



**EEV** internal model

AS\*A004GCGH AS\*A007GCGH AS\*A009GCGH AS\*A012GCGH AS\*A014GCGH

**EEV** external model

AS\*E004GCEH AS\*E007GCEH AS\*E009GCEH AS\*E012GCEH AS\*E014GCEH

# **OPERATING MANUAL**

INDOOR UNIT (Wall mounted type)
Keep this manual for future reference.

# **BEDIENUNGSANLEITUNG**

INNENGERÄT (wandmontierter Typ) Bewahren Sie dieses Handbuch für eine spätere Bezugnahme auf.

# **MODE D'EMPLOI**

UNITÉ INTÉRIEURE (Type montage mural) Conservez ce manuel pour pour toute référence ultérieure.

# **MANUAL DE FUNCIONAMIENTO**

UNIDAD INTERIOR (Tipo montado en pared) Conserve este manual para posibles consultas futuras.

# MANUALE DI ISTRUZIONI

UNITÀ INTERNA (tipo montato a parete) Conservare questo manuale per consultazione futura.

# ΕΓΧΕΙΡΙΔΙΟ ΛΕΙΤΟΥΡΓΙΑΣ

ΕΣΩΤΕΡΙΚΗ ΜΟΝΑΔΑ (Επιτοιχιος τύπος) Διατηρήστε το παρόν εγχειρίδιο για μελλοντική αναφορά.

# MANUAL DE FUNCIONAMENTO

UNIDADE INTERIOR (Tipo mural) Guarde este manual para consulta futura.

# РУКОВОДСТВО ПО ЭКСПЛУАТАЦИИ

ВНУТРЕННИЙ МОДУЛЬ (настенного типа) Сохраните данное руководство для последующего использования.

# **KULLANIM KILAVUZU**

İÇ ÜNİTE (Duvara monteli tip) Bu kılavuzu ileride başvurmak üzere saklayın.

Refer to the rating label for the serial number, manufactured year and month.

FUJITSU GENERAL LIMITED

MADE IN P.R.C.

[Original instructions]

PART No. 9377772428

## **OPERATING MANUAL**

PART No. 9377772428

VRF system indoor unit (Wall mounted type)

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# SAFETY PRECAUTIONS

- Before using the appliance, read these "PRECAUTIONS" thoroughly and operate in the correct way.
- The instructions in this section all relate to safety; be sure to maintain save operating conditions.
- "WARNING" and "CAUTION" have the following meanings in these instructions:

<b>♠</b> WARNING	This mark indicates procedures which, if improperly performed, might lead to the death or serious injury of the user.			
<b>CAUTION</b>	This mark indicates procedures which, if improperly performed, might possibly result in personal harm to the user, or damage to property.			

### PRECAUTIONS ON USE



- Do not keep exposing oneself to the direct wind of air conditioner for a long time.
- Do not insert fingers or objects into the outlet port or intake grilles.
- Except for EMERGENCY, never turn off main as well as sub breaker of the indoor units during operation. It will cause compressor failure as well as water leakage.

First, stop the indoor unit by operating the control unit, converter or external input device and then cut the breaker.

Make sure to operate through the control unit, converter or external input device.

- If the power supply cord of this appliance is damaged, it should only be replaced by the authorized service personal, since special purpose tools and specified cord are required.
- If any refrigerant happens to leak, extinguish any flames, ventilate the room and get in touch with authorized service personnel.



- Provide occasional ventilation during use.
- Do not use in applications involving the storage of foods, precision equipment, or art works.
- Do not place animals or plants in the direct path of the airflow.
- Do not direct airflow at fireplaces or heating apparatus.
- Do not block or cover the inlet port and outlet port.
- Do not climb on, or place objects on, the air conditioner.
- $\bullet$  Do not set flower vases or water containers on top of air conditioners.
- Do not hang objects from the indoor unit.
- Do not place anything below the indoor unit that should not get wet.
- Always turn off the electrical breaker whenever cleaning the air conditioner or the air filter.
- Do not pour water or cleaning solvent on the unit directly, or wash the unit with them.

- Do not expose the air conditioner directly to water.
- Do not operate the air conditioner with wet hands.
- Check the condition of the installation stand for damage.
- · Operate only with air filters installed.
- Do not drink the water drained from the air conditioner.
- Do not apply any heavy pressure to radiator fins.
- Do not use inflammable gases near the air conditioner.
- Do not touch the piping during operation.
- Ensure that any electronic equipment is at least 1 m away from either the indoor or outdoor units.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

## NOTE:

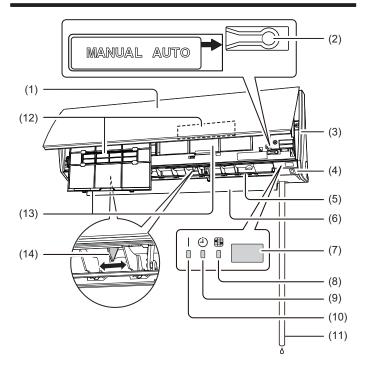
Switching the operating mode in the heat recovery system may require some time to prepare for operation. Please note that this is not a fault.

## PRECAUTIONS ON INSTALLATION



- Do not attempt to install this air conditioner by yourself.
- This unit contains no user-serviceable parts.
   Always consult authorized service personnel for repairs.
- When moving, consult authorized service personnel for disconnection and installation of the unit.
- The unit must be grounded.
- Make sure drain work is implemented properly for drainage.
- Avoid installing the air conditioner near a fireplace or other heating apparatus.
- When installing the indoor and outdoor unit, take precautions to prevent access to infants.

# NAME OF PARTS



- (1) Intake grille
- (2) MANUAL AUTO button: This is used to operate it while remote controller is not available.
- (3) Front panel
- (4) Human censor
- (5) Vertical airflow direction louver
- (6) Power diffuser
- (7) Remote control signal receiver: This is the place to receive the signals from the remote controller.
- (8) FILTER Indicator Lamp (red): It lights on if the filter became dirty. Clean the filter referring to "CLEANING AND CARE". It lights off when RESET button is pressed after cleaning.
- (9) TIMER Indicator Lamp (orange): It lights on while timer is working.
- (10) OPERATION Indicator Lamp (green): It lights on while operating.
- (11) Drain hose
- (12) Air cleaning filter
- (13) Air filter
- (14) Horizontal airflow direction louver (behind Vertical airflow direction louver)

## **Control unit (optional)**

Types of remote controllers:

- Wireless remote controller
- Wired remote controller
- Simple remote controller

For operation method, please refer to the operating manual of each

# MANUAL AUTO OPERATION

Use the MANUAL AUTO operation in the event the remote controller is lost or otherwise unavailable.



Do not press the MANUAL AUTO button with wet hands or pointed objects, otherwise an electric shock or malfunction may occur.

## Starting Operation

# Press the MANUAL AUTO button on the operating control panel.

The operation can be set in the following setting.

Operating mode	AUTO: When Auto mode cannot be selected, it will operate in the same mode as the other indoor unit in the same system. (When other indoor unit in the same system doesn't operate, the air conditioner will operate in cooling.)			
Fan speed	AUTO			
Setting temperature	23 °C			

# Stopping Operation

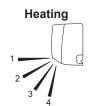
# Press the MANUAL AUTO button on the operating control panel.

# AIRFLOW DIRECTION

# Vertical airflow direction

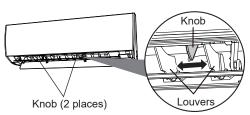
The vertical wind direction can be controlled with the remote controller.





### Horizontal airflow direction

The horizontal airflow direction can be manually set by adjusting Horizontal airflow direction louvers.



# **HUMAN SENSOR**

### About the human sensor

The Human sensor detects whether there are people in the room by looking for movement by people in the room.

Setting of Human sensor can be done in the remote controller of the following. Refer to the operating manual of the remote controller.

UTY-RNR\*Z\* (wired remote controller)

### About the Auto saving operation

If no one enters the room during the set time (15, 30, 60, 90, 120, 180 minutes), the set temperature will be automatically controlled.

(When someone comes back into the room, the Human sensor will detect this, and automatically revert to the original settings.)

## About the Auto-off operation

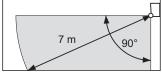
If no one enters the room during the set time (1 to 24 hours in 1 hour increments), the air conditioner will automatically stop operation.

## NOTES:

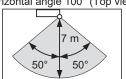
- To restart operation, press the [On/Off] button of the remote controller
- The Auto-off operation may not operate even if there is no one in the room. The sensor may incorrectly detect people even if there is no one in the room.

### Application range

Vertical angle 90° (Side view)



Horizontal angle 100° (Top view)



## NOTES:

- Energy Saving function may not work when the room temperature is very different from the temperature defined in temperature setting, such as when immediately after starting the operation.
- Since the Human sensor detects infrared light given out by people, there may be cases where this detection is incorrect.

# Situations in which the sensor will detect no people in the room, even when there is someone there

- When the temperature is high and the difference with between people's body temperature is small. (Such as during the summer when the temperature is 30°C or higher.)
- When there is someone in the room, but they do not move for a long period of time.
- When someone is hidden behind a sofa, other furniture, glass, or in similar situations.
- When someone is wearing extremely thick clothing and has their back facing the sensor.

# Situations in which the sensor will incorrectly detect people in the room, even when there is no one there

- When there is a dog or a cat moving around in the room.
- When the wind is making curtains or plants move.
- When there are heating units, humidifiers, or electric appliances such as oscillating electric fans operating.

# OPERATING TIPS

# **Operation and Performance**

#### About priority state and standby state

Multiple indoor units can be connected within the same system.
 Depending on the system, choice of operating mode are limited.

# Cooling priority state:

When the other indoor units within the same system operate in cooling or dry mode, heating cannot be selected at the same time.

#### Heating priority state:

When the other indoor units within the same system operate in heating mode, cooling and dry mode cannot be selected at the same time.

## Standby state:

The standby state activates when 2 or more indoor units start up at the same time in different mode. Any indoor unit other than priority mode will wait in standby state until priority mode changes (operation starts as soon as priority is switched).

At this time, the OPERATION indicator lamp (green) lights up and the TIMER indicator lamp (red) blinks.

# Low ambient cooling

 When the outdoor temperature drops, the outdoor unit's fans may switch to Low Speed, or one of the fans may stop intermittently.

## Heating performance

- Heating mode operates on the heat pump principle, absorbing heat from outdoor air and transferring that heat indoors. As a result, the operating performance is reduced as outdoor air temperature drops.
   If you feel that insufficient heating performance is being produced, we recommend you use this air conditioner in conjunction with another type of heating appliance.
- Heating mode heat your entire room by recirculating air throughout the room, with the result that some time may be required after first starting the air conditioner until the room is heated.

#### Automatic defrosting

• When using the Heating mode under conditions of low outdoor air temperature high humidity, frost may form on the outdoor unit, resulting in reduced operating performance. In order to prevent this kind of reduced performance, this unit is equipped with an Automatic defrosting function. If frost forms, the air conditioner will temporarily stop, and the defrosting circuit will operate briefly (for about 4 to 15 minutes). During Automatic defrosting operation, the OPERATION indicator lamp (green) will blinks.

#### Oil recovery operation

 Periodically, the Oil recovery operation is performed in order to return compressor oil to the outdoor unit.
 During Oil recovery operation, the OPERATION indicator lamp (green) will blinks (for about 10 minutes).

## Temperature and humidity range

 The temperature and humidity required for operating this product is as shown in the following table.

	Cooling/Dry mode	Heating mode		
Outdoor temperature	Please refer to the specification of outdoor units.			
Indoor temperature	18 to 32 °C DB	10 to 30 °C DB		
Indoor humidity	About 80% or less			

- If the air conditioner is operated under higher temperature conditions
  than those listed, the built-in protection circuit may operate to prevent
  internal circuit damage. Also, during Cooling and Dry modes, if the unit
  is used under conditions of lower temperature than those listed above,
  the heat-exchanger may freeze, leading to water leakage and other
  damage.
- If the unit is used for long periods under high-humidity conditions, condensation may form on the surface of the indoor unit, and drip onto the floor or other objects underneath.
- Do not use this unit for any purposes other than the Cooling, Heating, Dehumidifying, and air-circulation of rooms in ordinary dwellings.

# **CLEANING AND CARE**



- Before cleaning the indoor unit, be sure to turn it off and all the power supply has been disconnected.
- Before starting operation, make sure that the intake grille has been shut completely. Incomplete closing of the intake grille might have an effect on the proper working or performance of the air conditioner.
- Do not touch the aluminum fins of heat exchanger built-in the indoor unit to avoid personal injury when you maintain the unit.
- Do not expose the indoor unit to liquid insecticides or hair sprays.
- Do not stand on slippery, uneven or unstable surfaces when you maintain the unit.

# Cleaning the intake grille and the air filter

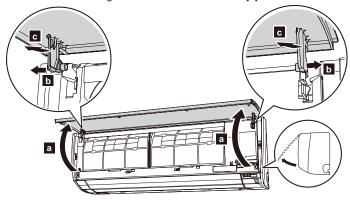
#### Daily care

When cleaning the indoor unit body, mind the following:

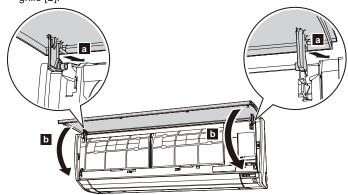
- Do not use water hotter than 40 °C.
- Do not use scouring cleanser, volatile solvents such as benzene or thinner.
- Wipe the unit gently by using a soft cloth.

#### Cleaning the intake grille

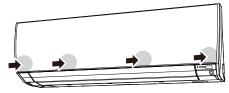
(1) Open the intake grille in direction of the arrow [a]. While gently pressing the left and right mounting shafts of the intake grille outward [b], remove the intake grille in direction of the arrow [c].



- (2) Wash the intake grille gently with water or wipe it gently with a soft cloth moisten with warm water. Then wipe it with a dry and soft cloth.
- (3) While holding the grille horizontal, set the left and right mounting shafts into the pillow blocks at the top of the panel [a]. To latch each shaft properly, insert the shaft until it snaps. Then close the intake grille [b].



(4) Press 4 places on the intake grille to close it completely.



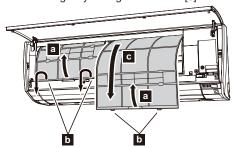
#### Cleaning the air filters

Mind that you have a periodical cleaning of the air filters to prevent reducing the operation efficiency of the product.

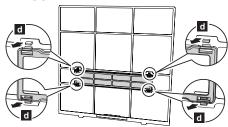
Using of clogged air filter with dust will lower the product performance, and may cause airflow reduction or increase of operating noise.

Clean the air filters once every 2 weeks under normal use.

- (1) Open the intake grille. (Refer to [a] of step 1 in "Cleaning the intake grille".)
- (2) While holding the intake grille with your hand, pull up the handle [a] of the filter in direction of the arrow and release the 2 claws [b]. Then pull the filter out with gently sliding it downward [c].



(3) Filter holder and air cleaning filter are attached on the rear side of the air filter. Remove them from the air filter by unlatching each corner of the filter holder [d].



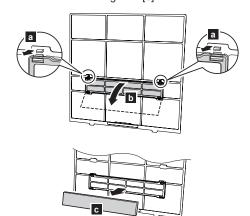
- (4) Remove dust by using a vacuum cleaner or by washing the filter. When you wash the filter, use neutral household detergent and warm water.
  - After rinse the filter well, dry it thoroughly in a shaded place before you reinstall it.
- (5) Attach the air cleaning filter and the filter holder to each air filter.
- (6) Attach the air filter with aligning both side of the filter with the front panel, and push in the filter fully.

#### NOTE:

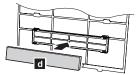
- Make sure that 2 claws are firmly snapped to the guide holes on the panel.
- (7) Close the intake grille firmly. (Refer to step 4 in "Cleaning the intake grille".)

# Replacing the air cleaning filter

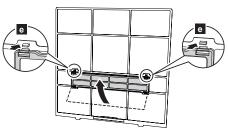
- (1) Remove the air filter. (Refer to step 1 in "Replacing the air filter".)
- (2) Release 2 latches [a] of the filter holder, and turn over the holder in direction of arrow [b]. Remove the soiled air cleaning filter [c].



(3) Attach new or maintained air cleaning filter [d] to the filter holder. New air cleaning filter can be attached to either of the right holder or the left holder.



(4) Latch 2 corners of the filter holder [e] to the air filter firmly.



- (5) Reinstall the air filter. (Refer to step 6 in "Cleaning the air filters".)
- (6) Close the intake grille firmly. (Refer to step 4 in "Cleaning the intake grille".)

Following 2 types of air cleaning filters are used in this product.

When you replace them, purchase dedicated air cleaning filters for this product.

Apple-catechin filter: UTR-FA16 (1 sheet)



The Apple-catechin filter uses static electricity to clean fine particles and dust in the air such as tobacco smoke and plant pollen that are too small to see

- This filter is disposable. Do not wash or reuse it.
- Once you open the package, use it as soon as possible. The cleaning effect is reduced if the filter is left with the package opened.
- Replace the filter once every 3 months under normal use.
- By setting the fan speed high, the air cleaning effect increases.

Ion deodorization filter: UTR-FA16-2 (Light blue, 1 sheet)



The filter deodorizes by powerfully decomposing absorbed odors using the oxidizing and reducing effects of ions generated by the ultra-fineparticle ceramic.

- To maintain the deodorizing effect, clean the filter once every 3 months as follows:
  - 1) Remove the filter.
  - 2) Flush the filter with high-pressure hot water until the surface of the filter is covered with water.
  - 3) Wash the filter gently with diluent neutral detergent. Do not wash it by wringing or rubbing to prevent reducing the deodorizing effect by damage.
  - 4) Rinse the filter well with water flow.
  - 5) Dry the filter thoroughly in a shaded place.
  - 6) Reinstall the filter to the indoor unit.
- Replace the filter once every 3 years under normal use.

#### When not using for an extended period

Leave the breaker on for at least 12 hours before starting operation when it is to be used again.

## After extended non-use of the unit

If you have shut down the indoor unit for 1 month or more, perform the FAN operation for half a day to dry the internal parts thoroughly before you perform normal operation.

# Additional inspection

After long period of use, accumulated dust inside the indoor unit may reduce the product performance even if you have maintained the unit with instructed daily care or cleaning procedures written in this manual.

In such a case, a product inspection is recommended.

For more information, consult authorized service personnel.

# TROUBLESHOOTING

# The following conditions are not breakdowns or operation failures.

### Doesn't operate immediately:

- If the unit is stopped and then immediately started again, the compressor will not operate for about 3 minutes, in order to prevent fuse
- Whenever the electrical breaker is turned off then on again, the protection circuit will operate for about 3 minutes, preventing unit operation during that period.

### Airflow is weak or stops:

- When Heating operation is started, indoor unit's fan may temporarily stop, to allow internal parts to warm up.
- During Heating operation, if the room temperature rises above the thermostat setting, the outdoor unit will stop, and the indoor unit's fan will stop. If you wish to warm the room further, set the thermostat for a higher setting.
- During Oil recovery operation, the airflow may stop for approximately 10 minutes. (Refer to "OPERATING TIPS")
- During Heating operation, the unit will temporarily stop operation (between 4 and 15 minutes) as the Automatic defrosting mode operates. (Refer to "OPERATING TIPS")
- The fan may operate at low speed during Dry operation or when the unit is monitoring the room's temperature
- In the monitor AUTO operation, the fan will operate at low speed.

#### **Blinking lamps:**

- The OPERATION indicator lamp (green) blinks: An Oil recovery operation is being performed. (Refer to "OPERATING
- The OPERATION indicator lamp (green) blinks: An Automatic defrosting operation is being performed. (Refer to "OP-**ERATING TIPS"**)
- The OPERATION indicator lamp (green) and TIMER indicator lamp (orange) are blinking alternately:

It has recovered from a power outage.

- The OPERATION indicator lamp (green) and TIMER indicator lamp (orange) are blinking simultaneously:
- It is operating in Trial operation mode. Ask a manager as there may be maintenance being conducted.
- The OPERATION indicator lamp (green) lights up and the TIMER indicator lamp (orange) blinks:

This is the standby state. (Refer to "OPERATING TIPS")

#### Noise is heard:

• In the following conditions there are sounds of water flowing from the indoor unit and the operation sound becomes loud. These are the sounds of the flowing of refrigerant.

When operation starts

When Oil recovery operation finishes

When Automatic defrosting operation finishes

- During operation, a slight squeaking sound may be heard. This is the result of minute expansion and contraction of the panel due to temperature changes.
- During Heating operation, a sizzling sound may be heard occasionally. This sound is produced by the Automatic defrosting operation. (Refer to "OPERATING TIPS")

#### Smells:

• Some smell may be emitted from the indoor unit. This smell is the result of room smells (furniture, tobacco, etc.) which have been taken into the air conditioner.

## Fog comes out of the indoor unit:

• During Cooling operation, a thin mist may be seen emitted from the indoor unit. This results from the sudden Cooling of room air by the air emitted from the air conditioner, resulting in condensation and misting.

#### Steam comes out of the indoor unit:

 During Heating operation, the outdoor unit's fan may stop, and steam may be seen rising from the unit. This is due to the Automatic defrosting operation. (Refer to "OPERATING TIPS")

# Water is produced from the outdoor unit:

 During Heating operation, water may be produced from the outdoor unit due to the Automatic defrosting operation.

# The following conditions may not be breakdowns so check again.

## Doesn't operate at all:

- Has there been a power failure?
- Has a fuse blown out, or a circuit breaker been tripped?
- Is the main power switch set to the OFF position?
- Are you trying to engage in an operation different from the priority state? (Refer to "OPERATING TIPS")
- Is it in standby state? (Refer to "OPERATING TIPS")
- Is the Auto-off operation of the Human sensor setting active? (Refer to "HUMAN SENSOR")

## The operation mode cannot be changed:

 Are you trying to change to an operation different from the priority conditions? (Refer to "OPERATING TIPS")

#### Poor Cooling (or Heating) performance:

- Did you adjust the room temperature settings (thermostat) correctly?
- Is the air filter dirty? (Refer to "CLEANING AND CARE")
- Are the air conditioner's inlet port or outlet port blocked?
- Is there a window or door open?
- In the case of Cooling operation, is a window allowing bright sunlight to enter? (Close the curtains.)
- In the case of Cooling operation, are there heating apparatus and computers inside the room, or are there too many people in the room?
- Is the fan speed set to low?
- Is the Auto saving operation of the Human sensor setting active? (Refer to "HUMAN SENSOR")

# Set the temperature lower than the room temperature and use it:

• Temperature does not fall down well.

Temperature may not fall down depending on the room conditions. (While high humidity or the room temperature is high.) (Refer to "OP-ERATING TIPS")

# In following situations stop operation immediately and get in touch with authorized service personnel.

- The problem cannot be solved even when the troubleshooting checks have been performed.
- The FILTER indicator lamp (red) is blinking very fast.
- The wired remote controller or simple remote controller indicate Er (when connected).
- It has burning smell.

# **SPECIFICATIONS**

Model		AS*A004	AS*A007	AS*A009	AS*A012	AS*A014
		GCGH	GCGH	GCGH	GCGH	GCGH
Power source		220 - 240 V ~ 50 Hz, 230 V ~ 60 Hz				
Available voltage		198 to 264 V (50 Hz)				
range		198 to 253 V (60 Hz)				
Cooling	[kW]	1.1	2.2	2.8	3.6	4.0
capacity	[Btu/h]	3800	7500	9600	12300	13600
Heating capacity	[kW]	1.3	2.8	3.2	4.0	4.5
	[Btu/h]	4400	9600	10900	13600	15400
Input power	[W]	12	16	20	25	36
Current	[A]	0.12	0.16	0.18	0.25	0.30
Sound pressure level						
High	dB [A]	31	34	37	40	44
Med - high	dB [A]	30	32	35	37	42
Med	dB [A]	28	30	32	35	40
Med - low	dB [A]	27	28	29	33	37
Low	dB [A]	26	26	26	30	34
Quiet	dB [A]	22	22	22	24	24
Dimensions and weight						
Height	[mm]	268				
Width	[mm]	840				
Depth	[mm]	203				
Weight	[kg]	8.5				

Model		AS*E004 GCEH	AS*E007 GCEH	AS*E009 GCEH	AS*E012 GCEH	AS*E014 GCEH
Power source	Power source 220 - 240 V ~ 50 Hz, 230 V ~ 60 H			0 V ~ 60 Hz		
Available volta range	age	198 to 264 V (50 Hz) 198 to 253 V (60 Hz)				
Cooling	[kW]	1.1	2.2	2.8	3.6	4.0
capacity	[Btu/h]	3800	7500	9600	12300	13600
Heating	[kW]	1.3	2.8	3.2	4.0	4.5
capacity	[Btu/h]	4400	9600	10900	13600	15400
Input power	[W]	12	16	20	25	36
Current	[A]	0.12	0.16	0.18	0.25	0.30
Sound pressu	re level					
High	dB [A]	31	34	37	40	44
Med - high	dB [A]	30	32	35	37	42
Med	dB [A]	28	30	32	35	40
Med - low	dB [A]	27	28	29	33	37
Low	dB [A]	26	26	26	30	34
Quiet	dB [A]	22	22	22	24	24
Dimensions and weight						
Height	[mm]	268				
Width	[mm]	840				
Depth	[mm]	203				
Weight	[kg]	8.5				

# Acoustic noise information:

The maximum sound pressure level is less than 70 dB (A) for both indoor unit and outdoor unit. According IEC 704-1 and ISO 3744.

• This product contains fluorinated greenhouse gases.