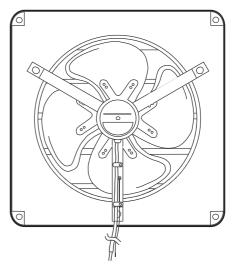
# Service Manual

Ventilating Fan 40KAQA

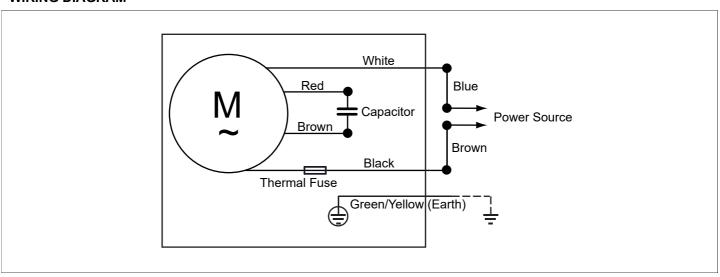


#### **SPECIFICATION**

Model	40KAQA				
Voltage	Volt/Hz	220 V 50 Hz	230 V 50 Hz	240 V 50 Hz	230 V 60 Hz
Power Consumption	Watt	47.0	52.0	59.0	67.0
Current	Ampere	0.260	0.270	0.290	0.310
Air Volume	m <sup>3</sup> /h	1880	1920	1960	2130
Net Weight kg 6.4		6.4	6.4	6.4	6.4

<sup>\*)</sup> Product specifications can be change without any notice.

#### **WIRING DIAGRAM**



Notes:

This Service Manual book was printed according to the latest data from manufacturing section.

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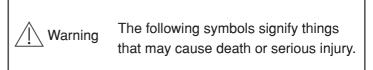
#### I. SAFETY INSTRUCTIONS

- Disconnect the power supply until blade is stationary before cleaning and maintenance.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.
- If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid a hazard.
- The product must be mounted on to the wall which is enough strong, If the wall is not enough strong it must be reinforced for it to be strong enough.

The type of instruction has been distinguished and explained using the following pictorial symbol. Possible harm or damage will occur if the user ignores the instructions and if the product is installed without following the correct instructions.

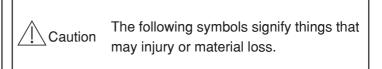


The following symbols signify things that are not allowed





The following symbols signify things that must be conducted without any errors.

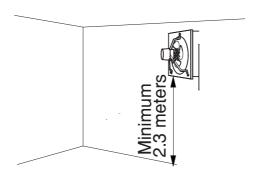


# II. A WARNING

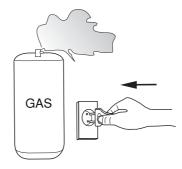
- On not install the fan out of the window and wall. Otherwise, the product may get wet in the rain and cause short circuit.
- O Do not install the power switch in bathroom. Otherwise, it may cause a short circuit, thus resulting a fire.
- On not install the product as the method which is not approved in the instruction. Otherwise, the product may fall down and it may cause injury.
- On not operate the product other than the voltage in name plate. Otherwise, it may damage the product or cause fire.
- Wiring is required to follow the local wiring regulations. Otherwise, it may cause fire.
- Installation should be done by authorized person. The product should be installed firmly. Otherwise, the product any fall down and it may cause injury.
- The product must be grounded. Otherwise, it may cause electric shock when there is any trouble or electric leakage.

# III. A CAUTION

- Do not reconstruct this product. Otherwise, it may cause damage to the product or injury.
- The special-purpose or dedicated parts, such as mounting fixtures, must be used if such parts are provided. Otherwise, the product may fall down and it may cause injury.
- Components must be installed tightly. Otherwise, it may injure person caused by product's falling off.
- The product must be installed tightly. Otherwise, it may injure person caused by product's falling off.
- The lowest surface of this product should be installed above 2.3 m from the floor after installation. Avoiding any accident.



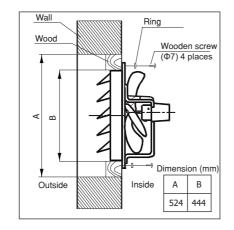
Do avoid the back-flow of gas into the room from the open flue of flammable gas or other open-fire appliances. Otherwise, it may cause fire.

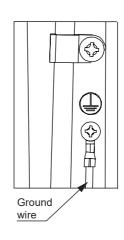


During installation, make sure the metal parts of the unit and screw for installation of the Fan do not come into contact with objects made of metal that are likely to be on the wall. Otherwise, it may cause fire.

### IV. INSTALLATION AND USE INSTRUCTION

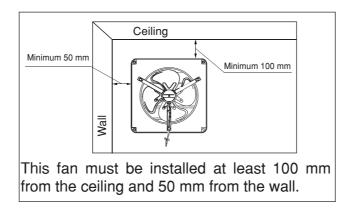
- 1. Install a Wooden Frame on the wall, Where the Fan will be installed.
- 2. Install the Fan Body into the wooden frame, use and tighten the Wood Screw and Ring firmly to avoid the Fan from shaking.





Notice

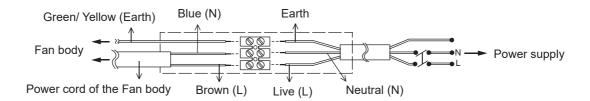
- If all of three Motor Arm had to be unmounted from the Frame during the installation, the Motor Arm must be re-installed firmly to Frame and using the provided Rings.
- Do not kink or pinch the supply wiring. Otherwise, it may cause electric leakage, Electric shock or fire.



3. To turn on the Fan, connect the supply cord to power source with the indicated voltage and frequency in the Name Plate.

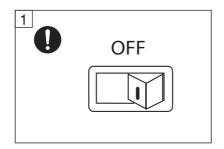
Notice

- Connect the power cord to the supply line according to the wiring diagram and the local electrical wiring rules of fixed wiring.
- Make sure all connections are fastened firmly after wiring is finished.
- It is required to use terminal (not included) that complies IEC 60998.
- The all connections should be accommodated in a suitable compartment.

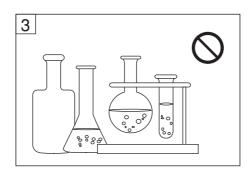


## V. MAINTENANCE

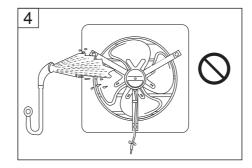
1. Make sure the electricity supply has been disconnected and the Propeller stops rotating before cleaning and maintenance.



- 2. Clean the blades and other outer parts using warm water mixed with detergent, then wipe again with a dry cloth.
- 3. Avoid using THINNER, GASOLINE, ALCOHOL, or materials that can cause rust or fade color.

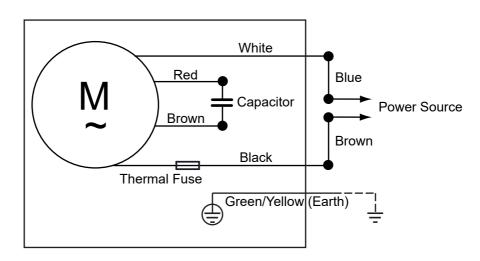


4. Don't let water reaches electrical parts like motor or switch.

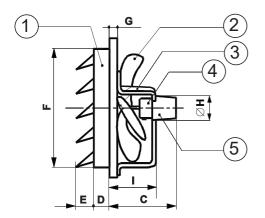


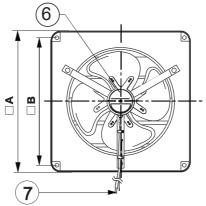
- 1 5. Use gloves during cleaning, to avoid accidents or injuries.
- 6. After cleaning, apply grease to Motor Shaft to prevent from rust.
- 7. After the Fan dries, re-assembly the Fan according to the installation instruction.
- 8. When the Fan is not to be used after cleaning, keep the Fan in the dry place.
- 9. If the Fan is not to be used for long term, remove the Fan from wooden frame to avoid the possibility of falling.

## VI. WIRING DIAGRAM



# **VII. PARTS NAME**





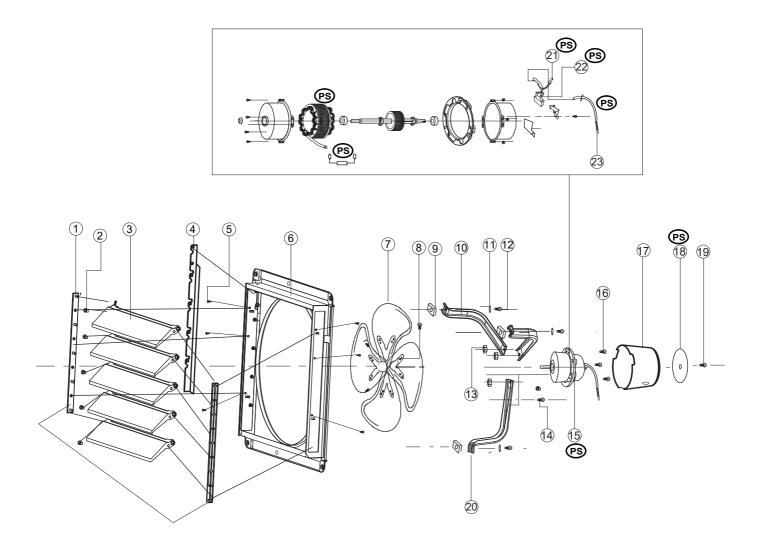
- 1. Main Frame
- 2. Blade
- 3. Arm
- 4. Motor
- 5. Motor Cover
- 6. Name Plate
- 7. Supply Cord

Size (mm):				
OV	40KAQA			
Α	510			
В	480			
$\circ$	215			
О	40			
Ε	55			
F	434			
G	10			
Н	126			
	130			

# **VIII. SERVICE STANDARD**

Type of Problem	Possible Cause	Repair Action	
The Motor not spinning	There is no electrical current	Check the connection and electrical voltage	
	The connection to the Power Supply Terminal detached	Check the connection on the terminal	
	The crimping joint between motor lead wire and capacitor detached	Re-crimping / Re-joint the connection	
	The Motor lead wire is broken	Replace the Motor	
	The Motor coil is broken	Replace the Motor	
	The Thermal Fuse is broken	Replace the Motor	
	The Capacitor is broken	Replace the Capacitor	
The Motor rotation is slow	The Capacitor capacitance drops	Replace the Capacitor	
	The Bearing broken	Replace the Motor	
	The Rotor dan Stator collides	Replace the Motor	
Noise	The Blade touching the Motor Arm	Replace the Blade / adjust the Blade profile	
	The Blade vibrates	Replace the Blade	
	The Blade not fasten firmly	Fasten the Blade screw	

## IX. ARRANGEMENT OF PARTS INSTALLATION



#### **IMPORTANT NOTES FOR SAFETY:**

- Components / Parts which marked with sare having special characteristic for safety.
- Use original components / parts when replacing the product components / parts.

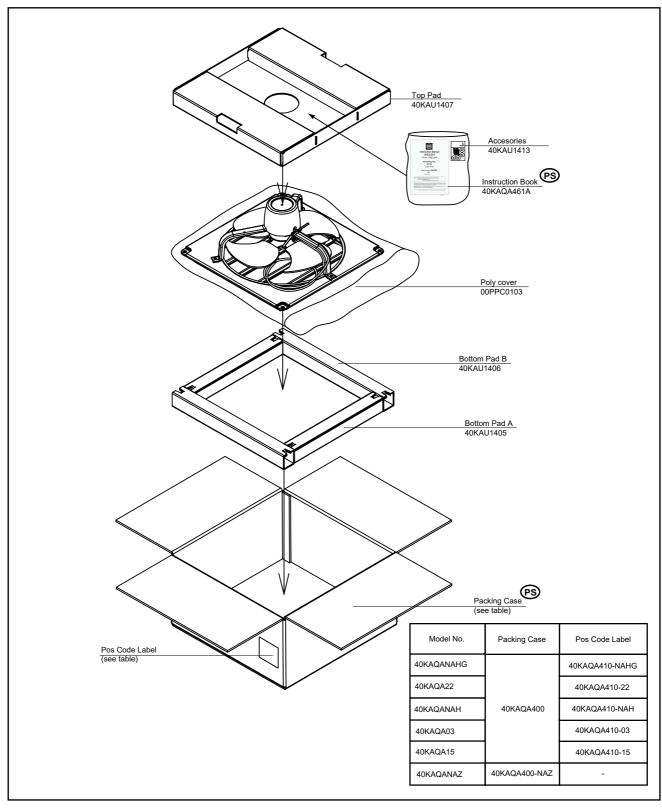
## X. SERVICE PART LIST

Number	Part Name		Part Number	Quantity (pcs)
1	Shutter Set Plate		40AEAS961A	2
2	Shutter Lever		25VGU1905	5
3	Shutter		40AAU0903ACG-E	5
4	Balancer Plating		40AEA0951T	1
5	Truss Tapp Screw		TTS-D4X8LA	6
6	Frame Assy		40AEAP900DPCG-E	1
7	Blade Asembly		40AEAP800ACG-E	1
8	Blade Set Screw		00HTN0101D	1
9	Cushion		30AEA0290A	3
10	Arm A		40AEAP910ACG-E	2
11	Spring Washer		SW-D8A	3
12	Cross Slot Screw		CSS-M8X20LA	3
13	Hexagonal Nut		HN-M6AMOA	3
14	Cross Slot Screw		CSS-M5X8LA	1
15	Motor Assy 220V PS		40KAU1M20A	1
16	Cross Slot Screw		CSS-M6X15LA	3
17	Rear Outer Cover		30AEAP401GTCG-E	1
18	Name Plate	PS	See Table X.1	1
19	Cross Slot Screw		CSS-M5X8LA	1
20	Arm		40KAU1910ACG	1
21	Connector PS		CE-230L	2
22	Capacitor 1.1µF 500VAC PS		40KAU1101	1
23	Cord Sub Assy PS		40KAU1131	1

Table X.1 Guide for ordering Name Plate

Model No.	Name Plate	
40KAQANAHG	- 40KAQA050	
40KAQA22		
40KAQANAH		
40KAQA03		
40KAQA15	40KAQA050-15	
40KAQANAZ	40KAQA050-NAZ	

## XI. PACKING INSTRUCTION





Jakarta, June 2024