Changes for the Better

MITSUBISHI ELECTRIC

SPLIT-TYPE, HEAT PUMP AIR CONDITIONERS

September 2006
No.OC321
REVISED EDITION-B

TECHNICAL & SERVICE MANUAL

Series SEZ Ceiling Concealed R410A

Indoor unit
[Model names]

SEZ-KA35VA
SEZ-KA50VA
SEZ-KA60VA
SEZ-KA71VA

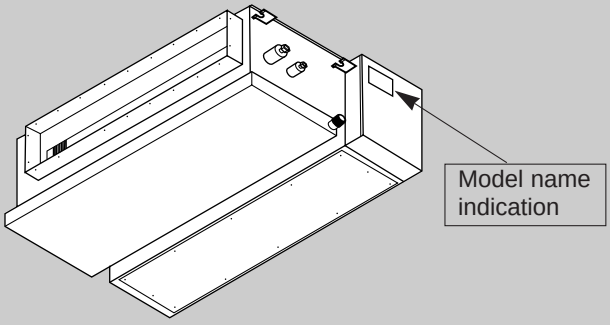
[Service Ref.]

SEZ-KA35VA.TH
SEZ-KA50VA.TH
SEZ-KA60VA.TH
SEZ-KA71VA.TH

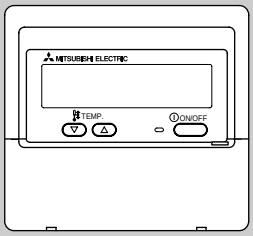
Revision:
- RoHS PARTS LIST is added in REVISED EDITION-B.
- Some descriptions have been modified.

- Please void OC321 REVISED EDITION-A.

Note:
- This manual describes only service data of the indoor units.When servicing outdoor units, please refer to the service manual No.OC322, OC323 together with this manual.
- RoHS compliant products have <G> mark on the spec name plate.
- For servicing of RoHS compliant products, refer to the RoHS Parts List.



INDOOR UNIT



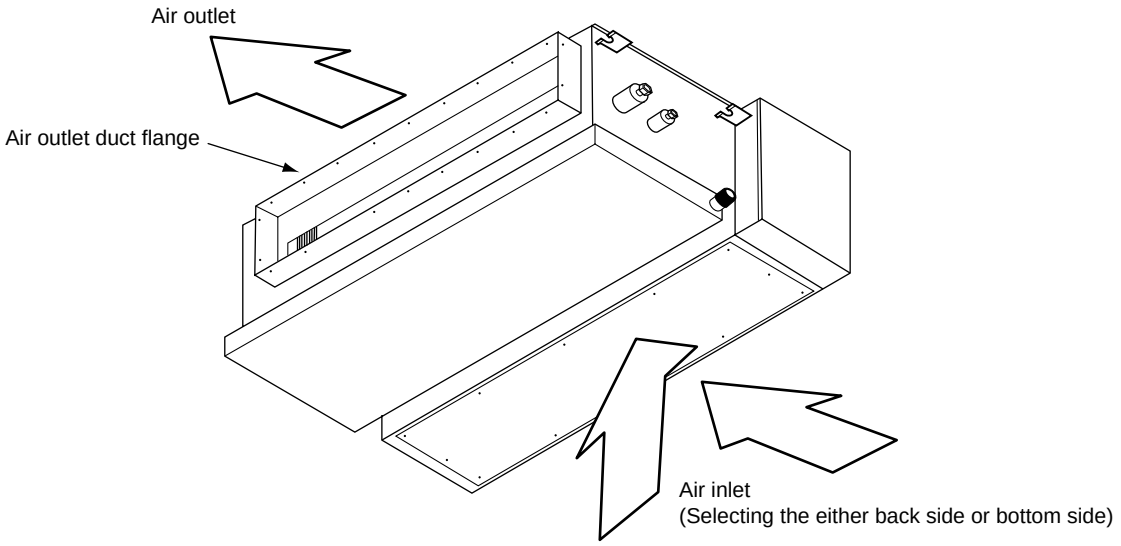
WIRED REMOTE CONTROLLER

CONTENTS

Mr.SLIM™

1 PART NAMES AND FUNCTIONS

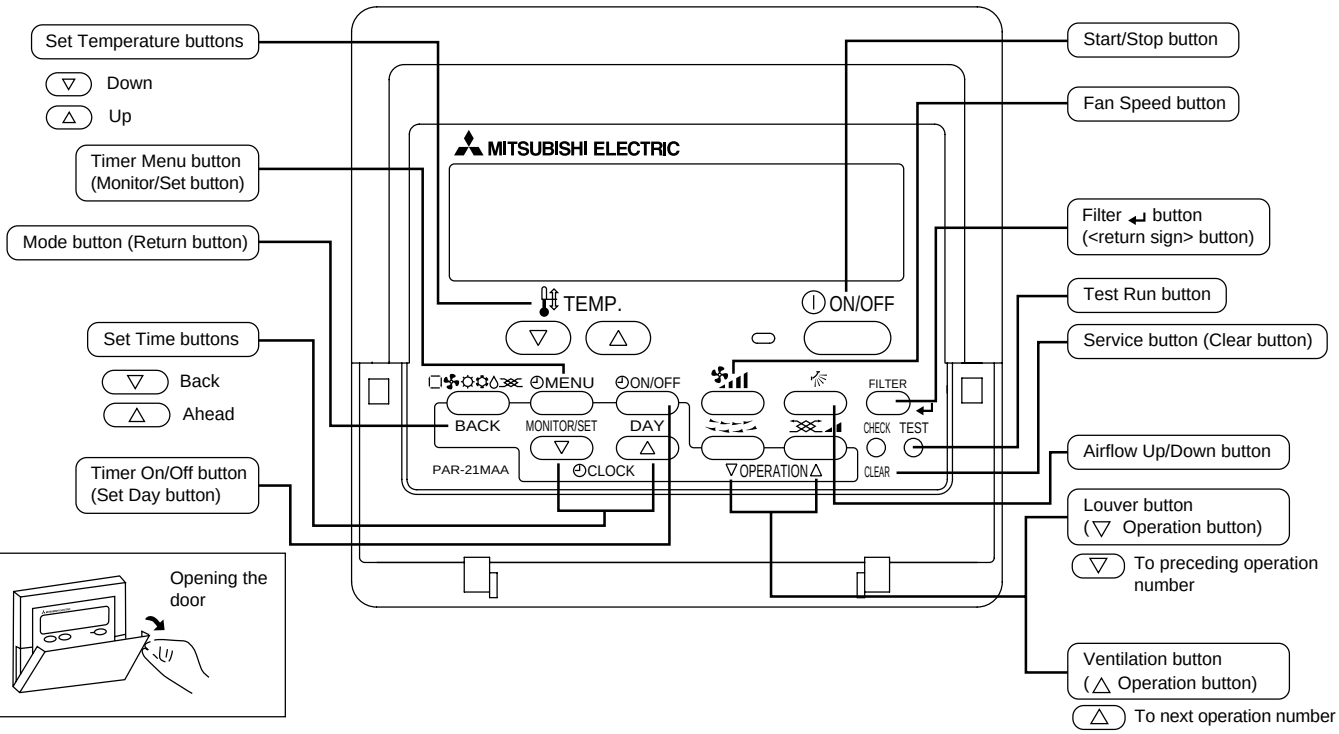
Indoor Unit
SEZ-KA35VA.TH
SEZ-KA50VA.TH
SEZ-KA60VA.TH
SEZ-KA71VA.TH



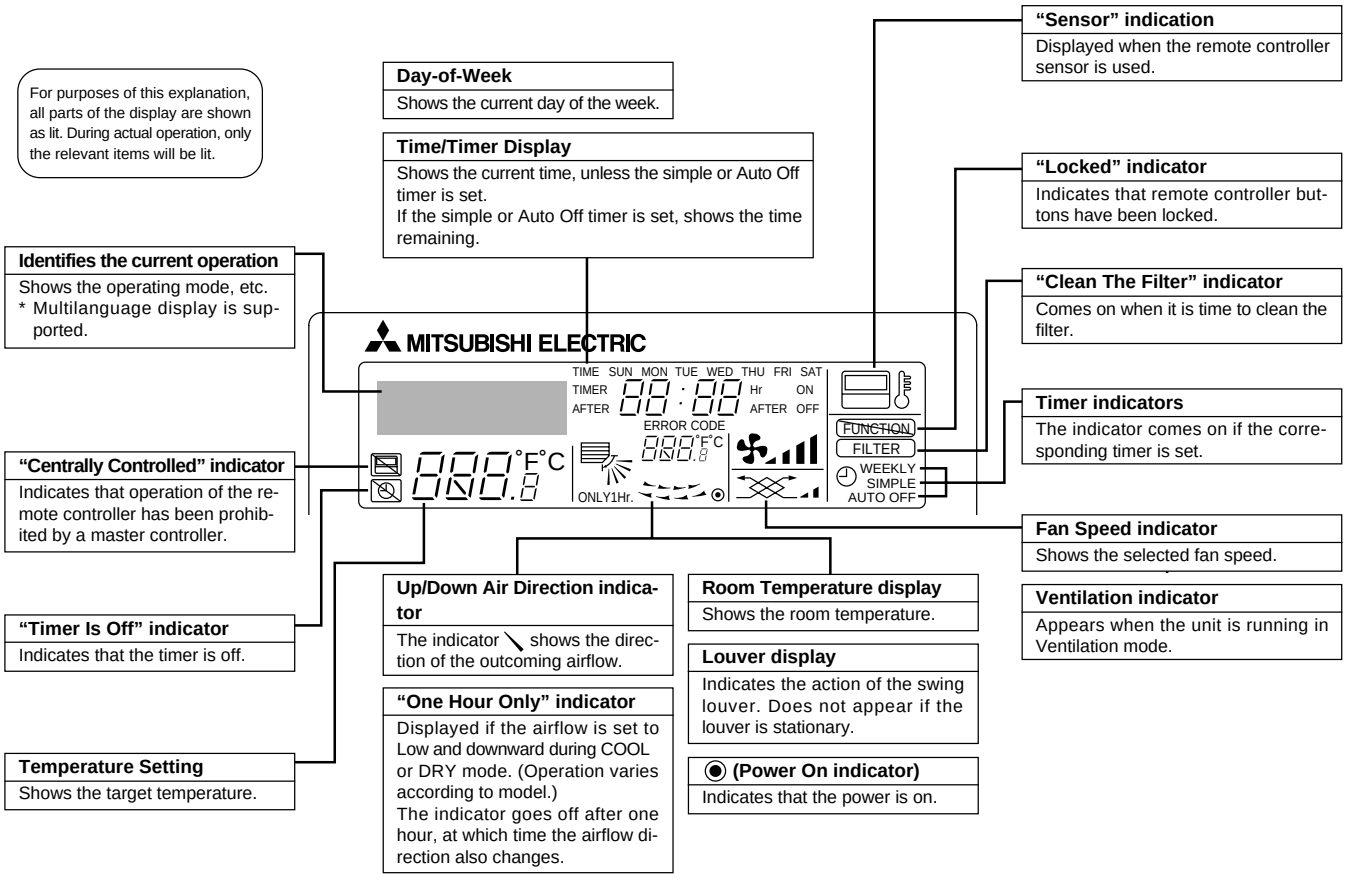
Wired remote controller

Once the controls are set, the same operation mode can be repeated by simply pressing the ON/OFF button.

● Operation buttons



● Display



Caution

- Only the Power on indicator lights when the unit is stopped and power supplied to the unit.
- If you press a button for a feature that is not installed in the indoor unit, the remote controller will display the "Not Available" message.
  If you are using the remote controller to operate multiple indoor units, this message will appear only if the feature is not present at the parent unit.
- When power is turned ON for the first time, it is normal that "PLEASE WAIT" is displayed on the room temperature indication (For max. 2minutes). Please wait until this "PLEASE WAIT" indication disappears then start the operation.

2 SPECIFICATIONS

Indoor model			SEZ-KA35VA.TH		SEZ-KA50VA.TH	
Function			Cooling	Heating	Cooling	Heating
Power supply			Single phase 230V, 50Hz		Single phase 230V, 50Hz	
Capacity	Air flow (High/Low)	m³ /h	780/600		1020/720	
Electrical data	Power outlet	A	10		20	
	Running current ✻1	A	0.40		0.55	
	Power input Rated frequency	W	60		80	
	Auxiliary heater	A(kW)	—		—	
	Fan motor current ✻1	A	0.22		0.27	
Fan motor	Model		PK6V19-EF		PK6V32-EF	
	Winding resistance (at20℃)	Ω	WHT-BLK : 257 BLK-BLU : 20 BLU-YLW : 27 YLW-BRN : 14 BRN-RED : 51(at 26℃)		WHT-BLK : 166 BLK-BLU : 52 BLU-YLW : 19 YLW-BRN : 8 BRN-RED : 40(at 26℃)	
	Dimensions W×H×D	mm	1100×270×700		1100×270×700	
	Weight	kg	33.5		33.5	
Special remarks	Air direction		1		1	
	Sound level (High/Low)	dB(A)	35/30		39/31	
	Fan speed (High/Low)	rpm	770/630		840/640	
	Fan speed regulator		3		3	
	External satatic pressure	Pa	Std : 30 Max : 50		Std : 30 Max : 50	
	Thermistor TH1 (at 25℃)	kΩ	10		10	
	Thermistor TH2 (at 25℃)	kΩ	10		10	
	Thermistor TH5 (at 25℃)	kΩ	10		10	

NOTE : Test conditions are based on ISO 5151
Cooling : Indoor D.B. 27℃ W.B. 19℃
Outdoor D.B. 35℃ W.B. 24℃
Heating : Indoor D.B. 20℃ W.B. 15℃
Outdoor D.B. 7℃ W.B. 6℃
Refrigerant piping length (one way): 5m
✻1 Measured under rated operating frequency.

Specifications and rating conditions of main electric parts

INDOOR UNIT

Item \ Model	SEZ-KA35VA.TH SEZ-KA50VA.TH SEZ-KA60VA.TH SEZ-KA71VA.TH
Indoor fan capacitor (C1)	SEZ-KA35/50VA.TH : 2.5μF 440V SEZ-KA60VA.TH : 3.0μF 440V SEZ-KA71VA.TH : 4.0μF 440V
Fuse (FUSE)	250V 6.3A
Varistor (ZNR)	ERZV10D471
Terminal block (TB)	TO OUTDOOR UNIT : 3P TO WIRED REMOTE CONTROLLER : 2P
Indoor fan motor thermal fuse	141℃±3℃

Indoor model			SEZ-KA60VA.TH		SEZ-KA71VA.TH	
Function			Cooling	Heating	Cooling	Heating
Power supply			Single phase 230V, 50Hz		Single phase 230V, 50Hz	
Capacity	Air flow (High/Low)	m³ /h	1200/720		1200/720	
Electrical data	Power outlet	A	20		20	
	Running current ✻1	A	0.65		0.60	
	Power input Rated frequency	W	100		130	
	Auxiliary heater	A(kW)	—		—	
	Fan motor current ✻1	A	0.39		0.51	
Fan motor	Model		PK6V50-EF		PK4V60-EA	
	Winding resistance	Ω	WHT-BLK : 103 BLK-BLU : 57 BLU-YLW : 15 YLW-BRN : 7 BRN-RED : 29 (at 26℃)		WHT-BLK : 108 BLK-BLU : 29 BLU-YLW : 26 YLW-BRN : 14 BRN-RED : 34 (at 26℃)	
	Dimensions W×H×D	mm	1100×270×700		1100×270×700	
	Weight	kg	33.5		35	
Special remarks	Air direction		1		1	
	Sound level(High/Low)	dB(A)	43/32		43/32	
	Fan speed(High/Low)	rpm	890/660		1050/690	
	Fan speed regulator		3		3	
	External satatic pressure	Pa	Std : 30 Max : 50		Std : 30 Max : 50	
	Thermistor TH1 (at 25℃)	kΩ	10		10	
	Thermistor TH2 (at 25℃)	kΩ	10		10	
	Thermistor TH5 (at 25℃)	kΩ	10		10	

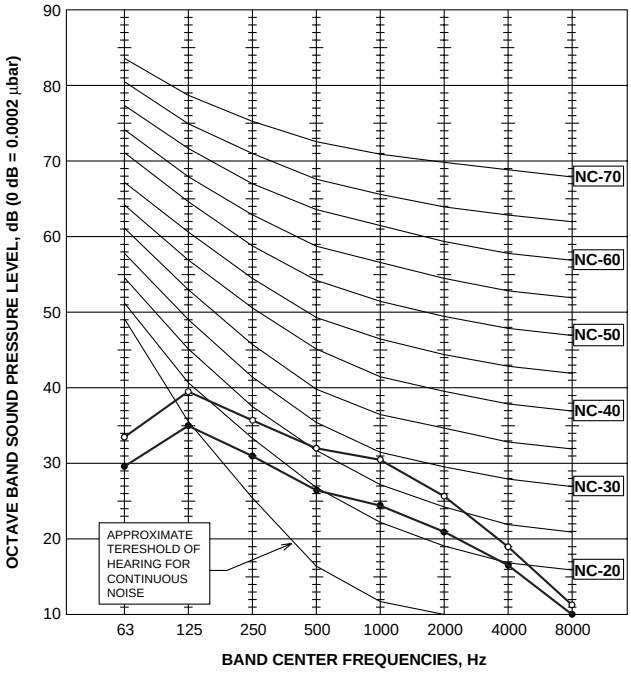
NOTE : Test conditions are based on ISO 5151
Cooling : Indoor D.B. 27℃ W.B. 19℃
Outdoor D.B. 35℃ W.B. 24℃
Heating : Indoor D.B. 20℃ W.B. 15℃
Outdoor D.B. 7℃ W.B. 6℃
Refrigerant piping length (one way): 5m
✻1 Measured under rated operating frequency.

NOISE CRITERION CURVES

SEZ-KA35VA.TH

<50Hz>

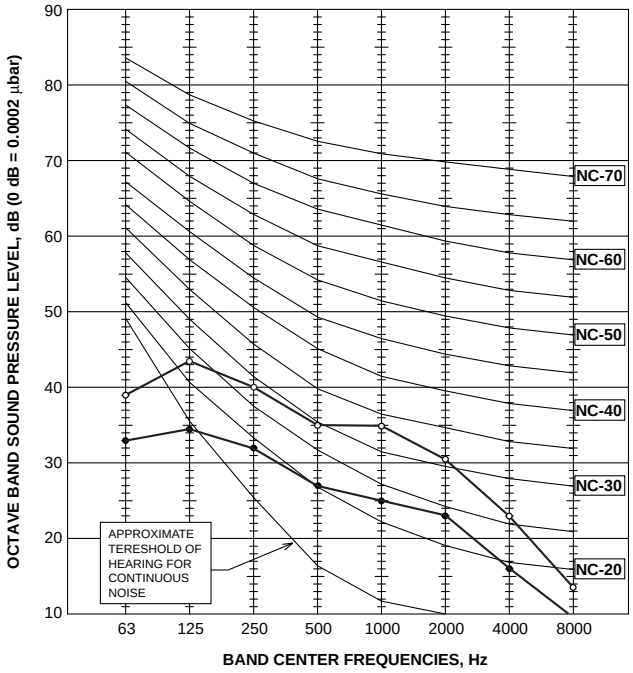
NOTCH	SPL(dB)	LINE
High	35	○—○
Low	30	●—●



SEZ-KA50VA.TH

<50Hz>

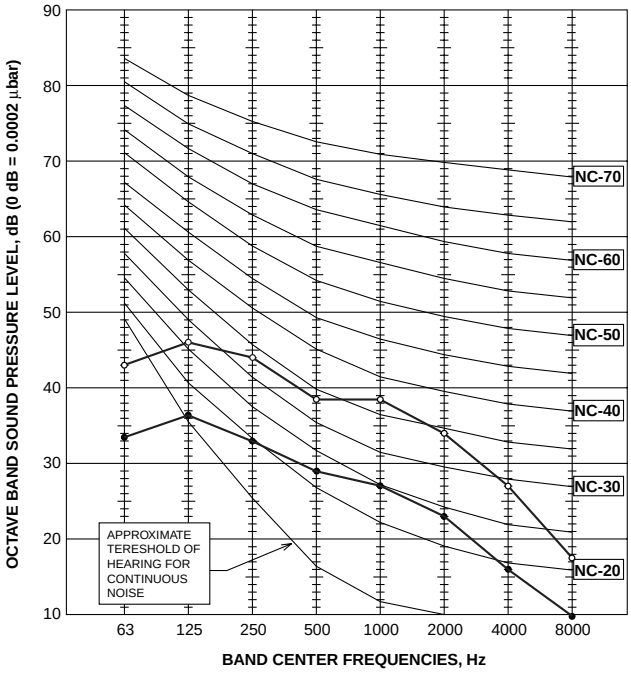
NOTCH	SPL(dB)	LINE
High	39	○—○
Low	31	●—●

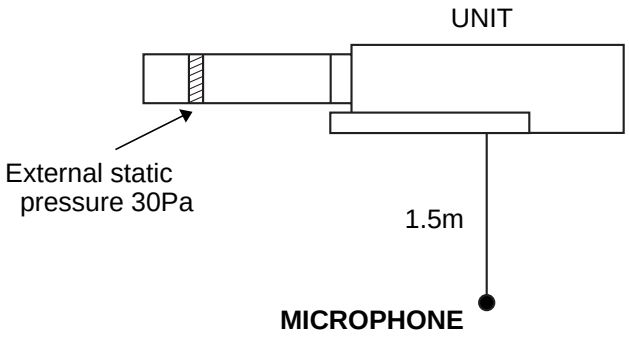


SEZ-KA60VA.TH
SEZ-KA71VA.TH

<50Hz>

NOTCH	SPL(dB)	LINE
High	43	○—○
Low	32	●—●

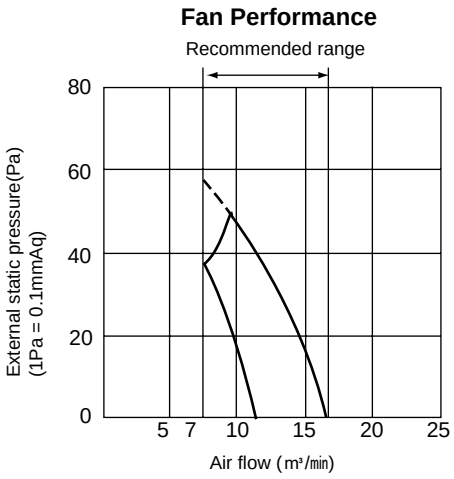


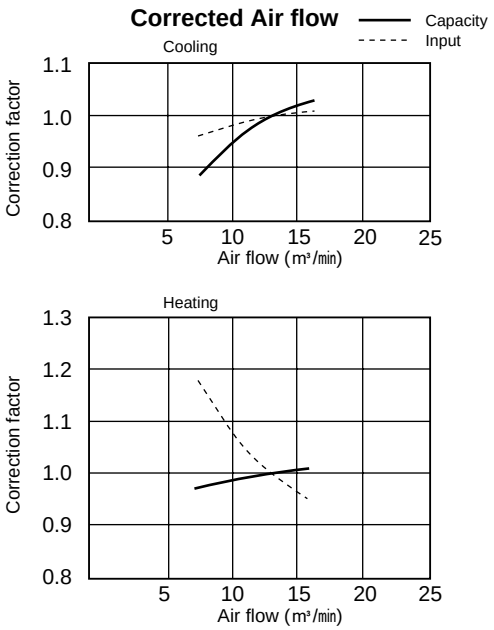


NOTE: The sound level is measured in an anechoic room where echoes are few, when compressor stops. The sound may be bigger than displayed level under actual installation condition by surrounding echoes. The sound level can be higher by about 2 dB than the displayed level during cooling and heating operation.

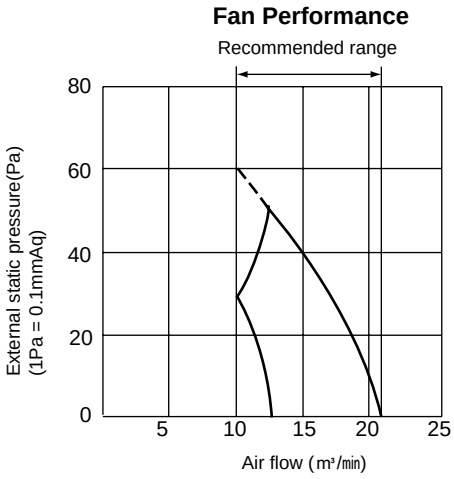
INDOOR FAN PERFORMANCE AND CORRECTED AIR FLOW

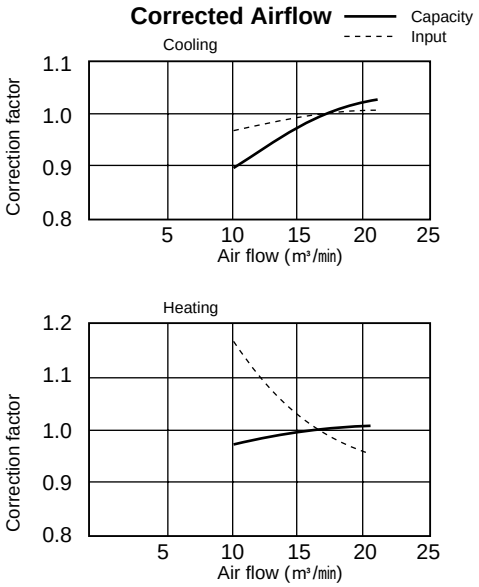
SEZ-KA35VA.TH





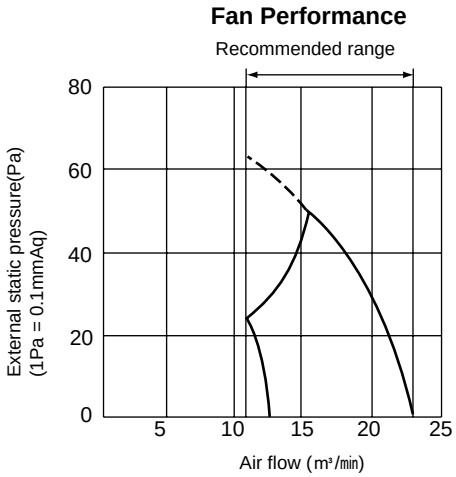
SEZ-KA50VA.TH

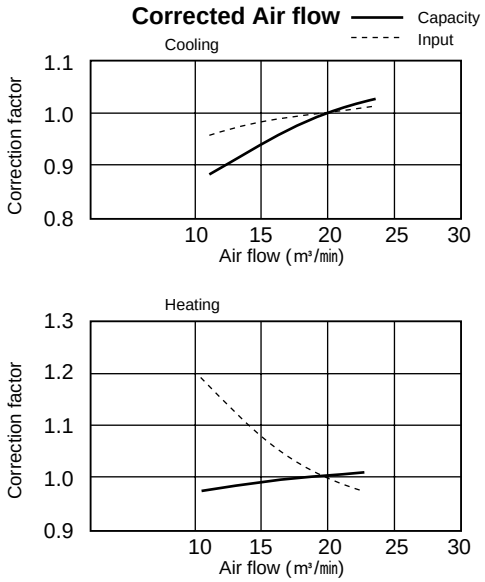




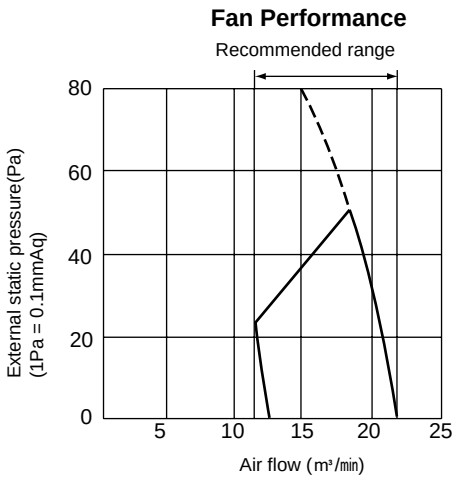
INDOOR FAN PERFORMANCE AND CORRECTED AIR FLOW

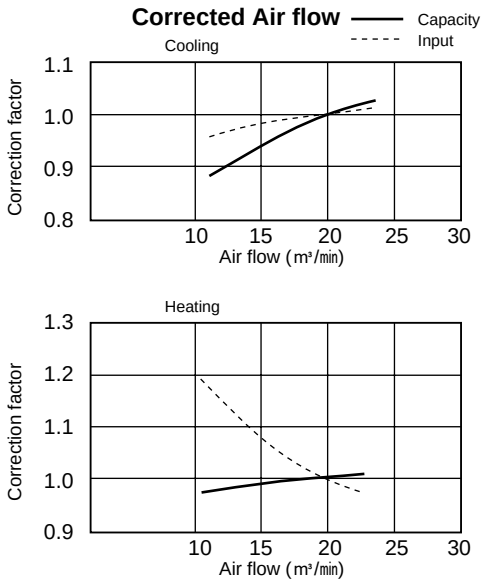
SEZ-KA60VA.TH





SEZ-KA71VA.TH

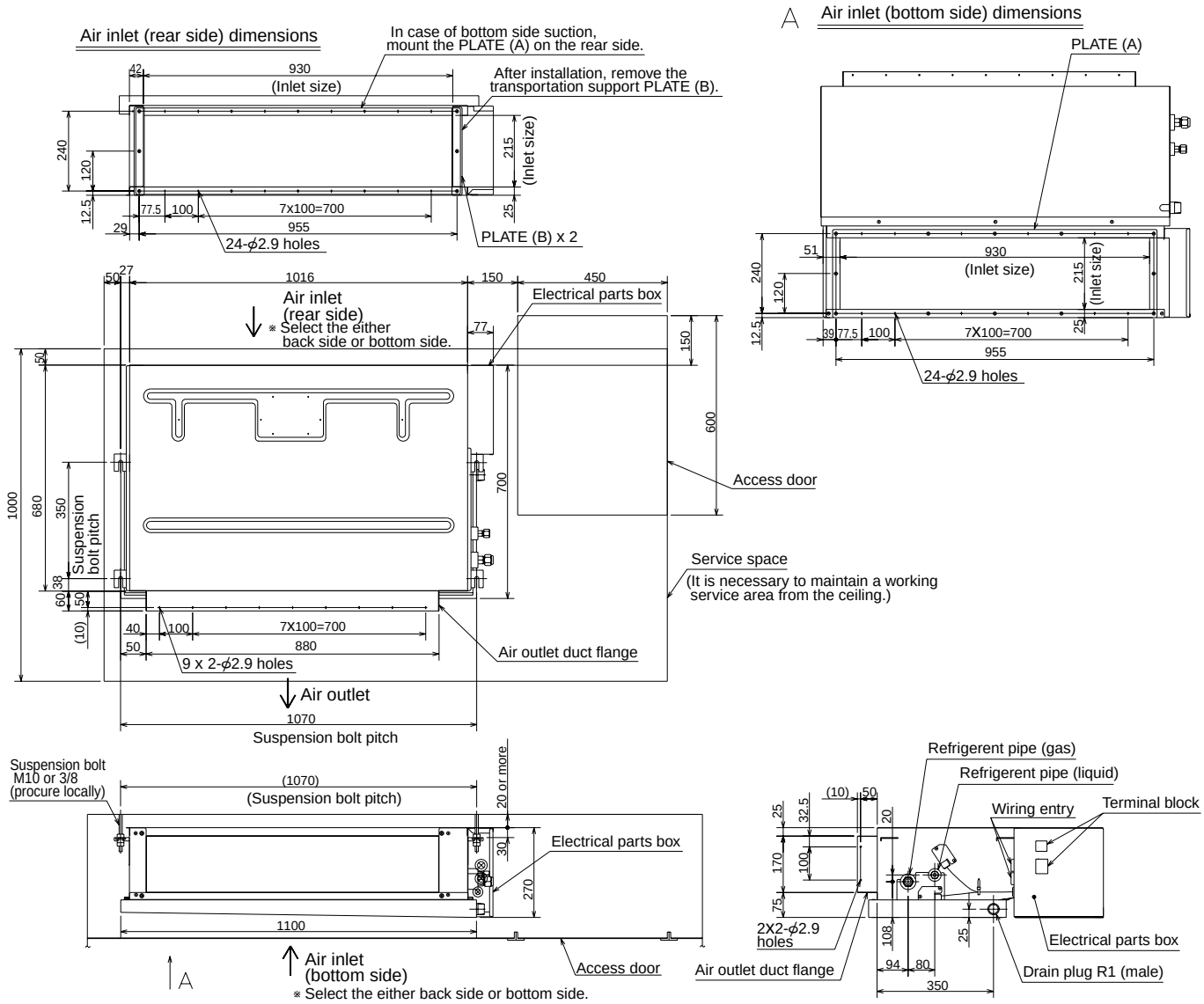




3 OUTLINES AND DIMENSIONS

SEZ-KA35VA.TH
SEZ-KA50VA.TH
SEZ-KA60VA.TH
SEZ-KA71VA.TH

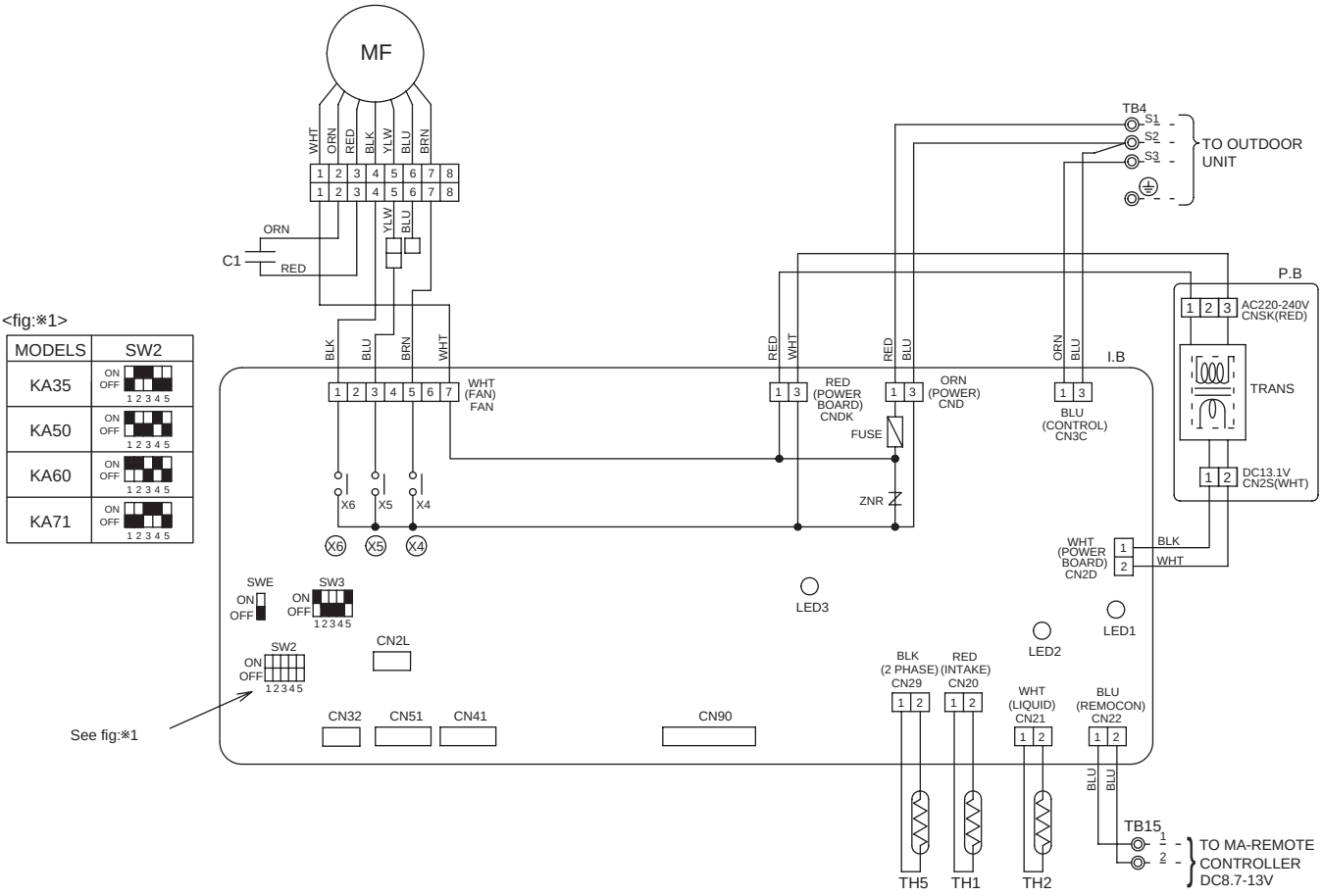
Unit : mm



Models	Refrigerent pipe (liquid)	Refrigerent pipe (gas)
SEZ-KA35VA	φ6.35mm flared connection 1/4F	φ9.52mm flared connection 3/8F
SEZ-KA50VA	φ6.35mm flared connection 1/4F	φ12.7mm flared connection 1/2F
SEZ-KA60VA	φ6.35mm flared connection 1/4F	φ15.88mm flared connection 5/8F
SEZ-KA71VA	φ9.52mm flared connection 3/8F	φ15.88mm flared connection 5/8F

4 WIRING DIAGRAM

SEZ-KA35VA.TH
SEZ-KA50VA.TH
SEZ-KA60VA.TH
SEZ-KA71VA.TH



<fig:※1>

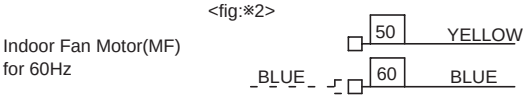
MODELS	SW2
KA35	ON OFF 1 2 3 4 5
KA50	ON OFF 1 2 3 4 5
KA60	ON OFF 1 2 3 4 5
KA71	ON OFF 1 2 3 4 5

[LEGEND]

SYMBOL		NAME	SYMBOL	NAME
P.B		INDOOR POWER BOARD	C1	CAPACITOR(FAN MOTOR)
I.B		INDOOR CONTROLLER BOARD	MF	FAN MOTOR
	CN2L	CONNECTOR(LOSSNAY)	TB4	TERMINAL BLOCK(INDOOR/OUTDOOR CONNECTING LINE)
	CN32	CONNECTOR(REMOTE SWITCH)	TB15	TERMINAL BLOCK(REMOTE CONTROLLER TRANSMISSION LINE)
	CN41	CONNECTOR(HA TERMINAL-A)		
	CN51	CENTRALLY CONTROL	TH1	ROOM TEMP.THERMISTOR (0°C/15kΩ,25°C/5.4kΩ DETECT)
	CN90	CONNECTOR(WIRELESS)		
	FUSE	FUSE(T6.3AL250V)	TH2	PIPE TEMP.THERMISTOR/LIQUID (0°C/15kΩ,25°C/5.4kΩ DETECT)
	LED1	POWER SUPPLY(I.B)		
	LED2	POWER SUPPLY(I.B)	TH5	COND./EVA.TEMP.THERMISTOR (0°C/15kΩ,25°C/5.4kΩ DETECT)
	LED3	TRANSMISSION(INDOOR-OUTDOOR)		
	SW2	SWITCH(CAPACITY CODE)		
	SW3	SWITCH(MODE SELECTION)		
	SWE	SWITCH(EMERGENCY OPERATION)		
	X4	RELAY(FAN MOTOR LL)		
	X5	RELAY(FAN MOTOR Lo)		
	X6	RELAY(FAN MOTOR Hi)		
	ZNR	VARISTOR		

NOTES: 1.Since the outdoor side electric wiring may change be sure to check the outdoor unit electric wiring for servicing.
2.Indoor and outdoor connecting wires are made with polarities,make wiring matching terminal numbers(S1,S2,S3).
3.Symbols used in wiring diagram above are, □□□ :Connector, ◎ :Terminal(block).
4.Since the indoor fan motor(MF) is connected with 50Hz power, if 60Hz power is used, change the wiring connection shown in fig:※2.

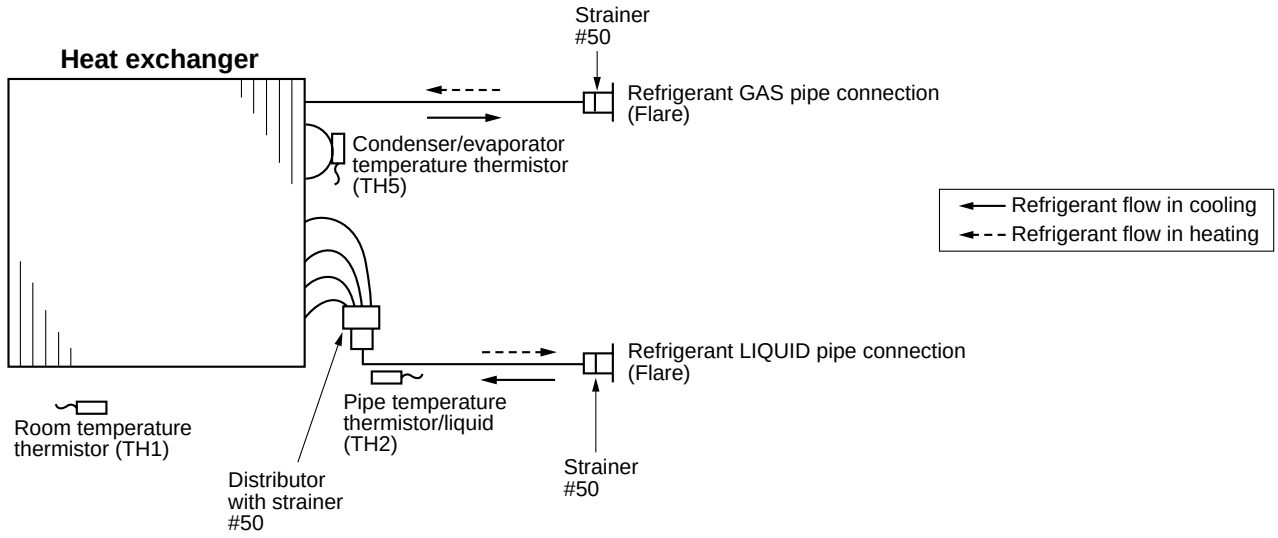
<fig:※2>



※For details on how to operate self-diagnosis, refer to the technical manuals etc.

5 REFRIGERANT SYSTEM DIAGRAM

SEZ-KA35VA.TH
SEZ-KA50VA.TH
SEZ-KA60VA.TH
SEZ-KA71VA.TH



6 TROUBLESHOOTING

6-1. CAUTIONS ON TROUBLESHOOTING

(1) Before troubleshooting, check the followings:

① Check the power supply voltage.

② Check the indoor/outdoor connecting wire for mis-wiring.

(2) Take care the followings during servicing.

① Before servicing the air conditioner, be sure to turn off the remote controller first to stop the main unit, and then turn off the breaker.

② When removing the indoor controller board, hold the edge of the board with care NOT to apply stress on the components.

③ When connecting or disconnecting the connectors, hold the housing of the connector. DO NOT pull the lead wires.

6-2. SELF-CHECK FUNCTION

Wired remote controller

(1) Turn on the power.

(2) Press the [CHECK] button twice.

(3) Set refrigerant address with [TEMP] button if system control is used.

(4) Press the [ON/OFF] button to stop the self-check.

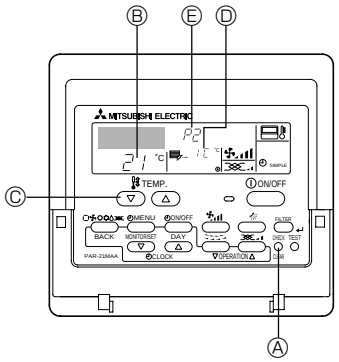
Ⓐ CHECK button

Ⓑ Refrigerant address

Ⓒ TEMP button

Ⓓ IC : Indoor unit
OC : Outdoor unit

Ⓔ Check code



• For description of each check code, refer to the following table.

① Check code	Symptom	Remark
P1	Intake sensor error	
P2	Pipe (TH2) sensor error	
P9	Pipe (TH5) sensor error	
E6,E7	Indoor/outdoor unit communication error	
P4	Drain sensor error	
P5	Drain pump error	
P6	Freezing/Overheating protection operation	
EE	Communication error between indoor and outdoor units	
P8	Pipe temperature error	
E0, E3~E5	Remote controller transmission error	
E1, E2	Remote controller control board error	
Fb	Indoor unit control system error (memory error, etc.)	
E9	Indoor/outdoor unit communication error (Transmitting error) (Outdoor unit)	For details, check the LED display of the outdoor controller board. As for outdoor unit, refer to service manual OC322.
UP	Compressor overcurrent interruption	
U3,U4	Open/short of outdoor unit thermistors	
UF	Compressor overcurrent interruption (When compressor locked)	
U2	Abnormal high discharging temperature/49C worked/insufficient refrigerant	
U1,Ud	Abnormal high pressure (63H worked)/Overheating protection operation	
U5	Abnormal temperature of heat sink	
U8	Outdoor unit fan safeguard stop	
U6	Compressor overcurrent interruption/Abnormal of power module	
U7	Abnormality of super heat due to low discharge temperature	
U9,UH	Abnormality such as overvoltage or voltage shortage and abnormal synchronous signal to main circuit /Current sensor error	
Others	Other errors (Refer to the technical manual for the outdoor unit.)	

• On wired remote controller.

① Check code displayed in the LCD.

• If the unit cannot be operated properly after the test run has been performed, refer to the following table to remove the cause.

Symptom			Cause
Wired remote controller		LED 1, 2 (PCB in outdoor unit)	
PLEASE WAIT	For about 2 minutes after power-on	After LED 1, 2 are lighted, LED 2 is turned off, then only LED 1 is lighted. (Correct operation)	• For about 2 minutes after power-on,operation of the remote controller is not possible due to system start-up. (Correct operation)
PLEASE WAIT → Error code	After about 2 minutes has expired after power-on	Only LED 1 is lighted. → LED 1, 2 blink.	• Connector for the outdoor unit's protection device is not connected. • Reverse or open phase wiring for the outdoor unit's power terminal block (L1, L2, L3)
Display messages do not appear even when operation switch is turned ON (operation lamp does not light up).		Only LED 1 is lighted. → LED 1 blinks twice, LED 2 blinks once.	• Incorrect wiring between indoor and outdoor units (incorrect polarity of S1, S2, S3) • Remote controller wire short

On the wireless remote controller with condition above, following phenomena take place.
• No signals from the remote controller are accepted.
• Operation lamp is blinking.
• The buzzer makes a short piping sound.

Note:
Operation is not possible for about 30 seconds after cancellation of function selection. (Correct operation)

For description of each LED (LED1, 2, 3) provided on the indoor controller, refer to the following table.

LED1 (power for microcomputer)	Indicates whether control power is supplied. Make sure that this LED is always lit.
LED2 (power for remote controller)	Indicates whether power is supplied to the remote controller. This LED lights only in the case of the indoor unit which is connected to the outdoor unit refrigerant address "0".
LED3 (communication between indoor and outdoor units)	Indicates state of communication between the indoor and outdoor units. Make sure that this LED is always blinking.

6-3. SELF-DIAGNOSIS ACTION TABLE

Note: Refer to the manual of outdoor unit for the details of display such as F, U, and other E.

Error Code	Meaning of error code and detection method	Cause	Countermeasure
P1	**Abnormality of room temperature thermistor (TH1)** ① The unit is in three-minute resume prevention mode if short/open of thermistor is detected. Abnormal if the unit does not reset normally after three minutes. (The unit returns to normal operation, if it has normally reset.) ② Constantly detected during cooling, drying and heating operation Short: 90℃ or more Open: -40℃ or less	① Defective thermistor characteristics ② Contact failure of connector (CN20) on the indoor controller board (Insert failure) ③ Breaking of wire or contact failure of thermistor wiring ④ Defective indoor controller board	①–③ Check resistance value of thermistor. 0℃ ……15.0kΩ 10℃ ….9.6kΩ 20℃ ….6.3kΩ 30℃ ….4.3kΩ 40℃ ….3.0kΩ If you put force on (draw or bend) the lead wire with measuring resistance value of thermistor breaking of wire or contact failure can be detected. ② Check contact failure of connector (CN20) on the indoor controller board. Refer to 6-5. Turn the power back on and check restart after inserting connector again. ④ Check room temperature display on remote controller. Replace indoor controller board if there is abnormal difference with actual room temperature. Turn the power off, and on again to operate after checking.
P2	**Abnormality of pipe temperature thermistor/Liquid (TH2)** ① The unit is in three-minute resume prevention mode if short/open of thermistor is detected. Abnormal if the unit does not reset normally after three minutes. (The unit returns to normal operation, if it has normally reset.) ② Constantly detected during cooling, drying, and heating (except defrosting) operation. Short: 90℃ or more Open: -40℃ or less	① Defective thermistor characteristics ② Contact failure of connector (CN21) on the indoor controller board (Insert failure) ③ Breaking of wire or contact failure of thermistor wiring ④ Defective refrigerant circuit is causing thermistor temperature of 90℃ or more or -40℃ or less. ⑤ Defective indoor controller board	①–③ Check resistance value of thermistor. For characteristics, refer to (P1) above. ② Check contact failure of connector (CN21) on the indoor controller board. Refer to 6-5. Turn the power on and check restart after inserting connector again. ④ Check pipe <liquid> temperature with remote controller in test run mode. If pipe <liquid> temperature is exclusively low (in cooling mode) or high (in heating mode), refrigerant circuit may have defective. ⑤ Check pipe <liquid> temperature with remote controller in test run mode. If there is exclusive difference with actual pipe <liquid> temperature, replace indoor controller board. Turn the power off, and on again to operate after checking.
P4	**Abnormality of drain sensor (DS)** ① Suspensive abnormality, if short/open of thermistor is detected for 30 seconds continuously. Turn off compressor and indoor fan. ② Short/open is detected for 30 seconds continuously during suspensive abnormality. (The unit returns to normal operation, if it has normally reset.) ③ Detect the following condition. • During cooling and drying operation. • In case that pipe <liquid> temperature - room temperature <-10deg (Except defrosting) • When pipe <liquid> temperature or room temperature is short/open temperature. • During drain pump operation	① Defective thermistor characteristics ② Contact failure of connector (CN31) on the indoor controller board (Insert failure) ③ Breaking of wire or contact failure of drain sensor wiring ④ Defective indoor controller board	①–③ Check resistance value of thermistor. 0℃ ……6.0kΩ 10℃ ….3.9kΩ 20℃ ….2.6kΩ 30℃ ….1.8kΩ 40℃ ….1.3kΩ ② Check contact failure of connector (CN31) on the indoor controller board. Refer to 6-5. Turn the power back on and check restart after inserting connector again. ④ Replace indoor controller board if drain pump operates with the line of drain sensor connector CN31-① and ② is short-circuited, and abnormality reappears. Turn the power off, and on again to operate after checking.
P5	**Malfunction of drain pump (DP)** ① Suspensive abnormality, if thermistor of drain sensor is let heat itself and temperature rises slightly. Turn off compressor and indoor fan. ② Drain pomp is abnormal if the condition above is detected during suspensive abnormality. ③ Constantly detected during drain pump operation	① Malfunction of drain pump ② Defective drain Clogged drain pump Clogged drain pipe ③ Attached drop of water at the drain sensor • Drops of drain trickles from lead wire • Clogged filter is causing wave of drain. ④ Defective indoor controller board	① Check if drain-up machine works. ② Check drain function. ③ Check the setting of lead wire of drain sensor and check clogs of the filter. ④ Replace indoor controller board if drain pump operates with the line of drain sensor connector CN31-① and ② is short-circuited and abnormality reappears. Refer to 6-5. Turn the power off, and on again to operate after checking.

Error Code	Meaning of error code and detection method	Cause	Countermeasure
P6	**Freezing/overheating protection is working** ① Freezing protection (Cooling mode) The unit is in six-minute resume prevention mode if pipe <liquid or condenser/evaporator> temperature stays under -15℃ for three minutes after the compressor started. Abnormal if it stays under -15℃ for three minutes again within 16 minutes after six-minute resume prevention mode. <Frost prevention mode> If pipe <liquid or condenser-evaporator> temperature is 2℃ or below when 16 minutes has passed after compressor starts operating, unit will start operating in frost prevention mode which stops compressor operation. After that, when pipe <liquid or condenser/evaporator> temperature stays 10℃ or more for 3 minutes, frost prevention mode will be released and compressor will restart its operation. ② Overheating protection (Heating mode) The units is in six-minute resume prevention mode if pipe <condenser / evaporator> temperature is detected as over 70℃ after the compressor started. Abnormal if the temperature of over 70℃ is detected again within 10 minutes after six-minute resume prevention mode.	(Cooling or drying mode) ① Clogged filter (reduced airflow) ② Short cycle of air path ③ Low-load (low temperature) operation beyond the tolerance range ④ Defective indoor fan motor • Fan motor is defective. • Indoor controller board is defective. ⑤ Defective outdoor fan control ⑥ Overcharge of refrigerant ⑦ Defective refrigerant circuit (clogging) (Heating mode) ① Clogged filter (reduced airflow) ② Short cycle of air path ③ Over-load (high temperature) operation beyond the tolerance range ④ Defective indoor fan motor • Fan motor is defective. • Indoor controller board is defective. ⑤ Defective outdoor fan control ⑥ Overcharge of refrigerant ⑦ Defective refrigerant circuit (clogging) ⑧ Bypass circuit of outdoor unit is defective.	(Cooling or drying mode) ① Check clogging of the filter. ② Remove shields. ④ Measure the resistance of fan motor's winding. Measure the output voltage of fan's connector (FAN) on the indoor controller board. ※The indoor controller board should be normal when voltage of AC 220~240V is detected while fan motor is connected. Refer to 6-5. ⑤ Check outdoor fan motor. ⑥⑦ Check operating condition of refrigerant circuit. (Heating mode) ① Check clogs of the filter. ② Remove shields. ④ Measure the resistance of fan motor's winding. Measure the output voltage of fan's connector (FAN) on the indoor controller board. ※The indoor controller board should be normal when voltage of AC 220~240V is detected while fan motor is connected. Refer to 6-5. ⑤ Check outdoor fan motor. ⑥~⑧Check operating condition of refrigerant circuit.
P8	**Abnormality of pipe temperature** <Cooling mode> Detected as abnormal when the pipe temperature is not in the cooling range 3 minutes after compressor start and 6 minutes after the liquid or condenser/evaporator pipe is out of cooling range. Note 1) It takes at least 9 min. to detect. Note 2) Abnormality P8 is not detected in drying mode. Cooling range : -3 deg ≧ (TH-TH1) TH: Lower temperature between: liquid pipe temperature (TH2) and condenser/evaporator temperature (TH5) TH1: Intake temperature <Heating mode> When 10 seconds have passed after the compressor starts operation and the hot adjustment mode has finished, the unit is detected as abnormal when condenser/evaporator pipe temperature is not in heating range within 20 minutes. Note 3) It takes at least 27 minutes to detect abnormality. Note 4) It excludes the period of defrosting (Detection restarts when defrosting mode is over) Heating range : 3 deg ≦ (TH5-TH1)	① Slight temperature difference between indoor room temperature and pipe <liquid or condenser / evaporator> temperature thermistor • Shortage of refrigerant • Disconnected holder of pipe <liquid or condenser / evaporator> thermistor • Defective refrigerant circuit ② Converse connection of extension pipe (on plural units connection) ③ Converse wiring of indoor/outdoor unit connecting wire (on plural units connection) ④ Defective detection of indoor room temperature and pipe <condenser / evaporator> temperature thermistor ⑤ Stop valve is not opened completely.	①~④ Check pipe <liquid or condenser / evaporator> temperature with room temperature display on remote controller and outdoor controller circuit board. Pipe <liquid or condenser / evaporator> temperature display is indicated by setting SW2 of outdoor controller circuit board as follows. (Conduct temperature check with outdoor controller circuit board after connecting 'A-Control Service Tool(PAC-SK52ST)'.) ②③Check converse connection of extension pipe or converse wiring of indoor/outdoor unit connecting wire.

Error Code	Meaning of error code and detection method	Cause	Countermeasure
P9	**Abnormality of pipe temperature thermistor / Condenser-Evaporator (TH5)** ① The unit is in three-minute resume protection mode if short/open of thermistor is detected. Abnormal if the unit does not get back to normal within three minutes. (The unit returns to normal operation, if it has normally reset.) ② Constantly detected during cooling, drying, and heating operation (except defrosting) Short: 90℃ or more Open: -40℃ or less	① Defective thermistor characteristics ② Contact failure of connector (CN29) on the indoor controller board (Insert failure) ③ Breaking of wire or contact failure of thermistor wiring ④ Temperature of thermistor is 90℃ or more or -40℃ or less caused by defective refrigerant circuit. ⑤ Defective indoor controller board	①–③ Check resistance value of thermistor. For characteristics, refer to (P1) above. ② Check contact failure of connector (CN29) on the indoor controller board. Refer to 6-5. Turn the power on and check restart after inserting connector again. ④ Operate in test run mode and check pipe <condenser / evaporator> temperature with outdoor controller circuit board. If pipe <condenser / evaporator> temperature is exclusively low (in cooling mode) or high (in heating mode), refrigerant circuit may have defect. ⑤ Operate in test run mode and check pipe <condenser / evaporator> temperature with outdoor control circuit board. If there is exclusive difference with actual pipe <condenser / evaporator> temperature replace indoor controller board. There is no abnormality if none of above comes within the unit. Turn the power off and on again to operate. (In case of checking pipe temperature with outdoor controller circuit board, be sure to connect A-control service tool (PAC-SK52ST).)
E0 or E4	**Remote controller transmission error(E0)/signal receiving error(E4)** ① Abnormal if main or sub remote controller can not receive normally any transmission from indoor unit of refrigerant address “0” for three minutes. (Error code : E0) ② Abnormal if sub remote controller could not receive for any signal for two minutes. (Error code: E0) ① Abnormal if indoor controller board can not receive normally any data from remote controller board or from other indoor controller board for three minutes. (Error code: E4) ② Indoor controller board cannot receive any signal from remote controller for two minutes. (Error code: E4)	① Contact failure at transmission wire of remote controller ② All remote controllers are set as “sub” remote controller. In this case, E0 is displayed on remote controller, and E4 is displayed at LED (LED1, LED2) on the outdoor controller circuit board. ③ Mis-wiring of remote controller ④ Defective transmitting receiving circuit of remote controller ⑤ Defective transmitting receiving circuit of indoor controller board of refrigerant address “0” ⑥ Noise has entered into the transmission wire of remote controller.	① Check disconnection or looseness of indoor unit or transmission wire of remote controller. ② Set one of the remote controllers “main”. If there is no problem with the action above. ③ Check wiring of remote controller. • Total wiring length: max.500m (Do not use cablex 3 or more) • The number of connecting indoor units: max.16units • The number of connecting remote controller: max.2units When it is not the above-mentioned problem of ①~③ ④ Diagnose remote controllers. a) When “RC OK” is displayed, Remote controllers have no problem. Put the power off, and on again to check. If abnormality generates again, replace indoor controller board. b) When “RC NG” is displayed, Replace remote controller. c) When “RC E3” is displayed, d) When “ERC 00-06” is displayed, [c),d)→Noise may be causing abnormality.] ＊ If the unit is not normal after replacing indoor controller board in group control, indoor controller board of address “0” may be abnormal.
E3 or E5	**Remote controller transmission error(E3)/signal receiving error(E5)** ① Abnormal if remote controller could not find blank of transmission path for six seconds and could not transmit. (Error code: E3) ② Remote controller receives transmitted data at the same time, compares the data, and when detecting it, judges different data to be abnormal 30 continuous times. (Error code: E3) ① Abnormal if indoor controller board could not find blank of transmission path. (Error code: E5) ② Indoor controller board receives transmitted data at the same time, compares the data,and when detecting it, judges different data to be abnormal 30 continuous times. (Error code: E5)	① Two remote controller are set as “main.” (In case of 2 remote controllers) ② Remote controller is connected with two indoor units or more. ③ Repetition of refrigerant address ④ Defective transmitting receiving circuit of remote controller ⑤ Defective transmitting receiving circuit of indoor controller board ⑥ Noise has entered into transmission wire of remote controller.	① Set a remote controller to main, and the other to sub. ② Remote controller is connected with only one indoor unit. ③ The address changes to a separate setting. ④~⑥ Diagnose remote controller. a) When “RC OK”is displayed, remote controllers have no problem. Put the power off,and on again to check. When becoming abnormal again, replace indoor controller board. b)When “RC NG”is displayed, replace remote controller. c)When “RC E3”or “ERC 00-66”is displayed, noise may be causing abnormality.

Error Code	Meaning of error code and detection method	Cause	Countermeasure
E6	**Indoor/outdoor unit communication error (Signal receiving error)** ① Abnormal if indoor controller board cannot receive any signal normally for six minutes after putting the power on. ② Abnormal if indoor controller board cannot receive any signal normally for three minutes. ③ Consider the unit abnormal under the following condition: When two or more indoor units are connected to one outdoor unit, indoor controller board cannot receive a signal for three minutes from outdoor controller circuit board, a signal which allows outdoor controller circuit board to transmit signals.	① Contact failure, short circuit or, mis-wiring (converse wiring) of indoor/outdoor unit connecting wire ② Defective transmitting receiving circuit of indoor controller board ③ Defective transmitting receiving circuit of indoor controller board ④ Noise has entered into indoor/ outdoor unit connecting wire.	∗ Check LED display on the outdoor control circuit board. (Connect A-control service tool, PAC-SK52ST.) Refer to EA-EC item if LED displays EA-EC. ① Check disconnection or looseness of indoor/ outdoor unit connecting wire of indoor unit or outdoor unit. Check all the units in case of twin triple indoor unit system. ②-④ Turn the power off, and on again to check. If abnormality generates again, replace indoor controller board or outdoor controller circuit board. ∗ Other indoor controller board may have defect in case of twin triple indoor unit system.
E7	**Indoor/outdoor unit communication error (Transmitting error)** Abnormal if "1" receiving is detected 30 times continuously though indoor controller board has transmitted "0".	① Defective transmitting receiving circuit of indoor controller board ② Noise has entered into power supply. ③ Noise has entered into outdoor control wire.	①-③ Turn the power off, and on again to check. If abnormality generates again, replace indoor controller board.
Fb	**Abnormality of indoor controller board** Abnormal if data cannot be normally read from the nonvolatile memory of the indoor controller board.	① Defective indoor controller board	① Replace indoor controller board.
E1 or E2	**Abnormality of remote controller control board** ① Abnormal if data cannot be normally read from the nonvolatile memory of the remote controller control board. (Error code: E1) ② Abnormal if the clock function of remote controller cannot be normally operated. (Error code: E2)	① Defective remote controller	① Replace remote controller.
PA (2502) (2500)	**Forced compressor stop (due to water leakage abnormality)** ① When the intake temperature subtracted with liquid pipe temperature is less than -10℃, drain sensor is detected whether it is soaked in the water or not at the interval of 90 seconds. (Drain pump will start operating when the drain sensor is detected to be soaked in the water.) ② The unit has a water leakage abnormality when the following conditions, a and b, are satisfied while the above-mentioned detection is performed. a) The drain sensor is detected to be soaked in the water 10 times in a row. b) The intake temperature subtracted with liquid pipe temperature is detected to be less than -10℃ for a total of 30 minutes. (When the drain sensor is detected to be NOT soaked in the water, the detection record of a and b will be cleared.) ③ The drain sensor detection is performed in operations other than cooling. (When the unit stops operating, during heating or fan operation, when the unit stops because of some abnormality) *Once the water leakage abnormality is detected, abnormality state will not be released until the main power is reset.	① Drain pump trouble ② Drain defective · Drain pump clogging · Drain pipe clogging ③ Open circuit of drain sensor side heater ④ Contact failure of drain sensor connector ⑤ Dew condensation on drain sensor · Drain water descends along lead wire. · Drain water waving due to filter clogging ⑥ Extension piping connection difference at twin, triple, quadruple system ⑦ Mis-wiring of indoor/ outdoor connecting at twin, triple, quadruple system ⑧ Room temperature thermistor / liquid pipe temperature thermistor detection is defective.	①Check the drain pump. Performance ②Please confirm whether water can be drained. ③Confirm the resistance of the drain sensor side heater. ④Check the connector contact failure. ⑤ Check the drain sensor leadwire mounted. Check the filter clogging. ⑥Check the piping connection. ⑦Check the indoor/ outdoor connecting wires. ⑧Check the room temperature display of remote controller. Check the indoor liquid pipe temperature display of outdoor controller board.

6-4. TROUBLESHOOTING BY INFERIOR PHENOMENA

Note: Refer to the manual of outdoor unit for the detail of remote controller.

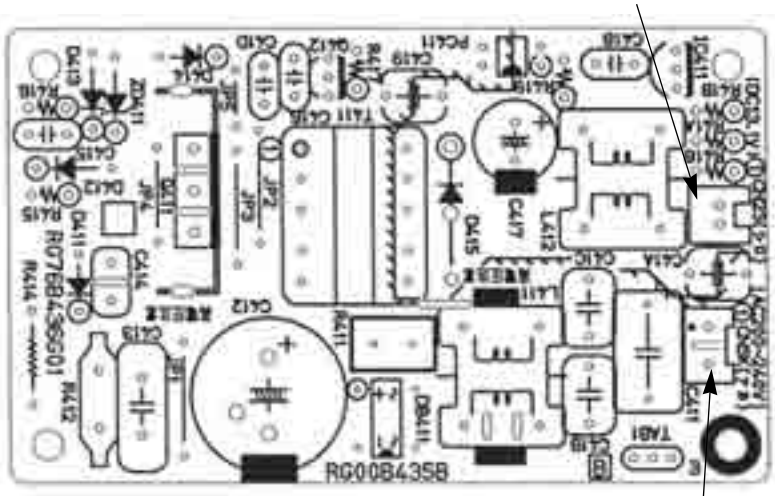
Phenomena	Cause	Countermeasure
(1)LED2 on indoor controller board is off.	• When LED1 on indoor controller board is also off. ① Power supply of rated voltage is not supplied to outdoor unit.	① Check the voltage of outdoor power supply terminal block (L, N) or (L_3, N). • When AC 220~240V is not detected. Check the power wiring to outdoor unit and the breaker. • When AC 220~240V is detected. —Check ② (below).
	② Defective outdoor controller circuit board	② Check the voltage between outdoor terminal block S1 and S2. • When AC 220~240V is not detected. Check the fuse on outdoor controller circuit board. Check the wiring connection. • When AC 220~240V is detected. —Check ③ (below).
	③ Power supply of 220~240V is not supplied to indoor unit.	③ Check the voltage between indoor terminal block S1 and S2. • When AC 220~240V is not detected. Check indoor/outdoor unit connecting wire for mis-wiring. • When AC 220~240V is detected. —Check ④ (below).
	④ Defective indoor power board	④ Check voltage output from CN2S on indoor power board (DC13.1V). Refer to 6-5. • When no voltage is output. Check the wiring connection. • When output voltage is between DC12.5V and DC13.7V. —Check ⑤ (below).
	⑤ Defective indoor controller board	⑤ Check the wiring connection between indoor controller board and indoor power board. Check the fuse on indoor controller board. If no problems are found, indoor controller board is defective.
	• When LED1 on indoor controller board is lit. ① Mis-setting of refrigerant address for outdoor unit (There is no unit corresponding to refrigerant address “0”.)	① Reconfirm the setting of refrigerant address for outdoor unit Set the refrigerant address to “0”. (For grouping control system under which 2 or more outdoor units are connected, set one of the units to “0”.) Set refrigerant address using SW1 (3-6) on outdoor controller circuit board.
(2)LED2 on indoor controller board is blinking.	• When LED1 on indoor controller board is also blinking. Connection failure of indoor/outdoor unit connecting wire	Check indoor/outdoor unit connecting wire for connection failure.
	• When LED1 is lit. ① Mis-wiring of remote controller wires Under twin triple indoor unit system, 2 or more indoor units are wired together.	① Check the connection of remote controller wires in case of twin triple indoor unit system. When 2 or more indoor units are wired in one refrigerant system, connect remote controller wires to one of those units.
	② Refrigerant address for outdoor unit is wrong or not set. Under grouping control system, there are some units whose refrigerant address is 0.	② Check the setting of refrigerant address in case of grouping control system. If there are some units whose refrigerant addresses are 0 in one group, set one of the units to 0 using SW1 (3-6) on outdoor controller circuit board.
	③ Short-cut of remote controller wires ④ Defective remote controller	③④ Remove remote controller wires and check LED2 on indoor controller board. • When LED2 is blinking, check the short-cut of remote controller wires. • When LED2 is lit, connect remote controller wires again and: if LED2 is blinking, remote controller is defective; if LED2 is lit, connection failure of remote controller terminal block etc. has returned to normal.

6-5. TEST POINT DIAGRAM

6-5-1. Indoor power board

SEZ-KA35VA.TH
SEZ-KA50VA.TH
SEZ-KA60VA.TH
SEZ-KA71VA.TH

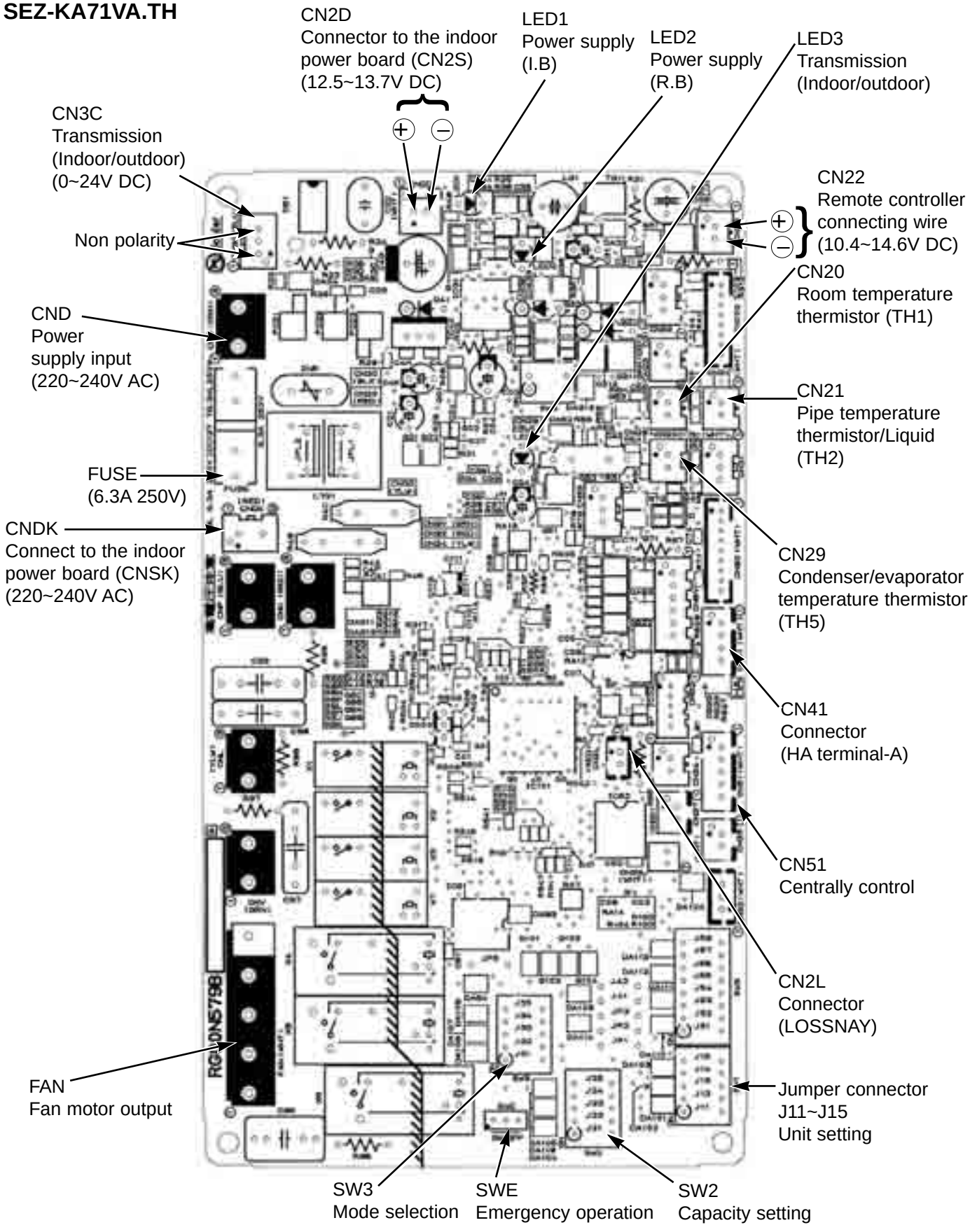
CN2S
Connect to the indoor controller board (CN2D)
between ① to ③ 12.6-13.7V DC (Pin① (+))



CNSK
Connect to the indoor controller board
(CNDK)
between ① to ③ 220-240V AC

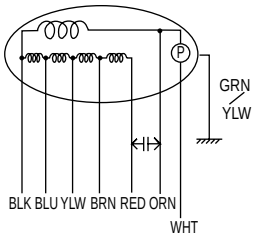
6-5-2. Indoor controller board

SEZ-KA35VA.TH
SEZ-KA50VA.TH
SEZ-KA60VA.TH
SEZ-KA71VA.TH



6-6. TROUBLE CRITERION OF MAIN PARTS

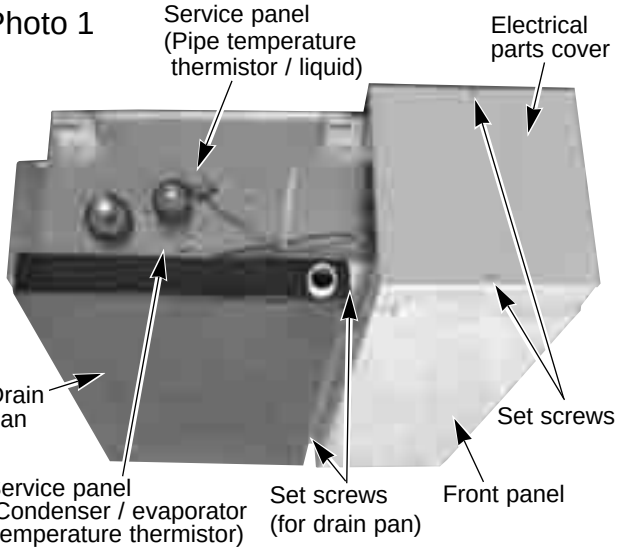
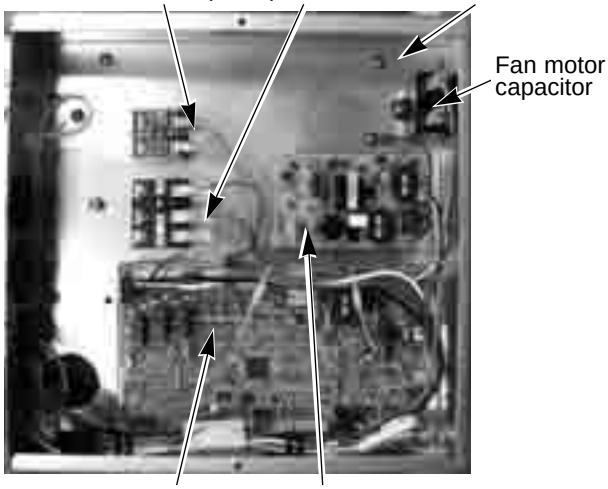
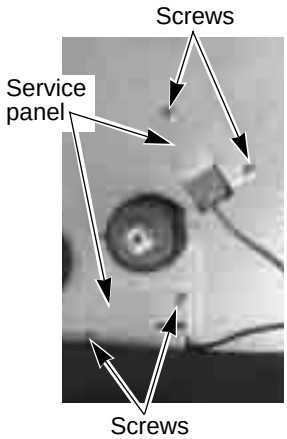
SEZ-KA35VA.TH
SEZ-KA50VA.TH
SEZ-KA60VA.TH
SEZ-KA71VA.TH

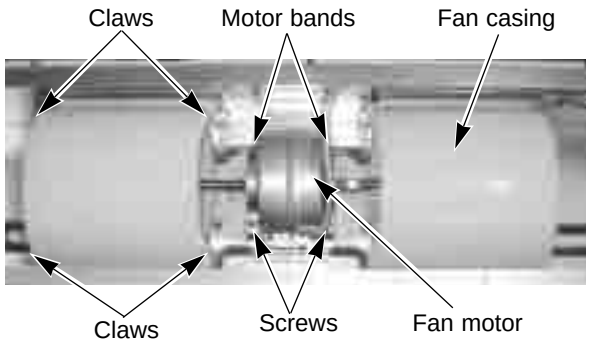
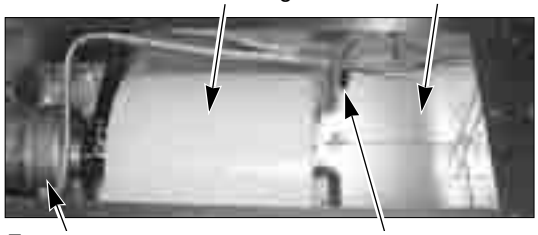
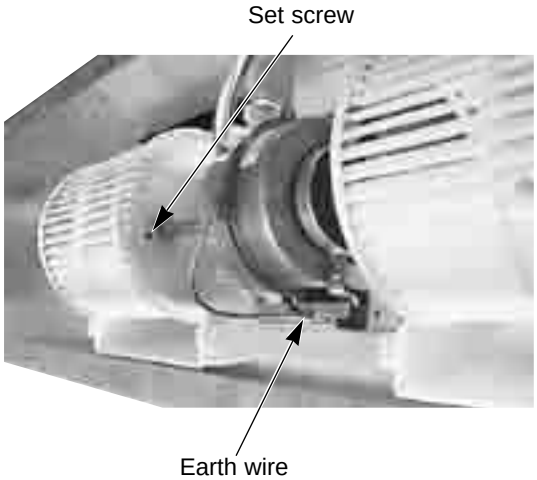
<table>
<tr><th>Part name</th><th>Check method and criterion</th></tr>
<tr><td>Room temperature thermistor (TH1)
Pipe temperature thermistor/liquid (TH2)
Condenser/evaporator temperature thermistor (TH5)</td><td>Measure the resistance with a tester.
(Part temperature 10°C ~ 30°C)
<table><tr><th>Normal</th><th>Abnormal</th></tr><tr><td>8kΩ~20kΩ</td><td>Opened or short-circuited</td></tr></table></td></tr>
<tr><td>Indoor fan motor (MF)
 

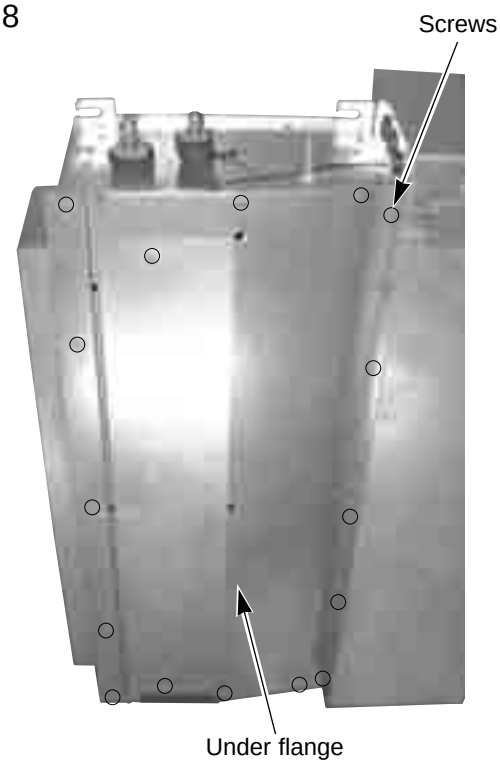
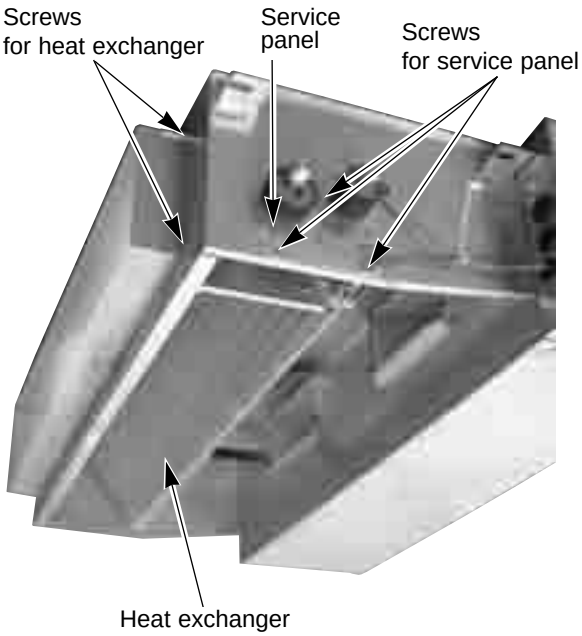
Ⓟ : Thermal fuse
141 ± 3˚C</td><td>Measure the resistance between the terminals with a tester.
(Coil wiring temperature 10°C ~ 30°C)
<table><tr><th rowspan="2"></th><th colspan="4">Normal</th><th rowspan="2">Abnormal</th></tr><tr><th>KA35VA</th><th>KA50VA</th><th>KA60VA</th><th>KA71VA</th></tr><tr><td>WHT-BLK</td><td>270~244Ω</td><td>157~175Ω</td><td>97~109Ω</td><td>103~113Ω</td><td rowspan="5">Opened or short-circuited</td></tr><tr><td>BLK-BLU</td><td>19~21Ω</td><td>49~55Ω</td><td>54~60Ω</td><td>28~30Ω</td></tr><tr><td>BLU-YLW</td><td>25~29Ω</td><td>18~20Ω</td><td>14~16Ω</td><td>25~27Ω</td></tr><tr><td>YLW-BRN</td><td>13~15Ω</td><td>7~9Ω</td><td>6~8Ω</td><td>13~15Ω</td></tr><tr><td>BRN-RED</td><td>48~54Ω</td><td>38~42Ω</td><td>27~31Ω</td><td>32~36Ω</td></tr></table></td></tr>
</table>

7 DISASSEMBLY PROCEDURE

SEZ-KA35VA.TH
SEZ-KA50VA.TH
SEZ-KA60VA.TH
SEZ-KA71VA.TH

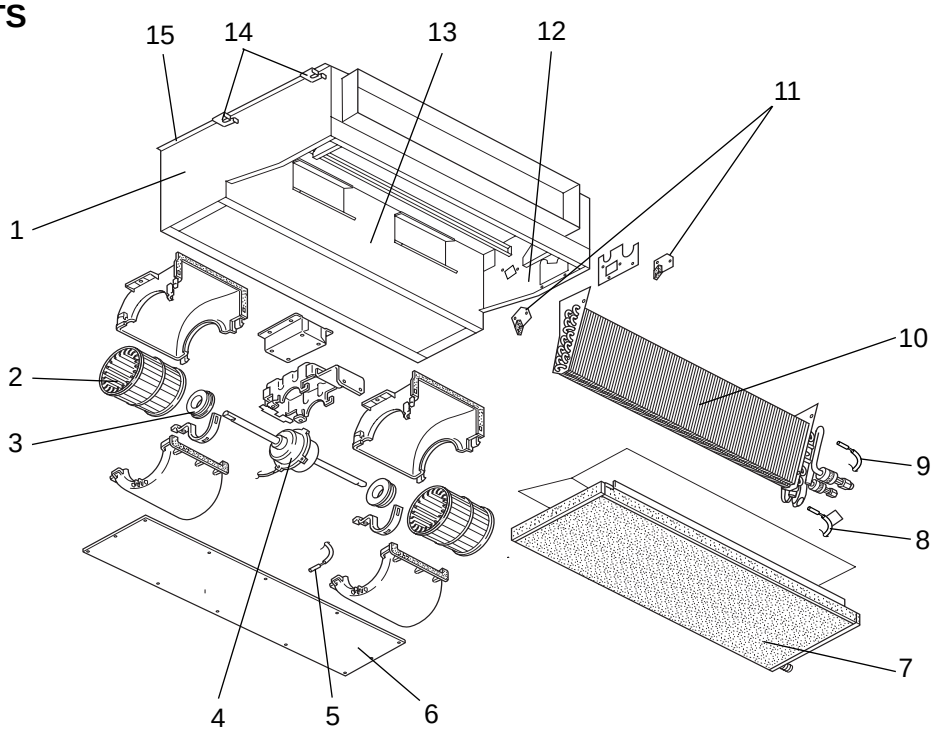
OPERATING PROCEDURE	PHOTOS
1. Removing the electrical parts (1) Remove 2 screws of electrical cover and electrical parts cover. (See Photo 1) ● Indoor controller board (I.B) ● Terminal block (TB4,TB15) ● Indoor power board (P.B) ● Fan motor capacitor (C1) (See Photo 2)	Photo 1 
2. Removing the pipe temperature thermistor (TH2) (1) Remove the electrical parts cover. (Refer to **1**) (2) Remove 2 screws of service panel and service panel. (See Photo 3) (3) Remove the thermistor (TH2) from the holder. (See Photo 4) (4) Remove the connector (CN21) from the indoor controller board and pull the white wire of thermistor (TH2) out.	Photo 2 
3. Removing the condenser / evaporator temperature thermistor (TH5) (1) Remove the electrical parts cover. (Refer to **1**) (2) Remove the service panel. (See Photo 3) (3) Remove the thermistor (TH5) from the holder. (See Photo 4) (4) Remove the connector (CN29) from the indoor controller board and pull the black wire of thermistor (TH5) out.	Photo 3  Photo 4 

OPERATING PROCEDURE	PHOTOS
4. Removing the room temperature thermistor (TH1) (1) Remove the electrical parts cover. (Refer to **1**) (2) Remove 12 screws of front panel and the front panel at fan side. (See Photo 1) (3) Remove the thermistor (TH1) from the separator panel. (See Photo 6) (4) Disconnect the connector (CN20)from the indoor controller board and pull the lead wire of thermistor (TH1) out.	Photo 5  Photo 6 
5. Removing the sirocco fan and the fan motor (MF). (1) Remove the electrical parts cover. (Refer to **1**) (2) Remove 12 screws of front panel and the front panel at fan side. (See Photo 1) (3) Disconnect the connector of the fan motor lead wire. (See Photo 2) (4) Undo the 4 claws and remove the fan claws.(down side) <Either left or right> (See Photo 5) (5) Remove the motor bands. <A screw each on left and right.> (See Photo 5) (6) Disconnect the earth wire from the fan motor leg. (See Photo 7) (7) Remove the fan motor and the sirocco fan by assembly. (See Photo 7) (8) Unscrew set screw and remove the sirocco fan. <Either left or right> (See Photo 7)	Photo 7 

OPERATING PROCEDURE	PHOTOS
6. Removing the drain pan (1) Unscrew each set screw on the right and left, and remove the drain pan pushing it toward the the back. (See Photo 1)	
7. Removing the heat exchanger (1) Remove the drain pan. (Refer to **6**) (2) Remove the 16 screws and the Under flange at heat exchanger side. (See Photo 8) (3) Remove the 4 screws of heat exchanger.(2 screws each on left and right) (See Photo 9) (4) Remove the thermistor (TH2) from the holder. (Refer to **2**) (5) Remove the thermistor (TH5) from the holder. (Refer to **3**) (6) Remove the 3 screws and the service panel. (See Photo 9) (7) Put the heat exchanger down to the fan motor and pull it toward you. (See Photo 9)	Photo 8  Photo 9 

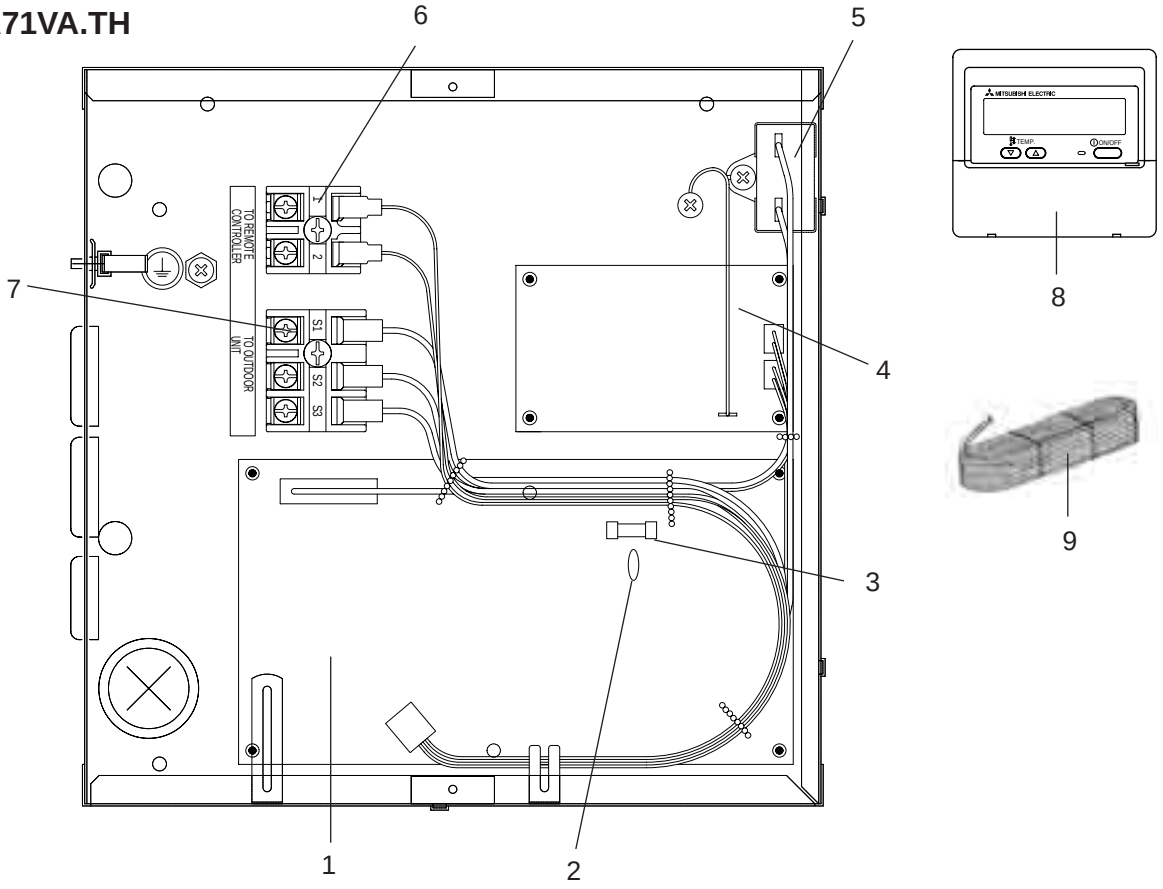
8 PARTS LIST (non-RoHS compliant)

INDOOR UNIT
STRUCTURAL PARTS
SEZ-KA35VA.TH
SEZ-KA50VA.TH
SEZ-KA60VA.TH
SEZ-KA71VA.TH



No.	Parts No.	Parts name	Specification	Q'ty/set SEZ-KA·VA.TH				Remarks (Drawing No.)	Wiring Diagram Symbol	Recommended Q'ty	Price	
				35	50	60	71				Unit	Amount
1	E07 039 086	LEFT SIDE PANEL		1	1	1	1					
2	E07 039 500	SIROCCO FAN		2	2	2	2					
3	E02 179 505	FAN MOTOR RUBBER MOUNT		2	2	2	2	<2PCS/SET>				
4	E07 039 300	FAN MOTOR	PK6V19-EF	1					MF			
	E07 040 300	FAN MOTOR	PK6V32-EF		1				MF			
	E07 041 300	FAN MOTOR	PK6V50-EF			1			MF			
	E07 223 300	FAN MOTOR	PK4V60-EA				1		MF			
5	E07 159 308	ROOM TEMPERATURE THERMISTOR		1	1	1	1		TH1			
6	E07 039 000	FRONT PANEL		1	1	1	1					
7	E07 039 700	DRAIN PAN		1	1	1	1					
8	E07 154 309	CONDENSER / EVAPORATOR TEMPERATURE THERMISTOR		1	1	1	1		TH5			
9	E07 159 307	PIPE TEMPERATURE THERMISTOR / LIQUID		1	1	1	1		TH2			
10	E07 143 620	INDOOR HEAT EXCHANGER		1								
	E07 144 620	INDOOR HEAT EXCHANGER			1							
	E07 145 620	INDOOR HEAT EXCHANGER				1						
	E07 223 620	INDOOR HEAT EXCHANGER					1					
11	E07 039 808	RIGHT LEG		2	2	2	2					
12	E07 143 085	RIGHT SIDE PANEL		1	1	1	1					
13	E07 143 293	SEPARATOR ASSY		1	1	1	1					
14	E07 039 809	LEFT LEG		2	2	2	2					
15	E07 039 290	BASE		1	1	1	1					

INDOOR UNIT
ELECTRICAL PARTS
SEZ-KA35VA.TH
SEZ-KA50VA.TH
SEZ-KA60VA.TH
SEZ-KA71VA.TH

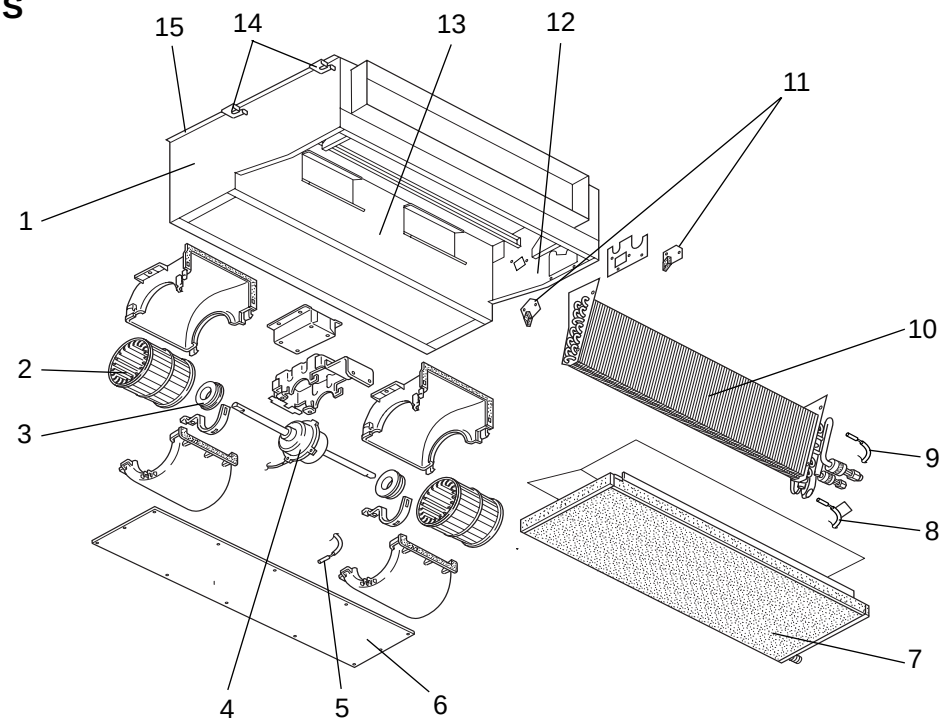


Part numbers that is circled is not shown in the figure.

No.	Parts No.	Parts name	Specification	Q'ty/set SEZ-KA·VA.TH 35	50	60	71	Remarks (Drawing No.)	Wiring Diagram Symbol	Recommended Q'ty	Price Unit	Amount
1	E07 159 447	INDOOR CONTROLLER BOARD		1					I.B			
	E07 160 447	INDOOR CONTROLLER BOARD			1				I.B			
	E07 161 447	INDOOR CONTROLLER BOARD				1			I.B			
	E07 223 447	INDOOR CONTROLLER BOARD					1		I.B			
2	E02 661 385	VARISTOR		1	1	1	1		ZNR			
3	E07 006 382	FUSE	250V/6.3A	1	1	1	1		FUSE			
4	E07 154 440	INDOOR POWER BOARD		1	1	1	1		P.B			
5	E02 063 351	FAN MOTOR CAPACITOR	2.5μF/440VAC	1	1				C1			
	E02 138 351	FAN MOTOR CAPACITOR	3.0μF/440VAC			1			C1			
	E02 064 351	FAN MOTOR CAPACITOR	4.0μF/440VAC				1		C1			
6	E07 156 375	TERMINAL BLOCK	2P	1	1	1	1		TB15			
7	E07 162 375	TERMINAL BLOCK	3P	1	1	1	1		TB4			
8	E07 159 426	REMOTE CONTROLLER		1	1	1	1		R.B			
9	E07 018 089	REMOTE CONTROLLER CABLE		1	1	1	1					
⑩	E07 039 449	CONTROLLER COVER		1	1	1	1					

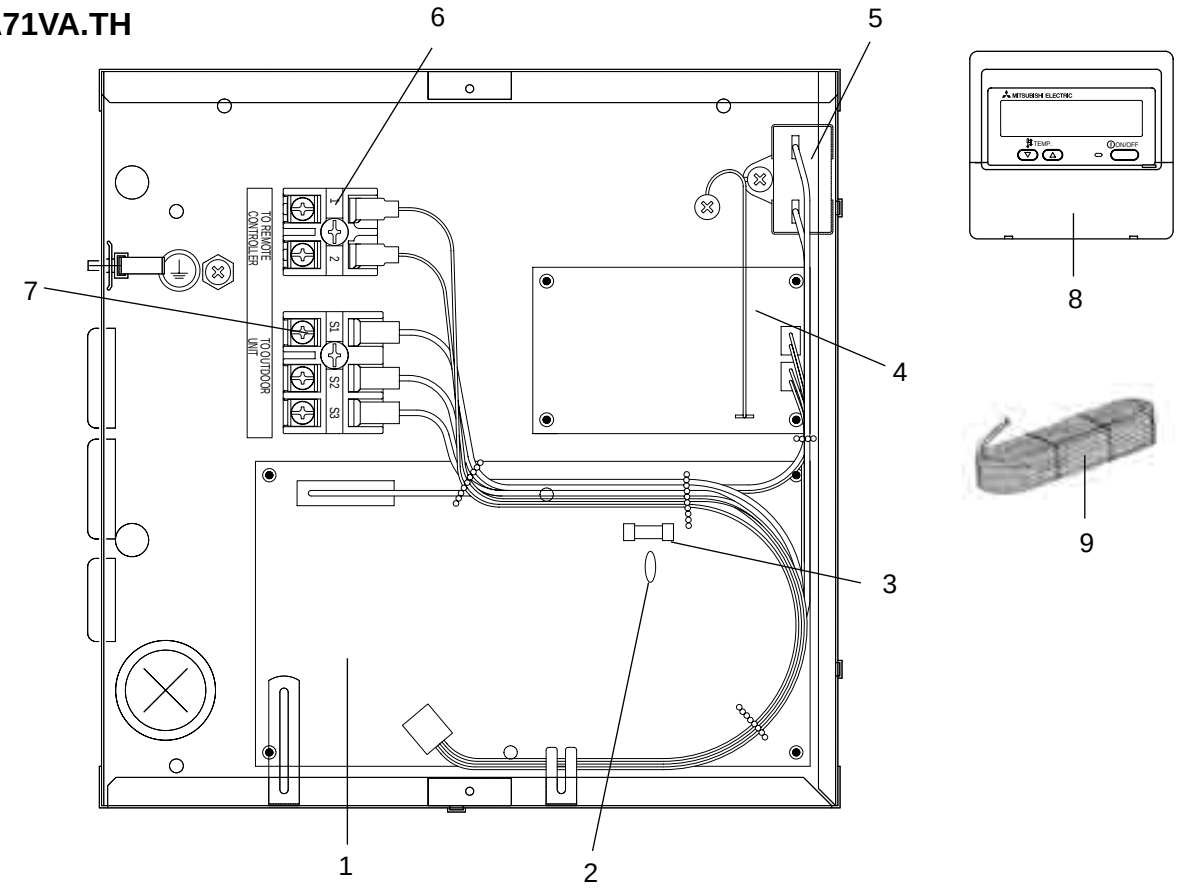
9 RoHS PARTS LIST

INDOOR UNIT
STRUCTURAL PARTS
SEZ-KA35VA.TH
SEZ-KA50VA.TH
SEZ-KA60VA.TH
SEZ-KA71VA.TH



No.	RoHS	Parts No.	Parts name	Specification	Q'ty/set SEZ-KA·VA.TH 35	50	60	71	Remarks (Drawing No.)	Wiring Diagram Symbol	Recommended Q'ty	Price Unit	Amount
1	G	E17 039 086	LEFT SIDE PANEL		1	1	1	1					
2	G	E17 039 500	SIROCCO FAN		2	2	2	2					
3	G	E12 179 505	FAN MOTOR RUBBER MOUNT		2	2	2	2	<2PCS/SET>				
4	G	E17 039 300	FAN MOTOR	PK6V19-EF	1					MF			
	G	E17 040 300	FAN MOTOR	PK6V32-EF		1				MF			
	G	E17 041 300	FAN MOTOR	PK6V50-EF			1			MF			
	G	E17 223 300	FAN MOTOR	PK4V60-EA				1		MF			
5	G	E17 159 308	ROOM TEMPERATURE THERMISTOR		1	1	1	1		TH1			
6	G	E17 039 000	FRONT PANEL		1	1	1	1					
7	G	E17 039 700	DRAIN PAN		1	1	1	1					
8	G	E17 154 309	CONDENSER / EVAPORATOR TEMPERATURE THERMISTOR		1	1	1	1		TH5			
9	G	E17 159 307	PIPE TEMPERATURE THERMISTOR / LIQUID		1	1	1	1		TH2			
10	G	E17 143 620	INDOOR HEAT EXCHANGER		1								
	G	E17 144 620	INDOOR HEAT EXCHANGER			1							
	G	E17 145 620	INDOOR HEAT EXCHANGER				1						
	G	E17 223 620	INDOOR HEAT EXCHANGER					1					
11	G	E17 039 808	RIGHT LEG		2	2	2	2					
12	G	E17 143 085	RIGHT SIDE PANEL		1	1	1	1					
13	G	E17 143 293	SEPARATOR ASSY		1	1	1	1					
14	G	E17 039 809	LEFT LEG		2	2	2	2					
15	G	E17 039 290	BASE		1	1	1	1					

INDOOR UNIT
ELECTRICAL PARTS
SEZ-KA35VA.TH
SEZ-KA50VA.TH
SEZ-KA60VA.TH
SEZ-KA71VA.TH



Part numbers that is circled is not shown in the figure.

No.	RoHS	Parts No.	Parts name	Specification	Q'ty/set SEZ-KA·VA.TH 35	50	60	71	Remarks (Drawing No.)	Wiring Diagram Symbol	Recommended Q'ty	Price Unit	Price Amount
1	G	E17 159 447	INDOOR CONTROLLER BOARD		1					I.B			
	G	E17 160 447	INDOOR CONTROLLER BOARD			1				I.B			
	G	E17 161 447	INDOOR CONTROLLER BOARD				1			I.B			
	G	E17 223 447	INDOOR CONTROLLER BOARD					1		I.B			
2	G	E12 661 385	VARISTOR		1	1	1	1		ZNR			
3	G	E17 006 382	FUSE	250V/6.3A	1	1	1	1		FUSE			
4	G	E17 154 440	INDOOR POWER BOARD		1	1	1	1		P.B			
5	G	E12 063 351	FAN MOTOR CAPACITOR	2.5μF/440VAC	1	1				C1			
	G	E12 138 351	FAN MOTOR CAPACITOR	3.0μF/440VAC			1			C1			
	G	E12 064 351	FAN MOTOR CAPACITOR	4.0μF/440VAC				1		C1			
6	G	E17 156 375	TERMINAL BLOCK	2P	1	1	1	1		TB15			
7	G	E17 162 375	TERMINAL BLOCK	3P	1	1	1	1		TB4			
8	G	E17 159 426	REMOTE CONTROLLER		1	1	1	1		R.B			
9	G	E17 018 089	REMOTE CONTROLLER CABLE		1	1	1	1					
⑩	G	E17 039 449	CONTROLLER COVER		1	1	1	1					

10 OPTIONAL PARTS

AIR FILTER

Applied unit	Models
SEZ-KA35VA.TH SEZ-KA50VA.TH SEZ-KA60VA.TH SEZ-KA71VA.TH	PAC - 1000 FT

Mr.SLIM™

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