minutes after start-up.	• Check the connection of the compressor connecting wire. • Refer to 13-6.⑤ "How to check inverter/compressor". • Check the stop valve.	○
3-time flash	Discharge temperature thermistor	Lighting	Once	Thermistor shorts or opens during compressor running.	• Refer to 13-6.④ "Check of outdoor thermistors".	○
	Defrost thermistor	Lighting	Once			
	Ambient temperature thermistor	Lighting	Twice			
	P.C. board temperature thermistor	Lighting	3 times			
	Gas pipe temperature thermistor	Lighting	4 times			
	Outdoor heat exchanger temperature thermistor	Lighting	9 times		• Replace the outdoor electronic control P.C. board.	○
	Gas pipe temperature thermistor A	Lighting	10 times	A short or open circuit is detected in the thermistor during cooling.	• Refer to 13-6.④ "Check of outdoor thermistors".	○
	Gas pipe temperature thermistor B	Lighting	11 times	(A,B,C : MXZ-3A54VA-E1, E2, E3)		
	Gas pipe temperature thermistor C	Lighting	12 times	(D : MXZ-4A71VA-E1, E2, E3)		
	Gas pipe temperature thermistor D	Lighting	13 times	(MXZ-4A80VA-E1, E2, E3)		
4-time flash	Overcurrent	Once	Goes out	28A current flows into intelligent power module.	• Reconnect compressor connector. • Refer to 13-6.⑤ "How to check inverter/compressor". • Check the stop valve.	—
5-time flash	Discharge temperature	Lighting	Lighting	Discharge temperature exceeds 116°C during operation. Compressor can restart if discharge temperature thermistor reads 100°C or less 3 minutes later.	• Check refrigerant circuit and refrigerant amount. • Refer to 13-6.④ "Check of LEV".	—
6-time flash	High pressure	Lighting	Lighting	High-pressure is detected with the high-pressure switch (HPS) during operation. (MXZ-4A80VA, MXZ-5A100VA)	• Check refrigerant circuit and refrigerant amount. • Check the stop valve.	—
				The outdoor heat exchanger temperature exceeds 70°C during cooling or the indoor gas pipe temperature exceeds 70°C during heating.		
7-time flash	Fin temperature	Goes out	3 times	The fin temperature exceeds 89°C during operation.	• Check around outdoor unit. • Check outdoor unit air passage. • Refer to 13-6.⑤ "Check of outdoor fan motor".	—
	P.C. board temperature	Goes out	4 times	The P.C. board temperature exceeds 73°C (MXZ-3A54VA, MXZ-4A71VA) or 87°C (MXZ-4A80VA, MXZ-5A100VA) during operation.	• Check outdoor fan motor. • Refer to 13-6.⑤ "Check of outdoor fan motor".	—
8-time flash	Outdoor fan motor	Lighting	Lighting	Failure occurs continuously three times within 30 seconds after the fan gets started.	• Refer to 13-6.⑤ "Check of outdoor fan motor".	—
9-time flash	Nonvolatile memory data	Lighting	5 times	Nonvolatile memory data cannot be read properly.	• Replace the outdoor electronic control P.C. board.	○
10-time flash	Discharge temperature	Lighting	Lighting	The frequency of the compressor is kept 80Hz or more and the discharge temperature is kept under 50°C (COOL mode)/40°C (HEAT mode) for more than 40 minutes.	• Check refrigerant circuit and refrigerant amount. • Refer to 13-6.④ "Check of LEV".	—

NOTE: Blinking patterns of this mode differ from the ones of Troubleshooting check table (13-4).



Then, check the outdoor unit with referring to this page.

- Check the indoor unit with referring to the indoor unit service manual, and confirm whether there is any problem in the indoor unit.

13-3. Instruction of troubleshooting

NOTE: Blinking patterns of this mode differ from the ones of Troubleshooting check table (13-4).

Upper or left lamp of OPERATION INDICATOR lamp (indoor unit)	Abnormal point (Failure mode / protection)	LED indication (Outdoor P.C. board)	Condition	Correspondence	Indoor/outdoor unit failure mode recall function
11-time flash	Communication error between P.C. boards	Lighting 8 times	Communication error occurs between the electronic control P.C. board and power board for more than 10 seconds.	• Check the connecting wire between outdoor P.C. board and power board.	—
	Current sensor	Lighting 7 times	A short or open circuit is detected in the current sensor during compressor operating.	• Replace the power board.	—
	Zero cross detecting circuit	Goes out 5 times	Zero cross signal cannot be detected while the compressor is operating.	• Check the connecting wire among electronic control P.C. board, noise filter P.C. board, and power board.	○
	Converter	Goes out 5 times	A failure is detected in the operation of the converter during operation.	• Replace the power board.	○
	Bus-bar voltage (1)	Goes out 5 times	The bus-bar voltage exceeds 400 V or falls to 200 V or below during compressor operating.		—
	Bus-bar voltage (2)	Goes out 6 times	The bus-bar voltage exceeds 430 V (MXZ-3A54VA, MXZ-4A71VA) or falls to 50V or below during compressor operating.		—
15-time flash	LEV for drain	Lighting	The indoor unit detects any abnormalities in the LEV for drain.	• Refer to 13-6. ① "Check of LEV".	—

