

DAIKIN



INSTALLATION MANUAL



Installation manual
Chilled Water Fan Coil Units

English

Models

FWT02AATNMV1

FWT03AATNMV1

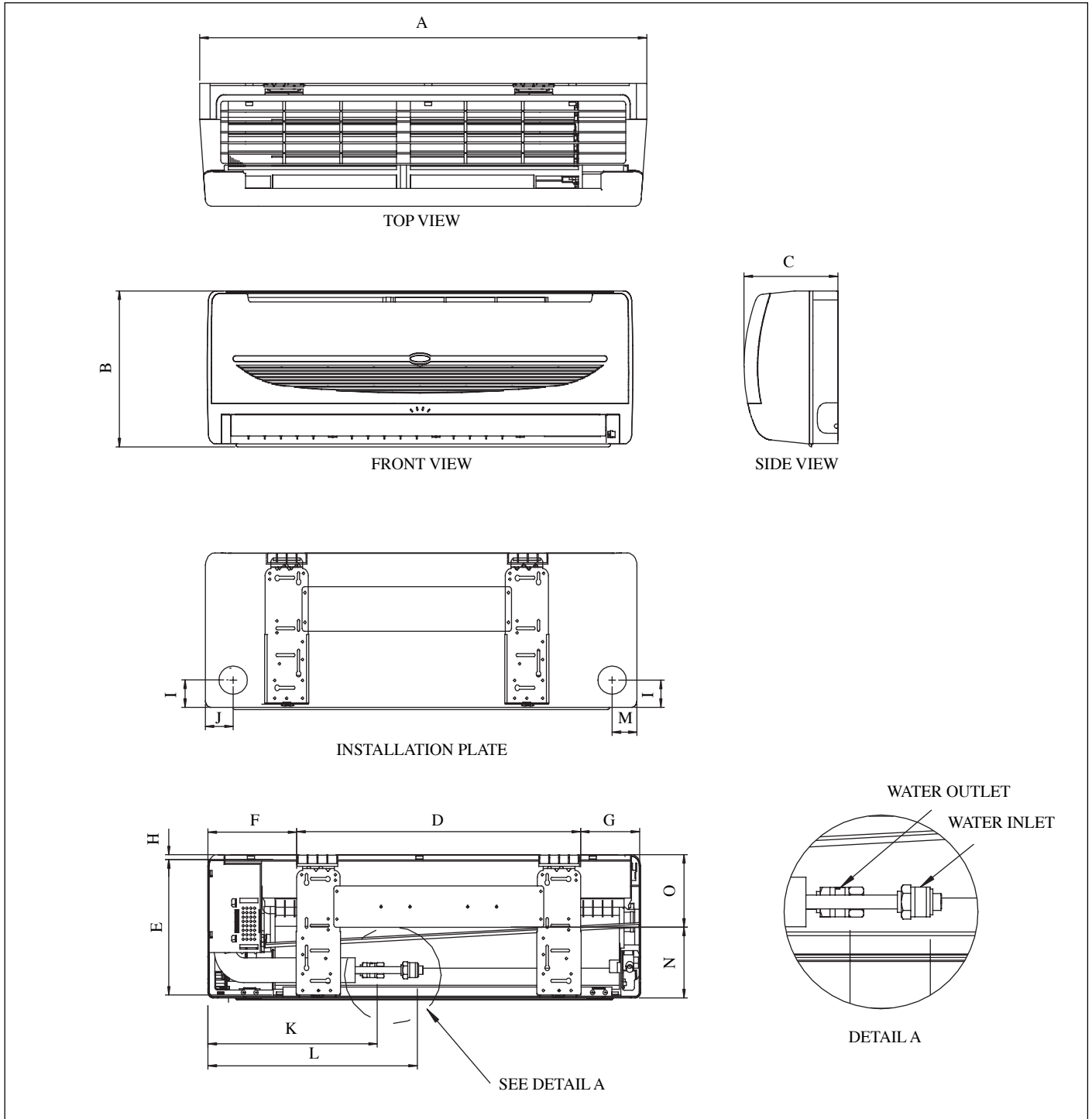
FWT04AATNMV1

FWT05AATNMV1

FWT06AATNMV1

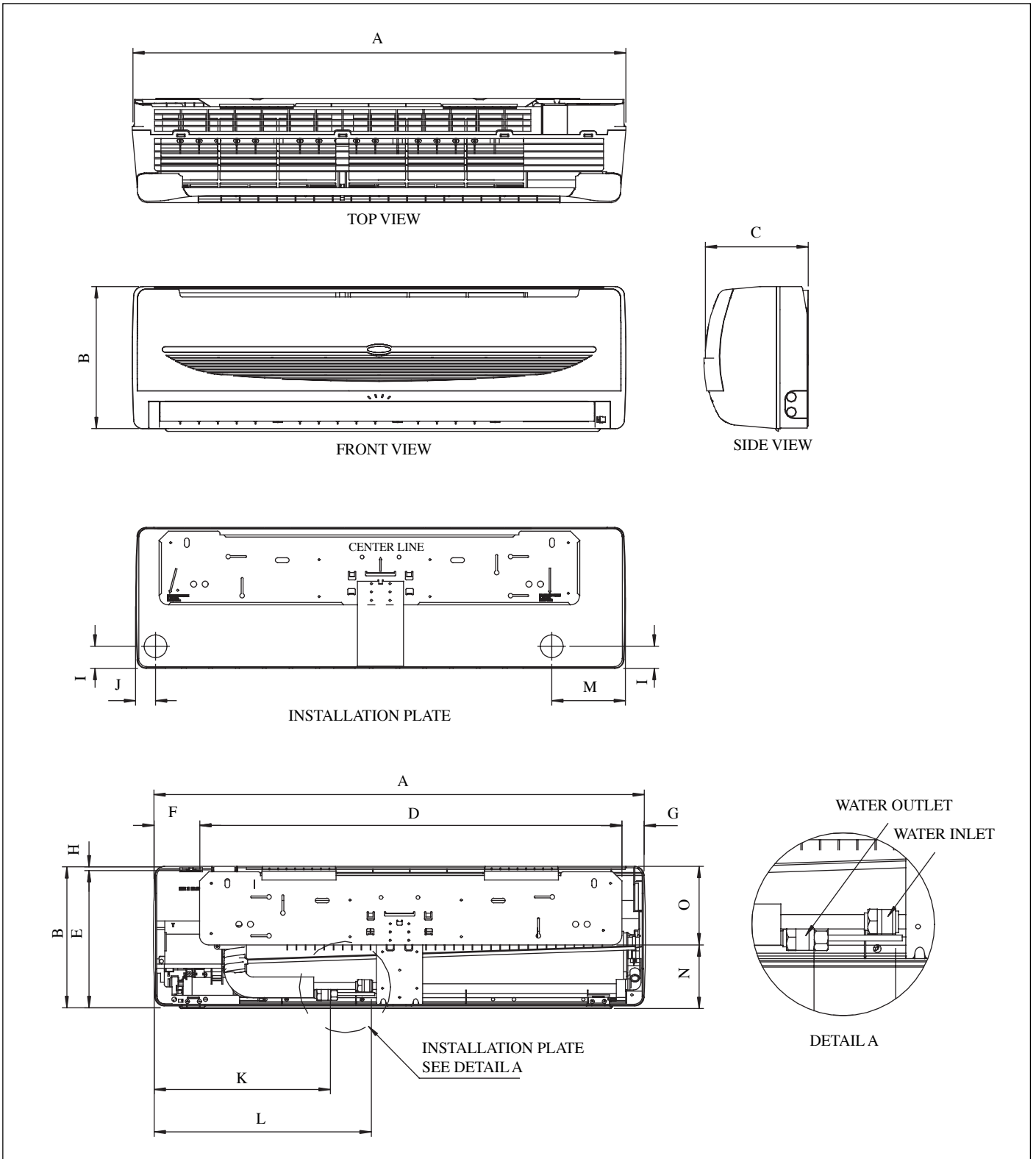
OUTLINE AND DIMENSIONS

Indoor Unit



Dimension	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
FWT02AATNMV1	799 (31,5)	260 (10,2)	198 (7,8)	379 (15,0)	246 (9,7)	185 (7,3)	124 (4,9)	8 (0,3)	56 (2,2)	50 (2,0)	350 (13,8)	379 (15,0)	50 (2,0)	128 (5,1)	132 (5,2)
FWT03AATNMV1 / FWT04AATNMV1	899 (35,4)	260 (10,2)	198 (7,8)	590 (23,2)	246 (9,7)	185 (7,3)	124 (4,9)	8 (0,3)	56 (2,2)	50 (2,0)	435 (17,1)	495 (19,5)	50 (2,0)	128 (5,1)	132 (5,2)

Indoor Unit





Dimension	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
FWT05AATNMV1 /	1060	310	220	912	294	99	51	8	48	43	369	453	160	138	160
FWT06AATNMV1	(41,7)	(12,2)	(8,6)	(35,9)	(11,6)	(3,9)	(2,0)	(0,3)	(1,9)	(1,7)	(14,5)	(17,8)	(6,3)	(5,4)	(6,3)

⚠ WARNING

- Installation and maintenance should be performed by qualified persons who are familiar with local code and regulation, and experienced with this type of appliance.
- All field wiring must be installed in accordance with the national wiring regulation.
- Ensure that the rated voltage of the unit corresponds to that of the name plate before commencing wiring work according to the wiring diagram.
- The unit must be GROUNDED to prevent possible hazard due to insulation failure.
- All electrical wiring must not touch the water piping or any moving parts of the fan motors.
- Confirm that the unit has been switched OFF before installing or servicing the unit.
- Risk of electric shock, can cause injury or death. Disconnect all remain electric power supplies before servicing.
- DO NOT pull out the power cord when the power is ON. This may cause serious electrical shocks which may result in the fire hazards.
- Keep the indoor and outdoor units, power cable and transmission wiring, at least 1m from TVs and radios, to prevent distorted pictures and static. {Depending on the type and source of the electrical waves, static may be heard even when more than 1m away}.

⚠ CAUTION

Please take note of the following important points when installing.

- **Ensure that the drainage piping is connected properly.**
 If the drainage piping is not connected properly, it may cause water leakage which will dampen the furniture.
- **Ensure that the unit's panel is closed after service or installation.**
 Unsecured panels will cause the unit to operate noisily.
- **Sharp edges and coil surfaces are potential locations which may cause injury hazards. Avoid from being in contact with these places.**
- **Before turning off the power supply set the remote controller's ON/OFF switch to the "OFF" position to prevent the nuisance tripping of the unit.** If this is not done, the unit's fans will start turning automatically when power resumes, posing a hazard to service personnel or the user.
- **Do not operate any heating apparatus too close to the air conditioner unit.** This may cause the plastic panel to melt or deform as a result of the excessive heat.
- **Ensure the color of wires of the outdoor unit and the terminal markings are same to the indoors respectively.**
- **IMPORTANT : DO NOT INSTALL OR USE THE AIR CONDITIONER UNIT IN A LAUNDRY ROOM.**

NOTICE**Disposal requirements**

Your air conditioning product is marked with this symbol. This means that electrical and electronic products shall not be mixed with unsorted household waste.

Do not try to dismantle the system yourself: the dismantling of the air conditioning system, treatment of the refrigerant, of oil and of other parts must be done by a qualified installer in accordance with relevant local and national legislation.

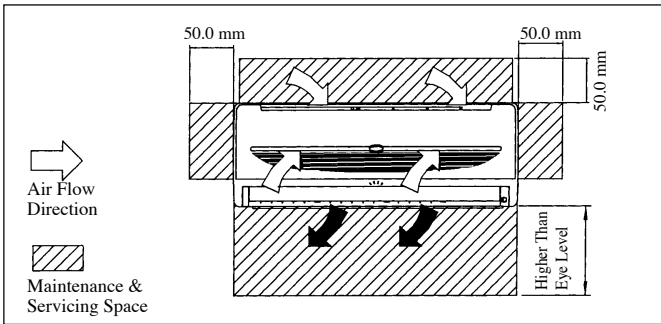
Air conditioners must be treated at a specialized treatment facility for re-use, recycling and recovery. By ensuring this product is disposed of correctly, you will help to prevent potential negative consequences for the environment and human health. Please contact the installer or local authority for more information.

Batteries must be removed from the remote controller and disposed of separately in accordance with relevant local and national legislation.

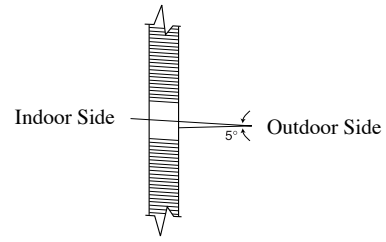


INSTALLATION OF THE INDOOR UNIT

The indoor unit must be installed in such a way so as to prevent short circuit of the cool discharged air with the hot return air. Please follow the installation clearance shown in the figure. Do not place the indoor unit where there could be direct sunlight shining on it. Also, this location must be suitable for piping and drainage, and be away from doors or windows.

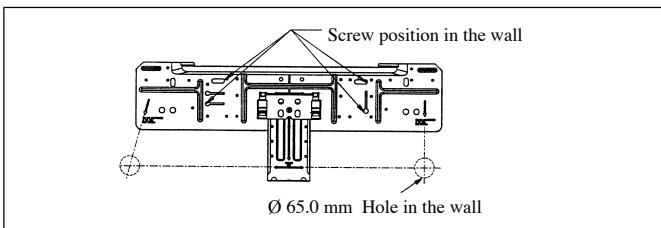
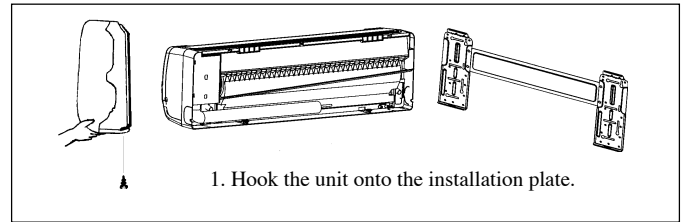
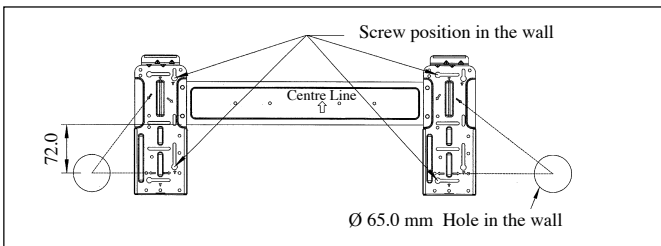


Hole With Cone Drill



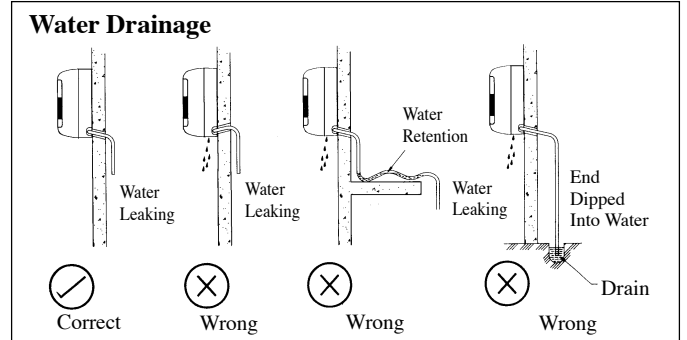
Mount The Unit Onto The Installation Plate

Hook the indoor unit onto the upper portion of the installation plate (Engage the two hooks at the rear top of the indoor unit with the upper edge of the installation plate). Ensure that the hooks are properly seated on the installation plate by moving it to the left and right.



Water Drainage Piping

The indoor drain pipe must be in a downward gradient for smooth drainage. Avoid situations that are likely to cause water to leak.



Water Piping Connection

The indoor unit is equipped with water outlet and inlet threaded connection. There is an air-vent for air purging that is fitted at the outlet water header.

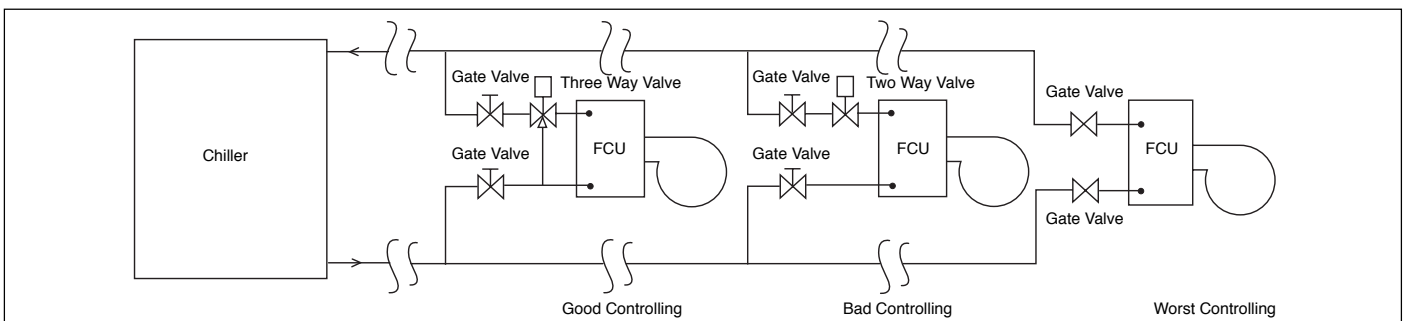
3 ways valve is required for cycling off or bypass the chilled water.

Black steel pipe, polyurethane pipe, PVC pipe and copper tube are recommended in field installation.

All types of piping and connection must be insulated by polyurethane (ARMAFLEX type or equivalent) to avoid condensation.

Do not use contaminated or damaged pipe and fitting for installation.

Some main fitting components are needed in the system to enhance the capacity and ease of service, such as gate valve, balancing valve, 2 ways or 3 ways valve, filter, strainer, etc.



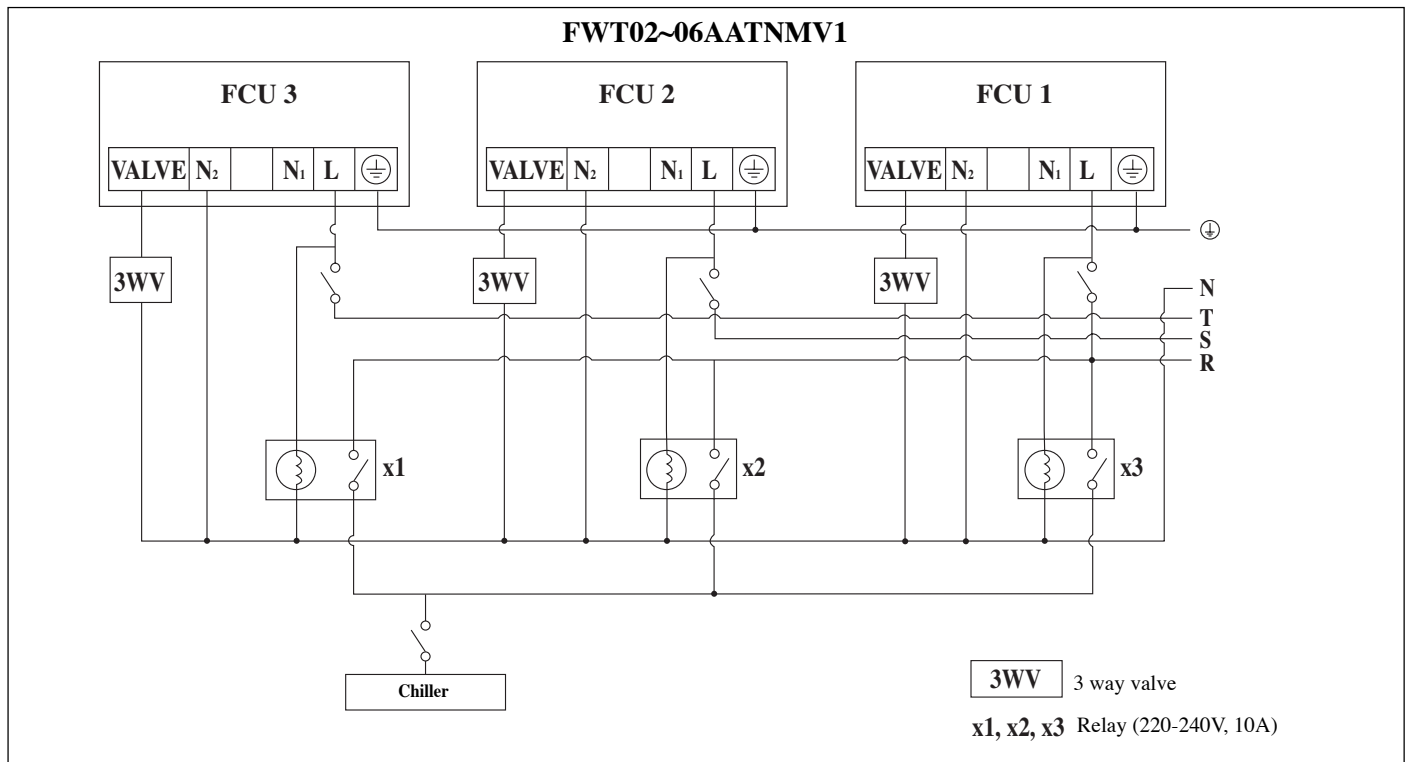
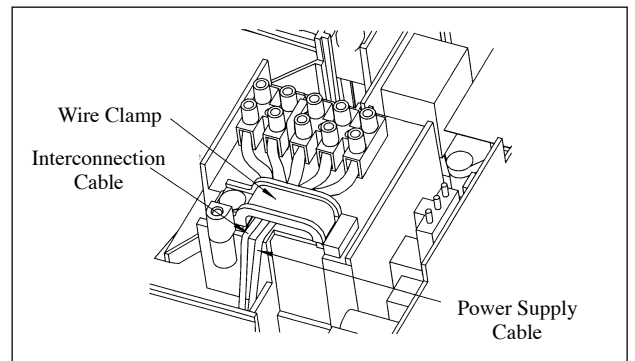
ELECTRICAL WIRING CONNECTION

IMPORTANT : The figures shown in the table are for information purpose only. They should be checked and selected to comply with the local/national codes of regulations. This is also subject to the type of installation and conductors used.

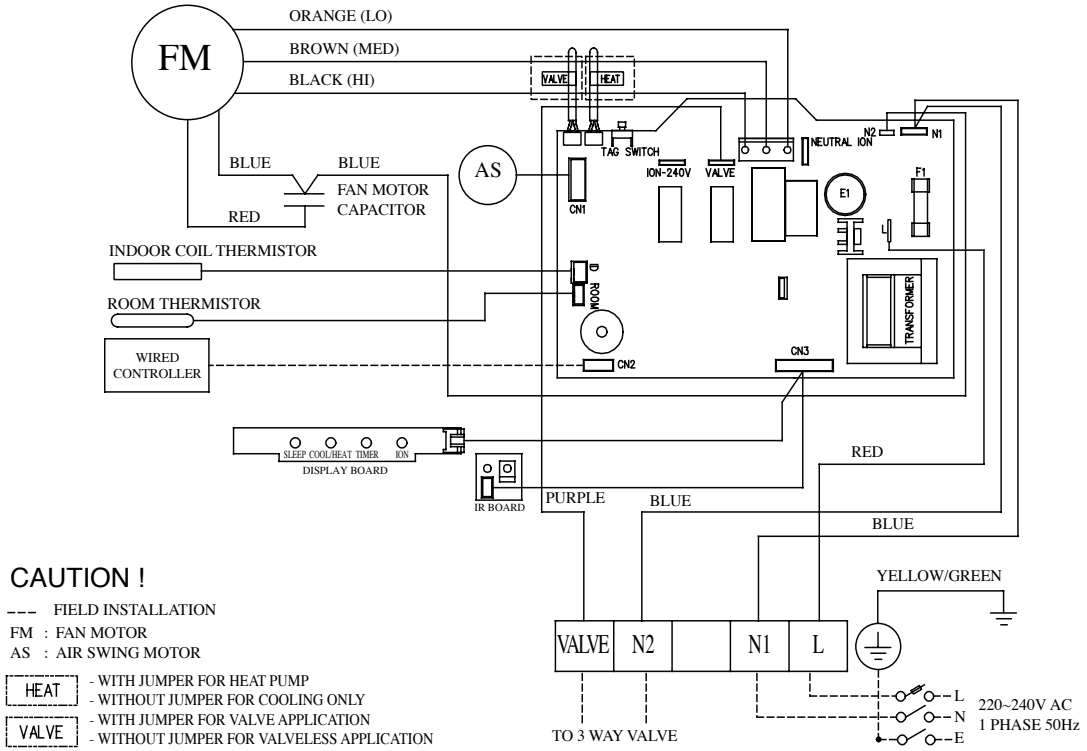
A main switch or other means for disconnection, having a contact separation in all poles, must be incorporated in the fixed wiring in accordance with relevant local and national legislation.

Model		FWT02AATNMV1 / FWT03AATNMV1 / FWT04AATNMV1	FWT05AATNMV1 / FWT06AATNMV1
Voltage range		220V – 240V/1Ph / 50Hz + ⊕	
Power supply cable size	mm²	1.5	1.5
Number of wire		3	3
Recommended fuse	A	2	2

- All wires must be firmly connected.
- All wires must not touch the water piping, or any moving parts of the fan motor.
- The connecting wires to the indoor unit must be clamped on the wire clamps as shown in the figure.
- The power supply cord must be equivalent to H05VV-F (60227 IEC 52 or 60227 IEC 53) which is the minimum requirement, and to be used in protective tube.

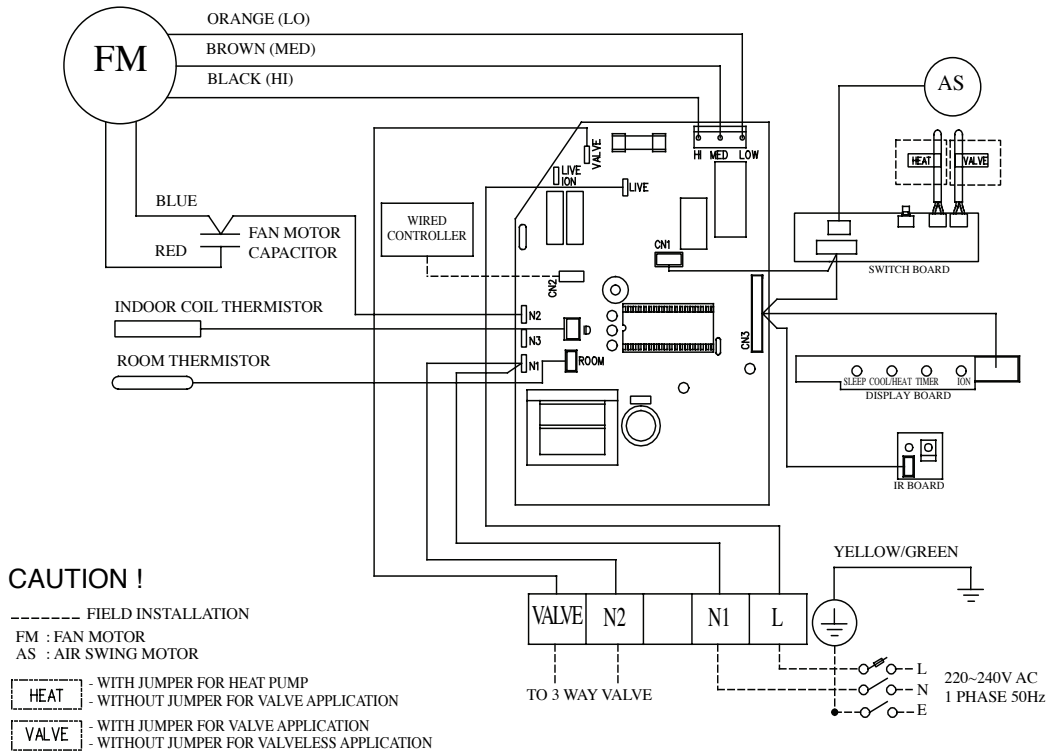


MODEL: FWT02AATNMV1 / FWT03AATNMV1 / FWT04AATNMV1



PART NO: 08 02 4 091934

MODEL: FWT05AATNMV1 / FWT06AATNMV1



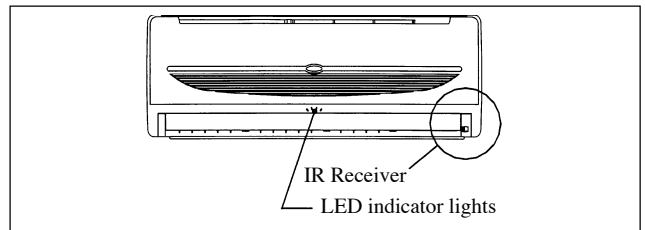
PART NO: 08 02 4 091938

Note: Unit comes in standard heatpump and for valve application.

INDICATOR LIGHTS

IR Signal Receiver

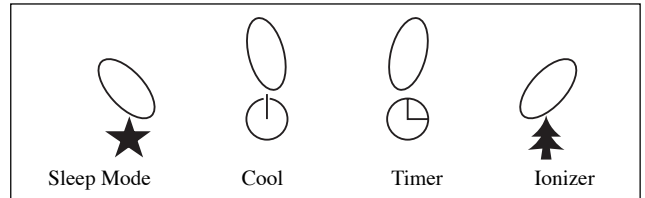
When an infrared remote control operating signal has been transmitted, the signal receiver on the indoor unit will make a <beep> sound to confirm acceptance of the signal transmission.



Cooling Unit / Heat Pump Unit

The table shows the LED indicator lights for the air conditioner unit under normal operation and fault conditions. The LED indicator lights are located at the middle of the air conditioner unit.

LED Indicator Lights For Cooling/ Heat Pump Unit



LED Indicator Lights : Normal Operation And Fault Conditions For Cooling / Heat Pump Unit

	COOL/HEAT (GREEN/RED)			Normal Operation / Fault Indication	Action
	Green			Cool mode	-
	Red			Heat mode	-
				Timer on	-
				Sleep mode on	-
				Ionizer on	-
				Fan mode on	-
				Dry mode on	-
	1 time			Room air sensor contact Loose / Short	Call your dealer
	2 times			Indoor coil sensor contact Loose/Short	Call your dealer
		3 times		Pipe water temperature poor	Call your dealer
		1 time		Pipe water temperature bad	Call your dealer

ON

ON or OFF

Blinking

Note: Ionizer is optional depending on availability.

AIR CONDITIONER UNIT OPERATION

Dry Mode

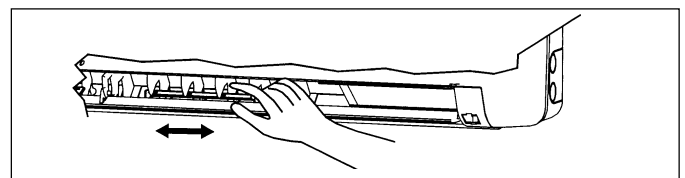
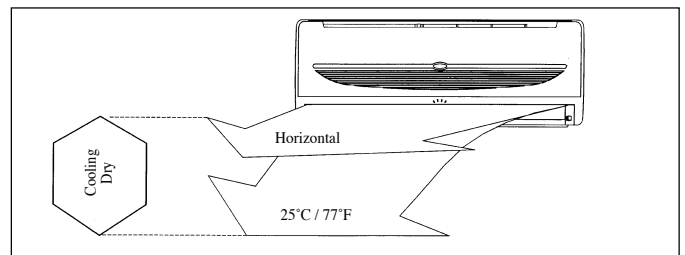
- When the air humidity is high, the unit can operate in dry mode. Press <MODE> button and choose <DRY>.
- If the room temperature is 2°C/35.6°F higher than the set temperature, the air conditioner will operate under cooling mode until it reaches within the 2°C/35.6°F range of difference compared to the set temperature before it converts to dry mode.
- If the room temperature is within the 2°C/35.6°F range of difference compared to the set temperature, it will directly operate under dry mode.
- The unit will operate at LOW speed under dry mode.

Horizontal Air Flow Control

- For more effective air circulation, you can manually adjust the air discharge grille to the left or right.
- During cool mode operation and dry mode operation, do not direct the air discharge louver downwards for too long. If operating continues in this way, condensation may occur on the louver, thus resulting in drippings.

Fan Speed And Rated Cooling Capacity

- The rated cooling capacity is provided at the maximum fan speed.
- The cooling capacity is lower when the unit is operating at MEDIUM and LOW fan speed.



OPERATING RANGE

Operating Limits:

Thermal carrier : Water

Water temperature : 5 ~50°C

Maximum water pressure : 16 bar

Air temperature : (as below)

Cooling Mode

Temperature	Ts °C/°F	Th °C/°F
Minimum indoor temperature	16.0 / 60.8	11.0 / 51.8
Maximum indoor temperature	32.0 / 89.6	23.0 / 73.4
Minimum outdoor temperature	16.0 / 60.8	-
Maximum outdoor temperature	46.0 / 114.8	-

Heating Mode

Temperature	Ts °C/°F	Th °C/°F
Minimum indoor temperature	16.0 / 60.8	-
Maximum indoor temperature	30.0 / 86.0	-
Minimum outdoor temperature	-5.0 / 23.0	-6.0 / 21.2
Maximum outdoor temperature	24.0 / 75.2	18.0 / 64.4

Ts: Dry bulb temperature.

Th: Wet bulb temperature.

⚠ CAUTION

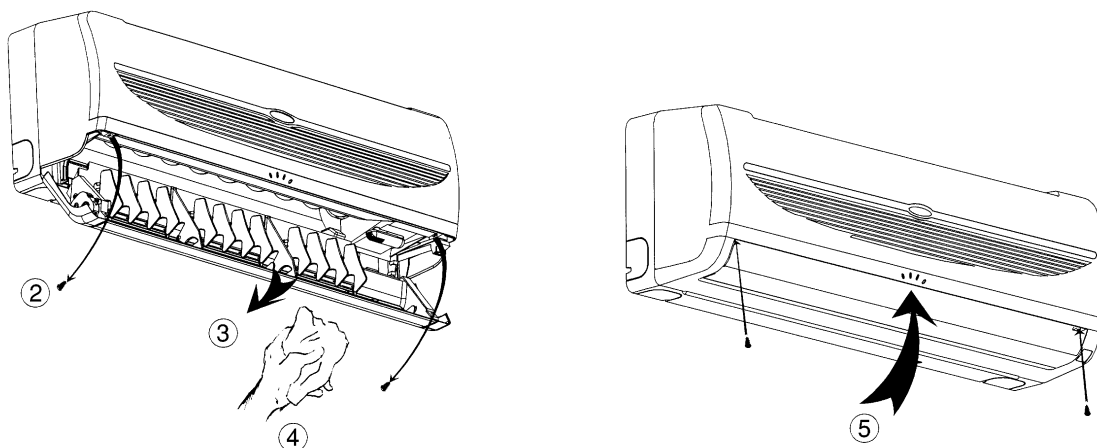
- The electrostatic air purifying and deodorizing filter should be replaced once every 6 months or when the filter changes color to brownish, whichever is sooner.
- Used dusty filters should be disposed and shouldn't be reused, even if it has been cleaned and washed.
- The filter is a consumable part which you can purchase from your air conditioner dealer.
- Use the new filter immediately once it has been taken out from its sealed packing. Do not unpack the new filter too early before it is actually used as this may decrease its deodorizing effect.

AUTO RANDOM RE-START FUNCTION

If there is a power cut when the unit is operating, it will automatically resume the same operating mode when the power is restored. (Applicable only to units with this feature.)

SERVICE AND MAINTENANCE

Service Parts	Maintenance Procedures	Period
Indoor air filter	<ol style="list-style-type: none"> Remove any dust adhering to the filter by using a vacuum cleaner or wash in lukewarm water (below 40°C/104°F) with a neutral cleaning detergent. Rinse the filter well and dry before placing it back onto the unit. Do not use gasoline, volatile substances or chemicals to clean the filter. 	<p>At least once every 2 weeks.</p> <p>More frequently if necessary.</p>
Indoor unit	<ol style="list-style-type: none"> Clean any dirt or dust on the grille or panel by wiping it off with a soft cloth soaked in lukewarm water (below 40°C/104°F) and a neutral detergent solution. Do not use gasoline, volatile substances or chemicals to clean the indoor unit. 	<p>At least once every 2 weeks.</p> <p>More frequently if necessary.</p>



- ① Off the unit.
- ② Unscrew the air discharge housing.
- ③ Flip open the air discharge housing.
- ④ Clean the blower.
- ⑤ Close the air discharge housing and tighten it with screw.

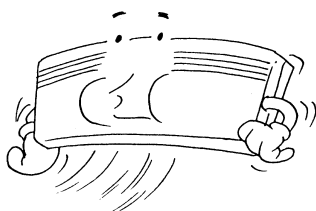
⚠ CAUTION

- Do not operate any heating apparatus too close to the air conditioner unit. This may cause the plastic panel to melt or deform as a result of the excessive heat.

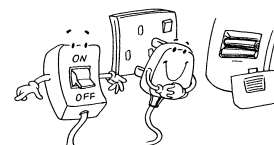
WHEN THE UNIT IS NOT USED FOR AN EXTENDED PERIOD OF TIME

Operate the unit for 2 hours with the following setting.

Operating mode : cool
Temperature : 30°C/86°F



Remove the power plug.
If you are using an independent electric circuit for your unit, cut off the circuit.
Remove the batteries in the remote control.



TROUBLESHOOTING

If any malfunction of the air conditioner unit is noted, immediately switch off the power supply to the unit. Check the following fault conditions and causes for some simple troubleshooting tips.

Fault	Causes
1. The compressor does not start operate after 3 minutes from starting the air conditioner unit.	- Protection against frequent starting. Wait for 3 to 4 minutes for the compressor to start operate.
2. The air conditioner unit does not operate.	- Power failure, or the fuse need to be replaced. - The power plug is disconnected. - It is possible that your delay timer has been set incorrectly. - If the fault persist after all these verifications, please contact the air conditioner unit installer.
3. The air flow is too low.	- The air filter is dirty. - The doors or windows are open. - The air suction and discharge are clogged. - The regulated temperature is not high enough.
4. The remote control display is dim.	- Battery flat. - The batteries are placed incorrectly.
5. Discharge air flow has bad odor.	- Odors may be caused by cigarettes, smoke particles, perfume etc. which might have adhered onto the coil.
6. Condensation on the front air grille of the indoor unit.	- This is caused by air humidity after an extended long period of operation. - The set temperature is too low, increase the temperature setting and operate the unit at high fan speed.
7. Water flowing out from the air conditioner unit.	- Check the condensate evacuation.

If the fault persists, please call your local dealer/serviceman.

MEMO

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