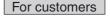


# **OPERATING INSTRUCTIONS**

INDOOR UNIT MFZ-KA25VA MFZ-KA35VA MFZ-KA50VA



### **OPERATING INSTRUCTIONS**



• To use this unit correctly and safely, be sure to read this operating instructions before use.

### Bedienungsanleitung

### Für Kunden

• Um diese Einheit richtig und sicher zu verwenden, unbedingt diese Bedienungsanleitung vor der Inbetriebnahme durchlesen.

### NOTICE D'UTILISATION

### A l'attention des clients

• Pour avoir la certitude d'utiliser cet appareil correctement et en toute sécurité, veuillez lire attentivement cette notice d'instructions avant de mettre l'appareil en fonction.

## GEBRUIKSAANWIJZING

### Voor de klant

• Om dit apparaat op de juiste manier en veilig te gebruiken, dient u eerst deze gebruiksaanwijzing aandachtig door te lezen.

## MANUAL DE INSTRUCCIONES

### Para los clientes

• Para emplear correctamente este aparato y por razones de seguridad debe leer este manual de instrucciones de manejo antes de su utilización.

## LIBRETTO D'ISTRUZIONI

### Per gli utenti

 Per utilizzare correttamente quest'unità, leggere questo libretto d'istruzioni attentamente e per intero.

## ΟΔΗΓΙΕΣ ΛΕΙΤΟΥΡΓΙΑΣ

## Για τον πελάτη

 Για να χρησιμοποιήσετε αυτή την μονάδα σωστά και με ασφάλεια, βεβαιωθείτε ότι έχετε διαβάσει αυτό το εγχειρίδιο οδηγιών πριν από την χρήση.

## INSTRUÇÕES DE OPERAÇÃO

### Para os clientes

 Para utilizar esta unidade correctamente, certifique-se de que lê estas instruções de operação antes da utilização.

## BRUGSANVISNING

### Til kunden

• Læs denne brugsanvisning før brugen så korrekt og forsvarlig anvendelse af klimaanlægget sikres.

• För att använda enheten på rätt och säkert sätt ska denna bruksanvisning läsas

Bu birimi doğru ve güvenli olarak calıştırmak icin, kullanmadan önce bu isletme

## BRUKSANVISNING

innan enheten tas i bruk.

**İŞLETME TALİMATLARI** 

talimatlarını mutlaka okuyun.

РУКОВОДСТВО ПО ЭКСПЛУАТАЦИИ

## För kunder

Satın alıcılar için

Для пользователей

Svenska

English

Français

Nederlands

Español

Italiano

Ελληνικά

Português

Dansk

## Türkçe

Русский

• Для обеспечения правильного и безопасного использования прибора следует до начала его эксплуатации внимательно прочитать данное руководство.

### WEEE

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## SAFETY PRECAUTIONS

- Since rotating parts and parts which could cause an electric shock are used in this product, be sure to read these "Safety Precautions" before use.
- Since the cautionary items shown here are important for safety, be sure to observe them.

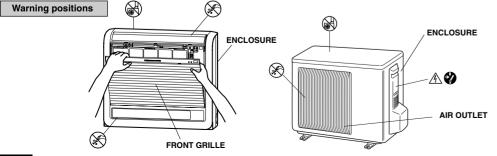
#### Marks and their meanings

⚠ WARNING: Incorrect handling could cause a serious hazard, such as death, serious injury, etc. with a high probability.
⚠ CAUTION: Incorrect handling could cause a serious hazard depending on the conditions.

#### (Meanings of symbols used in this manual)

· The colour of the sticker affixed to the unit is written in the parentheses.

- : Be sure not to do.
  - : Be sure to follow the instruction.
- (Black) : Never insert your finger or stick, etc.
- (Black) : Never step onto the indoor/outdoor unit and do not put anything on them.
- A : Danger of electric shock. Be careful.
- Be sure to disconnect the power supply plug from the power outlet.
  - : Be sure to shut off the power.
- After reading this manual, keep it together with the installation manual in a handy place for easy reference.



• This air conditioner is NOT intended for use by children or infirm persons without supervisions.

## 

Do not use intermediate connection of the power supply cord or the extension cord and do not  $\bigcirc$ connect many devices to one AC outlet. A fire or an electric shock may result from poor contact, poor insulation, exceeding the permissible current. etc. Do not scratch or process the power supply cord, etc. Do not put heavy object on the power supply cord and do not scratch or process the cord. The cord may be damaged and this may cause a fire or an electric shock. Do not turn the breaker off/on or disconnect/connect the power supply plug during operation. This may cause a fire due to spark, etc. Be sure to turn off the breaker or disconnect the power supply plug absolutely after switching the indoor unit off with the remote controller. Do not expose your skin directly to cool air for a long time. This could damage your health The customer should not install this unit. · If this is done incorrectly, it may cause a fire, an electric shock, or injury from the unit falling, water leaking, etc. Consult your dealer. Do not insert your finger or a stick, etc. into the air inlet/outlet.  $(\mathbf{x})$  Since the fan rotates at high speed, this may cause an injury. Young children should be supervised to ensure that they do not play with the air conditioner. When an abnormality (burning smell, etc.) occurs, stop the air conditioner and disconnect the power 82 supply plug or turn off the breaker. If the unit continues to be operated in an abnormal condition, it may cause a fire, trouble, etc. In this case. consult your dealer. Repairs or relocation should not be done by the customer. · If this is done incorrectly, it may cause a fire, an electric shock, or injury from the unit falling, water leaking, etc. Consult your dealer. · If the power supply cord is damaged, it must be replaced by the manufacturer or its service agent in order to avoid a hazard.

## 

$\bigcirc$	When the air filter is to be removed, do not touch the metal parts of the indoor unit.
$(\mathbf{y})$	This may cause an injury.
Ŭ	Do not put a vase or glass on the indoor unit.
	Water dropping into the indoor unit may deteriorate the insulation, causing electric shock.
	Do not use an insecticide or flammable spray.
	This may cause a fire or deformation of the cabinet.
	Do not put a pet or houseplant where it will be exposed to direct airflow.
	This could injure the pet or plant.
	Do not leave the unit on an installation stand which is damaged.
	The unit may fall and this may cause an injury.
	Do not step onto an unstable bench when maintaining the unit, etc.
	This may cause an injury, etc. if you fall down.
	Do not pull the power supply cord.
	The core wire of the power supply cord may be disconnected and this may cause a fire.
	Do not charge or disassemble the batteries and do not throw them into a fire.
	This may result in leakage, fire or an explosion.
	Do not operate the unit for a long time in high humidity, e.g. leaving a door or window open.
	• In the cooling mode, if the unit is operated in a room with high humidity (80% RH or more) for a long time,
	water condensed in the air conditioner may drop and wet or damage furniture, etc.
	Do not operate the unit at low outside temperature (less than -10°C) in the cooling mode.
	• In the cooling mode, if the unit is operated at low outside temperature (less than -10°C), water con-
	densed in the air conditioner may drop and wet or damage furniture, etc.

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## SAFETY PRECAUTIONS

$\bigcirc$	Do not use the unit for special purposes.
$\bigcirc$	Do not use this air conditioner to preserve precision devices, food, animals, plants and art objects.
_	This may cause deterioration of quality, etc.
ſ	Do not put a stove, etc. where they are exposed to direct airflow.
	This may cause imperfect combustion.
	When the unit is to be cleaned, switch it off and disconnect the power supply plug or turn off the
	breaker.
-	Since the fan rotates at high speed during operation, this may cause an injury.
ſ	When the unit is not going to be used for a long time, disconnect the power supply plug or turn off
	the breaker.
	Otherwise, dirt may collect and this may cause a fire.
ſ	Replace the 2 batteries with new ones of same type.
	• Using an old battery together with a new one may result in heat generation, leakage or an explosion.
ſ	If liquid from the batteries gets onto your skin or clothes, wash it well with clean water.
	• If liquid from the batteries gets into your eyes, wash them well with clean water and consult a doctor at
	once.
ſ	Ventilate well in using the unit with a stove, etc.
	An oxygen shortage may occur.
	Do not operate switches with wet hands.
<u>/1</u>	This may cause an electric shock.
ſ	Do not clean the air conditioner with water.
	Water may enter the unit and degrade the insulation. This may cause an electric shock.
$\nabla \Delta$	Do not step, sit or put anything on the indoor/outdoor unit.
$\bigcirc$	This may cause an injury, etc. if you or something falls down.

### For installation

## 

· Consult your dealer for installation of the air conditioner.

## 

 Do not install the unit where flammable gas could leak.

 • If gas leaks and collects around the unit, it may cause an explosion.

 Earth the unit.

 • Do not connect the earth to a gas pipe, water pipe, lightning rod or the

• Do not connect the earth to a gas pipe, water pipe, lightning rod or the earth of a telephone. If the earthing is incorrect, it may cause an electric shock.

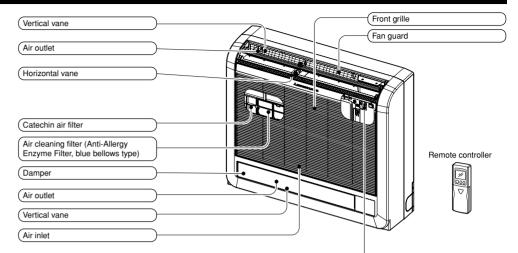
## Install an earth leakage breaker depending on the place where the air conditioner is to be installed (humid places, etc.).

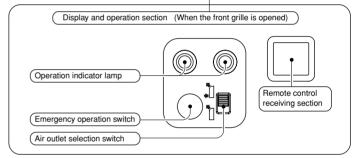
• If the earth leakage breaker is not installed, it may cause an electric shock.

- Drain should be fully drained.
- If the drainage route is incomplete, water may drop from the unit. This may wet and damage the furniture.

## NAME OF EACH PART

### Indoor unit

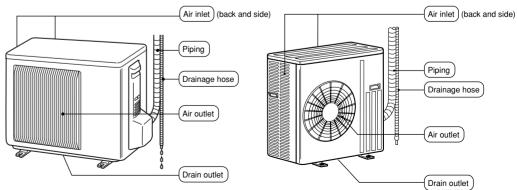




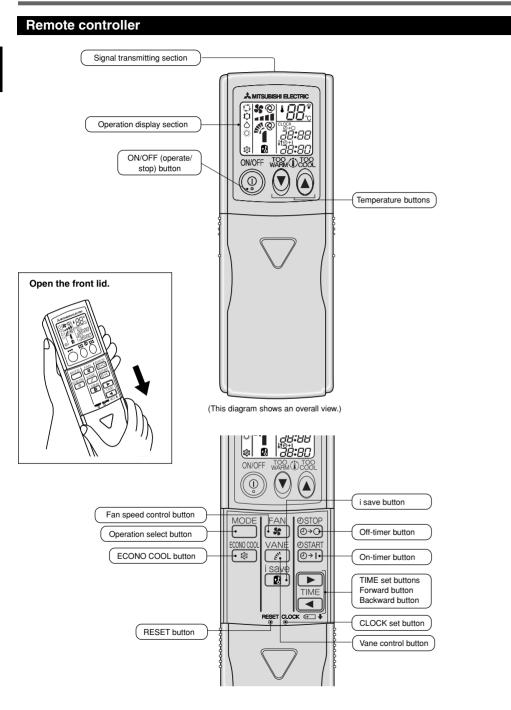
### Outdoor unit

#### SUZ-KA25/35VA(H)

SUZ-KA50VA



## NAME OF EACH PART



## **PREPARATION BEFORE OPERATION**

### Auto restart function

These models are equipped with an auto restart function. If you do not want to use this function, please consult the service representative because the setting of the unit needs to be changed.

#### Auto restart function is ...

When the indoor unit is controlled with the remote controller, the operation mode, the set temperature and the fan speed are stored in the memory. If a power failure occurs or the main power is turned off during operation, "Auto restart function" sets automatically to start operating in the same mode as the one set with the remote controller just before the shut off of the main power. (Refer to page 6 for details.)

#### Outdoor unit

Insert the power supply plug into the power outlet and/or turn the breaker on.

#### A WARNING:

Remove dirt from the power supply plug and insert the plug securely. If dirt adheres to the plug or insertion is incomplete, it may cause a fire or an electric shock.

#### **Remote controller**

Use the remote controller provided with the unit only. Do not use other remote controller.

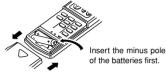
## **PREPARATION BEFORE OPERATION**

### **Remote controller**

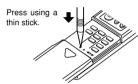
#### (How to set the batteries and the current time)

Remove the front lid and insert batteries. Then reattach the front lid.

Insert the minus pole of the batteries first. Check if the polarity of the batteries is correct.

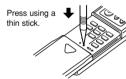


2 Press the RESET button.



- If the RESET button is not pressed, the remote controller may not operate correctly.
- Be sure to press the RESET button not too strongly.

### 3 Press the CLOCK set button.



# 4 Press the ► (Forward) and (Backward) buttons (TIME SET buttons) to set the current time.



Each time the button is pressed, the set time increases by 1 minute, and each time the button is pressed, the set time decreases by 1 minute.
Pressing those buttons longer increases/decreases the set time by 10 minutes.

## 5 Press the CLOCK set button again and close the front lid.

#### Handling of the remote controller

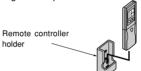
- The range that the signal can reach is about 6 m when the remote controller is pointed at the front of the indoor unit.
- When a button is pressed, one or two beeps will be heard from the indoor unit. If no sound is heard, operate again.
- Use the remote controller carefully.
- If it is dropped, thrown or it gets wet, the remote controller may not operate.

#### When installing on a wall, etc.

 Install the remote controller holder in a position where the signal reception sound (beep) can be heard from the indoor unit when the corr button is pressed.

#### How to install/remove the remote controller

Installing :Insert the remote controller downward. Removing :Pull it up.



- Dry-cell batteries
- Reference for replacing batteries
- Replace the batteries with new AAA alkaline batteries in the following cases:
- When the indoor unit does not respond to the remote control signal.
- When the display on the remote controller becomes dim.
- When a button of the remote controller is pressed, all displays appear on the screen, and then disappear immediately.
- Do not use manganese batteries. The remote controller could malfunction.
- The service life of an alkaline battery is about 1 year. However, a battery whose time limit is approaching may be exhausted soon. The recommended usable time limit is indicated (month/year) on the bottom of the battery.
- To prevent liquid leakage, take out all batteries when the remote controller is not going to be used for a long time.
- **△** CAUTION:
- If liquid from the batteries gets onto your skin or clothes, wash it well with clean water.

If liquid from the batteries gets into your eyes, wash them well with clean water and consult a doctor at once.

- Do not use rechargeable batteries.
- Replace the 2 batteries with new ones of the same type.
- Dispose of exhausted batteries in the correct manner.

### When the remote controller cannot be used (emergency operation)

When the batteries of the remote controller run out or the remote controller malfunctions, the emergency operation can be done using the EMERGENCY OPERATION switch.

### 1 Press the EMERGENCY OPERATION switch.

 Each time the EMERGENCY OPERATION switch is pressed, the unit will operate in order of EMER-GENCY COOL MODE, EMERGENCY HEAT MODE and STOP MODE.

However, when the EMERGENCY OPERATION switch is once pressed, the unit will operate in test run for 30 minutes and then the operation mode shifts to EMERGENCY MODE.



 Details of EMERGENCY MODE are as shown below. However, the temperature control does not work for 30 minutes in test run and the unit is set to continuous operation. The fan speed is set to High in test run and shifts to Medium after 30 minutes.

Operation mode	COOL	HEAT
Set temperature	24°C	24°C
Fan speed	Medium	Medium
Horizontal vane	Auto	Auto

 The operation mode is indicated by the Operation Indicator lamp on the indoor unit as following figure.

#### **Operation Indicator lamp**



2 To stop the emergency operation, press the EMERGENCY OPERATION switch once (in case of EMERGENCY HEAT MODE) or twice (in case of EMERGENCY COOL MODE). An automatic cooling and heating changeover operation system ensures easy control and year-round air conditioning.

Once the desired temperature is set, unit operation is switched automatically between cooling and heating according to the room temperature. In addition, fan control of the outdoor unit enables cooling operation at outside temperature as low as -10 °C.



То	select the AUTO mode	
1	Press the button.	

#### Select the 🔂 (AUTO) mode by pressing the MODE button. 2

Each time this button is pressed, the operation mode is changed in sequence:  $\textcircled{AUTO} \rightarrow \textcircled{C}$  (AUTO)  $\rightarrow \textcircled{C}$  (COOL)  $\rightarrow \Diamond$  (DRY)  $\rightarrow \bigcirc$  (HEAT) The set temperature is also displayed on the remote controller.

### To stop operation:

#### Press the o button.

After the operation mode is set once, the operation starts in the same mode as the one set previously from the next time by simply pressing the more button.

### Description of "AUTO RESTART FUNCTION"

- These units are equipped with an auto restart function. When the main power is turned on, the air conditioner will start operation automatically in the same mode as the one set with the remote controller before the shutoff of the main power.
- If the unit was set to off with the remote controller before the shutoff of the main power, it will remain stopped even after the main power is turned on.
- If the unit is operated in "€ AUTO" mode before power failure, the operation mode (COOL, DRY or HEAT) is not stored in the memory. When the main power is turned on, the unit decides the operation mode by the initial room temperature at restart and starts operation again.

#### Information for multi system air conditioner

Multi system air conditioner can connect two or more indoor units with one outdoor unit. According to the capacity, two or more units can operate simultaneously.

- When you try to operate two or more indoor units with one outdoor unit simultaneously, one for the cooling and the other for heating, the operation mode of the indoor unit that operates earlier is selected. The other indoor units that will start the operation later cannot operate, indicating an operation state. (Refer to the table of Operation Indicator lamp below.) In this case, please set all the indoor units to the same operation mode.
- When indoor unit starts the operation while the defrosting of outdoor unit is being done, it takes a few minutes (max. 10 minutes) to blow out the warm air.
- In the heating operation, the indoor unit that does not operate may get warm or the sound of refrigerant flowing may be heard. This is not a malfunction since the refrigerant continuously flows into the indoor unit that does not operate.

### Details of display on the indoor unit

The operation indicator at the right side of the indoor unit indicates the operation state.

П

(Green) : Lighted

(Orange): Lighted

: (Green) : Blinking

(Orange) : Blinking

: Not lighted

the temperature by about 1°C.	
	Operation Indicator

Press the button to raise the temperature. One press raises the temperature by about 1°C

#### **Description of "AUTO CHANGEOVER"**

When the set temperature is to be changed:

#### (1) Initial mode

(1) When unit starts the operation with AUTO operation from off;

• Press the (v) button to lower the temperature. One press lowers

- If the room temperature is higher than the set temperature, operation starts in COOL mode.
- If the room temperature is equal to or lower than the set temperature, operation starts in HEAT mode.

#### (2) Mode change

- ① COOL mode changes to HEAT mode when about 15 minutes have passed with the room temperature 2 degrees below the set temperature.
- 2 HEAT mode changes to COOL mode when about 15 minutes have passed with the room temperature 2 degrees above the set temperature.

#### NOTE:

If two or more indoor units are operating in multi system, there might be a case that the indoor unit, which is operating in *t* (AUTO), cannot change over to the other operating mode (COOL↔HEAT) and becomes a state of standby. Refer to the detailed information for multi system air conditioner explained on the right.

### **Operation indicator lamp**

Indication	Operation state	Difference between target temperature and room temperature
<u></u>	This shows that the air conditioner is operating to reach the target temperature. Please wait until the target temperature is obtained.	About 2°C or more
濂 □	This shows that the room temperature is approaching the target temperature.	About 2°C or less
[Normal operation] 注: 洪: [i-save operation] 美: 洪:	This shows a state of standby for operation. Please refer to Information for multi system air conditioner above.	_
業 道: Refer to the description of i-save mode.		_

## MANUAL OPERATION (COOL, DRY, HEAT)

## **AIR FLOW VELOCITY AND DIRECTION ADJUSTMENT**

#### A MITSUBISHI ELECTRIC <mark>\_\_\\$@\**↓**\_</mark> 10:00 ON/OFF Û (▲ FAN OSTOF \* ®→O ECONO CO ©STAR1 VANE िंद्री Ø≁I £\*\* sav 1 TIME ◀ RESET CLOCK E

### To select the COOL. DRY or HEAT mode: 1

Press the over button.

#### Select the operation mode by pressing the button. 2

Each time this button is pressed, the operation mode is changed in sequence:  $(AUTO) \rightarrow (COOL) \rightarrow (DRY) \rightarrow (HEAT)$ 

#### To stop operation:

### Press the o button.

After the operation mode is set once, the operation starts in the same mode as the one set previously from the next time by simply pressing the interviously from the next time by simply pressing the interviously formation.

#### A MITSUBISHLELECTRIC •*2*4. 3 **S** 10:00 1 ON/OFF WARM (I) COO ( D $(\mathbf{v})$ FAN OSTOP \* @→0 ECONO CO VANE OSTAR' ( 211 (⊡→I sav 1 TIME ◀



#### Each time the button is pressed, the fan speed is changed in sequence: $(Low) \rightarrow (Med.) \rightarrow (High) \rightarrow (High) \rightarrow (Super High) \rightarrow (AUTO)$

To change the AIR FLOW velocity, press the FAN button.

- Use the I (Super High) notch to cool/heat the room more efficiently.
- If the operating sound of the air conditioner disturbs your sleep, use the (Low) notch.

#### To change the AIR FLOW blowing direction vertically, press the button.

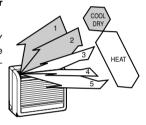
Each time the button is pressed, the angle of the horizontal vane is changed in sequence:  $(1) \rightarrow (2) \rightarrow (3) \rightarrow (4) \rightarrow (5) \rightarrow (SWING) \rightarrow (AUTO)$ 

#### SWING OPERATION

Use the swing operation to deliver air evenly.

#### Recommended horizontal vane range for more efficient air-conditioning

Use the (AUTO) position usually. Use position (1) or (2) in the COOL or DRY mode and use positions  $\hat{}_{1}(3)$  to  $\hat{}_{2}(5)$  in the HEAT mode when adjusting to your require ments.



#### When the set temperature is to be changed:

- Press the () button to lower the temperature. One press lowers the temperature by about 1°C.
- Press the 
   button to raise the temperature. One press raises the temperature by about 1°C.

#### In COOL operation

 When the outside temperature is low, the fan of the outdoor unit turns on and off frequently or decreases the rotation speed to maintain sufficient cooling capacity.

#### In DRY operation

- The temperature control (temperature setting) cannot be done.
- · The room temperature is slightly lowered in this operation mode.

#### The details of the display on the indoor unit are explained on page 6.

#### If the air conditioner doesn't cool or heat effectively...

If the fan speed is set to Low or AUTO, sometimes the air conditioner may not cool or heat the air effectively. In this case, change the fan speed to Med. or upper





### AIR FLOW velocity and direction can be selected as required.

## AIR FLOW VELOCITY AND DIRECTION ADJUSTMENT

#### Movement of the horizontal vane

	When to use ?	COOL/DRY	HEAT
Ø AUTO	<ul> <li>Select (AUTO) for most situations.</li> <li>Recommended air flow direction is automatically set.</li> <li>Swing operation is not used.</li> </ul>	Horizontal vane position (1) is set.	When the air outlet selection switch is set to blow out air from the upper and lower air outlets, position (5) is set. When the air outlet selection switch is set to blow out air from the upper air outlet only, position (3) is set. The horizontal vane operates as de- scribed below to prevent air from blow- ing directly on individuals in the room.
		on individuals in room)	
<b>(</b> 1)	Select the air flow direction to suit your personal preference. The range displayed on the remote controller and the actual operation range of the horizontal vane may	Water may condense and drip from the horizontal vane if the air conditioner is operated continuously using the down horizontal vane positions (3) – (5). To prevent this, the horizontal vane automatically moves to position (1) after 30 minutes to 1 hour of air conditioner operation. To return to the previous setting, press	When heating operation starts or dur- ing defrosting operation, the air flow is reduced and the upper air flow direction is set to prevent cold air from blowing directly on individuals in the room.
(2)	differ. ■ The vane does not move to horizontal position in COOL	the $\overset{\forall ANE}{\swarrow}$ button on the remote controller again to select the position.	(Does not blow directly on individuals in room)
(3)	and DRY modes.	After approximately 30 minutes to 1 hour	The horizontal vane moves to the set position once warm air blows from the indoor unit.
(4) (5)			Set air flow direction
		When positions Position (1) (3)–(5) are selected	
SWING	Select (SWING) for swing operation. ■ The horizontal vane moves intermittently so that the air does not blow directly on an individual in the room for too long.	The horizontal vane moves intermittently between positions (1) and (4). The horizontal vane stops for a brief period at positions (1) and (4).	The horizontal vane moves intermit- tently between positions (2) and (4). The horizontal vane stops for a brief period at positions (2) and (4).

#### NOTE:

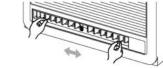
- Adjust the AIR FLOW direction using the remote controller. Moving the horizontal vane manually can cause trouble.
- When the operation mode changes in "<sup>(1)</sup> (AUTO)" mode, the horizontal vane is automatically changed to the position in each mode.
- The horizontal vane automatically moves in certain intervals to determine its position, and then it returns to the set position.

#### To change the horizontal direction of the air flow, move the vertical vane manually.

 Change the direction of the vertical vane (upper), holding the tabs on the vane.

NOODON

Change the direction of the vertical vane (lower), holding the vane.



Always adjust the vane when the damper is open. Opening the damper forcibly with hands can cause damage or malfunction.

Adjust the vane before operation starts.

Since the horizontal vane moves automatically, your fingers may be caught.

## **AIR OUTLET SELECTION**

With this function, air comes out simultaneously from the upper and lower air outlets so that the room can be cooled or heated effectively. This function is set using the switch behind the front grille of the indoor unit. (This function is available in cooling and heating operation.)

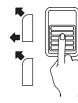
How to set to blow out air from the upper and lower air outlets:

Set the air outlet selection switch to 1.



How to set to blow out air from the upper air outlet only:

Set the air outlet selection switch to

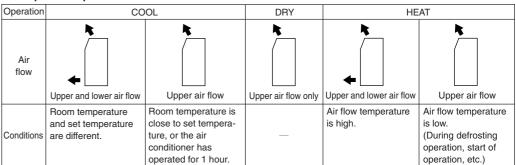


Air blows out automatically from the upper and lower air outlets as shown in the table below.

#### NOTE:

Set the air outlet selection switch to the end. Otherwise, air outlet cannot be selected as intended.

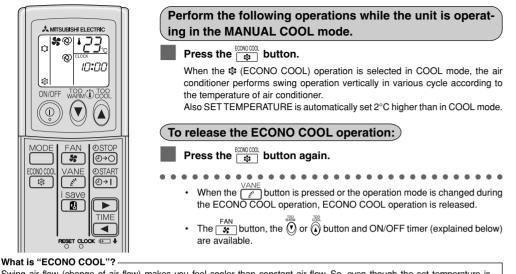
#### **Description of operation**



Be sure to keep the area around the damper of the lower air outlet free of any objects. If any objects block the normal
operation of the damper, the left operation indicator lamp may blink.

## ECONO COOL OPERATION

Use this operation when you want to be comfortable in COOL mode even with energy saved.



Swing air flow (change of air flow) makes you feel cooler than constant air flow. So, even though the set temperature is automatically set 2°C higher, it is possible to perform cooling operation with keeping comfort. As a result, energy can be saved.

## i-save OPERATION

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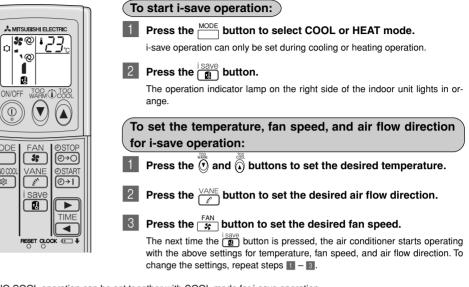
\*

VANE

2"

save

With this function, you can save the settings such as temperature, fan speed, and air flow direction for both cooling and heating operation.



#### NOTE:

- ECONO COOL operation can be set together with COOL mode for i-save operation.
- Timer operation can be used even if i-save operation is set.

#### To cancel i-save operation:

### Press the button again.

i-save operation can also be cancelled by pressing the mode button to change the operation mode. i-save operation has been successfully cancelled if the operation indicator lamp on the right side of the indoor unit turns off or changes from orange to green.

#### Usage of i-save operation:

#### 1 Using as a low-energy mode

i-save operation can be used as a low-energy mode by setting the temperature 2-3 °C warmer than the normal cooling temperature or 2-3 °C cooler than the normal heating temperature. This is good to use if a room is unoccupied or while you are sleeping.

- Before leaving the room unoccupied:
- Press the button to switch to the low-energy mode before leaving the room.
- When you return to the room, the temperature will not be too hot or too cold.
- Press the  $\left[\frac{1}{48}\right]$  button again and the air conditioner will operate with the normal settings for temperature, fan speed, and air flow direction for a comfortable, air-conditioned environment.

#### Before sleeping:

- Before going to sleep, press the button, and then go to your bedroom.
- · While you are sleeping, the room will be air-conditioned using the low-energy mode until the following morning.
- In the morning, press the button again, and the air conditioner will operate with the normal settings for temperature, fan speed, and air flow direction. The set room temperature will be obtained quicker than if the air conditioner was stopped while you were sleeping.

#### 2 Using as a mode for frequent settings

If you often switch between two groups of settings for temperature, fan speed, and air flow direction in the same operation mode, save one group of settings using the about the button. This will allow you to select the desired group of settings simply by pressing the button, avoiding the troublesome remote controller operations.

## TIMER OPERATION (ON/OFF TIMER)

#### It is convenient to set the timer when you go to bed, when you get home, when you get up, etc.

#### (How to set the ON timer)

**Press the** OSTART **button during operation.** Each time the button is pressed, the ON timer mode alternates between ON and OFF

## 2 Set the time of the timer using the TIME buttons ► (Forward) and ◄ (Backward).

Each time the **b** button is pressed, the set time increases by 10 minutes; each time the **b** button is pressed, the set time decreases by 10 minutes.

#### (To release the ON timer: )



#### Programming timer operation

The ON timer and the OFF timer can be used in combination. The timer of the set time that is reached first will operate first. ("\{" mark indicates the order of timer operations.)

• If the current time has not been set, the timer operation cannot be used.

#### NOTE:

If the main power is turned off or a power failure occurs while AUTO START/STOP timer is active, the timer setting is cancelled. As these models are equipped with an auto restart function, the air conditioner starts operating with timer cancelled at the same time that power is restored.

#### How to set the OFF timer



Each time the button is pressed, the OFF timer mode alternates between ON and OFF.

## 2 Set the time of the timer using the TIME buttons ► (Forward) and ◄ (Backward).

Each time the **b** button is pressed, the set time increases by 10 minutes; each time the **b** button is pressed, the set time decreases by 10 minutes.

### To release the OFF timer:



## WHEN THE AIR CONDITIONER IS NOT GOING TO BE USED FOR A LONG TIME

When it is not going to be used for a long time:

## Perform the FAN operation for 3 or 4 hours to dry the inside of the air conditioner.

 To perform FAN operation, set the remote controller to the highest temperature in the MANUAL COOL mode. (Refer to page 7.)

2 Turn off the breaker and/or disconnect the power supply plug.

Turn off the breaker or disconnect the power supply plug

when the air conditioner is not going to be used for a

Remove the batteries from the remote con-



When the air conditioner is to be used again:

Clean the air filter and install it in the indoor unit.

(Refer to page 10 for cleaning instructions.)

- Check that the air inlet and outlet of the indoor/outdoor units are not blocked with any obstacles.
- 3 Check that the earth is connected correctly.

#### A CAUTION:

Earth the unit.

Do not connect the earth to a gas pipe, water pipe, lightning rod or the earth of a telephone. If the earthing is incorrect, it may cause an electric shock.

# troller.

**∧** CAUTION:

long time.

3

To prevent liquid leakage, take out all batteries when the remote controller is not going to be used for a long time.

## MAINTENANCE

#### Before starting maintenance

Dirt may collect and this may cause a fire.

Turn off the breaker and/or disconnect the power supply plug.



#### ▲ CAUTION:

When the unit is to be cleaned, switch it off and disconnect the power supply plug or turn off the breaker. Since the fan rotates at high speed during operation, it may cause an injury.

#### Cleaning the indoor unit

#### Clean the unit using a soft dry cloth.

- If the dirt is noticeable, wipe the unit with a cloth soaked in a solution of mild detergent diluted in lukewarm water.
- Do not use gasoline, benzine, thinner, polishing powder, or insecticide. The unit may be damaged.

## **CLEANING THE FRONT GRILLE**

#### Front grille

Push the 2 positions indicated by the arrows until a click is heard and open the front grille.



### 2 Unhook the string which holds the grille.



## Open the grille completely and then remove it.



⚠ CAUTION:

• Do not drop the front grille or pull it out forcibly. The grille may be damaged.

Wipe the front grille with a soft dry cloth or wash it with water.

After washing the grille, wipe up the remaining water with a soft dry cloth and let it dry out of direct sunlight.

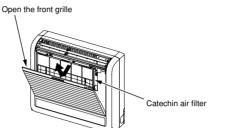
- If the dirt is noticeable, wipe the front grille with a cloth soaked in a solution of mild detergent diluted in lukewarm water.
- Do not use gasoline, benzine, thinner, polishing powder, or insecticide and do not wash the front grille with a scrubbing brush or the hard surface of a sponge.
- Do not soak the front grille in water/lukewarm water longer than two hours and do not expose the grille to direct sunlight, heat, or flames when drying it. The grille may be deformed or discolored.
- 4 Close the grille following the removal procedure in reverse.

Be sure to hook the string before closing the grille.

## **CLEANING THE CATECHIN AIR FILTER**

### Cleaning the catechin air filter (about once every 2 weeks)

1 Remove the catechin air filter.



#### **⚠** CAUTION:

When the catechin air filter is to be removed, do not touch the metal parts of the indoor unit. This may cause an injury.

#### 2 Remove dirt from the catechin air filter using a vacuum cleaner or by washing the filter with water.

- Do not wash with scrubbing brush or hard surface of sponge. Otherwise, the filter may deform.
- If the dirt is noticeable, wash the filter with a solution of mild detergent diluted in lukewarm water.
- If hot water (50 °C or more) is used, the filter may be deformed.

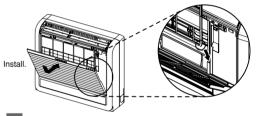


- After washing with water/lukewarm water, dry the catechin air filter well in the shade.
  - Do not expose the catechin air filter to direct sunlight or heat from a fire when drying it.



4 Install the catechin air filter.

Be sure to install its both ends into the tabs as shown below.



5 Securely close the front grille.

#### – What is "Catechin air filter"? -

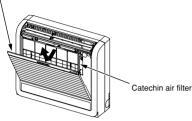
The air filter is dyed with a natural material, catechin, that is contained in tea. The catechin air filter deodorizes odor and noxious gases such as formaldehyde, ammonia, and acetaldehyde. Moreover, it restraints the activity of the viruses adhering to the filter.

## **CLEANING THE AIR CLEANING FILTER**

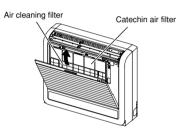
### Cleaning the air cleaning filter (about once every 3 months)

1 Remove the catechin air filter.

Open the front grille



### 2 Remove the air cleaning filter.



- 3 Soak the filter together with its frame in lukewarm water and wash it.
  - If the dirt is noticeable, use a solution of mild detergent diluted in lukewarm water.
  - If hot water (50°C or more) is used, the filter may be deformed.
  - Do not use a scrubbing brush or sponge. This may damage the surface of the filter.
  - Do not use a chlorine detergent.



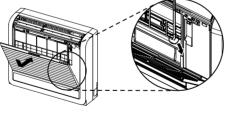
- 4 After rinsing with water/lukewarm water, shake off the excess water and dry the filter well in the shade.
  - Do not expose the filter to direct sunlight or heat from a fire when drying it.



5 Attach the air cleaning filter. Fix the filter with the tabs securely.



6 Install the catechin air filter. (Securely install its tabs.)



7 Securely close the front grille.

Instal

## **REPLACEMENT OF THE AIR CLEANING FILTER**

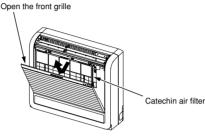
When the capacity is lowered because of dirt, etc., it is necessary to replace the air cleaning filter.

### Air cleaning filter replacement (about once every year)

1 Remove the catechin air filter.

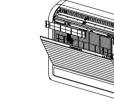
Remove the air cleaning filter.

Air cleaning filter



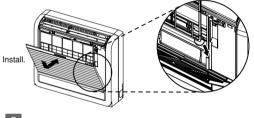
with the tabs securely.

3 Attach a new air cleaning filter. Fix the filter



4 Install the catechin air filter.

Be sure to install its both ends into the tabs as shown below.



5 Securely close the front grille.

#### Air cleaning filter

2

· If the air cleaning filter is clogged, it may lower the unit's capacity or cause condensation at the air outlet.

• The air cleaning filter is disposable. The standard usable term is about 1 year.

Catechin air filter

Optional parts O

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Optional parts are available from your local dealer.
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Name of parts	AIR CLEANING FILTER (Anti-Allergy Enzyme Filter)	
Parts number	MAC-415FT-E	

## **BEFORE CONTACTING THE SERVICE REPRE-**SENTATIVE, CHECK THE FOLLOWING AGAIN

Question	Check points
The air conditioner cannot be operated.	<ul> <li>Is the breaker turned on?</li> <li>Is the fuse blown?</li> <li>Is the ON timer set? (Page 10)</li> <li>Is there anything that block the normal operation of the damper? (Page 8)</li> </ul>
The room cannot be cooled or heated sufficiently.	<ul> <li>Is the temperature setting correct? (Page 7)</li> <li>Is the filter clean? (Page 11)</li> <li>Are there any obstacles blocking the air inlet or outlet of the indoor or outdoor unit?</li> <li>Is a window or door open?</li> </ul>
The air from the indoor unit smells strange.	Is the filter clean? (Page 11, 12)
The display on the remote controller does not appear or it is dim. The indoor unit does not respond to the re- mote control signal.	<ul> <li>Are the batteries exhausted? (Page 5)</li> <li>Is the polarity (+, -) of the batteries correct? (Page 5)</li> <li>Are any buttons on the remote controller of other electric appliances being pressed?</li> </ul>
When a power failure oc- curs.	<ul> <li>Does the air conditioner start operating again? If the air conditioner had operated before the power failure, as these models are equipped with an auto restart function, the air conditioner should start operating again. (Refer to Descrip- tion of "AUTO RESTART FUNCTION" on page 6.)</li> </ul>

Even if the above items are checked, when the air conditioner does not recover from the trouble, stop using the air conditioner and consult your dealer.

In the following cases, stop using the air conditioner and consult your dealer.

- · When water leaks or drops from the indoor unit.
- · When the left operation indicator lamp blinks.
- · When the breaker trips frequently.
- · The remote control signal may not be received in a room where an electronic ON/OFF type fluorescent lamp (inverter-type fluorescent lamp, etc.) is used.
- · Operation of the air conditioner may interfere with radio or TV reception in areas where the reception is weak. An amplifier may be required for the affected device.
- · When thunder is heard, stop operation and disconnect the power supply plug or turn off the breaker. Otherwise, the electrical parts may be damaged.

## WHEN YOU THINK THAT TROUBLE HAS OCCURRED

Question	Answer (not a malfunction)	Question	Answer (not a malfunction)	
The air conditioner cannot be operated for about 3 min- utes when restarted.	This protects the air conditioner according to in- structions from the microprocessor. Please wait.	The air flow direction changes during operation. The direction of the hori- zontal vane cannot be ad-	<ul> <li>When the air conditioner is operated i or DRY mode, if the operation continues blowing down for 1 hour, the direction of flow is automatically set to position (1</li> </ul>	
Cracking sound is heard.	• This sound is generated by the expansion/con- traction of the front panel, etc. due to change in temperature.	justed with the remote con- troller.		
The air from the indoor unit smells strange.	• The air conditioner may suck in an odor adher- ing to the wall, carpet, furniture, cloth, etc. and blow it out with the air.			
The fan of the outdoor unit does not rotate even though the compressor is running. Even if the fan starts to ro- tate, it stops soon.	<ul> <li>When the outside temperature is low, the fan may not operate to maintain sufficient cooling capacity.</li> </ul>	Water leaks from the out- door unit.	<ul> <li>During COOL and DRY operations, pipe connecting sections are cooled and this water to condense.</li> <li>In the heating operation, the defrosting tion makes water frozen on the outdoor and drip down.</li> <li>In the heating operation, water conde</li> </ul>	
The sound of water flowing is heard.	<ul> <li>This is the sound of refrigerant flowing inside the air conditioner.</li> </ul>		the heat exchanger drips down.	
is nearu.	<ul> <li>This is the sound of condensed water flowing in the heat exchanger.</li> </ul>	White smoke is discharged from the outdoor unit.	<ul> <li>In the heating operation, vapor generate defrosting operation looks like white sn</li> </ul>	
	This is the sound of the heat exchanger defrost- ing.	Air does not blow out soon in the heating operation.	<ul> <li>Please wait as the air conditioner is p to blow out warm air.</li> </ul>	
The sound as burbling is heard.	<ul> <li>This sound is heard when the outside air is absorbed from the drain hose in turning on the range hood or the ventilation fan and that makes water flowing in the drain hose spout out.</li> <li>This sound is also heard when the outside air blows into the drain hose in case the outside</li> </ul>	The operation is stopped for about 10 minutes in the heating operation.	<ul> <li>Defrosting of the outdoor unit is being defrosting operation).</li> <li>Since this is completed in 10 minutes wait. (When the external temperature is and humidity is too high, frost is formed</li> </ul>	
blows into the drain hose in case the outside wind is strong.		Hissing sound is some- times heard.	<ul> <li>This is the sound when the flow of re inside the air conditioner is switched.</li> </ul>	
sufficiently.         • When a ventilation fan or a gas cooker in a room, the cooling load increases, re in an insufficient cooling effect.		The room cannot be heated sufficiently.	<ul> <li>When the outside air temperature is heating effect may not be sufficient.</li> </ul>	
	When the outside air temperature is high, the cooling effect may not be sufficient.	In a multi-unit system, the in- door unit which is not oper-	A small amount of refrigerant continue into the indoor unit even though it is no	
Mist is discharged from the air outlet of the indoor unit.	<ul> <li>The cool air from the air conditioner rapidly cools moisture in the air inside the room, and it turns into mist.</li> </ul>	ating becomes warm and a sound, similar to water flow- ing, is heard from the unit.	ing.	
Mechanical sound is heard from the indoor unit.	This is the switching sound in turning on/off the fan or the compressor.	The air conditioner starts the operation only with the main power turned on,	<ul> <li>These models are equipped with an aut function. When the main power is turned out stopping the air conditioner with the</li> </ul>	
The swing operation of the HORIZONTAL VANE is sus- pended for about 15 sec- onds, then restarted.	This is for the swing operation of the HORIZON- TAL VANE to be performed normally.	though you do not operate the unit with the remote controller.	controller and is turned on again, the a tioner will start operation automatical same mode as the one set with the rem troller just before the shutoff of the mai	
		The damper opens and closes automatically.	The damper is automatically controlled crocomputer according to the air flow t	

Question	Answer (not a malfunction)
The air flow direction changes during operation. The direction of the hori- zontal vane cannot be ad- justed with the remote con- troller.	<ul> <li>When the air conditioner is operated in COOL or DRY mode, if the operation continues with air blowing down for 1 hour, the direction of the air flow is automatically set to position (1) to prevent condensed water from dropping.</li> <li>In the heating operation, if the air flow temperature is too low or when defrosting is being done, the horizontal vane position is automatically set to horizontal.</li> <li>The horizontal vane automatically moves in certain intervals to determine its position, and then it returns to the set position.</li> </ul>
Water leaks from the out- door unit.	<ul> <li>During COOL and DRY operations, pipe or pipe connecting sections are cooled and this causes water to condense.</li> <li>In the heating operation, the defrosting operation makes water frozen on the outdoor unit melt and drip down.</li> <li>In the heating operation, water condensed on the heat exchanger drips down.</li> </ul>
White smoke is discharged from the outdoor unit.	In the heating operation, vapor generated by the defrosting operation looks like white smoke.
Air does not blow out soon in the heating operation.	Please wait as the air conditioner is preparing to blow out warm air.
The operation is stopped for about 10 minutes in the heating operation.	<ul> <li>Defrosting of the outdoor unit is being done (Defrosting operation).</li> <li>Since this is completed in 10 minutes, please wait. (When the external temperature is too low and humidity is too high, frost is formed.)</li> </ul>
Hissing sound is some- times heard.	This is the sound when the flow of refrigerant inside the air conditioner is switched.
The room cannot be heated sufficiently.	When the outside air temperature is low, the heating effect may not be sufficient.
In a multi-unit system, the in- door unit which is not oper- ating becomes warm and a sound, similar to water flow- ing, is heard from the unit.	<ul> <li>A small amount of refrigerant continues to flow into the indoor unit even though it is not operat- ing.</li> </ul>
The air conditioner starts the operation only with the main power turned on, though you do not operate the unit with the remote controller.	<ul> <li>These models are equipped with an auto restart function. When the main power is turned off with- out stopping the air conditioner with the remote controller and is turned on again, the air condi- tioner will start operation automatically in the same mode as the one set with the remote con- troller just before the shutoff of the main power.</li> </ul>
The damper opens and closes automatically.	<ul> <li>The damper is automatically controlled by a mi- crocomputer according to the air flow tempera- ture and operation time of the air conditioner.</li> </ul>

## INSTALLATION, RELOCATION AND INSPECTION

#### Installation place

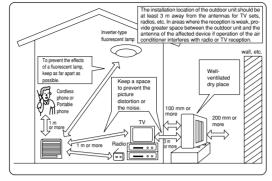
Avoid installing the air conditioner in the following places.

Where flammable gas could leak.

#### **⚠ CAUTION:**

Do not install the unit where flammable gas could leak. If gas leaks and collects around the unit, it may cause an explosion.

- Where there is much machine oil.
- · Salty places such as the seaside.
- Where sulfide gas is generated such as a hot spring.
- Where oil is splashed or where the area is filled with oily smoke.
- · Where there is high-frequency or wireless equipment.



#### 

If the air conditioner operates but does not cool or heat (depending on model) the room, consult your dealer since there may be a refrigerant leak. Be sure to ask the service representative whether there is refrigerant leakage or not when repairs are carried out.

The refrigerant charged in the air conditioner is safe. Refrigerant normally does not leak, however, if refrigerant gas leaks indoors, and comes into contact with the fire of a fan heater, space heater, stove, etc., harmful substances will be generated.

### **Electrical work**

- · Provide an exclusive circuit for the power supply of the air conditioner.
- Be sure to observe the breaker capacity.

#### **⚠** WARNING:

- · The customer should not install this unit.
- If installation is done incorrectly, it may cause a fire, an electric shock, or injury from the unit falling, water leaking, etc.
- Do not use intermediate connection of the power supply cord or the extension cord and do not connect many devices to one AC outlet.

A fire or an electric shock may result from poor contact, poor insulation, exceeding the permissible current, etc. Consult your dealer.

#### ▲ CAUTION:

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· Earth the unit.
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- Do not connect the earth to a gas pipe, water pipe, lightning rod or the earth of a telephone. If the earthing is incorrect, it may cause an electric shock.
- Install an earth leakage breaker depending on the place where the air conditioner is to be installed (humid places, etc.).
- If the earth leakage breaker is not installed, it may cause an electric shock.

#### Inspection and maintenance

- · When the air conditioner is used for several seasons, the capacity may be lowered due to dirt inside the unit.
- Depending on the condition, an odor may be generated or dehumidified water may not drain out smoothly due to dirt, dust, etc.
- It is recommended that the unit be inspected and maintained (charged) by specialist in addition to normal maintenance. Consult your dealer.

#### **Operating sound considerations**

- Do not put an object around the air outlet of the outdoor unit. This may lower the capacity or increase the volume of the
  operating sound.
- · If an abnormal sound is heard during operation, consult your dealer.

#### Relocation

• When the air conditioner is to be removed or re-installed because of rebuilding, moving, etc., special techniques and work are required.

#### A WARNING:

Repairs or relocation should not be done by the customer.

If this is done incorrectly, it may cause a fire, an electric shock, or an injury from the unit falling, water leaking, etc. Consult your dealer.

#### Disposal

To dispose of this product, consult your dealer.

If you have any questions, consult your dealer.

## **SPECIFICATIONS**

	Set name Indoor Outdoor		MFZ-KA25VA(H) MFZ-KA25VA SUZ-KA25VA(H)		MFZ-KA35VA(H) MFZ-KA35VA SUZ-KA35VA(H)		MFZ-KA50VA MFZ-KA50VA SUZ-KA50VA	
Model								
Function		Cooling	Heating	Cooling	Heating	Cooling	Heating	
Power supply			~ /N, 230V, 50Hz					
Capacity		kW	2.5	3.4	3.5	4.0	4.8	6.0
Input		kW	0.58	0.835	1.09	1.10	1.55	1.86
Weight	Indoor	kg	14					
	Outdoor	kg	33		37		53	
Refrigerant filling capacity (R410A)		kg	0.90 1.05		05	1.60		
IP code	Indoor		IP 20					
	Outdoor		IP 24					
Permissible excessive	LP ps	MPa	1.64					
operating pressure	HP ps	MPa	4.15					
Noise level	Indoor (Super High/ High/Med./Low)	dB(A)	37/32/27/22	37/32/27/22	38/33/28/23	38/33/28/25	43/39/35/32	44/39/35/32
	Outdoor	dB(A)	46		47	48	53	55

#### NOTE:

1. Rating	condition
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Cooling —	Indoor:	27°C DB, 19°C WB
	Outdoor:	35°C DB
Heating —	Indoor:	20°C DB
	Outdoor:	7°C DB, 6°C WB

#### 2. Guaranteed operating range

		Indoor	Outdoor			
		mador	SUZ-KA25/35VA	SUZ-KA50VA	SUZ-KA25/35VAH	
Cooling	Upper limit	32°C DB	46°C DB	43°C DB	46°C DB	
		23°C WB	—	—	—	
	Lower limit	21°C DB	-10°C DB	-10°C DB	-10°C DB	
		15°C WB	—	—	—	
Heating	Upper limit	27°C DB	24°C DB	24°C DB	24°C DB	
		—	18°C WB	18°C WB	18°C WB	
	Lower limit	20°C DB	-10°C DB	-10°C DB	-20°C DB	
		—	-11°C WB	-11°C WB	-21°C WB	

This product is designed and intended for use in the residential, commercial and light-industrial environment.

The product at hand is based on the following EU regulations:

- Low Voltage Directive 73/23/ EEC
- Electromagnetic Compatibility Directive 89/336/ EEC



SG79Y505H03