

Ultra-silent DC Inverter A New Choice for High-end Home Decoration

Clivet new-generation LC2 series DC inverter duct type unit adopts a DC inverter to deliver constant temperature and comfort while achieving high efficiency and energy saving. It also uses the DC inverter rare earth compressor to achieve rapid cooling and heating, and reduces the running sound to as low as 23 dB(A). The concealed installation can fit well with various high-end home decoration styles, presenting a noble look inside and outside.

> Innovative DC Inverter Technology to Renovate the Quality of Home Life

Clivet has always been making technological innovations to pursue higher efficiency and stability. The high-quality DC inverter rare earth compressor has taken another big step in innovation. It adopts a compact structural design and runs more stably. The use of permanent magnetic rotors requires no external supply current, which greatly improves power utilization, reduces losses, and achieves higher energy efficiency.

DC INVERTER

Four Advantages of the High-quality DC Inverter Rare Earth Compressor



New R410A environmentally-friendly refrigerant

Thanks to the adopted new R410A environmentally-friendly refrigerant, the compressor has an operating pressure about 1.6 times that of an ordinary R22 air conditioner and achieves higher cooling efficiency. In addition, the new refrigerant greatly reduces the emission of carbon dioxide and causes no damage to the ozone. It is recognized as the best refrigerant in the world.



Precise core components of the compressor



Silent
Quiet heating and cooling



Energy-efficient
Substantial improvement of power utilization



Power
Surging power brought by mature inverter technology



Durable
Powerful vitality of sports car level

> Use of Refrigerant for Inverter Module Cooling to Effectively Cope with Various Environments

This air conditioner reduces the heat generated by the inverter module and components and increases the cooling operation frequency of the compressor in the event of high temperatures, thereby improving the cooling capacity at high temperature. In a high temperature environment of 55°C, the air conditioner can perform strong cooling and improve the high temperature cooling capacity by 15% to 20%.

The inverter module adopts refrigerant cooling technology to cope with various harsh high temperature environments more effectively than ordinary air conditioners. The electric control box will no longer be affected by high temperatures and remain in a cool state, which ensures a more reliable product.

It can perform rapid cooling in a high temperature environment. In contrast to ordinary air conditioners, this unit improves the indoor temperature drop speed by 5-10%.



Innovative refrigerant ring technology

This technology achieves more efficient heat dissipation of liquid and provides strong cooling in an ultra-high temperature environment. This air conditioner can better cope with harsh high temperature environments in cities in comparison with common air conditioners.



> Top-notch Core Parts and Components to Ensure Better Quality

The air conditioner integrates a brand-name DC inverter compressor, cutting-edge DC motor (outdoor unit), accurate refrigerant control, and other core components to ensure the high quality of system. It is also energy-efficient, noiseless, and durable.



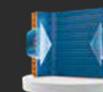
Famous brand compressor

The international famous brand high-efficiency DC inverter compressor provides strong power and runs more stably with high energy efficiency.



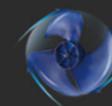
High-efficiency DC motor

The high-efficiency DC motor can effectively reduce energy loss and enhance the operating efficiency.



Efficient heat exchanger

With the cross-type design using multiple flow paths, the heat exchanger achieves more uniform air flow distribution, more sufficient heat transfer, and higher efficiency.



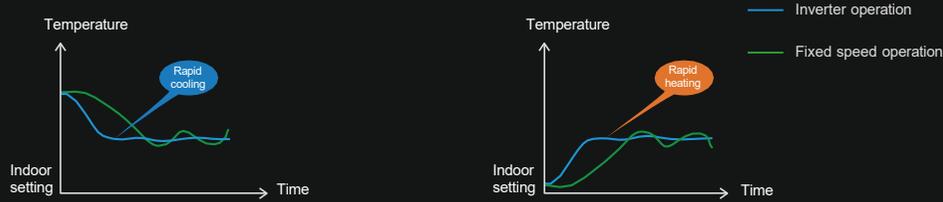
Ultra-silent fan blades

Fan blades with a CFD optimized structural design reduce the motor energy consumption and operating noise.

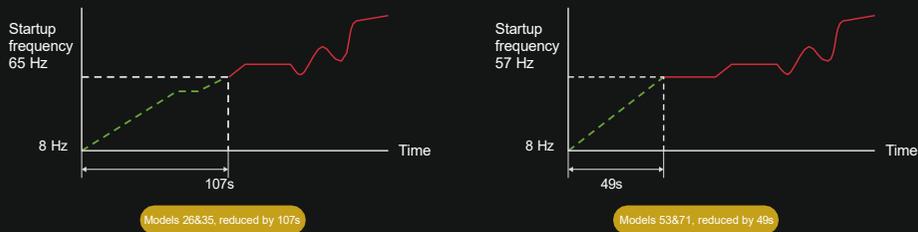
> Full DC Inverter Operation to Enable the Air Conditioner to Reach a Comfortable Temperature Rapidly

Clivet never neglects comfortable experience. The DC inverter technology implements a high-frequency startup function. Once the air conditioner meets set conditions following power-on and startup, it operates at the maximum output frequency. The instantaneous operating frequency is 65 or 57 Hz. After rapidly reaching a set temperature, the air conditioner switches to low-frequency operation to stably deliver a comfortable environment. The rapid cooling and heating give users a comfortable temperature without waiting.

Cooling and Heating Time Comparison Diagram



Schematic Diagram of the High-frequency Startup Function



> Accurate Constant Temperature Control to Deliver Consistent Comfortable Experience

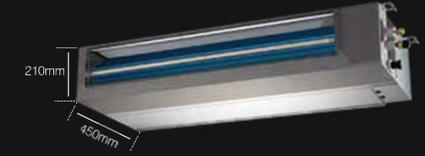
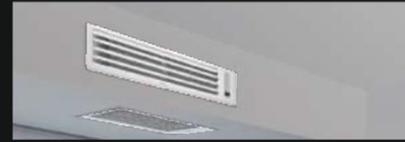
Dramatic temperature changes could cause colds, especially for susceptible people such as children and the elderly. Clivet LC2 DC inverter duct type unit guarantees the high quality of home life by using technologies. The outdoor unit utilizes a DC motor to achieve stepless speed regulation. It makes precision adjustment based on the indoor temperature and puts an end to fluctuating temperature differences, creating constant comfort for the elderly and children.

With fine control of constant temperature and stable temperature, children will not easily catch a cold.



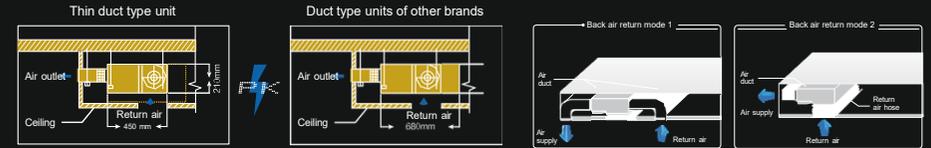
Duct Type Unit

> Exquisite Concealed Installation to Present an Artistic Look



With embedded installation, the indoor unit is completely concealed in the ceiling, with only the air outlet and return air inlet exposed. It presents a more restrained, advanced, and elegant look than conventional air conditioners.

Technical Features of the Thin Duct Type Unit



Compact size saves installation space

The thickness of thin duct type unit is only 210mm, the depth of it is only 450mm, leaving more living space for you. It does not protrude from the wall and saves ceiling space.

Return air design and flexible layout

Multiple air return modes can be implemented after simple adjustment, providing greater freedom for installation.

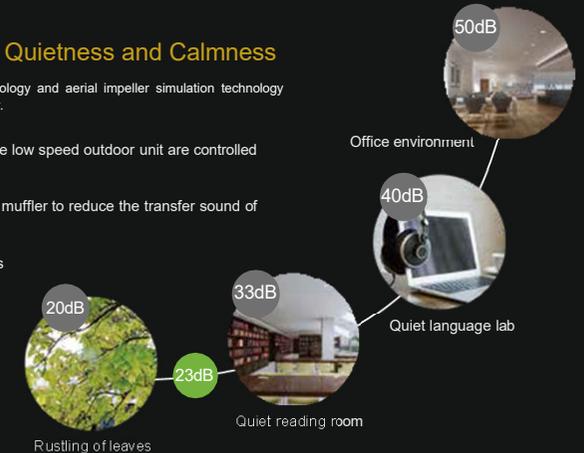


1 Classical type 2 Comfortable type 3 Fashionable type 4 Simple type

> 23 dB Low Sound to Ensure Quietness and Calmness

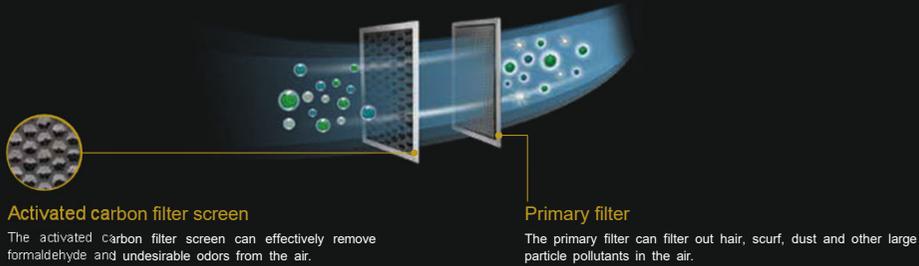
The CFD air duct optimization and analysis technology and aerial impeller simulation technology enable the air conditioner to run stably and quietly.

- > The superheat and the frequency limit of the low speed outdoor unit are controlled to help reduce the refrigerant sound.
- > The compressor is equipped with a special muffler to reduce the transfer sound of the compressor.
- > The chassis is reinforced using metal plates to reduce radiation noise.
- > The motor body technology is upgraded to reduce the electromagnetic sound.
- > The coupling shaft technology is upgraded to reduce vibration sound.



> Multi-layer Filtration to Supply Healthy Fresh Air*

The indoor unit can be equipped with a primary filter and activated carbon filter screen to effectively remove formaldehyde and odors from the air, keeping the air healthy and fresh.

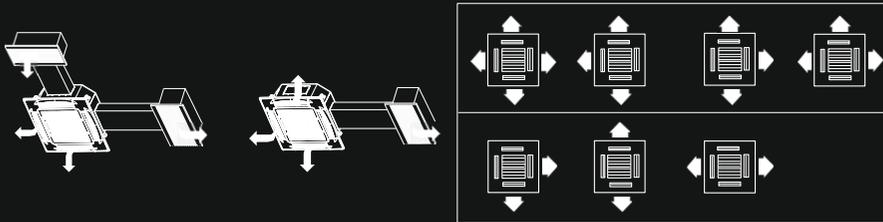


Note: *primary filter, and activated carbon filter screen are optional. Please consult local dealers for purchase.

Four-way Cassette Unit

> Flexible Air Distribution Type

7 discharge patterns in 2 to 4 directions can be selected to suit the requirements of the installation site or the shape of the room.



360° Airflow Outlet

360° air outlet provides strong air flow circulation to cool or heat every corner of a room and evenly control temperatures.



Sub Duct and Fresh Air Intake

Sub duct enables you to use the same air conditioner unit to cool an additional smaller space nearby.

Fresh air can enter through the cassette unit so you can enjoy fresher air in a room.



Easy Troubleshooting

For Four-way Cassette: By adding digital tube on the display board, Error Codes can be displayed directly for troubleshooting.



High-lift Drain Pump

Drain pump can pump condensate water up to 750mm high, which simplifies installation of the drain piping system.

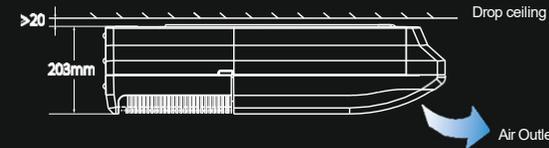


Ceiling & Floor Unit

> Convenient Installation

The slim and sleek structure design ensures easy installation.

It can be installed into a corner of the ceiling even if the ceiling is very narrow.



The unit can be installed either horizontally on the ceiling or vertically against the wall.

> Auto Swing and Wide Angle Air Flow

Two direction auto swing - vertical and horizontal.

The range of horizontal air discharge is widened which secures wider air flow distribution to provide more comfortable air circulation no matter where the unit is set up.

Three air flow speeds: low, medium and high; double air guides.



Auto Swing & Wide-angle Airflow

> Smart Comfort Control at Will

The smart network control system allows users to control the air conditioner with mobile phones or tablet computers through Wi-Fi or a mobile phone network. (Both IOS and Android mobile devices are supported.)



Remote control can be implemented via mobile terminals to get rid of space constraints. You can query the air conditioner status at any time and any place, and set timing startup. If you forgot to power off the air conditioner when hastily leaving home, you can power it off remotely to avoid wasting power.

The delicate control interface shows the operating status of the air conditioner in a visualized manner.

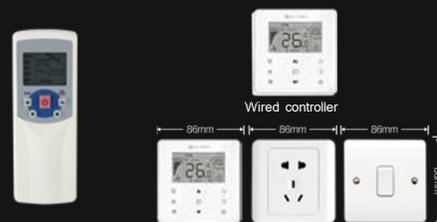


> Direct Control on Mobile Phones via infrared Rays



For Android mobile phones embedded with an infrared module, Clivet air conditioner terminal software can also be installed to send RC signals for control. This software can be freely downloaded from Android software stores for installation.

> Fashionable Various RCs and Wired Controllers



Remote controller

The high-grade RC is designed according ergonomically, featuring an exquisite and fashionable appearance that is comfortable to touch.

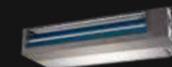
The wired controller is the same size as common switches and power sockets, allowing for neat and beautiful installation.

Outdoor Unit Specifications



Model		ACR2-X 26M	ACR2-X 35M	ACR2-X 53M	ACR2-X 71M	ACR2-X 90M	ACR2-X 105M	ACR2-X 120M	ACR2-X 140M	ACR2-X 160M
Power Supply		220-240/1/50								
Net weight	kg	25	25.5	33.5	47	51	68	68	68	91
Gross weight	kg	28	28.5	36.5	52	56	76.5	76.5	76.5	101
Net dimensions (W×H×D)	mm	722×555×260	722×555×260	795×555×287	910×712×345	910×712×345	950×840×360	950×840×360	950×840×360	1040×865×410
Packed dimensions (W×H×D)	mm	845×610×390	845×610×390	915×610×420	1045×800×485	1045×800×485	1025×860×510	1025×860×510	1025×860×510	1120×890×560
Refrigerant		R410A								
Type										
Factory charge		g								
Gas		mm	Φ9.5	Φ9.5	Φ12.7	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9
Liquid		mm	Φ6.4	Φ6.4	Φ6.4	Φ6.4	Φ9.5	Φ9.5	Φ9.5	Φ9.5

Duct Specifications



Model	Indoor unit	EDR3-X 26M	EDR3-X 35M	EDR3-X 53M	EDR3-X 71M	EDR3-X 90M	EDR3-X 105M	EDR3-X 140M	EDR3-X 160M	
Power Supply		220-240/1/50								
Cooling	Capacity	kW	2.6	3.5	5.3	7.2	9.0	10.5	14.0	16.0
Heating	Capacity	kW	3.6	4.15	6.2	8.6	10.0	11.6	16.0	18.0
Circulating Air Flow		m³/s	480	550	750	1400	1500	2200	2900	3300
External static pressure		Pa	25 (0-40)	25 (0-40)	25 (0-60)	25 (0-100)	25 (0-100)	37 (0-100)	50 (0-200)	50 (0-200)
Noise		dB(A)	34/33/19	35/34/21	36/35/24	43/39/36	43/39/36	43/39/36	49/46/45	52/49/47
Net weight	kg	17	17	21	37	39	43.5	68	68	
Gross weight	kg	20	20	24.5	43.5	45.5	50	76	76	
Net dimensions (W×H×D)	mm	700x210x450	700x210x450	920x210x450	1140x270x775	1140x270x775	1200x300x865	1370x420x691	1370x420x691	
Packed dimensions (W×H×D)	mm	870x285x525	870x285x525	1090x285x525	1370x365x855	1370x365x855	1400x375x925	1436x440x768	1436x440x768	
Refrigerant pipe										
Gas		mm	Φ9.5	Φ9.5	Φ12.7	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9
Liquid		mm	Φ6.4	Φ6.4	Φ6.4	Φ6.4	Φ9.5	Φ9.5	Φ9.5	Φ9.5

Four-way Cassette Unit Specifications



Model	Indoor unit	ECR2-X 53M	ECR2-X 71M	ECR2-X 90M	ECR2-X 105M	ECR2-X 120M	ECR2-X 140M	
Power Supply		220-240/1/50						
Cooling	Capacity	kW	5.3	7.2	9.0	10.5	12.0	14.0
Heating	Capacity	kW	6	8.2	9.9	11.6	13.2	15.4
Circulating Air Flow		m³/s	900	1000	1200	1600	1600	1720
Noise		dB(A)	54	55	58	58	59	59
Net weight	kg	22.5	22.8	23.3	28.7	28.7	30.8	
Gross weight	kg	27.3	27.6	28.1	33.7	33.7	35.8	
Net dimensions (WXHXD)	mm	840X840X230	840X840X230	840X840X230	840X840X300	840X840X300	840X840X300	
Packed dimensions (WXHXD)	mm	955X955X260	955X955X260	955X955X260	955X955X330	955X955X330	955X955X330	
Refrigerant pipe								
Gas		mm	Φ12.7	Φ15.9	Φ15.9	Φ15.9	Φ15.9	
Liquid		mm	Φ6.4	Φ6.4	Φ9.5	Φ9.5	Φ9.5	

Ceiling & Floor Unit Specifications



Model		EFR2-X 53M	EFR2-X 71M	EFR2-X 105M	EFR2-X 140M	EFR2-X 160M	
Power Supply		220-240/1/50					
Cooling	Capacity	kW	5.3	7.2	10.5	13.8	15.5
Heating	Capacity	kW	6.6	8.4	11.6	15.4	17.2
Circulating Air Flow		m³/s	800/660/560	1000/880/750	1800/1560/1320	1800/1560/1320	2000/1640/1400
Noise		dB(A)	47/43/40	48/45/41	50/47/44	50/47/44	52/48/45
Net weight	kg	27.5	34.1	49.5	49.5	56	
Gross weight	kg	33.2	40.5	57.6	57.6	65.2	
Net dimensions (W×H×D)	mm	990×203×660	1280×203×660	1670×244×660	1670×244×660	1670×285×660	
Packed dimensions (W×H×D)	mm	1089×296×744	1379×296×744	1765×325×760	1765×325×760	1775×377×760	
Refrigerant pipe							
Gas		mm	Φ12.7	Φ15.9	Φ15.9	Φ15.9	
Liquid		mm	Φ6.4	Φ6.4	Φ9.5	Φ9.5	