TOSHIBA

AIR CONDITIONER (MULTI TYPE) Owner's Manual

Heat recovery ventilation unit with DX Coil

Model name:

MMD-UPV0501HY-E

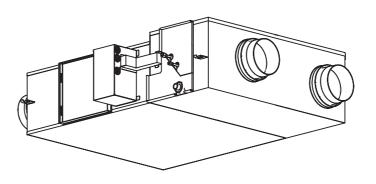
MMD-UPV0801HY-E

MMD-UPV1001HY-E



R32 or R410A

For commercial use





Original instruction

Thank you very much for purchasing TOSHIBA Heat recovery ventilation (HRV) unit with DX Coil. Please read this owner's manual carefully before using your HRV unit with DX Coil.

- Obtain the "Owner's manual" and "Installation manual" from constructor (or dealer).
 Request to constructor or dealer
- · Please clearly explain the contents of the Owner's manual and hand over it.

ADOPTION OF R32 or R410A REFRIGERANT

This Air Conditioner has adopted a refrigerant HFC (R32 or R410A) which does not destroy the ozone layer.

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

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Please read carefully through these instructions that contain important information which complies with the "Machinery Directive" (Directive 2006/42/EC), and understand them.

Generic Denomination: Heat recovery ventilation unit with DX Coil

Definition of Qualified Installer or Qualified Service Person

The HRV unit with DX Coil must be installed, maintained, repaired and removed by a qualified installer or qualified service person. When any of these jobs is to be done, ask a qualified installer or qualified service person to do them.

A qualified installer or qualified service person is an agent who has the qualifications and knowledge described in the table below.

Agent	Qualifications and knowledge which the agent must have
Qualified installer	 The qualified installer is a person who installs, maintains, relocates and removes the HRV units with DX Coil made by Carrier HVAC Equipment (Hangzhou) Co., Ltd. He or she has been trained to install, maintain, relocate and remove the HRV units with DX Coil made by Carrier HVAC Equipment (Hangzhou) Co., Ltd. or, alternatively, he or she has been instructed in such operations by an individual or individuals who have been trained and is thus thoroughly acquainted with the knowledge related to these operations. The qualified installer who is allowed to do the electrical work involved in installation, relocation and removal has the qualifications pertaining to this electrical work as stipulated by the local laws and regulations, and he or she is a person who has been trained in matters relating to electrical work on the HRV units with DX Coil made by Carrier HVAC Equipment (Hangzhou) Co., Ltd. or, alternatively, he or she has been instructed in such matters by an individual or individuals who have been trained and is thus thoroughly acquainted with the knowledge related to this work. The qualified installer who is allowed to do the refrigerant handling and piping work involved in installation, relocation and removal has the qualifications pertaining to this refrigerant handling and piping work as stipulated by the local laws and regulations, and he or she is a person who has been trained in matters relating to refrigerant handling and piping work on the HRV units with DX Coil made by Carrier HVAC Equipment (Hangzhou) Co., Ltd. or, alternatively, he or she has been instructed in such matters by an individual or individuals who have been trained and is thus thoroughly acquainted with the knowledge related to this work. The qualified installer who is allowed to work at heights has been trained in matters relating to working at heights with the HRV units with DX Coil made by Carrier HVAC Equipment (Hangzhou) Co., Ltd. or, alternatively, he or she has been instructed in such matters b
Qualified service person	 The qualified service person is a person who installs, repairs, maintains, relocates and removes the HRV units with DX Coil made by Carrier HVAC Equipment (Hangzhou) Co., Ltd. He or she has been trained to install, repair, maintain, relocate and remove the HRV units with DX Coil made by Carrier HVAC Equipment (Hangzhou) Co., Ltd. or, alternatively, he or she has been instructed in such operations by an individual or individuals who have been trained and is thus thoroughly acquainted with the knowledge related to these operations. The qualified service person who is allowed to do the electrical work involved in installation, repair, relocation and removal has the qualifications pertaining to this electrical work as stipulated by the local laws and regulations, and he or she is a person who has been trained in matters relating to electrical work on the HRV units with DX Coil made by Carrier HVAC Equipment (Hangzhou) Co., Ltd. or, alternatively, he or she has been instructed in such matters by an individual or individuals who have been trained and is thus thoroughly acquainted with the knowledge related to this work. The qualified service person who is allowed to do the refrigerant handling and piping work involved in installation, repair, relocation and removal has the qualifications pertaining to this refrigerant handling and piping work as stipulated by the local laws and regulations, and he or she is a person who has been trained in matters relating to refrigerant handling and piping work on the HRV units with DX Coil made by Carrier HVAC Equipment (Hangzhou) Co., Ltd. or, alternatively, he or she has been instructed in such matters by an individual or individuals who have been trained in matters relating to work at heights has been trained in matters relating to working at heights with the HRV units with DX Coil made by Carrier HVAC Equipment (Hangzhou) Co., Ltd. or, alternatively, he or she has been instructed in such matters by an individual or individuals who have been trained an

These safety cautions describe important matters concerning safety to prevent injury to users or other people and damages to property. Please read through this manual after understanding the contents below (meanings of indications), and be sure to follow the description.

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Indication	Meaning of Indication
MARNING	Text set off in this manner indicates that failure to adhere to the directions in the warning could result in serious bodily harm (1) or loss of life if the product is handled improperly.
<u>^</u> CAUTION	Text set off in this manner indicates that failure to adhere to the directions in the caution could result in slight injury (2) or damage (3) to property if the product is handled improperly.

- Serious bodily harm indicates loss of eyesight, injury, burns, electric shock, bone fracture, poisoning, and other injuries which leave aftereffect and require hospitalization or long-term treatment as an outpatient.
 Slight injury indicates injury, burns, electric shock, and other injuries which do not require hospitalization or long-term treatment as an outpatient.
 Damage to property indicates damage extending to buildings, household effects, domestic livestock, and pets.

MEANINGS OF SYMBOLS DISPLAYED ON THE UNIT

WILANINGO OF O	EARINGS OF STRIBGES BISE EATED ON THE SWIT			
	WARNING (Risk of fire)	This mark is for R32 refrigerant only. Refrigerant type is written on nameplate of outdoor unit. In case that refrigerant type is R32, this unit uses a flammable refrigerant. If refrigerant leaks and comes in contact with fire or heating part, it will create harmful gas and there is risk of fire.		
	Read the OWNER'S MANUAL carefully before operation.			
	Service personnel are required to carefully read the OWNER'S MANUAL and INSTALLATION MANUAL before operation.			
i	Further information is available in the OWNER'S MANUAL, INSTALLATION MANUAL, and the like.			

■ Warning indications on the HRV unit with DX Coil

Warning indication	Description
WARNING ELECTRICAL SHOCK HAZARD Disconnect all remote electric power supplies before servicing.	WARNING ELECTRICAL SHOCK HAZARD Disconnect all remote electric power supplies before servicing.
Moving parts. Do not operate unit with inspection cover removed. Stop the unit before the servicing.	WARNING Moving parts. Do not operate unit with inspection cover removed. Stop the unit before the servicing.
CAUTION High temperature parts. You might get burned when removing this cover.	CAUTION High temperature parts. You might get burned when removing this cover.
CAUTION Do not touch the aluminum fins of the unit. Doing so may result in injury.	CAUTION Do not touch the aluminum fins of the unit. Doing so may result in injury.
CAUTION BURST HAZARD Open the service valves before the operation, otherwise there might be the burst.	CAUTION BURST HAZARD Open the service valves before the operation, otherwise there might be the burst.

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1 Precautions for safety

The manufacturer shall not assume any liability for the damage caused by not observing the description of this manual.

MARNING

General

- Carefully read Owner's Manual before starting the HRV unit with DX Coil. There are many important things to keep in mind for daily operation.
- Ask for installation to be performed by the dealer or a professional.
 Only a qualified installer (*1) is able to install a HRV unit with DX
 Coil. If a non-qualified person installs a HRV unit with DX Coil, it may result in problems such as fire, electric shock, injury, water leakage, noise and vibration.
- Do not use any refrigerant different from the one specified for complement or replacement. Otherwise, abnormally high pressure may be generated in the refrigeration cycle, which may result in a failure or explosion of the product or an injury to your body.
- Usually, the refrigerant does not leak. If it should leak and catch fire on a fan heater, stove, or gas range, a toxic gas will be produced.
- Do not wash the HRV unit with DX Coil. Doing so may result in electric shock.
- Be sure to stop running the HRV unit with DX Coil and turn off the breaker before cleaning. Otherwise, injury may result as the fan is rotating at high speed inside the unit.
- Wear protective gloves and safety work clothing during installation, servicing and removal.

Transportation and storage

- When transporting the HRV unit with DX Coil, wear shoes with protective toe caps, protective gloves, and other protective clothing.
- When transporting the HRV unit with DX Coil, do not take hold of the bands around the packing carton. You may injure yourself if the bands should break.

- When stacking the packing cartons for storage or transportation, heed the precautions written on the packing cartons. Failure to heed the precautions may cause the stack to collapse.
- The HRV unit with DX Coil should be transported in stable condition. If any part of the product broken, contact your dealer.
- Use a hand track or forklift to carry the unit. When carrying it by human power, have six persons or more otherwise, you may strain your back.

Installation

- Only a qualified installer (*1) or qualified service person (*1) is allowed to carry out the electrical work of the HRV unit with DX Coil. Under no circumstances must this work be done by an unqualified individual since failure to carry out the work properly may result in electric shocks and/or electrical leaks.
- After the installation work has been completed, have the installer explain about the circuit breaker positions. In the event that trouble has occurred in the HRV unit with DX Coil, set the circuit breaker to the OFF position, and contact a service person.
- Do not install the HRV unit with DX Coil in a location that may be subject to a risk of exposure to a combustible gas. If a combustible gas leaks and becomes concentrated around the unit, a fire may occur.
- Use the company-specified products for the separately purchased parts. Use of non-specified products may result in fire, electric shock, water leakage or other trouble. Have the installation performed by a professional.
- Confirm that earthing is performed correctly.
- If the unit is installed in a small room, take appropriate measures
 to prevent the refrigerant from exceeding the limit concentration
 even if it leaks. Consult the dealer from whom you purchased the
 air conditioner when you implement the measures. Accumulation
 of highly concentrated refrigerant may cause an oxygen deficiency
 accident.
- Do not install the air conditioner in a location that may be subject to a risk of expire to a combustible gas. If a combustible gas leaks and becomes concentrated around the unit, a fire may occur.

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Operation

- Before opening the electrical control cover or inspection cover of the HRV unit with DX Coil, set the circuit breaker to the OFF position.
 Failure to set the circuit breaker to the OFF position may result in electric shocks through contact with the interior parts. Only a qualified installer (*1) or qualified service person (*1) is allowed to remove the electrical control cover or inspection cover of the HRV unit with DX Coil and do the work required.
- Inside the HRV unit with DX Coil are high-voltage areas and rotating parts. Due to the danger of electric shocks or of your fingers or physical objects becoming trapped in the rotating parts, do not remove the electrical control cover or inspection cover of the HRV unit with DX Coil. When work involving the removal of these parts is required, contact a qualified installer (*1) or a qualified service person (*1).
- Do not move or repair any unit by yourself. Since there is high voltage inside the unit, you may get electric shock when removing the cover and main unit.
- Use of a stand more than 50 cm high to clean the filter or heat exchange element of the HRV unit with DX Coil or to carry out other such jobs constitutes working at heights. Due to the danger of falling off the stand and injuring yourself while working at heights, this kind of work should not be done by unqualified individuals. When this kind of work must be carried out, do not do it yourself but ask a qualified installer (*1) or a qualified service person (*1) to do it for you.
- Do not place any combustion appliance in a place where it is directly exposed to the wind of HRV unit with DX Coil, otherwise it may cause imperfect combustion.
- Do not insert your finger or a stick into the air intake or discharge.
 Doing so may result injury as the fan is rotating at high speed inside the unit.
- Do not touch the aluminum fin of the HRV unit with DX Coil or outdoor unit. You may injure yourself if you do so. If the fin must be touched, do not touch it yourself but contact a qualified installer (*1) or a qualified service person (*1).

- Be sure to stop running the HRV unit with DX Coil and turn off the breaker before cleaning. Otherwise, injury may result as the fan is rotating at high speed inside the unit.
- Do not run or stop running the unit when flammable gas is leaking.
 A gas explosion may occur. Open the window to ventilate the room if flammable gas is leaking.
- Do not expose your body to cool air directly for a long time and do not cool yourself excessively. Doing so may result in deteriorated physical condition and ill health.
- Consult the shop where you purchased HRV unit with DX Coil if HRV unit with DX Coil (cooling and heating) is not performed properly as a refrigerant leakage may be the cause. Confirm the repair details with a qualified service person (*1) when the repair includes additional charging of the refrigerant.

Repairs

- When you have noticed that some kind of trouble (such as when a check display has appeared, there is a smell of burning, abnormal sounds are heard, water is leaking) has occurred in the HRV unit with DX Coil, do not touch the HRV unit with DX Coil yourself but set the circuit breaker to the OFF position, and contact a qualified service person. Take steps to ensure that the power will not be turned on (by marking "out of service" near the circuit breaker, for instance) until qualified service person arrives. Continuing to use the HRV unit with DX Coil in the trouble status may cause mechanical problems to escalate or result in electric shocks or other trouble.
- If there is a danger of the HRV units with DX Coil falling, do not approach the HRV unit with DX Coil but set the circuit breaker to the OFF position, and contact a qualified installer (*1) or a qualified service person (*1) to refit the unit. Do not set the circuit breaker to the ON position until the unit has been refitted.
- Do not modify the products. Do not also disassemble or modify the parts. It may cause a fire, electric shock or injury.

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Relocation

When the HRV unit with DX Coil is to be relocated, do not relocate
it yourself but contact a qualified installer (*1) or a qualified service
person (*1). Failure to relocate the HRV unit with DX Coil properly
may result in electric shocks and/or a fire.

(*1) Refer to the "Definition of Qualified Installer or Qualified Service Person".

A CAUTION

Cautions about installation (confirm the following cautions.)

- Connect the HRV unit with DX Coil to an exclusive power supply of the rated voltage, otherwise the unit may break down or cause a fire.
- Certainly lay the drain hose for perfect draining. Improper drainage may cause flooding in the house and getting furniture wet.

Cautions about operation

- Do not use this HRV unit with DX Coil for special purpose such as preserving food, precision instruments, art objects, breeding animals, car, vessel, etc.
- Do not touch any switches with wet finger, otherwise you may get an electric shock.
- If the HRV unit with DX Coil will not be used for a considerably long time, turn off the main switch or the circuit breaker, for safety.
- Prevent any liquid from falling into the remote controller. Do not spill juice, water or any kind of liquid.
- Do not pour or spray water or detergent on the electric parts.
 Doing so may cause electric leakage and result in a fire, electric shocks and/or injury.
- Do not install the unit and inside air intake in a place such as a machine factory, chemical plant, or research institute, where acids, alkaline, organic solvents, or coating materials are handled and toxic gases and/or corrosive gases may be produced.
 Otherwise, gas poisoning may occur and/or the inside of the unit
- Otherwise, gas poisoning may occur and/or the inside of the unit may be eroded or deteriorated. The deterioration and erosion may result in a fire.

- Do not use "Bypass mode" when heating the room in winter.
 Water condensed on the unit may drip onto the ceiling board and may soil the ceiling.
- Do not use the unit in a place where it is hot (40°C or higher) or where much oily smoke is produced, and do not directly expose the unit to flame.
- Doing so may result in a fire.
- Do not expose animals or plants to the wind from the unit. Doing so may harm the animal or plant.
- Do not use a flammable spray near the unit or inside air intake. Doing so may result in a fire.
- To make the HRV unit with DX Coil operate in its original performance, operate it within the range of the operating temperature specified in the instructions. Otherwise it may cause a malfunction, or water leak from the unit.
- Do not wash the "HRV unit with DX Coil". Doing so may result in electric shock.
- Check whether the installation base and other equipment have become deteriorated after being used for a long time. Leaving them such condition may result in the unit's falling down and causing injury.
- Do not leave flammable sprays or other flammable materials near the air conditioner, and do not spray flammable aerosol directly to the air conditioner. They may catch fire.
- Ask for cleaning of the HRV unit with DX Coil to be performed by the dealer. Cleaning the air conditioner in an improper manner may cause damage to plastic parts, insulation failure of electric parts or other parts, and result in a malfunction. In the worst case, it may result in water leakage, electric shock, smoke emission or fire.
- Fix the parts such as the inspection cover firmly.
- Stop running the unit if it vibrates abnormally. The unit or parts of it may fall and an injury may result.

■ Disposal

Dispose of HRV unit with DX Coil in accordance with the Directive 2012/19/EU WEEE (Waste Electrical and Electronic Equipment).

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■ Information on the transportation, handling and storage of the carton

Examples of indication on the carton

Symbol	Description	Symbol	Description	
Keep dry		DO NOT DROP	Do not drop	
Do not lay down		2 cartons	Stacking height (3 cartons can be stacked in this case)	
<u>†</u> †	This side up		Do not step	
	Handle with care	119 kg	Weight	
	Do not roll	≯ [≫]+	Do not clamp	

Other cautions	Description
Injury possibility. Don't handle with packing band, or may get injured in case of broken band.	CAUTION Injury possibility. Don't handle with packing band, or may get injured in case of broken band.
Stacking notice. In case that cardboard boxes protrude out of pallet when stacking, lay a 10mm thick plywood over the pallet. Cardboard box Plywood Pallet	Stacking notice. In case that cardboard boxes protrude out of pallet when stacking. Lay a 10 mm thick plywood over the pallet.

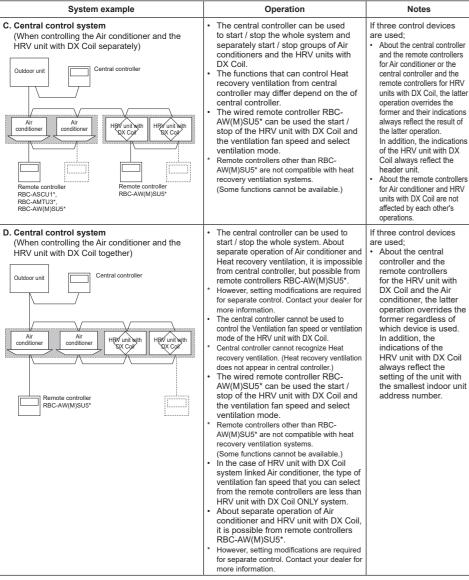
2 System configuration

The control method of this product differs depending on the system configuration. Operate it following the methods explained in the system configuration examples below.

- For the actual system configuration, ask your dealer or the installer of the product for information.
- Refer also to the installation manuals and owner's manuals of the remote controllers.
- If you use the central remote controller, refer also to its installation manual and owner's Manual.

System example	Operation	Notes
A. HRV unit with DX Coil system Outdoor unit HRV unit with HRV unit with HRV unit with RX Coil Remote controller RBC-AW(M)SU5*	The wired remote controller RBC-AW(M)SU5* can be used the start / stop of the HRV unit with DX Coil, the ventilation fan speed, select ventilation mode, select the operation mode and adjust the temperature. Remote controllers other than RBC-AW(M)SU5* are not compatible with heat recovery ventilation systems. (Some functions cannot be available.) For how to use the remote controller, refer to "4 How to use".	If two remote controllers are used, the latter operation overrides the former and their indications always reflect the result of the latter operation. In addition, the indications of the HRV unit with DX Coil always reflect the header unit.
B. HRV unit with DX Coil system linked with air conditioners Outdoor unit Air Air Conditioner Condit	The wired remote controller RBC-AW(M)SU5* can be used the start / stop of the HRV unit with DX Coil, the ventilation fan speed, select ventilation mode, select the operation mode and adjust the temperature. Remote controllers other than RBC-AW(M)SU5* are not compatible with heat recovery ventilation systems. (Some functions cannot be available.) In the case of HRV unit with DX Coil system linked Air conditioner, the type of ventilation fan speed that you can select from the remote controllers are less than HRV unit with DX Coil ONLY system. About separate operation of Air conditioner and Heat recovery ventilation, it is possible from remote controllers RBC-AW(M)SU5*. However, setting modifications are required for separate control. Contact your dealer for more information.	If two remote controllers are used, the latter operation overrides the former and their indications always reflect the result of the latter operation. In addition, the indications of the HRV unit with DX Coil always reflect the setting of the unit with the smallest indoor unit address number.

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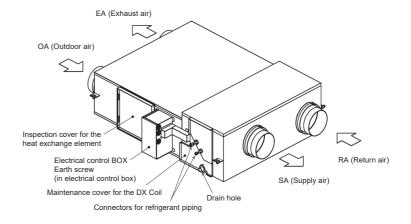
- * When the HRV unit with DX Coil system linked with indoor air conditioners is used, set the HRV unit with DX Coil as "Follower", referring to "Setting the address anually using the remote controller" in the Installation Manual of the outdoor unit.
- * The display and operation of ventilation air volume and humidification of HRV unit with DX coil displayed on the central controller differs depending on the type of central controller and the communication type.

NOTE

The heat exchange element may smell during the initial period of use. However, this is not a malfunction and the smell is harmless.

3 Part names and functions

■ Concealed microcomputer control type (main unit)



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■ Remote controller RBC-AWSU5*, RBC-AMSU5*

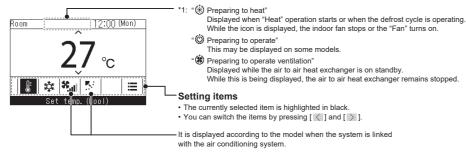
For RBC-AW(M)SU5* remote controller operation, refer also to the Owner's Manual of RBC-AW(M)SU5*.

◆Air conditioner main screen

This screen is for select the operation mode, adjust the temperature, air conditioner fan speed and air conditioner wind direction etc.

You can check the current state according to the setting items on the bottom of the screen.

You can switch the setting items by pressing [\langle] and [\rangle], and change them by pressing [\wedge] and [\vee].



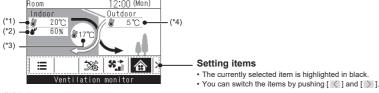
NOTE

- · The temperature setting is changed in the main screen.
- Functions and items that cannot be set are not shown, according to the model of air conditioners.
- While changing settings, if you push [5 Return] or if there are no button operations for about 60 seconds, the main screen returns.

♦ Heat recovery ventilation main screen

This screen is for monitoring the state of the air and for setting the ventilation fan speed and ventilation mode. You can check the current state according to the setting items on the bottom of the screen.

You can switch the setting items by pushing [\langle] and [\rangle], and change them by pushing [\wedge] and [\vee].



- (*1) Indoor temperature
- (*2) Indoor humidity
- (*3) Supply air temperature
- (*4) Outdoor temperature

NOTE

- · Functions and items that cannot be set are not shown, according to the model.
- While changing settings, if you push [5 Return] or if there are no button operations for about 60 seconds, the main screen returns.
- The displayed value (*1, *2, *3, *4) is the value detected by the HRV unit with DX Coil. Actual values may differ. It cannot be used as a measuring instrument.
- If the indoor humidity (*2) is displayed as "--%", the humidity sensor is malfunctioning, so please consult your dealer.
 Even if the humidity sensor fails, the HRV unit wiht DX Coil will continue to operate.
- Depending on the outdoor air temperature, the supply air temperature display value (*3) may not reach the set temperature.



▼Icon list

N	Displayed when "Energy saving operation" is "ON".	Ø	Displayed when "Timer" is "ON".
	Displayed when remote controller sensor is set. (*1)	 	Displayed when "Louver lock" is set.
z_{z_z}	Displayed when "Night operation" is "ON".	!!! !	Displayed when it is time for filter maintenance.
0	Displayed when operations are locked by central control. (*1)	₹	Displayed when "Soft Cooling" operation is "ON".
	Displayed when "Saving operation" is "ON".	7	Displayed for about 3 seconds when the operation mode is changed in the "Mode" screen when the operation mode is restricted.
*	Displayed when the Bluetooth® function is "ON". Refer to the Owner's Manual of the Bluetooth® function regarding Bluetooth® functions.	兩	Displayed when "Air purifier" function is "ON".
Δ	Displayed when a check code occurs. (*1)	F	Displayed when a notice code occurs. (*1) For details, contact your dealer.
-	It reaches the set temperature, and displayed while the room temperature is maintained.	#	It is displayed when a commercially available ventilation unit connected to the air conditioner is in operation.

^{*1:} Refer to the Installation Manual of the Wired remote controller.

▼ Heat recovery ventilation

%	Automatic	24 _H	24-hour ventilation
※	Heat exchange	?	Nighttime heat purge

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♦Operation button section

Preparation

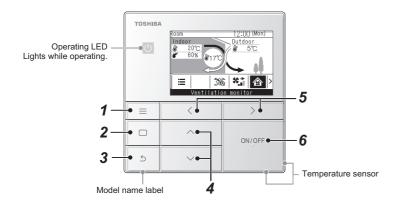
Turn on the circuit breaker

When the power is turned on, " Σ " appears on the remote controller display.

* The remote controller will not work for about 3 minute after turning on the power. This is not a malfunction.

REQUIREMENT

- · Keep the circuit breaker turned on during use.
- When you resume using the HRV unit with DX Coil after a long period of disuse, turn on the circuit breaker at least 12 hours before starting operation.



* The screens shown here are examples. The content that is displayed may differ, depending on the environment settings being used.

1 [Menu] button Shows the "Menu".

2 [Set/Fix] button
Fixes and applies settings.

Ways to use it are shown on screen

Return] button

Deletes selections.

Ways to use it are shown on screen.

4 [\sqrt] and [\sqrt] buttons
Changes settings and selects items.

5 [<] and [>] buttons
Selects setting items.
Other ways to use it are shown on screen.

6 [ON/OFF ON/OFF] button
Starts and stops connected devices.

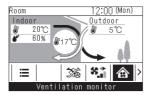
◆Main screen types and configuration

You can switch screens by pushing [<] or [>] in either of the main screens.

Air conditioner main screen



Heat recovery ventilation main screen

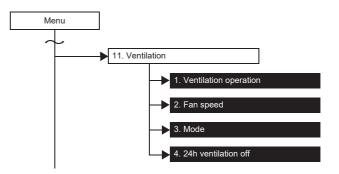


◆Menu items

Push the [Menu] button to display the main menu screen.

Select items with the [\sum] and [\sum] button to set.

In addition to the operations on the main screen, there are also items related to setting Heat recovery ventilation in the menu "11. Ventilation".



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4 How to use

When the Heat recovery ventilation is used for the first time or change the settings, operate the remote following the procedure below.

From the next time, the unit starts running following the set operation conditions by just pressing the [ON/OFF] only OFF] button.

■ Operations



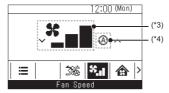
- 1 Push [ON/OFF ON/OFF] to start operations
 - → The operation LED lights.
- 2 Push [] and [] to select the item you want to change
 - → You can change the following items.
 - 1. Adjusting fan speed (Heat recovery ventilation screen)
 - 2. Ventilation mode settings (Heat recovery ventilation screen)
 - 3. Ventilation menu (Heat recovery ventilation screen)
 - 4. Changing the set temperature (Air conditioner screen)
- Changing the operation mode (Air conditioner screen)
- **3** To stop operations, push [ON/OFF] again

1. Adjusting fan speed (Heat recovery ventilation screen)

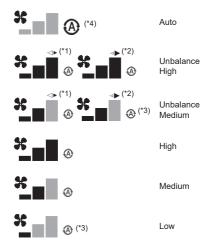
NOTE

* When Supply air is "Low" (Low select or "Supply air < Exhaust air" setting and select Unbalance Medium), HRV unit with DX Coil is thermostat off (Fan mode) for device protection.

The factory default setting for fan speed "Auto" and unbalance ("Supply air > Exhaust air" or "Supply air < Exhaust air") is disabled. Disabled setting items are not shown. To enable it, contact your supplier (dealer).



- 1 Push [<] and [>] to switch to the "Fan speed" screen
- 2 Push [\section] and [\subsection] to select ventilation fan speed



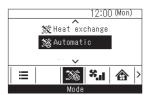
- (*1) < ▶ When "Supply air > Exhaust air" is set

 The volume of supply air to the inside is larger than the volume of exhaust air to the outside.
- (*2) ▷ When "Supply air < Exhaust air" is set

 The volume of exhaust air to the outside is larger than the volume of supply air to the inside.
- (*3) For HRV unit with DX Coil system linked with air conditioners, the display may vary or may not be displayed depending on the type of air conditioner.
- (*4) This " ③ " display appears only when an optional sensor is connected. Consult your dealer to change the setting to active. For HRV unit with DX Coil system linked with air conditioners, it may not be displayed depending on the type of air conditioner.

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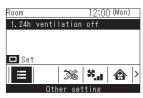
2. Ventilation mode settings (Heat recovery ventilation screen)



- 1 Push [<] and [>] to switch to the "Mode" screen
- 2 Push [\sum] and [\sum] to select a ventilation mode



3. Ventilation menu (Heat recovery ventilation screen)



- **1** Push [<] and [>] to switch to the menu function setting screen
- 2 Push [\subseteq] and [\subseteq] to select menu functions
- 3 Push [Set/Fix]
 - → A screen to confirm appears.
- 4 Push [Set/Fix]
 - → Return to the menu function setting screen.

4. Changing the set temperature (Air conditioner screen)

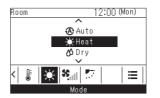


- 1 Push [<] and [>] to switch to the "Set temp." screen
- 2 Push [△] and [✓] to change the temperature setting
 - → Push [\(\sigma \)] to increase and push [\(\sigma \)] to decrease the set temperature

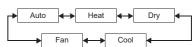
NOTE

- The temperature setting cannot be changed when "Fan" is set.
- For setting, refer also to the Owner's Manual of RBC-AW(M)SU5*.

5. Changing the operation mode (Air conditioner screen)



- 1 Push [<] and [>] to switch to the "Mode" screen
- 2 Push [\section] and [\subseteq] to select an operation mode



NOTE

Operation modes that cannot be set are not shown, according to the model of indoor unit.

For other settings, refer to the Owner's Manual of RBC-AW(M)SU5* and air conditioner.

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■ Functions

About ventilation modes

* For details, see "About ventilation modes" of "2 Features". [Heat exchange mode] or [Automatic mode] can be selected.

About unbalanced ventilation fan speed ([SA>EA]/ | SA<EA]</p>

For normal ventilation High, Medium and Low:

The volumes of the indoor air supply and outdoor air exhaustion are set to the same level.

For unbalanced ventilation fan speed:

- When [SA>EA] is selected: the volume of the indoor air supply is larger than that of the outdoor air exhaustion.
- (Inflow of humidity and smells from the toilet and kitchen is reduced.)
- When ISA<EA] is selected: the volume of the outdoor air exhaustion is larger than that of the indoor air supply.
- (Outflow of smells and floating bacteria into a corridor or other places is reduced.)
- * Consult your dealer if the setting of the imbalanced ventilation fan speed seems incorrect.

About 24-hour ventilation

- When the 24-hour ventilation setting is active, push the [ON/OFF] DN/OFF] button while the system is running and the operation lamp turns off, " 24," appears on the display, and 24-hour ventilation starts
- From "Ventilation menu" of main screen or in the menu "11. Ventilation", you can stop 24-hour ventilation temporarily.
- The " 24" indicator turns off and 24-hour ventilation stops temporarily.

NOTE

- The setting of 24-hour ventilation is "OFF" As factory default. Consult your dealer to change the setting to "ON".
- The ventilation setting of fan speed or mode cannot be changed during 24-hour ventilation. Their indicators are not displayed.
- * During 24-hour ventilation, the unit is running under the settings [LOW] ventilation fan speed and [Heat exchange mode].
- The " indicator stays lit or stops by the central control mode. (Central 1, 2 and the external input of a Heat recovery ventilation CN61 (2)-(3) or CN705 (1)-(2) prohibition of remote controller operation)

About nighttime heat purge operation

- Nighttime heat purge is a function to reduce the room air conditioning load in the morning in summer by exhausting the air indoor which has become warm while the Air conditioner is stopped in the night automatically in the Bypass mode.

If the [ON/OFF ON/OFF] button is pushed while the system is running, the operation lamp turns off, " appears on the display, and the nighttime heat purge operation turns on-standby.

After the operation becomes on-standby, the unit automatically starts ventilation in [Low] ventilation fan speed and [Bypass mode] when the conditions to start the nighttime heat purge operation below are fulfilled. The nighttime heat purge operation is paused for half an hour if any of the conditions to pause the operation are detected.

If the conditions to start the nighttime heat purge operation are fulfilled half an hour after the pause, the operation will start again. If not, the operation will remain paused for once more half an hour. This cycle is repeated until the conditions to stop

I his cycle is repeated until the conditions to stop (end) the nighttime heat purge operation below are fulfilled.

The conditions to start the nighttime heat purge operation

The unit compares temperatures indoor and outdoor using the monitoring operation (for about 5 minutes) and will start the nighttime heat purge operation if the following conditions are fulfilled.

- A certain amount of time has passed between the nightlime heat purge operation becoming on-standby and the monitoring operation starting. (The time is set between 1-48 hours in 1 hour steps.)
- 2. The indoor temperature is 3°C or more higher than the outdoor temperature and the indoor temperature is 2°C or more higher than the temperature set for the operation.

The conditions to pause the nighttime heat purge operation (the operation pauses for half an hour.)

 The indoor temperature (TRA) is the same or lower than the outdoor temperature (TOA) or the indoor temperature (TRA) is the same or lower than the temperature set for the operation.

The conditions to stop (end) the nighttime heat purge operation

The nighttime heat purge operation ends and the " 2" indicator disappears if any of the following conditions are fulfilled.

- The Air conditioner or HRV unit with DX Coil is started.
- 2. 48 hours has passed since the monitoring operation started.

NOTE

- The setting of the nighttime heat purge operation is "OFF" As factory default.
 - Consult your dealer to change the setting to "ON" or the setting of the time until the monitoring operation starts.
- The ventilation setting of fan speed or mode cannot be changed during the nighttime heat purge operation. Their indicators are not displayed.
- The " " indicator stays lit while the operation is onstandby or paused.
- The nighttime heat purge operation cannot be activated if 24-hour ventilation is activated.

CAUTION

- The nighttime heat purge operation is not executed if the outdoor temperature becomes about 15°C or less to prevent condensation in the HRV unit with DX Coil, but the " " indicator is still lit.
- The " indicator stays lit or stops by the central control mode. (Central 1, 2 and the external input of a Heat recovery ventilation CN61 (2)-(3) or CN705 (1)-(2) prohibition of remote controller operation)

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■ How to operate menus



- 1 Push [≡ Menu]
- 2 Push [∧] and [∨] to select an item

 → The selected item is highlighted in black.
- 3 Push [5 Return]
 - → "Menu" is displayed or return to the main screen.

■ Ventilation

You can set the ventilation items.

NOTE

- Depending on the system, there are items that can be set or cannot be set.
- · Depending on the settings, there are items that change the displayed content.



- 1 In "Menu", select "Ventilation", and push [Set/Fix]
- 2 Push [$ilde{\ }$] and [$ilde{\ }$] to select an item
- 3 Push [Set/Fix]

Item	Description	
Ventilation operation	Do "ON" or "OFF" for ventilation.	
2. Fan speed	Select the "Fan speed".	
3. Mode Select the "Mode".		
4. 24h ventilation off Stop 24 hour ventilation operation.		

Ventilation operation (ON or OFF for ventilation)



- 1 In the "Ventilation" screen, push [] and [] to select "Ventilation operation", and then push [Set/ Fix]
- 2 Push [\second] and [\subseteq] to select "ON" or "OFF"
- 3 Push [Set/Fix]
 - → Return to the "Ventilation" screen.

NOTE

- If no ventilation unit is connected, or if settings to enable "Individual ventilation" operations are not set, "Impossible" is displayed.
- "Fan speed", "Mode", and "24h ventilation off" can only be set when our Heat recovery ventilation of the VN-M*HE* Series
 or VN-*SY-E is connected to your system. "Schedule timer" can only be set when our Heat recovery ventilation of the
 VN-*SY-E Series is connected alone to your system.
- When a setting is configured to enable "Individual ventilation" operation with a Heat recovery ventilation other than the VN-M*HE* or VN-*SY-E Series connected, "

 " is displayed in the Details screen during ventilation operation.

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Fan speed



1 In the "Ventilation" screen, push [] and [] to select "Fan speed", and then push [□ Set/Fix]

- 2 Push [] and [] to select "Fan speed"
- 3 Push [Set/Fix]
 - → Return to the "Ventilation" screen.
 - * When Supply air is "Low" (Low select or "Supply air < Exhaust air" setting and select Unbalance Medium), HRV unit with DX Coil is thermostat off

Mode



- 1 In the "Ventilation" screen, push [] and [] to select "Mode", and then push [Set/Fix]
- 2 Push [] and [] to select "Mode"
- 3 Push [Set/Fix]
 - → Return to the "Ventilation" screen.

24h ventilation off



- 1 In the "Ventilation" screen, push [] and [] to select "24h ventilation off", and then push [Set/Fix] → A screen to confirm appears.
- 2 Push [Set/Fix]
 - → Return to the "Ventilation" screen.

Schedule timer (Setting 1-day operation schedule to do operations)

Set the operating schedule for 1 day, and then operate the air conditioner according to that schedule. You can operate at the same schedule every day, regardless of the day of the week, ("every day"), operate at a different schedule every day ("week"), or set a day without scheduled operations ("Holiday setting").

NOTE

An administrator password may be required.



- 1. In the password screen, push [\sqrt{] and [\sqrt{]} to select numbers, and push [\sqrt{] and [\sqrt{]}] to select the input position
- 2. After inputting the password, push [Set/Fix]
- * For the initial setting of the administrator password, refer to initial settings "Password setting" in Installation Manual.
- The schedule timer does not operate in the following conditions.
- When schedule timer is disabled, holiday is set using the schedule timer, the clock is flashing (not set), during abnormalities, in test mode, during function settings, while a timer is set and operating, and during central control (if "ON/OFF" is prohibited)
- · When 2 remote controllers are connected, settings cannot be done on the "Follower remote controller".
- Before doing "Schedule timer", do "Clock". (refer to the Owner's Manual of RBC-AW(M)SU5*)
- The time can be set in 1 minute increments.
- The temperature setting can be set in a range from 18°C to 29°C. (However, if "Set temp. range limit" has been set, then operation is done within that range)
- Push [5 Return] to not fix the changes, so conditions are as before changes, and return to the "Schedule timer" screen.
- The operation mode of "Schedule timer" becomes the operation mode of the previous operation time.
- Operating modes can be selected. For details, refer to "Setting timer operation mode" in "Field setting menu" in the Installation Manual of RBC-AW(M)SU5*.
- When "Schedule timer" is "ON", then " ② " is displayed in the detailed display.

Setting the schedule timer to ON





- In "Menu", select "Schedule timer", and push
 [Set/Fix]
- 2 Push [] and [] to select "Schedule timer"
- **3** Push [] to select "ON"
 - → Push [✓] and select "OFF" to cancel the settings.
- 4 Push [Set/Fix]
 - → Return to the "Schedule timer" screen.

C diti ddi	every day	Operate at the same schedule every day, regardless of the day of the week.
Condition setting	week	Operate to a set 1-week schedule that is different every day of the week. Three 1-week schedules can be registered.
		Days specified as "Holiday setting" do not operate on the schedule timer even if they are set to operate under "Condition setting" in the schedule.

Condition setting (Setting 1-day operation schedules)

You can set a 1-day operation schedule.

In 1 schedule (1-day), you can set up to 8 patterns (operate, start time, temperature setting).

▼ every day (Same schedule every day, regardless of the day of the week)

Operation can be done at the same schedule every day, regardless of the day of the week.



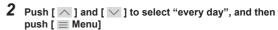


	5	Schedule timer(1/3)	
Day		: every day	
1.		:	℃
2.		:	℃
3.		:	℃
4.		:	°℃
5	Reti	ırn 🔳 Set	^~

Sc	hedule timer(1/3)	
Day :	every day	
1. ON	00:00	23℃
2	:	℃
3	:	℃
4	:	°C
~∨ Mode		<>
	rn 🔳 Fix	

		Sc	hedule timer(1/	3)
Day		:	every day	
1.	ON		07 :00	23°C °C
2.			:	℃
3.			:	℃
4.			:	°C
^~	+-			<>
Ð	Ret	ur	n 🔳 Fix	

1	In the "Schedule timer" screen, push [] and [] to select "Condition setting", and then push [Set/Fix]
	[

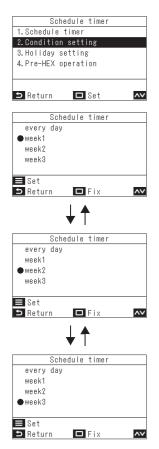


- → Push [] and [] to check the current settings. The settings are shown in 8 patterns.
- 3 Push [Set/Fix]
- 5 Push [>] to select the starting time and the set temperature
 - → If "--" (not set) is displayed, the time and temperature cannot be set
- 6 Push [\(\)] and [\(\)] to change the time and temperature settings
 - → Push [>] to switch to an item you want to change.
- **7** Push [\supset] to move to the next pattern
 - → Up to a total of 8 patterns can be set.
 - ightarrow Do the settings in steps $m{4}$ to $m{6}$ to set each pattern.
- 8 Push [Set/Fix]
 - → A screen to confirm changes appears.
- 9 Push [Set/Fix]
 - → Return to the "Schedule timer" screen.

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▼week (Different schedule every day of the week)

Operation can be done to a different schedule every day of the week.



- 1 In the "Schedule timer" screen, push [] and [] to select "Condition setting", and then push [Set/ Fix]
- - → Select a day and push [] and [] to check the settings for each day.
 - → Push [^] and [∨] to check the current settings. The settings are shown in 8 patterns.
- 3 Push [Set/Fix]

	Sc	hedule timer1(1/3)	
Day	:	Monday	
1.		:	°℃
2.		:	°℃
3.		:	°℃
4.		:	°℃
	Day		
₽	Retu	rn 🔳 Set	^~

	Sch	edule timer1(1/3)	
Day	:	Monday	
1.		:	°℃
2.		:	°℃
3.		:	℃
4.		:	°℃
	Day	🔳 Reset	<>
5	Retur	n 🗖 Fix	

	Sc	hedule timer1(1/3)	
Day	:	Monday	
1.	ON	01:00	25°C
2.	OFF	05:00	°C
3.	ON	10:00	25°C
4.	OFF	23:00	°C
^~	+-	🔳 Reset	<>
5	Retur	n 🔳 Fix	



- 4 Push [] and [] to select a day, and then push
- 6 Push [>] to move to the next pattern
 - → Up to a total of 8 patterns can be set for each day.
- 7 Push [<] and [>] to select a day
- 8 Push [\(\simeq \)] and [\(\simeq \)] to change the day (Make the settings for other days)
 - \rightarrow Do steps $m{4}$ to $m{8}$ to set all the days.

- 9 Push [Set/Fix]
 - → A confirmation message is displayed.
 - If the settings are acceptable, push [Set/Fix]
 - To return to the settings screen, push [Return]

NOTE

To do other "week" settings, repeat steps ${f 2}$ to ${f 9}$

▼ Deleting settings for a day

	Sc	hedule timer1(1/3)	
Day	:	Monday	
1.	ON	01:00	25°C
2.	OFF	05:00	°C
3.	ON	10:00	25°C
4.	OFF	23:00	°C
^~	+-	■ Reset	<>
5	Retur	n 🗖 Fix	



1 Push [■ Menu]

2 Push [Set/Fix]

- → The schedule for the selected day is deleted.
- → Push [5 Return] to return to the daily schedule settings screen.

▼Copying the content of a previous day



1 Push [ON/OFF ON/OFF]



2 Push [Set/Fix]

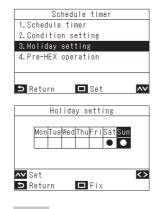
- → The schedule settings for the day prior to the selected day are copied.
- → Push [5 Return] to return to the daily schedule settings screen.

NOTE

Push [5 Return] to not fix the changes, so conditions are as before changes, and return to the "Schedule timer" screen.

Holiday setting (Days to not operate to a schedule timer)

Set the days of the week when no operation is performed in the "Schedule timer".



	In the "Schedule timer" screen, push [
--	--

2	Push [<] and [>] to select a day, and
	push [^] and [V] to select set or delete
	→ On days indicated by " • ", operations are not done to "Schedule

3 Push [Set/Fix]

timer'

→ Return to the "Schedule timer" screen.

NOTE

- Operations other than schedule timer operations (such as remote controller operations and central control) can be done on days even if they are set as holidays.
- Push [5 Return] to not fix the changes, so conditions are as before changes, and return to the "Schedule timer" screen.

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Timer operation

For Timer operation in the remote controllers for RBC-AW(M)SU5* refer to the Owner's Manual of the respective remote controllers.

Select a timer type from the following three: (Max. 168 hours)

OFF timer : Stops running after a specified period.

Off reminder timer : Stops running after a specified period every time the unit is used.

On timer : Starts running after a specified period.

■ Timer (Setting a timer to start or stop operation)

Selecting a timer type



- 1 In "Menu", select "Timer", and push [Set/Fix]
- **2** Push [\frown] and [\smile] to select the timer you want to
- 3 Push [Set/Fix]

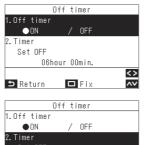
NOTE

About "Off timer" and "On timer" operations

- "Off timer" and "On timer" are enabled for only 1 time.
- "Off timer" and "On timer" do not operate in the following conditions.
- When "Off timer" and "On timer" are disabled, during function settings, during central control (if "ON/OFF" is prohibited)
- · When 2 remote controllers are connected, settings cannot be done on the "Follower remote controller".
- The setting range of "Off timer" and "On timer" is a minimum of 30 minutes and a maximum of 168 hours (7 days).
- Push [5 Return] to not fix the changes, so conditions are as before changes, and return to the "Timer" screen. • If there is a power outage, the "Off timer" and "On timer" settings are cancelled. (They become "OFF".)
- When "Off timer" and "On timer" are "ON", then " ?" is displayed in the detailed display.

Off timer

You can set the timer to the time at which to stop operation of a HRV unit with DX Coil.







- 1 In the "Off timer" screen, push [\nearrow] and [\checkmark] to select "Off timer"
- **2** Push [] → Pushing [>] cancels the settings.
- **3** Push [\subseteq] and [\subseteq] to select "Timer"
- 4 Push [] and [] to change the time
 - → The time can be set in 30 minute intervals for up to 24 hours, and at 1 hour intervals after that.
- 5 Push [Set/Fix] → Return to the "Timer" screen.

NOTE

- The HRV unit with DX Coil stops operating after the time set in "Off timer" has elapsed.
- In the period until the HRV unit with DX Coil operation is stopped by the "Off timer", countdown of the "Off timer" continues even if the HRV unit with DX Coil is stopped and started.

	Countdown of "Off timer"					
[Operating	Stop		Operating	Stop	
Set "	Off Stop	ped O	perated	No time re	maining in	
time	er" mar	uallv n	nanually	"Off t	imer"	

On timer

You can set the timer to the time at which to start operation of a HRV unit with DX Coil.



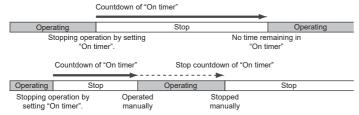




- 1 In the "On timer" screen, push [] and [] to select "On timer"
- **2** Push [<]
 - → Pushing [>] cancels the settings.
- 3 Push [\sum] and [\sum] to select "Timer"
- 4 Push [<] and [>] to change the time
 - → The time can be set in 30 minute intervals for up to 24 hours, and at 1 hour intervals after that.
- Push [□ Set/Fix]
 → Return to the "Timer" screen.

NOTE

- · The HRV unit with DX Coil starts operating after the time set in "On timer" has elapsed
- The HRV unit with DX Coil stops operating as soon as a time is set in "On timer".
- When the HRV unit with DX Coil operation is started during the countdown of "On timer", the "On timer" becomes "OFF".



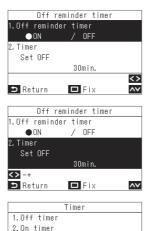
"Off timer" "On timer" operation

- "Off timer" "On timer" are valid only one time each.
- "Off timer" "On timer" do not operate in the following conditions.
 When "Off timer" "On timer" is disabled, during abnormalities, during function settings, and during central control (if "ON/OFF" is prohibited)
- · When 2 remote controllers are connected, settings cannot be done on the "Follower remote controller".
- The setting range of "Off timer" "On timer" are a minimum of 30 minutes and a maximum of 168 hours (7 days).
- Push [5 Return] to not fix the changes, so conditions are as before changes, and return to the "Timer" screen.
- · When the power fails, "Off timer" "On timer" are canceled. (become "OFF".)
- When "Off timer" "On timer" are "ON", then "

 " is displayed in the detailed display.

Off reminder timer

You can set the timer from the HRV unit with DX Coil operation start time to the stop time.



30min

■ Set

- 1 In the "Off reminder timer" screen, push [] and [] to select "Off reminder timer"
 2 Push [] → Pushing [] cancels the settings
- 4 Push [<] and [>] to change the time

 → Times can be set in 10 minute intervals.
- 5 Push [☐ Set/Fix]
 → Return to the "Timer" screen.

NOTE

⇒ Return

3.Off reminder time

Set OFF

· The HRV unit with DX Coil starts operating, and after the set time has elapsed, the HRV unit with DX Coil stops operating.



- "Off reminder timer" does not operate in the following conditions.
- When "Off reminder timer" is disabled, during abnormalities, in test mode, during function settings, while a timer is set, and during central control (if "ON/OFF" is prohibited)
- · When 2 remote controllers are connected, settings cannot be done on the "Follower remote controller".
- The setting range of "Off reminder timer" is a minimum of 30 minutes and a maximum of 240 minutes.
- Push [S Return] to not fix the changes, so conditions are as before changes, and return to the "Timer" screen.
- When "Off reminder timer" is "ON", then " (2)" is displayed in the detailed display.

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5 Installation

■ Location

- Do not install the unit in places where the outside temperature falls below 5 °C.
- Avoid installing near machines emitting high frequency waves.
- Not suitable for chemical plants such as liquefied carbon dioxide refrigerant plants.
- A failure may occur in certain locations such as the following:
- Areas with large amount of oil droplets (including machine oil) or vapors
- · Salty areas near oceans, etc.
- · Hot springs emitting sulfidizing gas, etc.
- Heavily acidic or alkaline places.

Special maintenance or parts are required for use in the above places. For details, contact the dealer where you purchased the product.

- Do not install the air conditioner in locations where iron or other metal dust is present. If iron or other metal dust adheres to or collects on the interior of the air conditioner, it may spontaneously combust and start a fire.
- Leave an enough space around the air intake and outlet of the outdoor unit so that the ventilation is not restricted.
- Avoid places where strong wind may blow against the air intake and discharge of the outdoor unit.
- Attach a snow stand, snow hood, etc. to the outdoor unit for use in snowfall areas. For details, contact the dealer where you purchased the product.
- Make sure drain water from the outdoor unit is emitted into places with good drainage.
- Confirm that the filters for the heat transfer element and the medium efficiency particulate air filter are attached. If they are not attached, the heat transfer element or the heat exchanger will become clogged with dust, deteriorating the performance and possibly causing water leakage.
- Keep a distance of at least 1 m between the HRV unit with DX Coil / remote controller and a TV or radio. Failure to observe this precaution may cause visual disturbance or noise.
- Leave a distance of at least 1.5 m between the air discharge and a fire alarm. If this precaution is not observed, the alarm may not work properly or detect fire in case of fire.

■ Be careful of operation sounds

- Locate the unit in a place secure enough so that the sounds and vibrations do not increase.
- If something is placed near the air discharge of the outdoor unit, noise may increase.
- Do not disturb your neighbors with cool / warm air or noise coming from the air discharge of the outdoor unit

6 Air conditioner operations and performance

■ Check before operation

- Turn on the power switch at least 12 hours before starting operation.
- · Connect the earth wire securely.
- · Attach the air filter to the indoor unit.

■ Defrosting during heating

If frost falls on the outdoor unit during heating, defrosting is automatically performed (for approximately 2 - 10 minutes) to increase the heating effect

■ 3-minute protection

The outdoor unit will not operate for approximately 3 minutes after the air conditioner has been immediately restarted after stopping, or the power switch has been turned on. This is to protect the system.

■ Power failure

- In the case of a power failure, all operations stop.
- To resume operations, push the ON/OFF button.

■ Fan rotation of a stopped indoor unit

While other indoor units operate, the fans on indoor units in stand-by mode rotate for several minutes approximately once per one hour to protect the machines.

■ Protective device (High pressure switch)

The high pressure switch stops the HRV unit with DX Coil automatically when excessive load is applied to the HRV unit with DX Coil.

If the protective device activates, the unit's running stops and the operation lamp blinks.

When the protective device activates, the check code are displayed on the remote controller.

The protective device may activate in the following cases:

During cooling

- When the air intake or air discharge of the outdoor unit is blocked.
- When strong wind blows continuously against the air discharge of the outdoor unit.

During heating (for heat-pump model only)

- When dust or dirt is excessively adhered to the air filter of the indoor unit.
- · When the air discharge of the indoor unit is blocked.

NOTE

When the protective device activates, turn off the power switch, remove the cause, and then restart running.

■ Cooling / heating operations

Each unit can be controlled individually. However, when cooling and heating of indoor units connected to the same outdoor unit are performed simultaneously, it depends on the type of outdoor unit. For outdoor units that do not support simultaneous operation, when you attempt simultaneous operation, indoor units performing cooling are stopped, and the running preparation indicator is is displayed on the remote controller. An indoor unit performing heating continues running. When you attempt an operation without the configured settings, the running preparation indicator is displayed on the remote controller and operation stops. If operation is fixed to cooling or heating by the HRV unit with DX Coil administrator, only the configured settings apply to the operation.

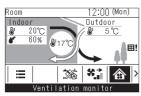
■ Heat exchange element

A smell may be emitted from the heat transfer element during the initial stages of use. This is neither a malfunction nor harmful.

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♦Filter sign reset

" !!" appears on the detailed display to tell the time for cleaning the filter.



 When " !!" is displayed, be sure to clean the filters and then do a reset.



 If the HRV units with DX Coil are operated while "囲!" is displayed, then "Filter check." is displayed. Push an operation button while it is displayed or leave it for at least 5 seconds and the display will disappear.

When the filter check mark is displayed (filter check reset)



1 In "Menu", select "Filter sign reset", and push [Set/ Fix]

2 Push [Set/Fix]



Cleaning remote controller

- · Use a dry cloth to wipe the remote controller.
- · Do not use a damp cloth on the remote controller.
- Do not use a chemically-treated duster for wiping or leave such materials on the unit for long.
- It may damage or fade the surface of the unit.
- Do not use benzene, thinner, polishing powder, or similar solvents for cleaning.
 These may cause the plastic surface to crack or deform.



7 Maintenance

■ Maintenance of the filter and heat exchange element

MARNING

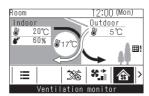
Cleaning the filter and heat exchange element involves dangerous work in high places, have a qualified installer or qualified service person to do it.

Do not attempt it by yourself.

⚠ CAUTION

Do not push buttons with wet hands. Doing so may result in electric shock.

♦Cleaning the filters



When " !!" is displayed on the detailed display, clean the filters.

Clogged filters may cause lower performance.

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Specifications

	Model No.		MMD-UPV***1HY*		
Item	Fan Speed		050	080	100
Tuno	Function		Cooling and heating dual purpose type		
Туре	Unit configuration		Discrete type		
Power Supply			220 - 240	V~, 50 Hz / 208 - 230	V~, 60Hz
Equivalent HP			1.0	1.7	2.0
Refrigerant				R32 , R410A	
Outdoor air thermal	cooling capacity (*1)		4.10 (1.30)	6.56 (2.06)	8.25 (2.32)
load handling capacity	heating capacity (*1)		5.53 (2.33)	8.61 (3.61)	10.92 (4.32)
		(Extra high)	250	477	558
	Heat Exchange Mode	High	215	368	540
	Trout Exeriainge meas	Medium	145	192	350
Power consumption (W)		Low	38	74	96
one. concampaen (11)		(Extra high)	250	477	558
	Bypass Mode	High	215	382	557
	7,	Medium	145	200	364
		Low	38	74	96
		(Extra high)	1.52	2.80	3.20
	Heat Exchange Mode	High	1.35	2.21	3.11
	Treat Exchange Wode	Medium	0.94	1.22	2.11
Current (A)		Low	0.31	0.53	0.65
Surroin (7.1)	Bypass Mode	(Extra high)	1.52	2.80	3.20
		High	1.35	2.29	3.19
	Dypass Mode	Medium	0.94	1.26	2.19
		Low	0.31	0.53	0.65
		(Extra high)	1.52	2.80	3.20
	Heat Exchange Mode	High	1.35	2.21	3.11
	Trout Exeriainge meas	Medium	0.94	1.22	2.11
Maximum running		Low	0.31	0.53	0.65
Current (A)		(Extra high)	1.52	2.80	3.20
	Bypass Mode	High	1.35	2.29	3.19
	Dypass Mode	Medium	0.94	1.26	2.19
		Low	0.31	0.53	0.65
		(Extra high)	500	800	950
Air Volume (m³/h) (*2)		High	500	800	950
All Volume (III /II) (2)		Medium	430	600	800
		Low	220	350	430
Air Volume Limit (m³/h)		lower limit	330	480	640
Extra high, High, Med)		upper limit	600	960	1140
		(Extra high)	455	728	865
net supply air flow (m³/h)		High	455	728	865
iot supply all flow (III-/II)		Medium	383	546	728
		Low	196	319	392
		(Extra high)	220	220	185
External Static Pressure	Heat Exchange Mode	High	170	130	160
(Pa)	I leat Exchange Mode	Medium	125	75	115
		Low	35	27	30

14	Model No.		MMD-UPV***1HY*		
Item	Fan Speed		050	080	100
External Static Pressure (Pa)	Bypass Mode	(Extra high)	220	220	185
		High	170	130	160
		Medium	125	75	115
		Low	35	27	30
Sound pressure level (dB(A)) (*3)	Heat Exchange Mode	(Extra high)	39.0	43.0	43.0
		High	37.0	38.5	42.0
		Medium	34.0	33.5	39.5
		Low	24.0	23.0	25.5
	Bypass Mode	(Extra high)	39.0	43.0	43.0
		High	37.0	39.5	42.5
		Medium	34.0	34.5	40.5
		Low	24.0	23.0	25.5
		(Extra high)	74.0	72.5	70.5
		High	74.0	72.5	70.5
	average	Medium	74.5	75.0	71.0
		Low	78.0	86.5	82.0
	for heating	(Extra high)	79.0	78.0	78.0
Temperature Exchange Efficiency (%)		High	79.0	78.0	78.0
		Medium	79.5	79.0	78.5
		Low	81.0	89.0	85.0
	for cooling	(Extra high)	69.0	67.0	63.0
		High	69.0	67.0	63.0
		Medium	69.5	71.0	63.5
		Low	75.0	84.0	79.0
Enthalpy exchange Efficiency (%)	for heating	(Extra high)	73.0	73.0	72.0
		High	73.0	73.0	72.0
		Medium	73.5	75.0	73.0
		Low	77.0	86.0	81.0
	for cooling	(Extra high)	64.0	64.0	62.0
		High	64.0	64.0	62.0
		Medium	65.0	68.0	63.0
		Low	70.0	79.0	75.0
net supply air flow ratio (%)		(Extra high)	91	91	91
		High	91	91	91
		Medium	89	91	91
		Low	89	91	91
External dimensions (Length × Width × Height)	(mm)		1360×1020×386	1593×12	230×386
Product weight (kg)			66	85	85
Applicable duct nominal diameter (mm)			Ф200	Ф250	Ф250

Product information of ecodesign requirements. (Regulation (EU) 2016/2281) http://ecodesign.toshiba-airconditioning.eu/en

Sound pressure level is less than 70 dBA.
 When the temperature of the outdoor air is below -10°C, the unit runs the prevent cold draft mode (SA fan operates intermittently). SA fan does not drive when the temperature of the outdoor air is below -20°C.

^{*1} The number in () indicates the heat collected by Air to Air heat exchange.

^{*2} Air volume can be changed over to high (extra high) mode, medium mode or low mode. When Supply air is "Low", HRV unit with DX Coil is thermostat off (Fan mode) for device protection.

^{*3} Sound pressure level is measured 1.5 m below the center of the unit. Sound pressure level is the value which was measured at the acoustic room.

Actually, sound pressure levels become higher than this value depending on the operating conditions, reflected sound and peripheral noise.

9 Operating precautions of CO₂ / PM2.5 sensor (Optional parts)

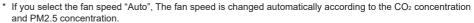
- This multi function sensor is not a measuring instrument based on the Measurement Law.
 Do not use the sensor unit as a safety device to detect and prevent toxic gases or flammable gases that will result in oxygen deficiency, carbon monoxide poisoning and so on.
- The concentration is detected be each sensor in the indoor suction (RA) air path of the HRV unit with DX
 Coil. As unevenness will also occur in the living room concentration, a difference between the concentration
 displayed in the remote controller and the environmental measurement etc. may result. If there is a difference
 between the concentration displayed in the remote controller and the concentration in the environmental
 measurements etc., you may adjust the sensor sensitivity or correct the concentration to be displayed in the
 remote controller.

(Environmental measurements: Measurements, investigations and analysis of the concentration etc. that are conducted in order to understand the atmospheric and other environmental conditions)

- · In this multi function sensor, the HRV unit with DX Coil cannot be started/stopped automatically,
- When running at Fan speed "Auto", the ventilation mode is fixed as the [Heat exchange mode] regardless of the heat exchange mode set from the remote controller.
 (The remote controller display will remain in the ventilation mode set.)
- During 24-hr ventilation operation and nighttime heat purge operation, the automatic fan speed control is not performed by this sensor.
- If you want to remove odors, dust, etc. by ventilation regardless of the indoor concentration, select [High] instead of "Auto" for the fan speed.
- Due to the impact of sudden changes in the temperature and humidity (rain etc.), the detection accuracy of this sensor may change and the indoor concentration may not be detected correctly. In such a situation, run the unit with the fan speed set to "High" for a while instead of "Auto".
- · When running at Fan speed "Auto", the fan speed may increase automatically and the noise may get louder.
- As the detection concentration of each sensor may differ depending on the operating environment, product installation conditions and so on, the target concentration may be exceeded depending on the operating environment.
- This multi function sensor is designed for use in a typical indoor air environment. When it is used in an
 extremely dusty room etc., the concentration may not be detected correctly.

◆Display of concentration and control

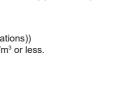
- * If CO₂ / PM2.5 sensor (Multi function sensor) is connected to a HRV unit with DX Coil, each concentration is displayed on the remote controller as shown in the figure on the right.
- * The display of the CO₂ concentration and PM2.5 concentration on the remote controller can be hidden with the DN settings. If you want to change, contact your supplier (dealer).
- * If the concentration is hidden, in the event of a sensor failure, the CO₂ concentration "- ppm", PM2.5 concentration "- μg/m³" will also not be displayed.
- * The display range of the concentration is as follows: CO₂: 300 5000 ppm, PM2.5: 0 - 999 µg/m³.

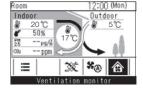


- * The target concentration of the factory default is as follows: CO₂: 1000 ppm, PM2.5: 70 μg/m³. If you want to change the target concentration, contact your supplier (dealer).
- * The automatic fan speed control according to the CO₂ concentration or PM2.5 concentration can be selected individually. When both controls are enabled, the HRV unit with DX Coil will run at a fan speed close to the target concentration (higher of the concentrations). If you want to select the control either CO₂ or PM2.5 concentration, contact your supplier (dealer).
- * As a general guideline, the CO₂ concentration should be 1000 ppm or less. (REHVA (Federation of European Heating Ventilation and Air Conditioning Associations))
- * As a general guideline, the PM2.5 concentration (daily average) should be 70 μg/m³ or less. (Ministry of Environment of China)

♦Sensor malfunction

- * CO₂ concentration display is "- ppm" while the HRV unit with DX Coil is running, the concentration may be abnormal or the sensor may be possible to malfunction.
- PM2.5 concentration display is "- ppm", the sensor may be possible to malfunction.
- * In addition, if the check code [E30] [J04] [J05] flash on the display of the remote controller, CO₂ / PM2.5 sensor may be possible to malfunction. In the above case, contact your supplier (dealer).
- * In the event of this CO₂ / PM2.5 sensor failure, the HRV unit with DX Coil will keep operating.





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10 Before calling for service

Check the points described below before asking for repair servicing.

Symptom	Cause		
Operation does not start after pressing	Is the circuit breaker turned off?		
the button.	Has a power failure occurred?		
The unit runs though the operation lamp does not turn on.	Does the " " or " " " indicator appear on the display? The nighttime heat purge operation or 24-hour ventilation is set to "ON". Refer to "Functions" for details. Consult your dealer to change the setting to "OFF".		
The unit starts running without any operation of the remote controller.	Has the unit just recovered from a power failure or have you just turned on the circuit breaker? (The settings concerning recovering from power failure are set to "ON". Consult your dealer for details.		
"Swish" sound is heard sometimes.	When the operation has started, during the operation, or immediately after the operation has stopped, a sound such as water flows may be heard, and the operation sound may become larger for 2 or 3 minutes immediately after the operation has started. They are flowing sound of refrigerant etc.		
Slight clacking sound is heard.	This is sound generated when heat exchanger, etc. expand and contract slightly due to change of temperature.		
"🎳 " indication is lit.	When cooling operation cannot be performed because another indoor unit performs heating operation. Is outdoor temperature out of operation temperature range?		
" indication is lit.	When the manager of the HRV unit with DX Coil has fixed the operation to COOL or HEAT, and an operation contrary to the setup operation is performed.		
" 🛞 " indication is lit.	When stopping the fan to prevent cool air blow at starting heating.		
Sound or cool air is output from the stand by indoor unit.	Since refrigerant is flowed temporarily to prevent stay of oil or refrigerant in the stand by indoor unit, sound of flowing refrigerant, may be heard or white steam when other indoor unit operates in HEAT mode, and cold air in COOL mode may be blow-out.		
When power of the HRV unit with DX Coil is turned on, "Ticktock" sound is heard.	Sound is generated when the expansion valve operates when power has been turned on.		
Operates or stops automatically.	Is the timer "ON" or "OFF"?		
Does not operate.	Is it a power failure? Is the power switch turned off? Is the power fuse or breaker blown? Is the protective device operated? (The operation lamp goes on.) Is the timer "ON"? (The operation lamp goes on.) Are COOL and HEAT selected simultaneously? ("" indication is lit on the display of the remote controller.) Is outdoor temperature out of operation temperature range? Operation stops automatically.		
The unit runs in the ventilation mode only	Is outdoor temperature out of operation temperature range? When the outdoor temperature is outside the range of cooling / heating operation, the unit runs in the ventilation mode automatically.		

11 Troubleshooting

A CAUTION

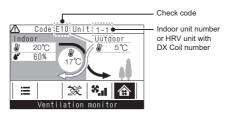
If any of the following conditions occur, turn off the main power supply switch and immediately contact the dealer:

- · Switch operation does not work properly.
- The main power fuse often blows out, or the circuit breaker is often activated.
- A foreign matter or water fall indoor the HRV unit with DX Coil.
- When the HRV unit with DX Coil does not operate even after the cause of the protective device activation has been removed.

(The operation lamp and \nearrow on the remote controller are flashing. When \nearrow and a combination of \not E, \not F, \not H, \not L, or \not P and a number are displayed on the remote controller, also inform a qualified service person of the display content.)

· Any other unusual conditions are observed.

◆Confirm and check



When a trouble occurs in the HRV unit with DX Coil, the check code and the HRV unit with DX Coil number flash on the display of the remote controller.

* The check code is only displayed during the operation.

When the check code and HRV unit with DX Coil number are displayed, pushing [5 Return] opens the "Check" screen.

In the "Check" screen, push [Set/Fix] to show the contacts.

Push [Menu] to display "Model information"



♦Contact information for repairs

You can look for contact information for repairs.



In the "Information" screen, push [△] and [✓] to select "Service information", and then push [□ Set/Fix]

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Declaration of Conformity

Manufacturer: Carrier HVAC Equipment (Hangzhou) Co., Ltd.

No.181, Weiken Street, Baiyang Block, Hangzhou Qiantang Area,

Zhejiang Province, China

TCF holder: Carrier RLC Europe S.A.S

Immeuble Le Cristalia 3 rue Joseph Monier

92500 Rueil-Malmaison FRANCE

Hereby declares that the machinery described below:

Generic Denomination: Air Conditioner

Model / type: MMD-UPV0501HY-E

MMD-UPV0801HY-E MMD-UPV1001HY-E

Commercial name: Heat recovery ventilation unit with DX Coil

Complies with the provisions of the "Machinery Directive" (Directive 2006/42/EC) and the regulations transposing into national law.

Must not be put into service until the final machinery into which it is to be incorporated has been declared in conformity with the provisions of Machinery Directive, where appropriate.

Name: Takeuchi, Hiroyuki

Position: SM, Quality Assurance Dept.

Date: 10 JULY, 2024

Place Issued: People's Republic of China

NOTE

This declaration becomes invalid if technical or operational modifications are introduced without the manufacturer's consent.

Declaration of Conformity

Manufacturer: Carrier HVAC Equipment (Hangzhou) Co., Ltd.

No.181, Weiken Street, Baiyang Block, Hangzhou Qiantang Area,

Zhejiang Province, China

TCF holder: Carrier Solutions UK Ltd.

Porsham Close Belliver Industrial Estate Roborough Plymouth Devon

PL6 7DB United Kingdom

Hereby declares that the machinery described below:

Generic Denomination: Air Conditioner

Model / type: MMD-UPV0501HY-E

MMD-UPV0801HY-E MMD-UPV1001HY-E

Commercial name: Heat recovery ventilation unit with DX Coil

The Supply of Machinery (Safety) Regulations 2008

Must not be put into service until the final machinery into which it is to be incorporated has been declared in conformity with the provisions of Machinery Directive, where appropriate.

Name: Takeuchi, Hiroyuki

Position: SM, Quality Assurance Dept.

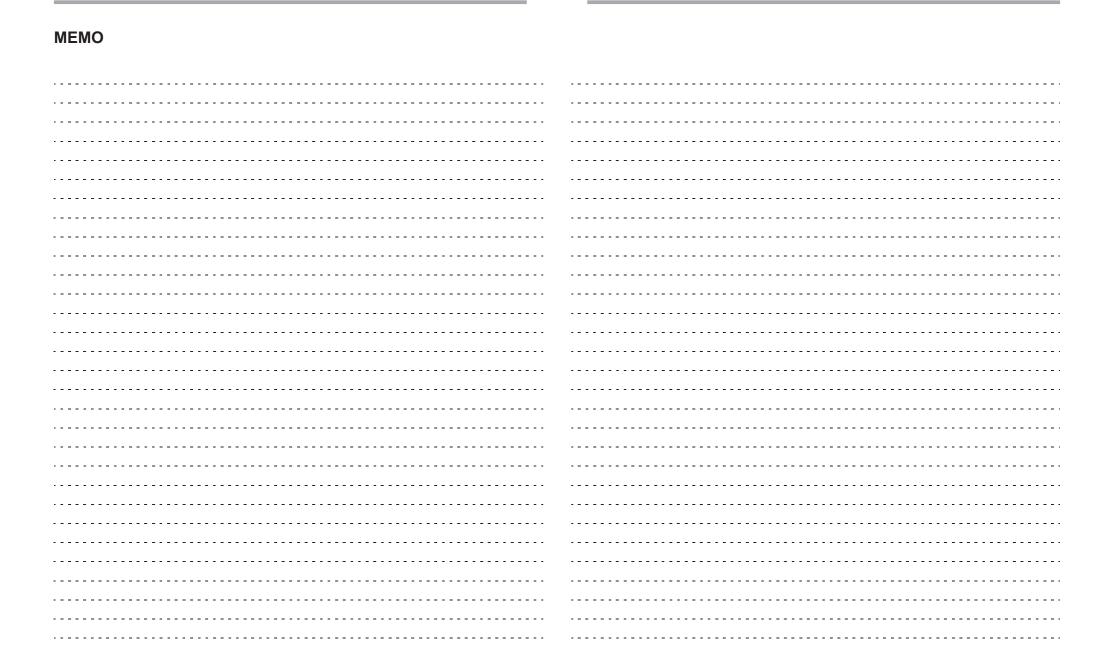
Date: 10 JULY, 2024

Place Issued: People's Republic of China

NOTE

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Carrier HVAC Equipment (Hangzhou) Co., Ltd.