
SIRAIR
22
Alpha Inverter Black Edition
With Built-In WiFi & UVC
Pure luxury, perfectly silent.
SIRAIR®
Cooling . Heating . Energy
Alpha
Inverter

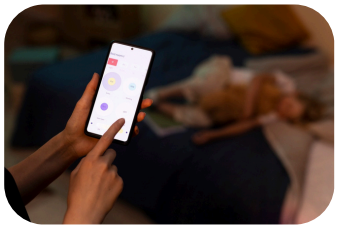
WIFI Control

Sirair smart airconditioners can be controlled or scheduled from your phone, no matter where you are. They are also compatible with Amazon Echo, Google Smart-home systems, and smart Tv's, allowing you to control your AC using voice commands, which enhances convenience and makes your life smarter.

WIFI Control

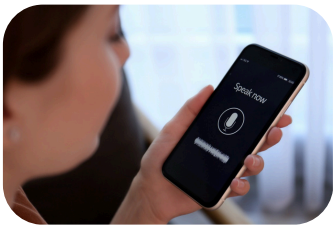
Voice Control

Technology



Control Your AC From Anywhere

Sirair's smart airconditioning system is a cloud service designed to serve customers worldwide. Through this cloud service, users can easily control their home cooling systems with a single click, enabling them to enjoy the benefits of a more intelligent lifestyle. The intelligent cloud service strategically places server groups in multiple regions across the globe, automatically matching users with servers in their respective areas. With the support of global DNS and CDN accelerators, users can experience fast cloud browsing.

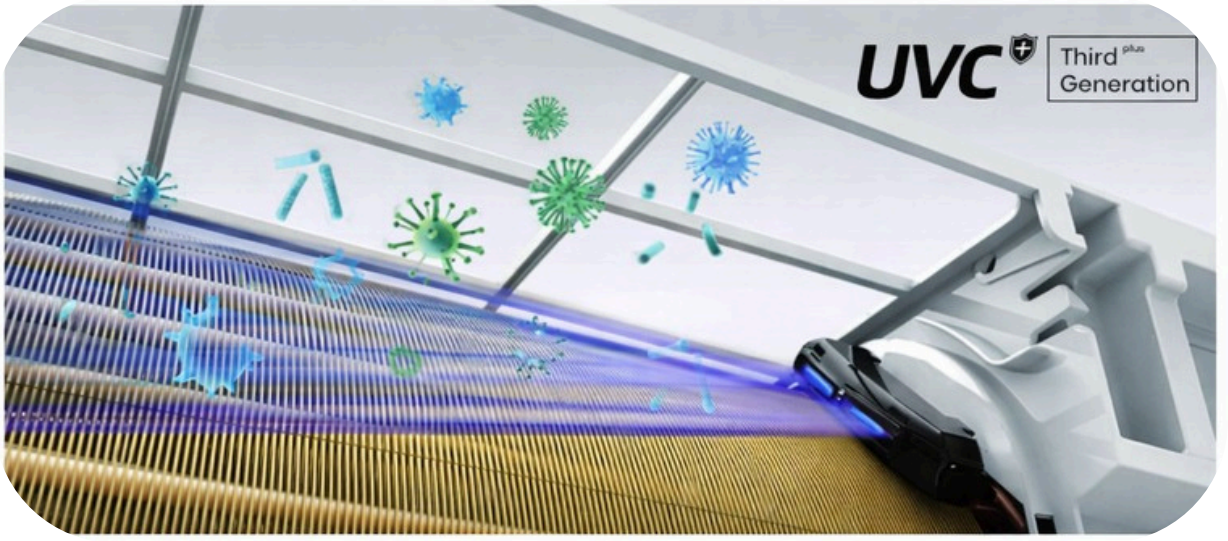


Voice Control

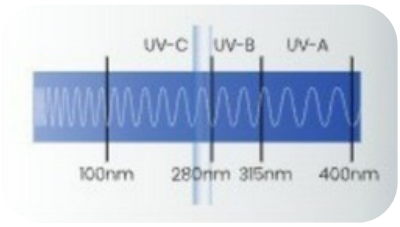
Sirair's smart WIFI technologies are compatible with your smartphones and AI speakers, such as Google Assistant or Amazon Alexa, enhancing the intelligence of your daily life. You can now enjoy easy control for all your airconditioners.

UVC Sterilization

When this function is activated, the built-in LED UV light emits light from right to left onto the evaporator. The cross-flow fan propels the room air, carrying viruses through the sterilization module's irradiation range, resulting in the instant inactivation of viruses. This function can be employed for cyclic and multiple killing.



Technology



UVC Working Theory

The Sirair UVC sterilization module emits deep ultraviolet rays in the range of 260 to 280nm. When these rays irradiate micro organisms, they can penetrate the cell membrane and nucleus of the micro organisms, disrupting the molecular bonds of DNA and rendering them incapable of replication and inactive, ultimately leading to their demise.

Third Plus Generation UVC

Sirair's 3rd Plus Generation UVC LED features a 30° working angle for powerful light gathering. Compared to the second generation, it enhances the sterilization rate by 200%.

Benefits

- Sterilization rate reach to 99.2%
- One-button start
- Safe and reliable operation
- Installed under the panel, not exposed.
- UVC Long service life, 30,000 hours.

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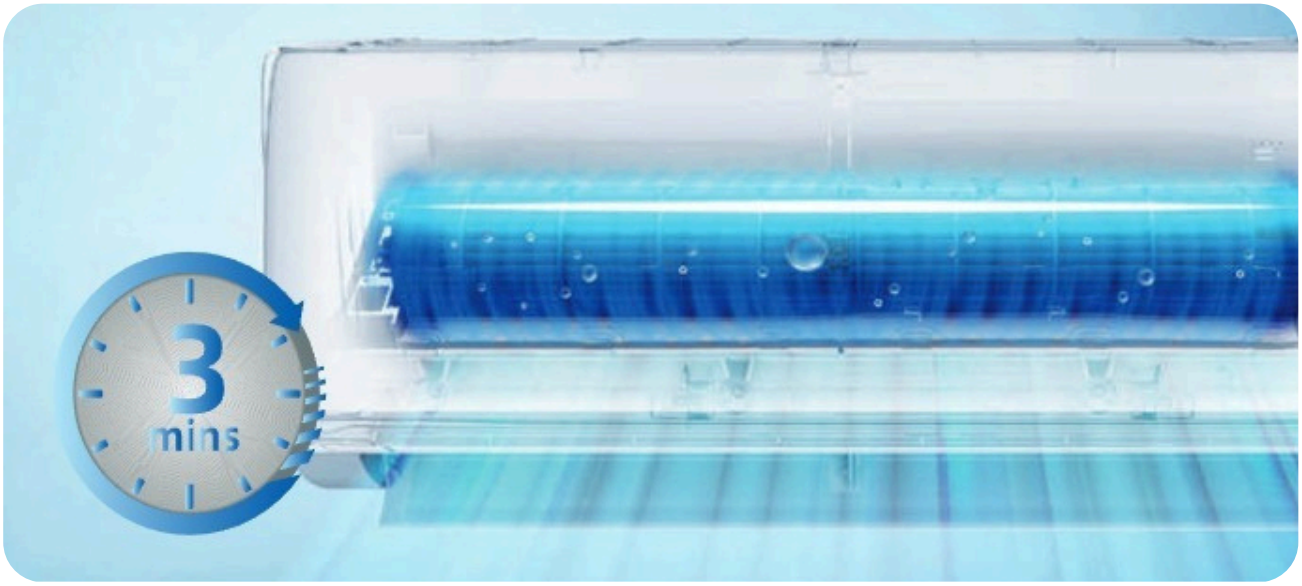
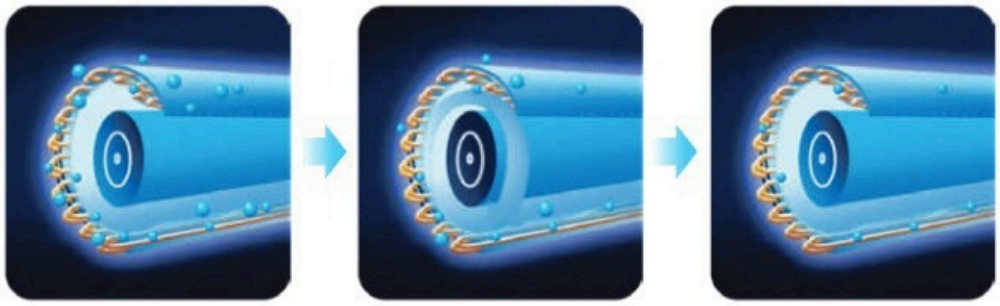
Mildew Proof

Water may still remain in the unit after turning off the airconditioner. With Sirair's mildew-proof technology , when the airconditioner is turned off, the fan continues to run for 3 minutes to dry the evaporator and prevent mildew in the unit.



Technology



Step 1
Water still remain after turning off

Step 2
Keep running for 3 minutes

Step 3
water will be dried

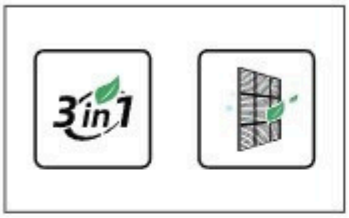
Benefits

- **Internal Drying:** Prevents the growth of mold and fungi by drying the evaporator coil after the unit is turned off, eliminating the source of "musty" aircon smells.
- **Component Protection:** Stops moisture buildup that can lead to internal corrosion, significantly extending the lifespan of the unit.
- **Sustained Efficiency:** Keeps the cooling fins clean and clear of organic growth, ensuring the air conditioner maintains its energy efficiency and airflow over time.

Health Filter

Filters are a crucial component of your airconditioner. Not only do filters help clean and purify the air circulating in your home, but they also prevent contamination of the airconditioner.

3 IN 1 Filter & High Density Filter



Vitamin C Filter Silver Ion Filter Active Carbon Filter

- Air travels through multiple filters and each one has the function to provide you with better and healthier air.
- Sirair high density filter creates cleaner air with outstanding dust collection due to new improved density of the filter.

Benefits

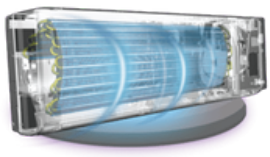
- Purifies the air, reduces airborne particles and can lower the number of allergens in your home.
- Protects your airconditioner for long lasting operation.

Energy Saving

Technology

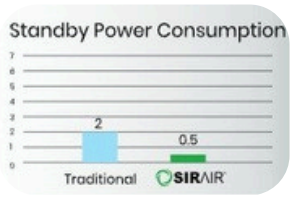
Eco Mode

When activated, Eco Mode optimizes the compressor's frequency and fan speed to maintain a stable temperature with minimal power consumption. It prevents wasteful "start-stop" cycles, allowing the unit to run at peak efficiency and significantly lowering monthly electricity costs.



C-Shaped Efficient Evaporator

The C-shaped design increases the surface area for heat exchange compared to traditional flat or V-shaped evaporators. By allowing for a more compact internal layout while maximizing the contact between air and refrigerant, it significantly boosts cooling and heating speed while improving overall energy efficiency.



0.5w Standby

The utilization of digital green power design, an industry-leading standby chip, and an intermittent oscillation mode is employed to minimize AC standby power consumption to 0.5w.

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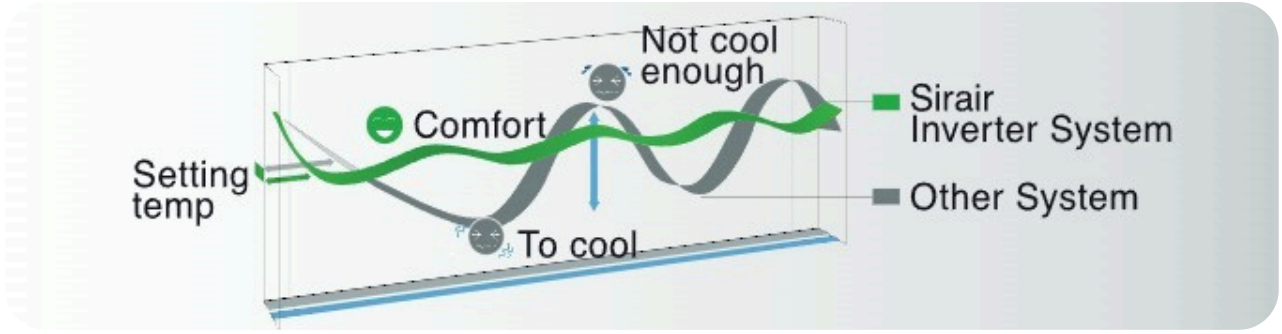
DC Inverter

Unlike standard units that frequently turn fully on and off, the DC Inverter acts like smart cruise control. It uses a variable-speedmotor to adjust power output precisely. Once the target temperature is reached, it slows down to maintain that level steadily, reducing energy consumption by up to 50% and eliminating uncomfortable temperature fluctuations.

Technology



1800 sine Wave Control

This advanced motor-driving technology uses a smooth "sine wave" electrical signal rather than a choppy "square wave" to power the compressor.

- **Stable Cooling & Heating:** By providing a continuous, fluid power supply, it allows the unit to transition between cooling and heating modes more efficiently.
- **Ultra-Quiet Performance:** It results in whisper-quiet operation and reduced vibration in the outdoor unit.
- **Enhanced Durability:** By smoothing out the compressor's rotation during both high-intensity heating and steady cooling, it extends the hardware's lifespan and ensures near-silent comfort.

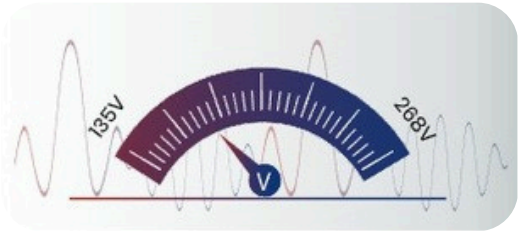
Twin Rotary Compressor

The Twin Rotary Compressor features two opposing compression chambers that rotate 180 degrees apart. This dual-rotor design cancels out mechanical shaking and vibration, allowing the unit to operate at extremely low speeds for massive energy savings or maximum speeds for rapid cooling/heating without noisy mechanical stress.

DC Motor

The DC (Direct Current) Motor is the "engine" behind the fan and compressor, offering superior control compared to traditional AC motors. Because it uses permanent magnets instead of electrical induction to create rotation, it generates significantly less heat and consumes up to 50% less energy. This allows for step-less speed adjustments, meaning the fan can spin at the exact RPM required for perfect comfort without the "hum" of alternating current, resulting in higher efficiency and a much longer hardware lifespan.

Reliability



Wide Voltage Range

The Sirair Inverter is engineered to with stand unstable power environments. Featuring a wide operating voltage range of 138V to 265V, the unit can maintain consistent cooling and heating performance even during significant voltage fluctuations or "brownouts." This protective circuitry ensures the internal components are not damaged by inconsistent power supply, providing peace of mind and long-term reliability in areas with volatile electrical grids.

Operation Up To -20 0C

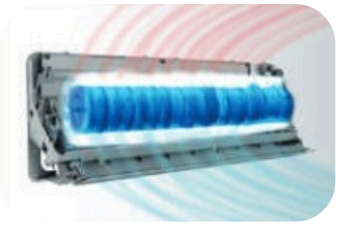
Built for even the harshest environments,Sirair airconditioners are capable of operating in extreme low-temperature conditions down to -20°C. This ensures reliable heating and performance during severe winters, providing consistent warmth when standard units might struggle or fail to operate.

Benefits

- **Significant Energy Savings:** By avoiding the heavy power surges required to restart traditional compressors, the DC Inverter operates at ultra-low frequencies once the target temperature is reached. This results in up to 30-50% lower electricity consumption compared to non-inverter models.
- **Whisper-Quiet Operation:** Because the system doesn't constantly cycle on and off at full power, it eliminates the loud mechanical "clunks" and vibrations associated with standard units. The smooth, gradual speed adjustments ensure a peaceful environment, even during the night.

Comfort Airflow

Technology



Turbo

The Turbo function forces the compressor and indoor fan to operate at their maximum frequency and speed simultaneously. This enables the unit to reach the desired set temperature in the shortest possible time, providing near-instant relief from extreme heat or cold upon entering a room.

Sleep Mode

Sleep Mode gradually adjusts the temperature throughout the night to match the natural drop in human body temperature during sleep. This prevents the room from becoming uncomfortably cold (or hot) while you rest, while also significantly reducing energy consumption and lowering fan noise for a deeper, uninterrupted sleep.

3D Airflow

Vertical 3D Airflow uses dual-vane oscillation and the Coanda Effect to shape air for long-range or diffused cooling. By cycling through vertical arcs, it prevents air layering and ensures uniform temperature without needing horizontal louvers.

Features Guide

Health

Mildew Proof

Prevents the growth of mold and bacteria by drying the internal coil after the unit is turned off. This ensures a fresh, odorless environment and extends the lifespan of your air conditioner.

High Density Filter

Provides superior air filtration by capturing significantly smaller dust particles, pollen, and pet dander compared to standard filters. This advanced mesh ensures a cleaner breathing environment while maintaining optimal airflow for better cooling performance.

UVC Sterilization

UVC sterilization uses integrated ultraviolet light to destroy the DNA of bacteria, viruses, and mold as air passes through the unit. It eliminates up to 99.9% of pathogens, ensuring the air you breathe is medically clean and safe. By keeping the internal coils free from organic growth, it also prevents odors and maintains peak efficiency.

3 in 1 Filter

Combines three specialized layers—typically Vitamin C, Silver Ion, and Cold Catalyst—to simultaneously sterilize bacteria, remove unpleasant odors, and release skin-softening antioxidants for a healthier indoor atmosphere.

DC Inverter

180° Sine Wave

Uses advanced smooth-current technology to drive the compressor with a continuous, fluid wave instead of jagged pulses. This results in significantly quieter operation, higher energy efficiency, and a longer motor lifespan due to reduced vibration and heat.

Fast Cooling & Heating

Uses a high-frequency startup system to achieve your desired temperature in seconds. By running the compressor at maximum speed immediately, it provides an instant blast of powerful airflow to rapidly cool or heat a room during extreme weather conditions.

Features Guide

DC Inverter

Wide Voltage Range

Enables the unit to operate reliably despite significant fluctuations in power supply. It protects the sensitive electronics from damage caused by voltage drops or surges, ensuring stable performance in areas with inconsistent electricity.

-20°C Ultra-low Tem Start

Engineered for extreme climates, this technology allows the compressor to start and provide effective heating even when outdoor temperatures drop as low as -20°C. By utilizing specialized pre-heating and advanced inverter frequency control, it ensures reliable warmth when standard units would fail.

Comfort

Turbo Mode

A high-performance setting that forces the unit to operate at maximum capacity to reach your target temperature in the shortest time possible. It is ideal for providing instant relief when entering a room that is uncomfortably hot or cold.

Sleep Mode

Automatically adjusts the temperature and fan speed during the night to match your body's natural metabolic changes. It saves energy while ensuring you wake up refreshed and comfortable.

Anti-Cold Air

Specifically designed for heating mode, this feature prevents the fan from operating until the indoor coil is sufficiently warm. This eliminates cold drafts when the unit first starts, ensuring only warm air is circulated into the room.

3D Airflow

Vertical 3D Airflow uses dual-vane oscillation and the Coanda Effect to shape air for long-range or diffused cooling. By cycling through vertical arcs, it prevents air layering and ensures uniform temperature without needing horizontal louvers.

Quiet Mode

Dramatically reduces operating noise by optimizing fan speed and compressor frequency to their lowest levels. This creates a whisper-quiet environment perfect for sleep, study, or relaxation without compromising your comfort.

Features Guide

Energy Saving

	Brand Compressor	Powered by globally recognized compressor technology (such as GMCC or Highly), ensuring the "heart" of your air conditioner is built for maximum durability, high-speed cooling, and ultra-efficient energy consumption.
	ECO	An ultra-efficient operating mode that caps the power consumption of the compressor and fan. By prioritizing energy savings while maintaining a steady temperature, it allows for long-term cooling with minimal impact on your electricity bill.
	0.5W Standby	Features intelligent power-management circuitry that slashes electricity consumption to just 0.5 Watts when the unit is off. This eliminates "phantom" power draw, ensuring your air conditioner consumes almost zero energy when not in active use.

Smart

	WIFI Control	Allows you to control your air conditioner from anywhere using your smartphone. Through a dedicated app, you can turn the unit on or off, adjust temperatures, and set schedules remotely so your home is perfectly comfortable before you even arrive.

Convenience

	Auto Restart	In the event of a sudden power outage, the unit stores your current settings in its memory. Once power is restored, the air conditioner automatically restarts and returns to its previous operating mode and temperature without any manual intervention.
	Auto Mode	Uses smart sensors to detect the current room temperature and automatically selects the most appropriate operating mode (Cool, Heat, or Fan). This "set and forget" feature ensures a consistent climate without the need for constant manual adjustments.

Features Guide

Convenience

Hidden LED Display

Features a sophisticated design where the digital temperature display is integrated behind the front panel. It remains invisible when the unit is off, maintaining a clean, minimalist aesthetic, and shines through clearly only when the AC is operational.

24 Hr Timer

Allows you to set a specific time for the air conditioner to automatically switch on or off within a 24-hour period. This provides convenience and energy savings by ensuring the unit only runs when needed.

Emergent Using

A fail-safe feature that allows the air conditioner to continue operating in a restricted mode even if a temperature sensor fails. Instead of shutting down completely, the system uses pre-programmed logic to maintain comfort until repairs can be made.

Louver Position Memory

Remembers your preferred airflow direction and automatically restores the horizontal louver to its last set position every time you turn the unit on. This eliminates the need for manual readjustment, providing personalized comfort instantly.

Independent Dehumidification

Effectively removes excess moisture from the air without drastically reducing the room temperature. This creates a more comfortable, "dry" environment, preventing clamminess and protecting your home from mold and mildew during humid or rainy seasons.

Dust Removal Reminder

Automatically tracks the accumulated operating time of the unit and alerts you when it is time to clean the filters. By ensuring timely maintenance, it helps maintain peak energy efficiency, airflow, and indoor air quality.

Features Guide

Reliability

 Self-diagnosis and Auto-protection	Constantly monitors the system for malfunctions. If a fault is detected, the unit displays an error code for fast troubleshooting and automatically triggers a protection shutdown to prevent internal damage or electrical hazards.
 Error Alarm	In the event of an operational failure or abnormal condition, the unit triggers a specific alarm or flashes a code on the display. This provides an immediate warning to the user, ensuring that technical issues are addressed promptly before they escalate.
 Smart Defrosting	Unlike traditional timers, this intelligent system only activates defrost mode when frost is actually detected on the outdoor coils. This maximizes heating time, reduces energy waste, and ensures a more consistent indoor temperature during cold weather.
 Heating Compensation	Since hot air naturally rises to the ceiling, the temperature near the floor is often cooler than the unit detects. This feature automatically adjusts the output to bridge this temperature gap, ensuring the actual living space stays as warm as the thermostat setting.
 Dew Prevention	In high-humidity conditions, this feature prevents condensation from forming on the external surface of the indoor unit and louvers. By intelligently managing the fan speed and surface temperature, it eliminates water "sweating" and dripping that could damage your walls or flooring.
 Anti-rust Design	The outdoor unit is constructed from galvanized steel and treated with a multi-layered anti-corrosion coating. This protects the casing and internal hardware from rust and oxidation, ensuring long-term structural integrity and a clean appearance even in coastal or high-humidity areas.
 Thoughtful Packaging	Utilizes reinforced, multi-layered structural materials and high-density shock-absorbing foam to protect the unit during transit. This ensures your appliance arrives in perfect condition, free from cosmetic dents or internal mechanical stress caused by shipping.

Technical Specifications

Specification	12K	18K	24K
Model	12K	18K	24K
Climate type	T1	T1	T1
Panel	Alpha	Alpha	Alpha
Power supply (Ph-V-Hz)	220~240V / 50Hz	220~240V / 50Hz	220~240V / 50Hz
Type	Split	Split	Split
Power supply mode	Indoor	Indoor	Indoor
Control type	Remote	Remote	Remote
Cooling capacity (BTU)	12000	18000	24000
EER	A	A	A
Heating capacity (BTU)	12000	18000	24000
COP	A++	A++	A++
Moisture removal (L/h)	1.2	1.8	2.2
Max input consumption (W)	1416	2110	2840
Max current (A)	6.6	9.9	13.3
Compressor type	Rotary	Rotary	Rotary
Compressor brand	GMCC	SANYO	GMCC
Indoor fan motor brand	Welling Broad-Ocean Tongda LT	Welling Broad-Ocean Tongda LT	Broad-Ocean LT
Indoor fan motor capacitor (uF)	1.2	2	3
Indoor fan motor speed (RPM)	1320	1250	1280
Indoor air flow (m^3/h)	550 / 500 / 450 / 400	820 / 720 / 620 / 520	1150 / 1080 / 1000 / 850
Indoor noise level dB(A)	42 / 40 / 38 / 36	44 / 41 / 38 / 35	46 / 43 / 40 / 37
Indoor unit dimension (W×H×D mm)	805×270×197	908×295×220	1025×319×223
Indoor packing (mm)	864×332×265	979×354×292	1102×395×305
Outdoor fan motor brand	Welling / Broad-Ocean	Welling / Broad-Ocean	Welling / Broad-Ocean / LT
Outdoor fan motor capacitor (uF)	2.5	2.5	2.5
Outdoor fan motor speed (RPM)	860	880	880
Outdoor noise level dB(A)	50	54	54
Outdoor unit dimension (W×H×D mm)	660×530×250	780×560×270	780×560×270
Outdoor packing (mm)	768×575×338	889×612×359	889×612×359
Refrigerant type	R410A	R410A	R410A
Refrigerant charge (Kg)	0.68	1.15	1.35
Liquid side (inch)	1/4	1/4	1/4
Gas side (inch)	3/8	1/2	5/8
Cooling ambient temp (°C)	16 ~ 52	16 ~ 52	16 ~ 52
Heating ambient temp (°C)	-15 ~ 24	-15 ~ 24	-15 ~ 24
Max refrigerant pipe length (m)	12	12	15
Max difference in level (m)	7	7	8

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Brand parts may differ.
E&OE