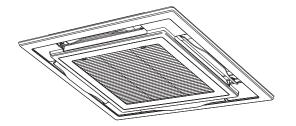
TOSHIBA

AIR CONDITIONER (SPLIT TYPE) Owner's Manual



R32

Indoor Unit

For commercial use

Model name:

4-way Cassette Type

RAV-HM561UTP-E RAV-HM801UTP-E RAV-HM901UTP-E RAV-HM1101UTP-E RAV-HM1401UTP-E RAV-HM1601UTP-E

Scan QR CODE to access installation and owner's manual on website. https://www.toshiba-carrier.co.th/manuals/default.aspx Manual are available in AR/BG/CZ/DA/DE/EL/EN/ES/ET/FI/FR/ HR/HU/IT/LT/LV/NL/NO/PL/PT/RO/RU/SK/SL/SV/TR.



Original instruction

Thank you very much for purchasing TOSHIBA Air Conditioner. Please read this owner's manual carefully before using your Air Conditioner.

- Be sure to 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.

Contents

1	Part names
2	Wired remote controller.
3	Timer operation
4	Self clean mode
5	Maintenance
6	Troubleshooting
7	Operations and performance
8	Installation
9	Specifications

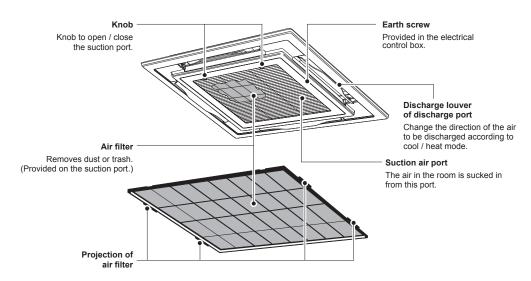
■ Information on the transportation, handling and storage of the carton

Examples of indication on the carton

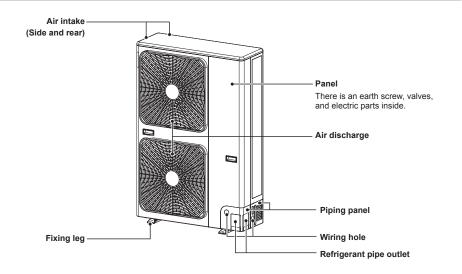
Symbol	Descriptio	on	Symbol	Description
Ť	Keep dry			Do not drop
Ţ	Fragile			Do not lay down
11 cartons	Stacking height (12 cartons can be si this case)	tacked in	DO NOT WALK ON THIS CARDON	Do not walk on this carton
	This side up		*	Do not step
Handle with care				-
Other cautio	ons		Description	n
Caution 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.		Stacking I In case tha Lay a 10 m	notice. at cardboard boxes protrude out on the pallet.	of pallet when stacking.

1 Part names

Indoor unit



■ Outdoor unit (The design varies depending on the outdoor unit. The following illustration shows an example.)

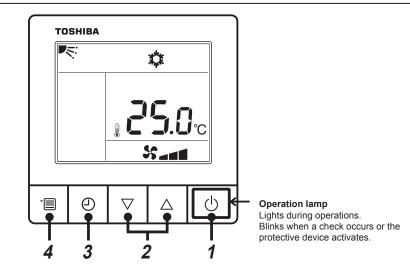


2 Wired remote controller

Remote controller model name: RBC-ASCU1*

2.1 Component Names and Functions When operating the button, the LCD backlight will be lightened for 15 seconds.

■Button



1 **ON/OFF** button

Press the button to turn on the air conditioner, and press the button again to turn off the air conditioner.

2 Setting button

It is used for temperature setting in general conditions. In running mode, fan speed mode and wind direction mode, it is used for the change of respective settings.

3 Timer off button

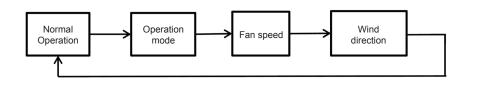
Set the timer off.

4 Menu button

It is used for the selection of the running mode, fan speed and wind direction.

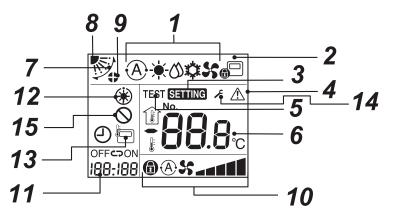
Press of the button each time, then it will switch in the following order.

• In different modes of the indoor unit, the selection of fan speed or wind direction may be omitted.



Indication icon

All the icons shown on the display are for illustrative purposes only. Cooling only model do not show heating-related icons. When "SETTING" flickers, the operation will not be accepted.



9

- 1 Running mode indication icon Indicate the selected running mode.

3 Setting indication icon

Indicate that the system is checking automatically after the circuit breaker has been disconnected or other conditions have occurred.

- **4 Repair indication icon** Display when performing an inspection or the protective device is running.
- 5 Test run indication icon Display during the test run period.
- **6** Temperature setting indication icon Display the selected setting temperature.
- 7 Wind direction indication icon Display when the louver moves up and down.
- 8 Louver position indication icon Indicate the louver position.
 - Louver locking indication icon Display when there is a louver locking device. (4-Way cassette type only)

10 Fan speIndicate the s		
Auto		As
Low		×-
Low +		S
Med.		S
Med. +		×
High		×
Fix	6	8

11 Timer off indication ico

When an error occurs, display the error code. In normal state, display the time of timer off

2.2 Operation

When you use the air conditioner for the first time or change the settings, please follow the steps below. From then on, press the On/Off button to run the air conditioner with the selected settings.

■ Standby

When "SETTING" flickers, the operation will not be accepted by system.

REQUIREMENT

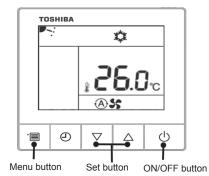
- During use, keep the power switch in open state.
- When you use it again after a long time, please turn on the power switch at least 12 hours in advance.
- · About 1 minute after the power is turned on, the remote controller can work. This is not a fault.

12 Pre-heat indicator

Displayed when the heating mode is energized or defrost cycle is initiated. While this indication is displayed, the indoor fan stops or operate in fan mode.

- **13** Remote controller sensor indication icon Display when using the remote controller sensor.
- **14** Notice display Displayed while notice code occurs. For details, contact your dealer (distributor).
- **15** No function display Displayed when the function requested is not available on that model.

■Run operation



1 ON/OFF button

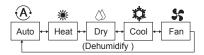
Press the button to light up the running indicator, and start running.

2 Select running mode

Switch to the running mode by pressing the menu button.

· The current running mode icon flickers.

Press the set button each time, then the running mode and its icons change in the following order :



- "
 Dehumidify" is not available for concealed duct high static press type.
- If the button is not operated within 30 seconds, the running mode selection will end.

3 Select the fan speed

Switch to the fan speed mode by pressing the menu button.

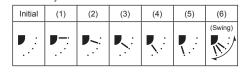
• The current fan speed icon flickers.

Press the set button each time, then the fan speed mode and its indication change in the following order :

- The fan speed that can be set will vary depending on the connected indoor units.
- In the fan mode, " (A) Auto" cannot be selected.
 These models that cannot set the fan speed will display " (f) \$\$".
- If the button is not operated within 30 seconds, the fan speed selection will end.
- **4** Set the louver direction and auto swing
 - Push the Menu button several times and select the wind direction mode to blink the wind direction.
 - Push the setting button several times to display the louver direction as shown in the figure below.
 - If you do not push any button for 30s, the wind direction mode finishes.

For heating

The louver can be adjusted to six steps. Point the louver downward. If not pointing downward, hot air may not reach the floor.



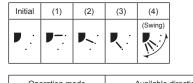
	ions
HEAT, FAN $(1) \leftrightarrow (2) \leftrightarrow (3) \leftrightarrow (4) \leftrightarrow (4)$	\mapsto (5) \leftrightarrow (6)

▼ For cooling

The louver can be adjusted to four steps. Point the louver horizontally. If pointing downward, dew

may form on the surface of the air discharge port and may drop down.

If a louver lock setup is carried out in the position of (1), fan speed will be restricted for prevention of ceiling contamination.



Operation mode	Available directions
COOL, DRY	$(1) \leftrightarrow (2) \leftrightarrow (3) \leftrightarrow (4)$

▼ For fan

The louver can be adjusted to six steps. Select a wind direction.

■ Auto swing

begins swinging.

The SWING \checkmark indicator is displayed and the louver

5 Temperature selection

- Press the set button to adjust the temperature. • Temperature setting range is from 18.0°C to 29.0°C
- The sensitivity of temperature adjustment is 0.5°C.

■8°C operation (For object pre-heating)

The air conditioner can control the heating temperature to about 8°C in the heating mode. The 8°C heating operation requires settings with the wired remote controller. Ask the installer or dealer for the settings according to the installation manual of the indoor unit.

Start

7 Set the displayed temperature to 18°C in the heating mode by pushing TEMP. ▼ button.

2 Set the displayed temperature to 8°C by pushing TEMP. 💌 button for at least four seconds.

Stop

1 Set the displayed temperature to 18°C by pushing TEMP. A button.

• The air conditioner returns to the normal Heat mode. Select a desired temperature and operation mode.

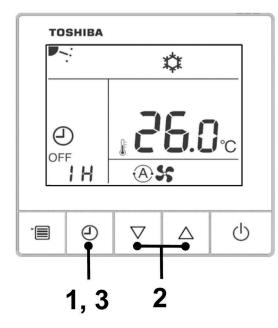
NOTE

- The discharged air temperature is lower than that in the normal heating operation.
- The room temperature may not be heated evenly depending on the remote controller installation location.
- The room temperature may not reach 8°C depending on the room size or the installation conditions.
- Setting for fan speed is available during the 8°C heating operation.
 - The 8°C heating operation is cancelled in the following cases.
- When operation is stopped with
 button
- When another operation mode is selected with <a>> button
- When temperature setting or operation mode is changed or operation is started / stopped by the wireless remote controller or the central control remote controller.
- When this operation mode is used, observe proper operating hours and periodic maintenance by service staff is recommended.

3 Timer operation

3.1 Timer off Operation

Timer off: When reaching the setting time, the indoor unit stops running.



1 Timer off button

Press the timer off button in process of air conditioner operation.

• The \bigcirc and OFF light, while serring and timing indication icon flicker.

2 Select the timer off time

Press the set button to set the time.

Increase in accordance with the law of 0.5 hour(30 minutes), 1 hour, 2 hours ..., it can be up to 24 hours.
If you do not operate the button within 30 seconds, the timer off setting will be canceled.

3 Press the timer off button

The **Series** disappears and the timer off indication icon changes from flickering to normally on, then the timer off function starts.

When running the shutdown timer, the timing indication is displayed in the form of countdown.

■Cancel timing

1 Press the timer off button.

The timing indication icon disappears.

NOTE

• When the shutdown timer is running, it will continue to run even if the air conditioner is turned on or off via the on/off button.

4 Self clean mode

This function is provided to dry the inside of the indoor unit by the FAN operation after running the cooling / dry / AUTO (cooling) mode to keep the indoor unit clean.

The self clean time varies with the cooling / dry / Auto (cooling) operation time as follows.

Cooling / dry / Auto (cooling) operation time	self clean time
Less than 10 minutes	No self clean operation
10 minutes to less than 1 hour	1 hour
More than 1 hour	2 hours

• "(())" is displayed on the remote controller during self clean operation.

To stop self clean forcibly, push 🕑 button twice in succession.

- The fan continues to run even after o button is pushed to stop operation in some modes. This is normal because the self clean mode is in progress.
- The louvers open slightly and are directed horizontally during self clean, and they close when the self clean is completed.
- The operation lamp (LED) does not light during the self clean mode (function).
- The self clean mode (function) cannot clean the room or remove the already existing mold and dust inside the indoor unit.
- To cancel the self clean function, consult the dealer.

5 Maintenance

Cleaning the air filter and other parts of the air filter involves dangerous work in high places, so be sure to have a qualified installer or qualified service person to do it.

Do not attempt it by yourself.

Do not push buttons with wet hands.

Doing so may result in electric shock.

Cleaning the air filters

When the filter indicator is displayed on the remote controller, clean the air filters.
 (Only for RBC-AMTU*** and RBC-AMSU*** remote controllers.)

· Clogged filters may lower the cooling and heating performance.

When the unit will not be used for a long time

1. Perform the fan operation for a couple of hours to dry inside.

- 2. Stop the air conditioner with the remote controller and turn off the circuit breaker.
- 3. Clean the air filters and reinstall them.

Before the cooling season

Clean the drain pan

Contact the dealer where you purchased the product.

(Drain does not work if the drain pan or vent is clogged. In some cases the drain may overflow and wet the wall or floor. Be sure to clean the drain pan before the cooling season.)

Check periodically

- If the unit is used for a long time, parts may deteriorate and cause malfunction or bad drainage of dehumidified water depending on the heat, humidity, or dust.
- In addition to the usual maintenance, it is recommended that you have the unit checked and maintained by the dealer where
 you purchased it.



For environmental conservation, it is strongly recommended that the indoor and outdoor units of the air conditioner in use be cleaned and maintained regularly to ensure efficient operation of the air conditioner. When the air conditioner is operated for a long time, periodic maintenance (once a year) is recommended. Furthermore, regularly check the outdoor unit for rust and scratches, and remove them or apply rustproof treatment, if necessary. As a general rule, when an indoor unit is operated for 8 hours or more daily, clean the indoor unit and outdoor unit at least once every 3 months. Ask a professional for this cleaning / maintenance work. Such maintenance can extend the life of the product though it involves the owner's expense.

Failure to clean the indoor and outdoor units regularly will result in poor performance, freezing, water leakage, and even compressor failure.

Maintenance List

Part	Unit	Check (visual / auditory)	Maintenance
Heat exchanger	Indoor / outdoor	Dust / dirt clogging, scratches	Wash the heat exchanger when it is clogged.
Fan motor	Indoor / outdoor	Sound	Take appropriate measures when abnormal sound is generated.
Filter	Indoor	Dust / dirt, breakage	Wash the filter with water when it is contaminated.Replace it when it is damaged.
Fan	Indoor	Vibration, balance Dust / dirt, appearance	 Replace the fan when vibration or balance is terrible. Brush or wash the fan when it is contaminated.
Air intake / discharge grilles	Indoor / outdoor	Dust / dirt, scratches	Fix or replace them when they are deformed or damaged.
Drain pan	Indoor	Dust / dirt clogging, drain contamination	Clean the drain pan and check the downward slope for smooth drainage.
Ornamental panel, louvers	Indoor	Dust / dirt, scratches	Wash them when they are contaminated or apply repair coating.
Exterior	Outdoor	Rust, peeling of insulator Peeling / lift of coat	Apply repair coating.

6 Troubleshooting

Check the points described below before requesting repair.

		Symptom	Cause
	Outdoor unit	 White, misty, cold air or water comes out Sometimes the noise of air leaking is heard. A noise is heard when the power is turned on. 	 The fan of the outdoor unit is automatically stopped and defrosting is performed. The solenoid valve works when defrosting starts or stops. The outdoor unit is preparing for running.
It is not a malfunction.	Indoor unit	 Sometimes a swishing is heard. A clacking sound is heard. Discharged air smells unusual. The fan continues running even after the unit operation is stopped. 	 When the unit starts running, during operation, or immediately after the unit stops running, a sound such as water flowing may be heard, or the operation sound may become louder for a couple of minutes immediately after the unit starts running. This is the sound of the refrigerant flowing or the dehumidifier draining. This is a sound generated when the heat exchanger, etc. expands and contracts slightly due to temperature change. Various smells from the walls, carpet, clothes, cigarette, cosmetics, etc. adhere to the air conditioner. The fan keeps running to self clean operation the heat exchanger during drying.
		The unit does not run	 Has a blackout occurred? Has the circuit breaker blown? Has the protective device been activated? (The operation indicator and r on the remote controller are blinking.)
Check again.	The room does	not cool down or warm up.	 Is the air intake or discharge of the outdoor unit clogged? Is a door or window open? Is the air filter clogged with dust? Is the air volume set to "Low"? Or is the operation mode set to "Fan"? Is the setup temperature appropriate?

If there is something unusual even after checking the above, stop running the unit, turn off the circuit breaker, and inform the dealer where you purchased the product of the product number and symptom. Do not attempt to repair the unit by yourself as doing so is dangerous. If the check indicator (E_{i}^{0} , F_{i}^{0} , H_{i}^{0} , etc.) is displayed on the remote controller LCD, inform the dealer of its content as well.

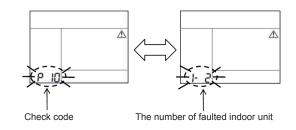
If any of the following occur, stop running the unit immediately, turn off the circuit breaker, and contact the dealer where you purchased the product.

- · The switch does not work properly.
- The circuit breaker often blows out.
- · You unintentionally put a foreign object or water inside.
- · The unit cannot be run even after the cause of the protective device activation is removed.
- Other unusual conditions are found.

■Confirmation and check

If there is something unusual even after checking the above, stop running the unit, turn off the circuit breaker, and inform the dealer where you purchased the product of the product number and symptom. Do not attempt to repair the unit by yourself as doing so is dangerous. If the check indicator ($\mathcal{E}\partial$, $\mathcal{F}\partial$, $\mathcal{H}\partial$, etc.) is displayed on the wired remote controller LCD, inform the dealer of its content as well.

If the air conditioner fails, the timer off indication will alternately display the check code and the number of faulted indoor unit.



Troubleshooting history and confirmation

If the air conditioner fails, you can view the troubleshooting history by following the steps below. (The troubleshooting history can record at most 4 records.)

The troubleshooting history can be viewed when the air conditioner is on or off.

• If you view the troubleshooting history in the timer off operation, the timer off will be cancelled.

Step	Operating Instructions	
1	 Long press the timer off button for more than 10 seconds tillan indication icon appears, indicating that you have entered the troubleshooting history mode. If [
	Press the set button each time, then the recorded troubleshooting history will be displayed in the order of [01] (newest) to [04] (oldest).	
2	In the troubleshooting history mode, do not press the menu button for more than 10 seconds. Otherwise, all troubleshooting history of the indoor unit will be deleted.	
3	After completing the check, press the ON/OFF button to return to normal mode.It will continue to run if in the running mode. Please press the On/ Off button again if in the stop mode.	1 2 3

7 Operations and performance

Check before running

- · Check whether the earth wire is cut or disconnected.
- Check whether the air filter is installed.
- Turn on the circuit breaker 12 hours or more before starting operation.

▼ 3 minutes protection function

3-minutes protection function prevents the air conditioner from starting for initial 3 minutes after the main power switch / circuit breaker is turned on for re-starting the air conditioner.

▼ Power failure

Power failure during operation will stop the unit completely.

- To restart the operation, push the ON / OFF button on the remote controller.
- Lightning or a wireless car telephone operating nearby may cause the unit to malfunction. Turn off the main power switch or circuit breaker and then turn them on again. Push the ON / OFF button on the remote controller to restart.

Defrosting operation

If the outdoor unit is frosted during the heating operation, defrosting starts automatically (for approximately 2 to 10 minutes) to maintain the heating capacity.

- The fans in both indoor and outdoor units will stop during the defrosting operation.
- During the defrosting operation, the defrosted water will be drained from the bottom plate of the outdoor unit.

▼ Heating capacity

In the heating operation, the heat is absorbed from the outside and brought into the room. This way of heating is called heat pump system. When the outside temperature is too low, it is recommended to use another heating apparatus in combination with the air conditioner.

▼ Protective device

- · Stops operation when the air-conditioner is overloaded.
- If the protective device is activated, the unit stops running, and the operation indicator and check indicator on the remote controller blink.

▼ If the protective device is activated

- Turn off the circuit breaker and perform a checkup. Continued running may cause a malfunction.
- Check whether the air filter is installed. If not, the heat
 exchanger may be clogged with dust and water leakage
 may occur.

▼ During cooling

 The air intake or discharge of the outdoor unit is clogged. Strong wind continuously blows against the discharge of the outdoor unit.

During heating

- The air filter is clogged with a large amount of dust.
- The air intake or discharge of the indoor unit is clogged.

▼ Do not turn off the circuit breaker

During the air-conditioning season, leave the circuit breaker turned on, and use the ON / OFF key on the remote controller.

Attention to snowfall and freeze on the outdoor unit

 In snowy areas, the air intake and air discharge of the outdoor unit are often covered with snow or frozen up.
 If snow or freeze on the outdoor unit is left as it is, it may cause machine failure or poor warming.

 In cold areas, pay attention to the drain hose so that it perfectly drains water without water remaining inside for freeze prevention. If water freezes in the drain hose or inside the outdoor unit, it may cause machine failure or poor warming.

Air conditioner operating conditions

For proper performance, operate the air conditioner under the following temperature conditions:

	Outdoor temperate	e : -15°C to 46°C (Dry bulb temp.)
Cooling operation	Room temperatu	: 21°C to 32°C (Dry bulb temp.), 15°C to 24°C (Wet bulb temp.)
	[CAUTION]	Room relative humidity – less than 80 %. If the air conditioner operates in excess of this igure, the surface of the air conditioner may cause dewing.
Heating energian	Outdoor tempera	re : -15°C to 15°C (Wet bulb temp.)
Heating operation	Room temperatu	: 15°C to 28°C (Dry bulb temp.)

If air conditioner is used outside of the above conditions, safety protection may work.

8 Installation

Do not install the air conditioner in the following places

- Do not install the air conditioner in any place within 1 m from a TV, stereo, or radio set. If the unit is installed in such place, noise transmitted from the air conditioner affects the operation of these appliances.
- Do not install the air conditioner near a high frequency appliance (sewing machine or massager for business use, etc.),
 otherwise the air conditioner may malfunction.
- 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.
- Do not install the air conditioner in a humid or oily place, or in a place where steam, soot, or corrosive gas is generated.
- Do not install the air conditioner in a salty place such as seaside area.
- Do not install the air conditioner in a place where a great deal of machine oil is used.
- · Do not install the air conditioner in a place where it is usually exposed to strong wind such as in seaside area.
- · Do not install the air conditioner in a place where sulfureous gas generated such as in a spa.
- Do not install the air conditioner in a vessel or mobile crane.
- Do not install the air conditioner in an acidic or alkaline atmosphere (in a hot-spring area or near a chemicals factory, or in a place subject to combustion emissions). Corrosion may be generated on the aluminum fin and copper pipe of the heat exchanger.
- Do not install the air conditioner near an obstacle (air vent, lighting equipment, etc.) that disturbs discharge air. (Turbulent airflow may reduce the performance or disable devices.)
- Do not use the air conditioner for special purposes such as preserving food, precision instruments, or art objects, or where breeding animals or growing plants are kept.
- (This may degrade the quality of preserved materials.)
- Do not install the air conditioner over an object that must not get wet. (Condensation may drop from the indoor unit at a humidity of 80% or more or when the drain port is clogged.)
- Do not install the air conditioner in a place where an organic solvent is used.
- Do not install the air conditioner near a door or window subject to humid outside air.
 Condensation may form on the air conditioner.
- · Do not install the air conditioner in a place where special spray is used frequently.

Be careful with noise or vibrations

- Do not install the air conditioner in a place where noise by outdoor unit or hot air from its air discharge annoys your neighbors.
- Install the air conditioner on a solid and stable foundation so that it prevents transmission of resonating, operation noise and vibration.
- If one indoor unit is operating, some sound may be audible from other indoor units that are not operating.

9 Specifications

Madal	Sound powe		
Model	Cooling	Heating	Weight (kg)
RAV-HM561UTP-E	*	*	20
RAV-HM801UTP-E	*	*	20
RAV-HM901UTP-E	*	*	24
RAV-HM1101UTP-E	*	*	24
RAV-HM1401UTP-E	*	*	24
RAV-HM1601UTP-E	*	*	24

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

Declaration of Conformity

Manufacturer:	Toshiba Carrier (Thailand) Co., Ltd. 144 / 9 Moo 5, Bangkadi Industrial Park, Tivanon Road, Tambol Bangkadi, Amphur Muang, Pathumthani 12000, Thailand
TCF holder:	TOSHIBA CARRIER EUROPE S.A.S Route de Thil 01120 Montluel FRANCE
Hereby declares that the	e machinery described below:
Generic Denomination:	Air Conditioner
Model / type:	RAV-HM561UTP-E RAV-HM801UTP-E RAV-HM901UTP-E RAV-HM1101UTP-E RAV-HM1401UTP-E RAV-HM1601UTP-E
Commercial name:	Digital Inverter Series / Super Digital Inverter Series Air Conditioner
Complies with the provis into national law	sions of the Machinery Directive (Directive 2006/42/EC) and the regulations transposing
NOTE	

NOTE

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

Declaration of Conformity

 Manufacturer:
 Toshiba Carrier (Thailand) Co., Ltd.

 144 / 9 Moo 5, Bangkadi Industrial Park, Tivanon Road, Tambol Bangkadi, Amphur Muang, Pathumthani 12000, Thailand

 TCF holder:
 TOSHIBA CARRIER 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: RAV-HM561UTP-E RAV-HM801UTP-E RAV-HM901UTP-E RAV-HM1101UTP-E RAV-HM1401UTP-E RAV-HM1601UTP-E

Commercial name: Digital Inverter Series / Super Digital Inverter Series Air Conditioner

Complies with the provisions of the Supply of Machinery (Safety) Regulations 2008

NOTE

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

Toshiba Carrier (Thailand) Co., Ltd.

144 / 9 Moo 5, Bangkadi Industrial Park, Tivanon Road, Tambol Bangkadi, Amphur Muang, Pathumthani 12000, Thailand

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