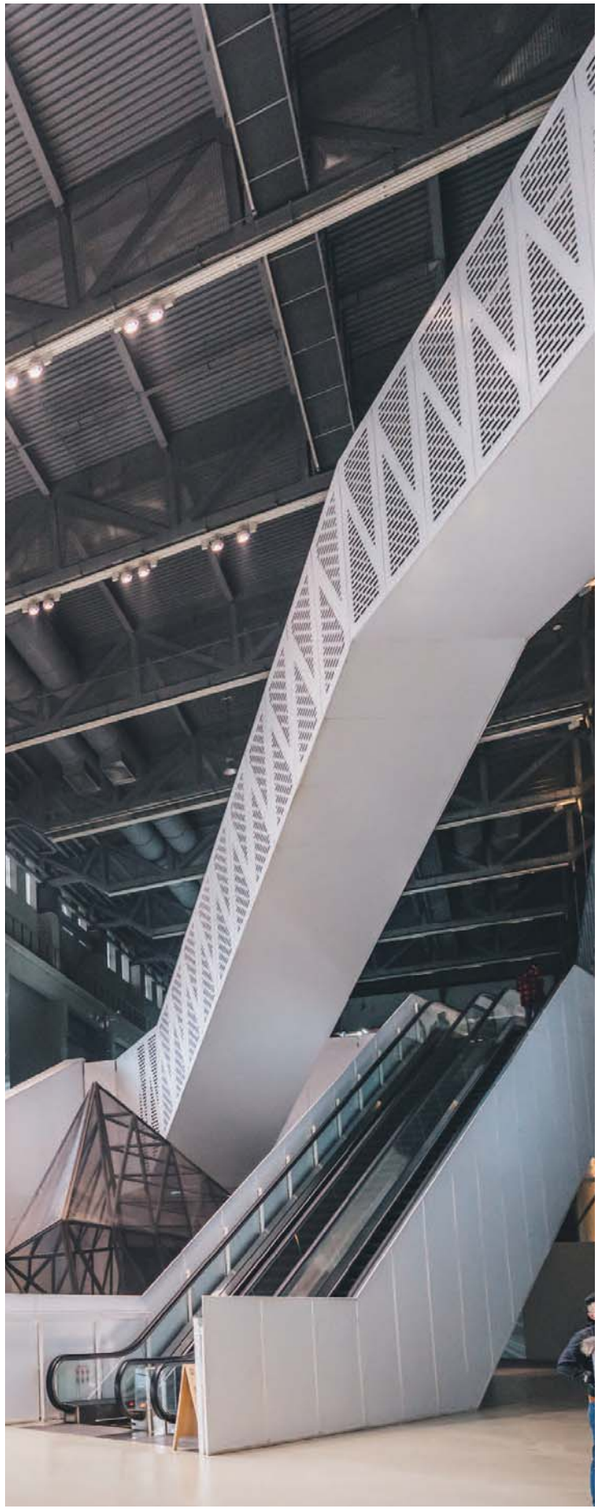
LUFT
HVAC Technologies

LRVF SYSTEM

LUFT Commercial Air Conditioner

INDEX



Product Lineup

Modular VRF Outdoor Unit

All DC Inverter

Capacity (kW)	25.2	28.0	33.5	40.0	45.0	50.4	56.0	61.5	Page
Capacity (HP)	8	10	12	14	16	18	20	22	
LVRF 6 	•	•	•	•	•	•	•	•	9

LVRF 6 Series

8/10/12HP

14/16/18/20/22HP

24/26/28/30/32/34/36/38/40/42/44HP

46/48/50/52/54/56/58/60/62/64/66HP

68/70/72/74/76/78/80/82/84/86/88HP

Individual VRF Outdoor Unit

Capacity(kW)	Appearance	61.5	67.0	73.0	78.5	85.0	90.0	Page
LVRF Individual		•	•	•	•	•	•	27

LVRF Individual

22/24HP

26/28/30/32HP

Product Lineup

Mini VRF Outdoor Unit

Capacity(kW)	8	10	12	14	16	22	28	Page
LVRF Mini 	•	•	•	•	•	•	•	32

Indoor Unit (DC fan motors)

Capacity(kW)	Appearance	2.2	2.8	3.6	4.5	5.6	7.1	8.0	9.0	10.0	11.2	12.5	14.0	15.0	Page
Four-way Cassette			•	•	•	•	•	•	•	•	•	•	•		40
Slim Duct		•	•	•	•	•	•								45
Mid ESP Duct					•	•	•	•	•	•	•	•	•	•	47
Wall-mounted		•	•	•	•	•	•								57

Indoor Unit (AC fan motors)

Capacity(kW)	Appearance	2.2	2.8	3.6	4.5	5.6	7.1	8.0	9.0	10.0	11.2	12.5	14.0	15.0	Page
One-way Cassette		•	•	•	•	•	•								38
Two-way Cassette		•	•	•	•	•	•								39
Four-way Cassette							•	•	•	•	•	•	•		42
Slim Duct		•	•	•	•	•	•								45
Mid ESP Duct					•	•	•	•	•	•	•	•	•	•	47
High ESP Duct											•	•	•	•	49
Ceiling&Floor					•	•	•	•	•	•	•	•	•		53
Wall-mounted		•	•	•	•	•	•								57

Capacity(kW)	Appearance	22.0	28.0	45.0	56.0	Page
High ESP Duct		•	•	•	•	49
Fresh Air Processor		•	•	•	•	50

AHU Kit

Mode	Appearance	LVRFK01	LVRFK02	Page
LVRF_AHK		•	•	69

Heat Recovery Ventilator

Air Volume(m^3/h)	Appearance	200	300	400	500	600	800	1000	1500	2000	2500	3000	4000	5000	Page
LHRV		•	•	•	•	•	•	•	•	•	•	•	•	•	74

Health

Fresh Air Intake

Air outside can be led into the room via a connection pipe, which keeps the indoor air fresh and healthy.

Long-term Filter

The latest long-term filter ensures better air quality. Meanwhile, the cleaning frequency has been decreased, and maintenance is also much easier.

Self-Cleaning

Indoor unit will continue running with special combined mode to blow and dry indoor evaporator after the unit switch off so as to keep clean and healthy.

Comfort

Anti-Cold-Air

When starting the heating operation, the fan speed is regulated automatically from the lowest speed to the preset level. This function can prevent cold air from blowing out at the beginning of the operation, which avoids the discomfort to the user.

Follow Me

Temperature sensor built in the remote control will sense its surrounding temperature, so the unit can achieve accurate and comfortable temperature control just like the air conditioner is following you.

Fast Cooling /Heating

Startup at high frequency increases cooling/heating capacity and reduces time to reach set temperature, thus you can enjoy cooling and heating in seconds.

Auto swing

Distributes cool/warm air to maximum area by moving horizontal and vertical fags automatically.

Independent Dehumidification

With the independent dehumidification function, the unit can efficiently dehumidify the room and give you more comfort.

3D Air Flow

Combine vertical and horizontal auto swing to ensure an even distribution of air fow throughout the room.

Dimmer

Press this button to shut off the display light on the front panel.

Silent

Indoor fan will run at super breeze speed and indoor noise level can be extremely low when the unit enters silent mode operation.

Reliability

Self-diagnosis Function

Once abnormal operation or parts failure happen, the unit will monitor the failures, the microcomputer of air conditioner will switch off and protect the system automatically when it happens. Meanwhile, the error or protection code will be displayed on the indoor unit.

Low Ambient Cooling

With special designed PCB, outdoor fan speed can be changed automatically according to condensation temperature. The air conditioner can run cooling operation even when the outdoor ambient temperature down to -15°C.

Intelligent Defrosting

Normal defrost function can only be operated in certain time,but LVRF commercial air conditioner's intelligent defrost can start automatically according to the surrounding condition.

Compressor Heating Belt

Auxiliary heating belt can increase compressor oil temperature in winter and prevent defrosting water accumulated, which improves heat transfer efficiency.

No Frosting Chassis

The unique pipeline design makes the temperature on chassis higher than normal units, and it prevents defrosting water accumulated, which improves heat transfer efficiency and solves the drainage problem.

Golden Fin

Effectively prevent bacteria breeding and improve heat transfer efficiency. The unique anti-corrosive golden coating on the condenser can withstand the rain, salty air and other corrosive elements.

Optional Electric Heater

Built-in auxiliary electric heater as option, the heating performance will be more powerful.

Fire-proof Electric Box

Electrical control box adopts new design, which can meet the higher fire safety requirement to prevent the internal fire due to the electric spark accident.

Energy Saving

180° Sine Wave Control

With considerable advantages, DC Inverter 180° sine wave driving technology has much wider range of frequency and voltage, higher energy efficiency, more smooth running and lower noise.

0.5W Standby

Intelligent technology enables LVRF products to cut energy consumption from normal 5W to 0.5W per hourwhen standby, which counts 90% of saving.

Sleep Mode

The function enables the air conditioner to automatically increase cooling or decrease heating 1°C per hour for the first 2 hours, then holds steady for the next 5 hours, after that it will switch off. This function maintains both energy saving and comfort in night.

Hydrophilic aluminum fin

The louvered hydrophilic aluminum foil has improved by more than 10%. There refrigerant inlet and outlet are separated, to ensure the sub-cooling and enhance the cooling capacity.

Full Process By DC Drive

DC control,DC Compressor,DC indoor motor, DC outdoor motor, and DC Electronic expansion valve make low noise and high efficiency.

Convenience

24-hour Timer

Users can turn on or turn off the air conditioner at any time in 24 hours with remote controller or wireless controller.

Built-in Drain Pump

The built-in pump can lift the condensing water 1200 mm upmost from the drainage pan.

Dual side Drainage

Both left and right sides of the indoor unit are possible for drainage hose connection, and it's easy for installation with this function.

Digital Tube Display

Easily for the running parameters checking and more convenient for troubleshooting, digital tube displays work status such as indoor temperature, setting temperature, the mode of operation, etc.

Remote Control

Help users to control the air conditioner easily, you can design your most comfortable settings with this controller.

Wired Control

Help users to control the air conditioner easily, the wired controller can be fixed on the wall and avoid mislaying. It's mainly used for commercial zone and makes air conditioner control more convenient.

Central Control

With the control function of weekly timer, zone (or group) setting etc., the centralized controller can control 64 units with RS 485 wire connection and the central control adapter.

WIFI Control

With the WIFI control, you can easily turn off the air conditioner outside your house via smart device. Furthermore, you can turn it on before you come back.The indoor unit filter can be taken off to wash easily and it keeps cleaning air all the time.

Washable Filter

The indoor unit filter can be taken off to wash easily and it keeps cleaning air all the time.

Auto Restart Function

If the air conditioner breaks off unexpectedly due to the power cut, it will restart with the previous setting mode automatically when the power resume.

Nomenclature

Indoor Unit

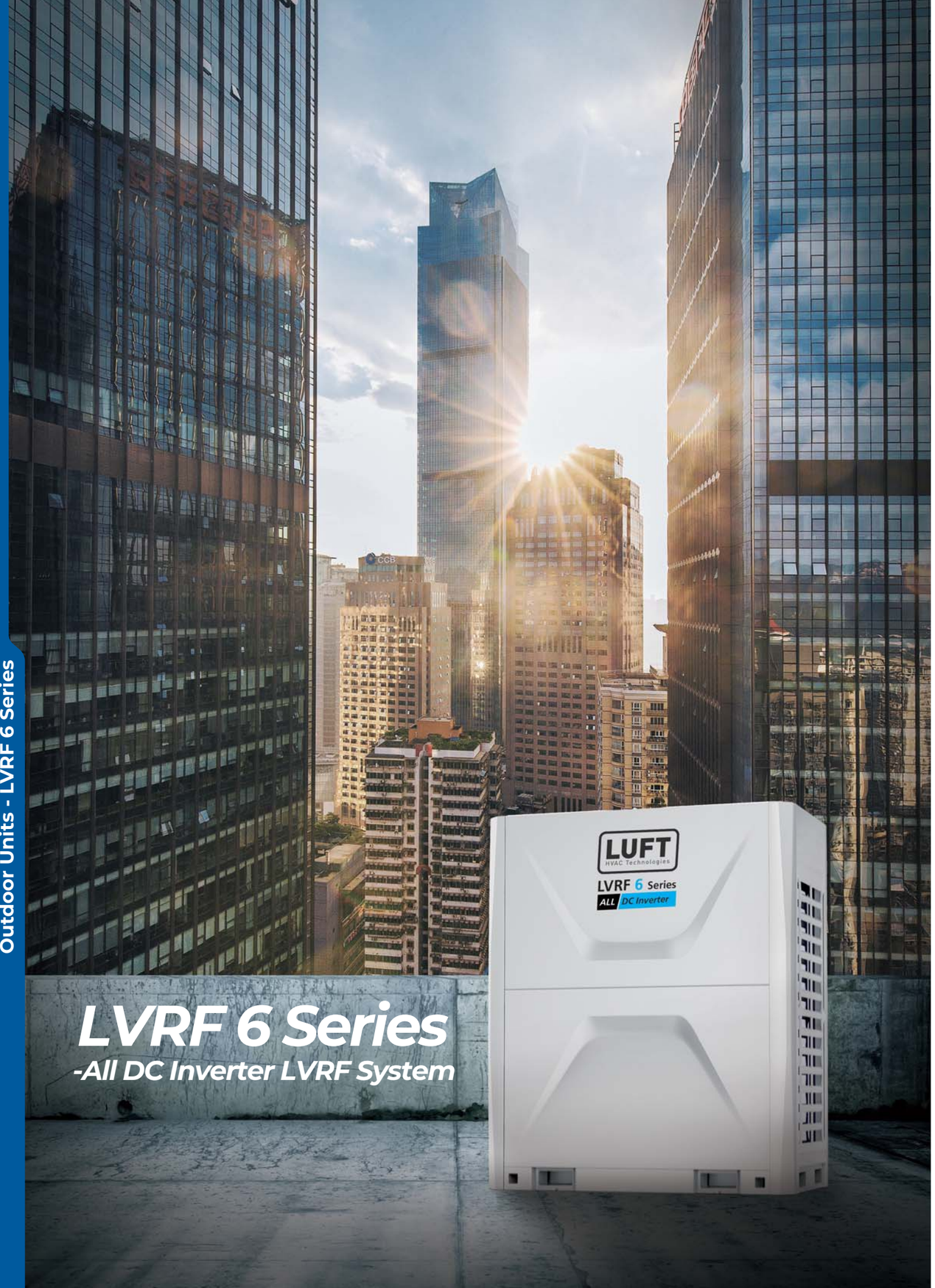
LVRF CFS 028 4 AC 1 A

- A — Design Series Code
- 1 — **Refrigerant Type:** R1: R410A. R22 Omitted
- AC — **Fan Motors:** AC: AC; DC: DC
- 4 — **Power Supply:** 1: 220-240V~, 1Ph, 50Hz; 2: 220-240V~, 1Ph, 60Hz; 3: 380-415V~, 3Ph, 50Hz; 4: 220-240V~, 1Ph, 50/60Hz
- 028 — Cooling Capacity (×100W)
- CFS — **Indoor Unit Type:** 1WS: One-Way Cassette; 4WM: Four-Way Cassette Mini; 4WS: Four-Way Cassette; DSS: Slim Duct; DHS: High ESP Duct; DFS: Fresh Air Processer; 2WS: Two-Way Cassette; CFS: Ceiling&Floor; DMS: Mid ESP Duct; HWS: Wall-Mounted
- LVRF — LVRF Refrigerant Variable AC

Outdoor Unit

LVRF T1 HP 22 4 1 DD A

- A — Design Series Code
- DD — DD : DC + DC DF: DC + FIX
- 1 — **Refrigerant Type:** 1: R410A R22 Omitted
- 4 — **Power Supply:** 1: 220-240V~, 1Ph, 50Hz; 2: 220-240V~, 1Ph, 60Hz; 3: 380-415V~, 3Ph, 50Hz; 4: 220-240V~, 1Ph, 50/60Hz; 5: 380-415V~, 3Ph, 60Hz; 6: 380-415V~, 3Ph, 50/60Hz
- 22 — Cooling Capacity (HP)
- HP — HP: Heat Pump HR: Heat Recovery
- T1 — **Climate Class:** T3 Tropical Type T1 European
- LVRF — LVRF Refrigerant Variable AC



Outdoor Units

LVRF 6 Series

VER Technology

Variable Energy-efficiency Regulation

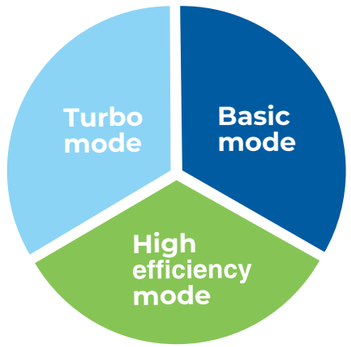
Evaporating and condensing temperature makes strong effect to the cooling and heating performance and energy-efficiency ratio of AC system.
Thanks to VER technology, LVRF6 series has various modes with different refrigerant temperature which lead the system to different performance and energy-efficiency

Cooling: 3 modes with diffirent evaporating temperature.
Heating: 3 modes with diffirent rent condensing temperature.

Turbo mode
High cooling and heating performance, cool down or warm up the room rapidly.

Basic mode
Default mode, balance the reaction speed and efficiency.

High efficiency mode
Satisfy the lowest capacity requirement and low the energy consumption.



Users can choose a certain mode according to the actual need in different area and climate, so that the system can satisfy various requirement, and the seasonal efficiency can be optimized.

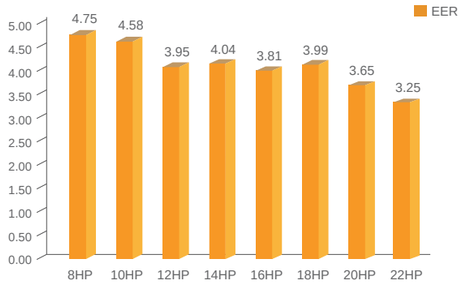
Outdoor Units - LVRF 6 Series

High Efficiency and Energy Saving

High EER And COP

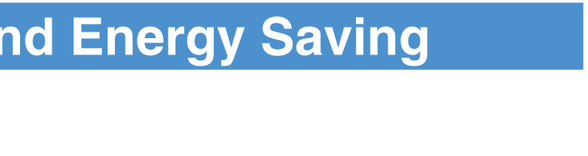
LVRF6 Series achieves the industry's top class energy efficiency in cooling and heating by utilizing all DC inverter compressors, and Enhanced vapor injection.

The cooling EER is up to 4.75 and the heating COP is up to 5.48 in the 8HP category.



180° Sine Wave Control

DC inverter compressor users 180° sine wave vector control technique makes motor operate smooth and increases the efficiency. significantly compared with traditional sawtooth wave. It also can lower the noise level.

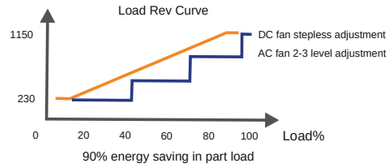


Traditional Control

180° Sine Wave DC Control

DC Brushless Fan Motor

DC brushless motor adjusts the fan speed according to the system pressure,and running load to enhance the efficiency by 45%. The super aero fan provides a larger air volume and higher static pressure.



Enhanced Vapor Injection DC Inverter Compressor

EVI-Enhanced vapor injection

Heating condition, reducing the outlet temperature, increasing the compressor capacity, improving the heating performance.

Optimize the asymmetric vortex design

Heating condition, reducing the outlet temperature, increasing the compressor capacity, improving the heating performance.

Dynamic oil balance structure

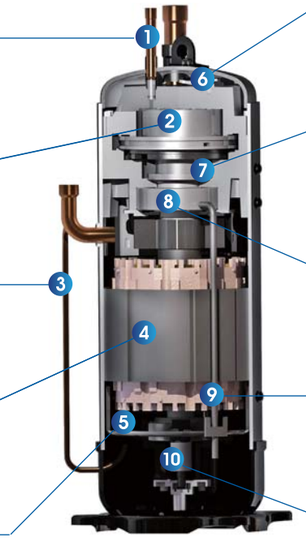
Oil balance tube implementation parallel compressor and oil quantity dynamic equilibrium, ensuring the reliability of several paralleledcompressors.

High efficiency motor configuration

Using high quality material concentrated stator, cooperate with neodymium magnet rotor, having outstanding efficiency.

High pressure cavity structure

Large exhaust buffer volume,reducing the air flow noise and vibration of the runtime.



Pressure relief valve structure

Improving the partial load efficiency, adapt to thet-ransformer ratio working condition, improving the compressor performance.

The intermediate pressure servo mechanism

According to the operation pressure among dynamic adjusting middle pressure, has realized the axial flexible, optimization of dynamic vortex disk meshing, improve product performance.

High reliability of the bearing

Adopt cylinder bearing and self-aligning ball bearing bearing group, improving the reliability of the compressor.

Internal oil circulation structure

Lubricating oil to achieve internal circulation, reducing heat loss, decreasing the rate of spitting oil, improve the efficiency and reliability.

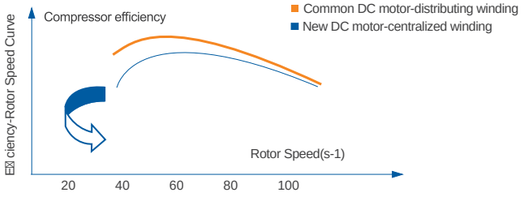
Positive displacement gear oil pump

Positive displacement gear oil pump to ensure the high and low frequency can satisfy the oil supply, improving the reliability of the compressor.

High-efficient permanent magnetic motors are installed, giving better performance than traditional DC inverter compressors.

Centralizing winding

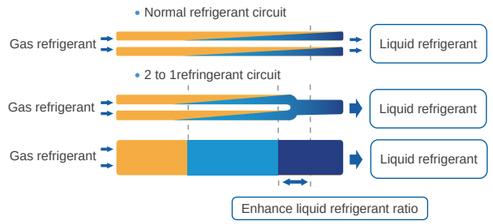
Distnbutin winding



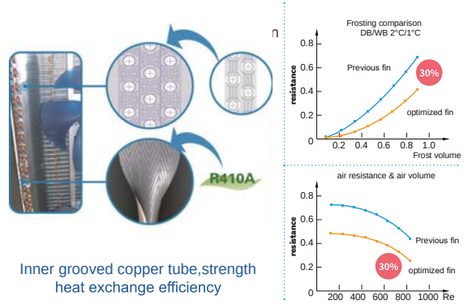
Powerful magnets provide high torque and efficiency and achieve 70% reduction in volume.

High Efficient Heat Exchanger

Optimized 2 to 1 refrigerant circuit design，increase the heat exchanging efficiency and enhance the ratio of liquid which flow to the evaporator.



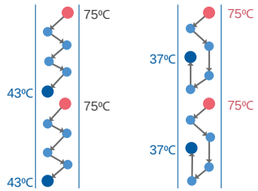
Optimized fin design, reduces the water resistance and wind resistance.



Inner grooved copper tube,strength heat exchange efficiency

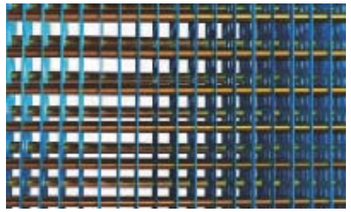
2-stage Sub-cooling Technology

The first stage sub-cooling process due to optimized refrigerant circuit and "Inverse fin type" window fin design.



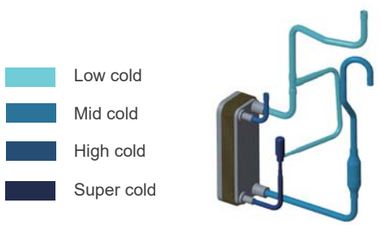
Normal condenser ambient 35°C

e-pass condenser ambient 35°C



"Inverse fin type" window fin design

The second stage sub-cooling process by a high efficiency plate heat exchanger with a sub-cooling EXV.



4-times Anticipation Energy-saving Control Technology

Module anticipation energy-saving control technology

In partial load, intelligent judgment single operation and the efficiency of the module keep the minimum power consumption.

Compressor anticipation energy-saving adjustment technology

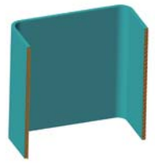
Control compressors quantity and operating frequency, to get higher energy efficiency ratio in partial load. Compressor parallel technology .

Fan anticipation energy-saving adjustment technology

Control running quantity and operating frequency, obtain higher energy efficiency ratio under partial load.

Refrigerant anticipation energy-saving technology adjustment

Adjust the opening of the electronic expansion valve, to improve the effect of condenser heat transfer, to get higherenergy efficiency ratio under partial load.



Wide Application Range

Large Capacity&Free Combination

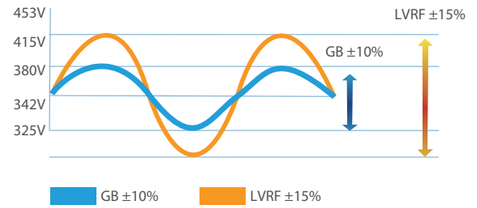
8 basic models from 8HP to 22HP.
Maximum combination: 88HP(246kW), top level in industry.
Less quantity of system, space saving, easy installation and low cost.

Wide Operation Range

No matter in hot summer or cold winter, LVRF6 can supply comfortable environment for users.

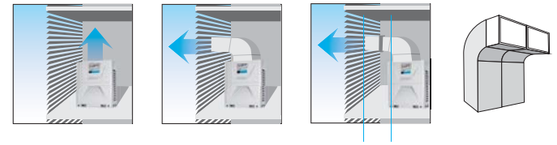
Wide Voltage Design

In Country with unstable voltage, LVRF system still could run stably.



Changeable ESP

Optimized fan provide outdoor unit up to 80Pa static pressure. Outdoor units can be installed in the service floor or facility room.

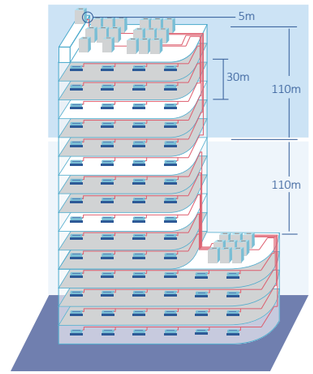


Long Piping Length

Thanks to the DC inverter control technology and sub-cooling circuit technology ,it is possible to design a system with longer piping and elevation difference which make it easier to design and installation.

Max. Total piping length — 1000m
Max. Actual piping length — 240m
Max. piping length from 1st indoor branch to the farthest indoor unit — 40m/90m*
Max. Level difference between indoor units — 30m
Max. Level difference between ODU and IDU units — 110m

*The longest length after first branch is 40m as standard can be extended to up to 90m under certain conditions.Please contact your local dealer for further information.



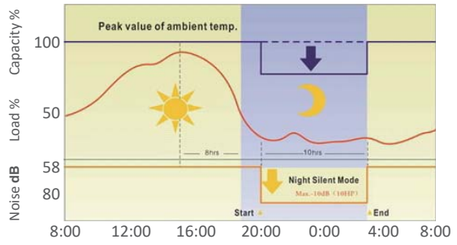
Outdoor Units - LVRF 6 Series

Comfortable And Healthy Environment

Silence Operation

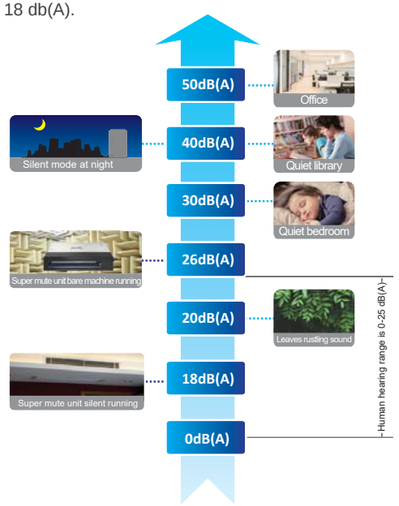
Outdoor Unit Quiet Mode

By using optimized fan blades and the CFD(computational Fluid Dynamics) technology, the product is equipped with the night low-noise operation function. Provide more quiet operation during the night. Minimum operation noise only 45dB(A)



Indoor Unit Quiet Mode

Innovative centrifugal fan for large diameter and a new design of the spiral duct system equipped with high-quality motor at the same time, making the air supply more quietly and smoothly. The lowest noise is 18 db(A).

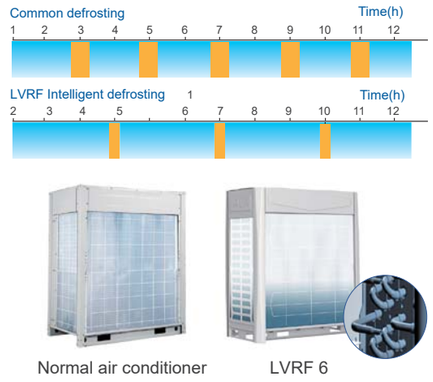


Intelligent Defrosting

Variable parameters defrost through temperature and pressure sensors, to grasp time accurately which can defrost or heat normally.

Base on the main unit and at the end of the EXV control the output, fast bolt in liquid refrigerant system, unit operation is more stable; Through the dry run, defrosting exhaust temperature higher, more complete, more conventional. The defrosting time less 3 min than others at least.

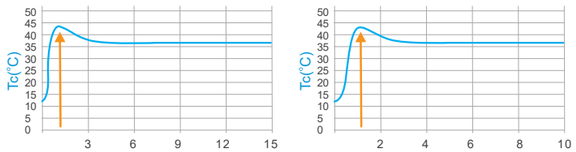
Refrigerant pipeline design to ensure outdoor heat exchanger bottom no frost during heating and ice water mixture discharge smoothly when defrosting.



Normal air conditioner LVRF 6

Fast Warm Up And Cool Down

The DC Inverter Compressor system reaches full load rapidly providing less temperature fluctuation and an improved living environment, bring great user experience.



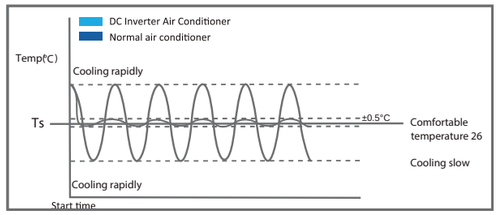
Capacity reaches 100% in 50s 10HP

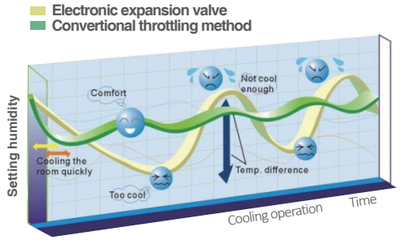
Capacity reaches 100% in 70s 48HP

Precise Temperature Control

LVRF composite temperature control technology, through the indoor/outdoor operation condition detection, adjust outdoor power output, optimize the indoor air distribution, achieve the high precision adjustment of 0.5°C.

The unit uses PI calculation principle to calculate the percentage of indoor capacity demand according to indoor temperature fluctuations, to perform real-time control to the compressor operating frequency and through the double EXV adjustment, precision up to level 1000, accurately control the refrigerant flow, assure indoor comfort.

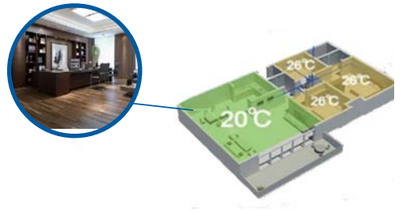




Humanization Design

VIP Function

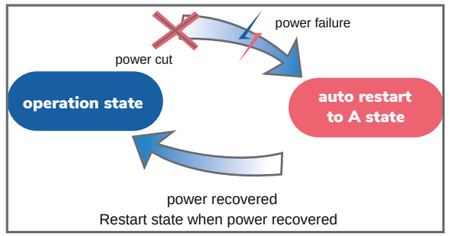
Special VIP control function, the VIP room will decide the whole system operation mode, prior to other mode or economic locking function, ensure the priority of the important room.



Auto Restart Function

The AC can automatically memorize the operation setting when power is cut off accidently. It can return to previous setting when power resumes.

Recover the former operation state when power is restored , no need restart the unit manually



Economic Locking Function

Special design economic locking function, through outdoor PCB switch setting. If work in economic lock, AC lowest work cooling temperature will keep in 26°C and highest heating temperature keep 20°C.

Easy Installation & Maintenance

Saving Installation Space

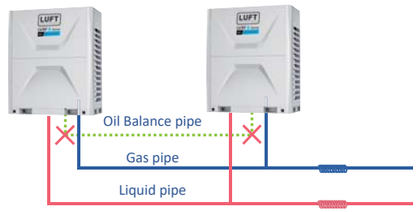
Less quantity of system, space saving, easy installation and low cost.

22HP: Required Space Reduced by 44%

88HP: Required Space Reduced by 36%

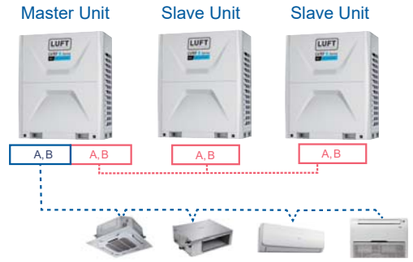
No Oil Balance Pipe Between ODUS

High efficient oil/gas separating tech,make the system oil balance between compressors without oil balance pipe.



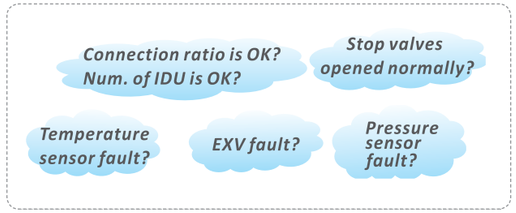
Non-Polar Communication

No polar in communication wire ,easy installation and commissioning.



Auto Commissioning

When commissioning, the outdoor mainboard can check the operation state and show the corresponding error code in engineering mode.
Find out the faults when commissioning, enhance the reliability of the system.



Auto Refrigerant Recycling &Auto Refrigerant Charging

Refrigerant can be recycled to the outdoor units or indoor units when maintenance is need.
The outdoor unit can adjust the refrigerant amount according to the operation parameters such as pressure and temperature, and remind the installation personnel to stop charging.

One Button Test Run

Press the button lightly once in the motherboard outdoor, to realize the cooling and heating test run, don't need to open indoor machine one by one.

AutoDust Removal &AutoSnow-Blowing

The outdoor fan can rotate in reverse direction to remove dust on heat exchanger to ensure the heat exchange performance.

Black BOX Function

Using aviation grade Black BOX technique, memorizing operation parameters before the failure, finding fault information quickly, as an accurate, efficient maintenance services to provide valuable information, maintenance more convenient.

360° Pipe-connecting Mode

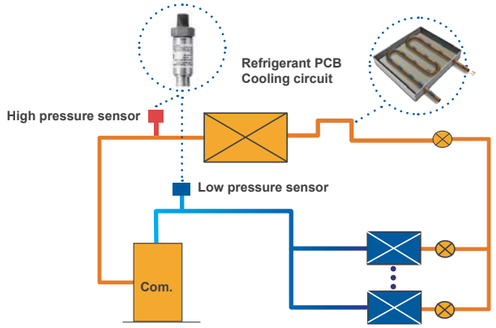
LVRF- 6 series can be on the front, left side, right side to choose pipe-connecting direction freely, it's easy to install.

Outdoor Units - LVRF 6 Series

Reliable & Stable

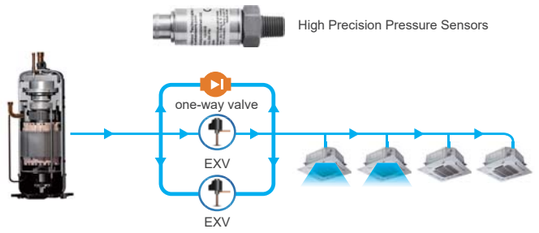
Refrigerant PCB Cooling System

The PCB is well cooled by the refrigerant, ensuring the system operate steadily even in tropical area.
Frequency limit of inverter compressor can be relaxed, so that the output capacity of ODU can be higher than conventional products.



Precise Refrigerant Control

Real-time monitoring the discharge and suction pressure of the system.
The output of compressors and the EXV open degree can be regulated precisely to optimize the compression ratio.
Ensuring the compression ratio always in safety zone.



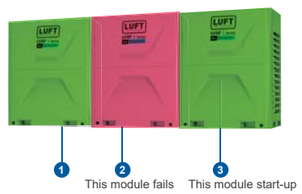
Module Alternate Operation

In one combination system,any module could run as the master unit according to the running time.Balance the life of the outdoor units in one system.

Back-Up Operation Technology

Module Emergency

As one module breaks down, module emergency can be set, then the rest modules in same combination can run normally.



Compressor Emergency

As one compressor breaks down, compressor emergency can be set, then another compressor in this unit can run normally.

All-round Protection

- High pressure protection
- Low pressure protection
- High compression ratio protection
- Low compression ratio protection
- High discharge temp. protection
- Low discharge temp. protection

- Voltage protection
- Current protection
- Fan motor protection
- Inverter module protection
- Compressor overload protection
- Phase sequence protection

Ground protection

Oil Return Control Technology

Dynamic Oil Return Control Technology

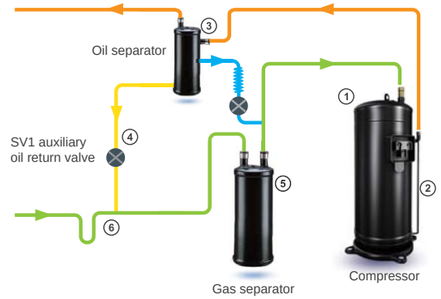
Monitor compressor running state and running time, computing system reasonable oil return time.

6-Step Oil Separating Technology

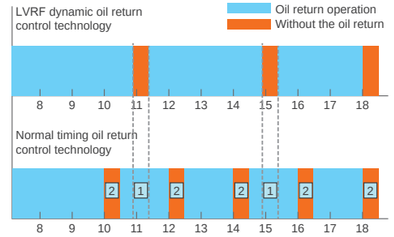
Completely solve the problem of oil, the system more stable and reliable

Compressor Throwing Oil Technology

When the compressor oil level higher than the warning line, system through tubing eliminate redundant frozen oil, keep the oil balance between compressor.



① Compressor with oil mist separation
② Oil self balancing control design
③ High efficient oil separator
④ Emergency oil circuit designl
⑤ Gas-liquid separator oil return
⑥ System with oil return design



1 Need oil return but there was no oil return operation, which can't guarantee the system stability and reliability.

2 Without oil return operation is to carry on the oil return operation, which cause unnecessary waste.

LVRF 6 Series

Flexible Outdoor Unit Combination									
kW	HP	8HP	10HP	12HP	14HP	16HP	18HP	20HP	22HP
25.2	8	★							
28.0	10		★						
33.5	12			★					
40.0	14				★				
45.0	16					★			
50.4	18						★		
56.0	20							★	
61.5	22								★
67.0	24			★★					
73.0	26		★			★			
78.5	28			★		★			
84.0	30		★					★	
89.5	32		★						★
95.0	34			★					★
101.5	36				★				★
106.5	38					★			★
111.9	40						★		★
117.5	42							★	★
123.0	44								★★
128.5	46			★★					★
134.5	48		★			★			★
140.0	50			★		★			★
145.5	52		★					★	★
151.0	54		★						★★
156.5	56			★					★★
163.0	58				★				★★
168.0	60					★			★★
173.4	62						★		★★
179.0	64							★	★★
184.5	66								★★★
190.0	68			★★					★★
196.0	70		★			★			★★
201.5	72			★		★			★★
207.0	74		★					★	★★
212.5	76		★						★★★
218.0	78			★					★★★
224.5	80				★				★★★
229.5	82					★			★★★
234.9	84						★		★★★
240.5	86							★	★★★
246.0	88								★★★★

*The above combination types are factory-recommended type. The combined type also can be combined at will.

LVRF 6 Series 380~415V-50/60Hz

HP			8	10	12	14
Model			LVRF_T1HP_08_61_DDA	LVRF_T1HP_10_61_DDA	LVRF_T1HP_12_61_DDA	LVRF_T1HP_14_61_DDA
Combination		HP	8	10	12	14
Capacity	Cooling	kW	25.2	28	33.5	40
	Heating	kW	25.2	28	33.5	40
Electric Data	Power supply	V~,Hz,Ph	380~415,3,50/60	380~415, 3, 50/60	380~415, 3, 50/60	380~415, 3, 50/60
	Cooling input	kW	5.31	6.11	8.48	9.90
	EER	W/W	4.75	4.58	3.95	4.04
	Heating input	kW	4.6	5.23	6.38	8.25
	COP	W/W	5.48	5.35	5.25	4.85
	SEER		6.7	6.5	7.2	6.5
	SCOP		4.2	4.0	4.2	4.3
Performance	Air Flow Volume	m^3/h	12000	12000	12000	14000
	Sound Pressure level	dB(A)	≤58	≤58	≤58	≤61
Compressor	Type		DC inverter	DC inverter	DC inverter	DC inverter
	Quantity		1	1	1	1
Fan motor	Type		DC motor	DC motor	DC motor	DC motor
	Quantity		1	1	1	2
Max. No. of Indoor Units		unit	13	16	20	23
Connection Ratio		%	50~200	50~200	50~200	50~200
Dimension (WxDxH)	Net	mm	990×765×1635	990×765×1635	990×765×1635	1340×765×1635
	Packing	mm	1030×825×1865	1030×825×1865	1030×825×1865	1395×815×1865
Weight	Net	kg	215	215	230	265
	Gross	kg	225	225	240	280
Pipe Diameter	Liquid Side	mm	12.7	12.7	12.7	15.88
	Gas Side	mm	22.2	22.2	22.2	28.6
Operation Range	Cooling	°C	-15~52	-15~52	-15~52	-15~52
	Heating	°C	-25~24	-25~24	-25~24	-25~24
Stuffing Quantity	20/40/40H	unit	14/28/28	14/28/28	14/28/28	11/22/22

LVRF 6 Series 380~415V-50/60Hz

HP			16	18	20	22
Model			LVRF_T1HP_16_61_DDA	LVRF_T1HP_18_61_DDA	LVRF_T1HP_20_61_DDA	LVRF_T1HP_22_61_DDA
Combination		HP	16	18	20	22
Capacity	Cooling	kW	45	50.4	56	61.5
	Heating	kW	45	50.4	56	61.5
Electric Data	Power supply	V~,Hz,Ph	380~415, 3, 50/60	380~415, 3, 50/60	380~415, 3, 50/60	380~415, 3, 50/60
	Cooling input	kW	11.82	12.63	15.34	18.90
	EER	W/W	3.81	3.99	3.65	3.25
	Heating input	kW	9.78	11.69	13.83	15.44
	COP	W/W	4.60	4.31	4.05	3.98
	SEER		6.3	6.0	5.6	5.2
	SCOP		4.2	4.0	3.6	3.5
Performance	Air Flow Volume	m^3/h	14000	16000	16000	16000
	Sound Pressure level	dB(A)	≤61	≤63	≤63	≤63
Compressor	Type		DC inverter	DC inverter	DC inverter	DC inverter
	Quantity		1	2	2	2
Fan motor	Type		DC motor	DC motor	DC motor	DC motor
	Quantity		2	2	2	2
Max. No. of Indoor Units		unit	26	30	33	36
Connection Ratio		%	50~200	50~200	50~200	50~200
Dimension (WxDxH)	Net	mm	1340×765×1635	1340×765×1635	1340×765×1635	1340*765*1635
	Packing	mm	1395×815×1865	1395×815×1865	1395×815×1865	1395×815×1865
Weight	Net	kg	265	330	330	330
	Gross	kg	280	345	345	345
Pipe Diameter	Liquid Side	mm	15.88	15.88	15.88	15.88
	Gas Side	mm	28.6	28.6	28.6	28.6
Operation Range	Cooling	°C	-15~52	-15~52	-15~52	-15~52
	Heating	°C	-25~24	-25~24	-25~24	-25~24
Stuffing Quantity	20/40/40H	unit	11/22/22	11/22/22	11/22/22	11/22/22

Notes:
1.Cooling Capacity: Indoor temperature 27°C DB/19°C WB; Outdoor temperature:35°C DB/ 24°C WB.
2.Heating Capacity: Indoor temperature 20°C DB; Outdoor temperature: 7°C DB/ 6°C WB.
3.Piping Length: Equivalent piping length: 7.5m, level difference: 0m.
4.We can guarantee the operation only within 130% Combination. If you want to connect more than 130% combination, please contact us and discuss the requirement.
5.Anechoic chamber conversion value, measured in test room. During actual operation.These values are normally somewhat higher as a result of ambient conditions.
6.The above designs and specifications are subject to change without prior notice. Final specifications please refer to technical specification provided by sales representative.
7.Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1.3m above the floor.
8.The above combined types are factory-recommended type. The combined type also can be combined at will.

LVRF 6 Series 380~415V-50/60Hz

HP			24	26	28	30
Model			LVRF_T1HP_24_61_DDA	LVRF_T1HP_26_61_DDA	LVRF_T1HP_28_61_DDA	LVRF_T1HP_30_61_DDA
Combination		HP	12+12	10+16	12+16	10+20
Capacity	Cooling	kW	67	73	78.5	84
	Heating	kW	67	73	78.5	84
Electric Data	Power supply	V~,Hz,Ph	380~415,3,50/60	380~415, 3, 50/60	380~415, 3, 50/60	380~415, 3, 50/60
	Cooling input	kW	16.96	17.93	20.30	21.45
	EER	W/W	3.95	4.07	3.87	3.92
	Heating input	kW	12.76	15.01	16.16	19.06
	COP	W/W	5.25	4.86	4.86	4.41
	SEER		7.2	6.5	7.2	7.2
	SCOP		4.2	4.2	4.2	4.2
Performance	Air Flow Volume	m^3/h	12000×2	12000+14000	12000+14000	12000+16000
	Sound Pressure level	dB(A)	≤58	≤61	≤61	≤63
Compressor	Type		DC inverter	DC inverter	DC inverter	DC inverter
	Quantity		2	2	2	3
Fan motor	Type		DC motor	DC motor	DC motor	DC motor
	Quantity		2	3	3	3
Max. No. of Indoor Units		unit	40	42	46	49
Connection Ratio		%	50~200	50~200	50~200	50~200
Dimension (WxDxH)	Net	mm	(990×765×1635)×2	990×765×1635+1340×765×1635	990×765×1635+1340×765×1635	990×765×1635+1340×765×1635
	Packing	mm	(1030×825×1865)×2	1030×825×1865+1395×815×1865	1030×825×1865+1395×815×1865	1030×825×1865+1395×815×1865
Weight	Net	kg	230×2	215+265	230+265	215+330
	Gross	kg	240×2	225+280	240+280	225+345
Pipe Diameter	Liquid Side	mm	15.88(5/8)	19.05(3/4)	19.05(3/4)	19.05(3/4)
	Gas Side	mm	28.6(9/8)	34.93(11/8)	34.93(11/8)	34.93(11/8)
Operation Range	Cooling	℃	-15~52	-15~52	-15~52	-15~52
	Heating	℃	-25~24	-25~24	-25~24	-25~24
Stuffing Quantity	20/40/40H	unit	14/28/28	14/28/28	14/28/28	11/22/22

LVRF 6 Series 380~415V-50/60Hz

HP			32	34	36	38
Model			LVRF_T1HP_32_61_DDA	LVRF_T1HP_34_61_DDA	LVRF_T1HP_36_61_DDA	LVRF_T1HP_38_61_DDA
Combination		HP	10+22	12+22	14+22	16+22
Capacity	Cooling	kW	89.5	95	101.5	106.5
	Heating	kW	89.5	95	101.5	106.5
Electric Data	Power supply	V~,Hz,Ph	380~415, 3, 50/60	380~415, 3, 50/60	380~415, 3, 50/60	380~415, 3, 50/60
	Cooling input	kW	25.01	27.38	28.80	30.72
	EER	W/W	3.58	3.47	3.52	3.47
	Heating input	kW	20.67	21.82	23.69	25.22
	COP	W/W	4.33	4.35	4.28	4.22
	SEER		6.5	7.2	6.5	6.3
	SCOP		4.0	4.2	4.3	4.2
Performance	Air Flow Volume	m^3/h	12000+16000	12000+16000	14000+16000	14000+16000
	Sound Pressure level	dB(A)	≤63	≤63	≤63	≤63
Compressor	Type		DC inverter	DC inverter	DC inverter	DC inverter
	Quantity		3	3	3	3
Fan motor	Type		DC motor	DC motor	DC motor	DC motor
	Quantity		3	3	4	4
Max. No. of Indoor Units		unit	52	56	59	62
Connection Ratio		%	50~200	50~200	50~200	50~200
Dimension (WxDxH)	Net	mm	990×765×1635+1340×765×1635	990×765×1635+1340×765×1635	(1340×765×1635)×2	(1340×765×1635)×2
	Packing	mm	1030×825×1865+1395×815×1865	1030×825×1865+1395×815×1865	(1395×815×1865)×2	(1395×815×1865)×2
Weight	Net	kg	215+330	230+330	265+330	265+330
	Gross	kg	225+345	240+345	280+345	280+345
Pipe Diameter	Liquid Side	mm	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)
	Gas Side	mm	34.93(11/8)	34.93(11/8)	41.3(13/8)	41.3(13/8)
Operation Range	Cooling	℃	-15~52	-15~52	-15~52	-15~52
	Heating	℃	-25~24	-25~24	-25~24	-25~24
Stuffing Quantity	20/40/40H	unit	11/22/22	11/22/22	11/22/22	11/22/22

Notes:
1.Cooling Capacity: Indoor temperature 27°C DB/19°C WB; Outdoor temperature:35°C DB/ 24°C WB.
2.Heating Capacity: Indoor temperature 20°C DB; Outdoor temperature: 7°C DB/ 6°C WB.
3.Piping Length: Equivalent piping length: 7.5m, level difference: 0m.
4.We can guarantee the operation only within 130% Combination. If you want to connect more than 130% combination, please contact us and discuss the requirement.
5.Anechoic chamber conversion value, measured in test room. During actual operation.These values are normally somewhat higher as a result of ambient conditions.
6.The above designs and specifications are subject to change without prior notice. Final specifications please refer to technical specification provided by sales representative.
7.Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1.3m above the floor.
8.The above combined types are factory-recommended type. The combined type also can be combined at will.

LVRF 6 Series 380~415V-50/60Hz

HP			40	42	44	46
Model			LVRF_T1HP_40_61_DDA	LVRF_T1HP_42_61_DDA	LVRF_T1HP_44_61_DDA	LVRF_T1HP_46_61_DDA
Combination		HP	18+22	20+22	22+22	12×2+22
Capacity	Cooling	kW	111.9	117.5	123	128.5
	Heating	kW	111.9	117.5	123	128.5
Electric Data	Power supply	V~,Hz,Ph	380~415,3,50/60	380~415, 3, 50/60	380~415, 3, 50/60	380~415, 3, 50/60
	Cooling input	kW	31.53	34.24	37.80	35.86
	EER	W/W	3.55	3.43	3.25	3.58
	Heating input	kW	27.13	29.27	30.88	28.20
	COP	W/W	4.12	4.01	3.98	4.56
	SEER		6.0	5.6	5.2	7.2
	SCOP		4.0	3.6	3.5	4.2
Performance	Air Flow Volume	m^3/h	16000×2	16000×2	16000×2	12000×2+16000
	Sound Pressure level	dB(A)	≤63	≤63	≤63	≤63
Compressor	Type		DC inverter	DC inverter	DC inverter	DC inverter
	Quantity		4	4	4	4
Fan motor	Type		DC motor	DC motor	DC motor	DC motor
	Quantity		4	4	4	4
Max. No. of Indoor Units		unit	64	64	64	64
Connection Ratio		%	50~200	50~200	50~200	50~200
Dimension (WxDxH)	Net	mm	(1340×765×1635)×2	(1340×765×1635)×2	(1340×765×1635)×2	(990×765×1635)×2+1340×765×1635
	Packing	mm	(1395×815×1865)×2	(1395×815×1865)×2	(1395×815×1865)×2	(1050×815×1805)×2+1395×815×1865
Weight	Net	kg	330×2	330×2	330×2	230×2+330
	Gross	kg	345×2	345×2	345×2	240×2+345
Pipe Diameter	Liquid Side	mm	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)
	Gas Side	mm	41.3(13/8)	41.3(13/8)	41.3(13/8)	41.3(13/8)
Operation Range	Cooling	℃	-15~52	-15~52	-15~52	-15~52
	Heating	℃	-25~24	-25~24	-25~24	-25~24

LVRF 6 Series 380~415V-50/60Hz

HP			48	50	52	54
Model			LVRF_T1HP_48_61_DDA	LVRF_T1HP_50_61_DDA	LVRF_T1HP_52_61_DDA	LVRF_T1HP_54_61_DDA
Combination		HP	10+16+22	12+16+22	10+20+22	10+22×2
Capacity	Cooling	kW	134.5	140	145.5	151
	Heating	kW	134.5	140	145.5	151
Electric Data	Power supply	V~,Hz,Ph	380~415, 3, 50/60	380~415, 3, 50/60	380~415, 3, 50/60	380~415, 3, 50/60
	Cooling input	kW	36.83	39.20	40.35	43.91
	EER	W/W	3.65	3.57	3.61	3.44
	Heating input	kW	30.45	31.60	34.50	36.11
	COP	W/W	4.42	4.43	4.22	4.18
	SEER		6.5	7.2	6.5	6.5
	SCOP		4.2	4.2	4.0	4.0
Performance	Air Flow Volume	m^3/h	12000+14000+16000	12000+14000+16000	12000+16000×2	12000+16000×2
	Sound Pressure level	dB(A)	≤63	≤63	≤63	≤63
Compressor	Type		DC inverter	DC inverter	DC inverter	DC inverter
	Quantity		4	4	5	5
Fan motor	Type		DC motor	DC motor	DC motor	DC motor
	Quantity		5	5	5	5
Max. No. of Indoor Units		unit	64	64	64	64
Connection Ratio		%	50~200	50~200	50~200	50~200
Dimension (WxDxH)	Net	mm	990×765×1635+(1340×765×1635)×2	990×765×1635+(1340×765×1635)×2	990×765×1635+(1340×765×1635)×2	990×765×1635+(1340×765×1635)×2
	Packing	mm	1050×815×1805+(1395×815×1865)×2	1050×815×1805+(1395×815×1865)×2	1050×815×1805+(1395×815×1865)×2	1050×815×1805+(1395×815×1865)×2
Weight	Net	kg	215+265+330	230+265+330	215+330×2	215+330×2
	Gross	kg	225+280+345	240+280+345	225+345×2	225+345×2
Pipe Diameter	Liquid Side	mm	19.05(3/4)	19.05(3/4)	22.2(7/8)	22.2(7/8)
	Gas Side	mm	41.3(13/8)	41.3(13/8)	47.6(15/8)	47.6(15/8)
Operation Range	Cooling	℃	-15~52	-15~52	-15~52	-15~52
	Heating	℃	-25~24	-25~24	-25~24	-25~24

Notes:
1.Cooling Capacity: Indoor temperature 27°C DB/19°C WB; Outdoor temperature:35°C DB/ 24°C WB.
2.Heating Capacity: Indoor temperature 20°C DB; Outdoor temperature: 7°C DB/ 6°C WB.
3.Piping Length: Equivalent piping length: 7.5m, level difference: 0m.
4.We can guarantee the operation only within 130% Combination. If you want to connect more than 130% combination, please contact us and discuss the requirement.
5.Anechoic chamber conversion value, measured in test room. During actual operation.These values are normally somewhat higher as a result of ambient conditions.
6.The above designs and specifications are subject to change without prior notice. Final specifications please refer to technical specification provided by sales representative.
7.Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1.3m above the floor.
8.The above combined types are factory-recommended type. The combined type also can be combined at will.

LVRF 6 Series 380~415V-50/60Hz

HP			56	58	60	62
Model			LVRF_T1HP_56_61_DDA	LVRF_T1HP_58_61_DDA	LVRF_T1HP_60_61_DDA	LVRF_T1HP_62_61_DDA
Combination		HP	12+22×2	14+22×2	16+22×2	18+22×2
Capacity	Cooling	kW	156.5	163	168	173.4
	Heating	kW	156.5	163	168	173.4
Electric Data	Power supply	V~,Hz,Ph	380~415,3,50/60	380~415, 3, 50/60	380~415, 3, 50/60	380~415, 3, 50/60
	Cooling input	kW	46.28	47.70	49.62	50.43
	EER	W/W	3.38	3.42	3.39	3.44
	Heating input	kW	37.26	39.13	40.66	42.57
	COP	W/W	4.20	4.17	4.13	4.07
	SEER		7.2	6.5	6.3	6.0
	SCOP		4.2	4.3	4.2	4.0
Performance	Air Flow Volume	m^3/h	12000+16000×2	14000+16000×2	14000+16000×2	16000×3
	Sound Pressure level	dB(A)	≤63	≤63	≤63	≤63
Compressor	Type		DC inverter	DC inverter	DC inverter	DC inverter
	Quantity		5	5	5	6
Fan motor	Type		DC motor	DC motor	DC motor	DC motor
	Quantity		5	6	6	6
Max. No. of Indoor Units		unit	64	64	64	64
Connection Ratio		%	50~200	50~200	50~200	50~200
Dimension (WxDxH)	Net	mm	990×765×1635+(1340×765×1635)×2	(1340×765×1635)×3	(1340×765×1635)×3	(1340×765×1635)×3
	Packing	mm	1050×815×1805+(1395×815×1865)×2	(1395×815×1865)×3	(1395×815×1865)×3	(1395×815×1865)×3
Weight	Net	kg	230+330×2	265+330×2	265+330×2	330×3
	Gross	kg	240+345×2	280+345×2	280+345×2	345×3
Pipe Diameter	Liquid Side	mm	22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)
	Gas Side	mm	47.6(15/8)	47.6(15/8)	47.6(15/8)	47.6(15/8)
Operation Range	Cooling	℃	-15~52	-15~52	-15~52	-15~52
	Heating	℃	-25~24	-25~24	-25~24	-25~24

LVRF 6 Series 380~415V-50/60Hz

HP			64	66	68	70
Model			LVRF_T1HP_64_61_DDA	LVRF_T1HP_66_61_DDA	LVRF_T1HP_68_61_DDA	LVRF_T1HP_70_61_DDA
Combination		HP	20+22×2	22×3	12×2+22×2	10+16+22×2
Capacity	Cooling	kW	179	184.5	190	196
	Heating	kW	179	184.5	190	196
Electric Data	Power supply	V~,Hz,Ph	380~415, 3, 50/60	380~415, 3, 50/60	380~415, 3, 50/60	380~415, 3, 50/60
	Cooling input	kW	53.14	56.70	54.76	55.73
	EER	W/W	3.37	3.25	3.47	3.52
	Heating input	kW	44.71	46.32	43.64	45.89
	COP	W/W	4.00	3.98	4.35	4.27
	SEER		5.6	5.2	7.2	6.5
	SCOP		3.6	3.5	4.2	4.2
Performance	Air Flow Volume	m^3/h	16000×3	16000×3	12000×2+16000×2	12000+14000+16000×2
	Sound Pressure level	dB(A)	≤63	≤63	≤63	≤63
Compressor	Type		DC inverter	DC inverter	DC inverter	DC inverter
	Quantity		6	6	6	6
Fan motor	Type		DC motor	DC motor	DC motor	DC motor
	Quantity		6	6	6	7
Max. No. of Indoor Units		unit	64	64	64	64
Connection Ratio		%	50~200	50~200	50~200	50~200
Dimension (WxDxH)	Net	mm	(1340×765×1635)×3	(1340×765×1635)×3	(990×765×1635)×2+(1340×765×1635)×2	990×765×1635+(1340×765×1635)×3
	Packing	mm	(1395×815×1865)×3	(1395×815×1865)×3	(1050×815×1805)×2+(1395×815×1865)×2	1050×815×1805+(1395×815×1865)×3
Weight	Net	kg	330×3	330×3	230×2+330×2	215+265+330×2
	Gross	kg	345×3	345×3	240×2+345×2	225+280+345×2
Pipe Diameter	Liquid Side	mm	22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)
	Gas Side	mm	47.6(15/8)	47.6(15/8)	47.6(15/8)	47.6(15/8)
Operation Range	Cooling	℃	-15~52	-15~52	-15~52	-15~52
	Heating	℃	-25~24	-25~24	-25~24	-25~24

Notes:
1.Cooling Capacity: Indoor temperature 27°C DB/19°C WB; Outdoor temperature:35°C DB/ 24°C WB.
2.Heating Capacity: Indoor temperature 20°C DB; Outdoor temperature: 7°C DB/ 6°C WB.
3.Piping Length: Equivalent piping length: 7.5m, level difference: 0m.
4.We can guarantee the operation only within 130% Combination. If you want to connect more than 130% combination, please contact us and discuss the requirement.
5.Anechoic chamber conversion value, measured in test room. During actual operation.These values are normally somewhat higher as a result of ambient conditions.
6.The above designs and specifications are subject to change without prior notice. Final specifications please refer to technical specification provided by sales representative.
7.Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1.3m above the floor.
8.The above combined types are factory-recommended type. The combined type also can be combined at will.

LVRF 6 Series 380~415V-50/60Hz

HP			72	74	76	78
Model			LVRF_T1HP_72_61_DDA	LVRF_T1HP_74_61_DDA	LVRF_T1HP_76_61_DDA	LVRF_T1HP_78_61_DDA
Combination		HP	12+16+22×2	10+20+22×2	10+22×3	12+22×3
Capacity	Cooling	kW	201.5	207	212.5	218
	Heating	kW	201.5	207	212.5	218
Electric Data	Power supply	V~,Hz,Ph	380~415,3,50/60	380~415, 3, 50/60	380~415, 3, 50/60	380~415, 3, 50/60
	Cooling input	kW	58.10	59.25	62.81	65.18
	EER	W/W	3.47	3.49	3.38	3.34
	Heating input	kW	47.04	49.94	51.55	52.70
	COP	W/W	4.28	4.14	4.12	4.14
	SEER		7.2	6.5	6.5	7.2
	SCOP		4.2	4.0	4.0	4.2
Performance	Air Flow Volume	m^3/h	12000+14000+16000×2	12000+16000×3	12000+16000×3	12000+16000×3
	Sound Pressure level	dB(A)	≤63	≤63	≤63	≤63
Compressor	Type		DC inverter	DC inverter	DC inverter	DC inverter
	Quantity		6	7	7	7
Fan motor	Type		DC motor	DC motor	DC motor	DC motor
	Quantity		7	7	7	7
Max. No. of Indoor Units		unit	64	64	64	64
Connection Ratio		%	50~200	50~200	50~200	50~200
Dimension (WxDxH)	Net	mm	990×765×1635+(1340×765×1635)×3	990×765×1635+(1340×765×1635)×3	990×765×1635+(1340×765×1635)×3	990×765×1635+(1340×765×1635)×3
	Packing	mm	1050×815×1805+(1395×815×1865)×3	1050×815×1805+(1395×815×1865)×3	1050×815×1805+(1395×815×1865)×3	1050×815×1805+(1395×815×1865)×3
Weight	Net	kg	230+265+330×2	215+330×3	215+330×3	230+330×3
	Gross	kg	240+280+345×2	225+345×3	225+345×3	240+345×3
Pipe Diameter	Liquid Side	mm	22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)
	Gas Side	mm	47.6(15/8)	47.6(15/8)	47.6(15/8)	47.6(15/8)
Operation Range	Cooling	℃	-15~52	-15~52	-15~52	-15~52
	Heating	℃	-25~24	-25~24	-25~24	-25~24

LVRF 6 Series 380~415V-50/60Hz

HP			80	82	84	86	88
Model			LVRF_T1HP_80_61_DDA	LVRF_T1HP_82_61_DDA	LVRF_T1HP_84_61_DDA	LVRF_T1HP_86_61_DDA	LVRF_T1HP_88_61_DDA
Combination		HP	14+22×3	16+22×3	18+22×3	20+22×3	22×4
Capacity	Cooling	kW	224.5	229.5	234.9	240.5	246
	Heating	kW	224.5	229.5	234.9	240.5	246
Electric Data	Power supply	V~,Hz,Ph	380~415, 3, 50/60	380~415, 3, 50/60	380~415, 3, 50/60	380~415, 3, 50/60	380~415,3,50/60
	Cooling input	kW	66.60	68.52	69.33	72.04	75.60
	EER	W/W	3.37	3.35	3.39	3.34	3.25
	Heating input	kW	54.57	56.10	58.01	60.15	61.76
	COP	W/W	4.11	4.09	4.05	4.00	3.98
	SEER		6.5	6.3	6.0	5.6	5.2
	SCOP		4.3	4.2	4.0	3.6	3.5
Performance	Air Flow Volume	m^3/h	14000+16000×3	14000+16000×3	16000×4	16000×4	16000×4
	Sound Pressure level	dB(A)	≤63	≤63	≤63	≤63	≤63
Compressor	Type		DC inverter	DC inverter	DC inverter	DC inverter	DC inverter
	Quantity		7	7	8	8	8
Fan motor	Type		DC motor	DC motor	DC motor	DC motor	DC motor
	Quantity		8	8	8	8	8
Max. No. of Indoor Units		unit	64	64	64	64	64
Connection Ratio		%	50~200	50~200	50~200	50~200	50~200
Dimension (WxDxH)	Net	mm	(1340×765×1635)×4	(1340×765×1635)×4	(1340×765×1635)×4	(1340×765×1635)×4	(1340×765×1635)×4
	Packing	mm	(1395×815×1865)×4	(1395×815×1865)×4	(1395×815×1865)×4	(1395×815×1865)×4	(1395×815×1865)×4
Weight	Net	kg	265+330×3	265+330×3	330×4	330×4	330×4
	Gross	kg	280+345×3	280+345×3	345×4	345×4	345×4
Pipe Diameter	Liquid Side	mm	22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)
	Gas Side	mm	47.6(15/8)	47.6(15/8)	47.6(15/8)	47.6(15/8)	47.6(15/8)
Operation Range	Cooling	℃	-15~52	-15~52	-15~52	-15~52	-15~52
	Heating	℃	-25~24	-25~24	-25~24	-25~24	-25~24

Notes:
1.Cooling Capacity: Indoor temperature 27°C DB/19°C WB; Outdoor temperature:35°C DB/ 24°C WB.
2.Heating Capacity: Indoor temperature 20°C DB; Outdoor temperature: 7°C DB/ 6°C WB.
3.Piping Length: Equivalent piping length: 7.5m, level difference: 0m.
4.We can guarantee the operation only within 130% Combination. If you want to connect more than 130% combination, please contact us and discuss the requirement.
5.Anechoic chamber conversion value, measured in test room. During actual operation.These values are normally somewhat higher as a result of ambient conditions.
6.The above designs and specifications are subject to change without prior notice. Final specifications please refer to technical specification provided by sales representative.
7.Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1.3m above the floor.
8.The above combined types are factory-recommended type. The combined type also can be combined at will.

Outdoor Units - LVRF 6 Series

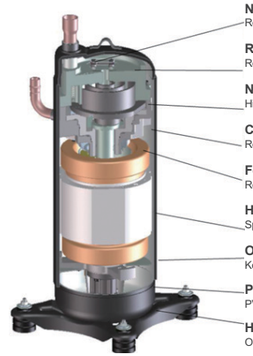
Outdoor Units - LVRF Individual Series

Individual VRF

LVRF Individual Series

High Efficiency

Dual DC inverter compressor for each model.
Large heat exchanger with high performance.Ensuring the compression ratio always in safety zone.
High precision and stepless regulation of the output capacity.



New Suction Structure
Reduce suction pressure loss at high speed, and suitable for big stroke volume.

Relief Valve
Reduce over compression loss especially for medium and low capacity condition.

New Scroll Shape
High efficiency asymmetric scroll shape.

Compliant Frame Mechanism
Reduce leakage loss and friction loss simulteneously.

Featured Dischange System
Refrigerant flow out from center of compressor. This contribute to reduce oil circulation at any condition.

High Efficiency Motor
Special designed high efficiency motor.

Oil Partition
Keeping oil in the compressor by this partition makes high reliability.

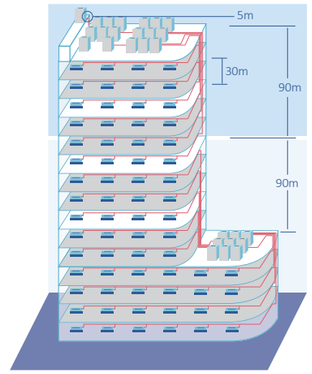
PVE Oil
PVE oil is reliable due to its solubility to refrigerant.

High Reliability Oil Supply System
Oil supply system using pressure difference makes reliability improve especially at low speed condition.

Long Piping Length

Max. Total piping length — 1000m
Max. Actual piping length — 190m
Max. piping length from 1st indoor branch to the farthest indoor unit — 40m/90m*
Max. Level difference between outdoor units — 5m
Max. Level difference between indoor units — 30m
Max. Level difference between ODU and IDU units — 90m

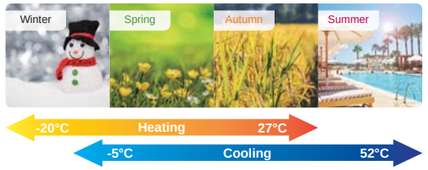
*The longest length after first branch is 40m as standard can be extended to up to 90m under certain conditions.Please contact your local dealer for further information.



Outdoor Units - LVRF Individual Series

Wide Operation Range

No matter the ambient temperature is as high as 52°C in hot summer or -20°C in cold winter, the system can operate perfectly and supply comfortable environment for users.

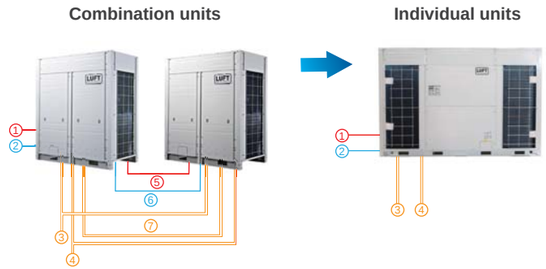


Easy Installation

Easy installation and less material consumption (compare with combination units).

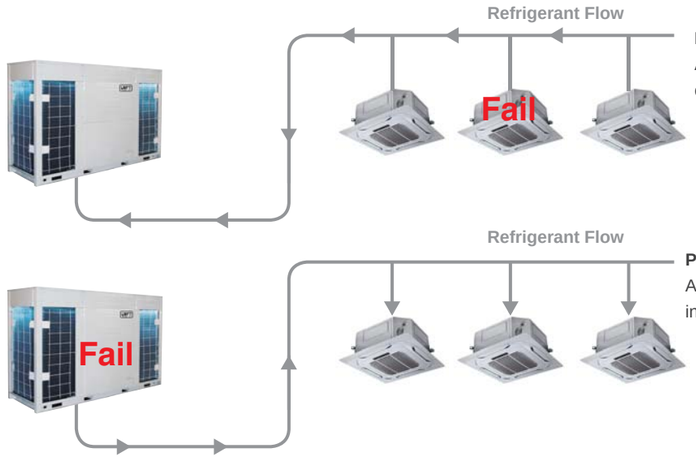
① Power & grounding wire
② Communication wire
③ Main gas pipe
④ Main liquid pipe
⑤ Power & grounding wire
⑥ Communication wire
⑦ Oil balance pipe

Compactstructure and less occupied space.



Easy Maintenance

Auto refrigerant recycling (Optional function), easy operation, refrigerant-saving and environment-friendly.



Pump-in mode
All the refrigerant can be recycled to the outdoor unit.

Pump-out mode
All the refrigerant can be recycled to the indoor side.

LVRF Individual Series

LVRF Individual Series 380~415V-50Hz

HP			22	24	26	28	30	32
Model	Outdoor	50Hz	LVRF_T1HP_22_31_DDAI	LVRF_T1HP_24_31_DDAI	LVRF_T1HP_26_31_DDAI	LVRF_T1HP_28_31_DDAI	LVRF_T1HP_30_31_DDAI	LVRF_T1HP_32_31_DDAI
Capacity	Cooling	kW	61.5	67	73	78.5	85	90
	Heating	kW	69	75	81.5	87.5	95	100
Electric Data	Power supply	V~,Hz,Ph	380 ~415, 50, 3	380 ~415, 50, 3	380 ~415, 50, 3	380 ~415, 50, 3	380 ~415, 50, 3	380 ~415, 50, 3
	Cooling input	kW	18.67	20.1	21.9	23.7	25.8	27.5
	EER	W/W	3.29	3.33	3.33	3.31	3.29	3.27
	Heating input	kW	17.75	19.3	20.2	22	24.4	26.3
	COP	W/W	3.89	3.89	4.03	3.98	3.89	3.80
Performance	Air Flow Volume	m^3/h	21000	21000	28000	28000	30000	30000
	Sound Pressure level	dB(A)	≤63	≤63	≤65	≤65	≤65	≤65
Compressor	Type		DC inverter	DC inverter	DC inverter	DC inverter	DC inverter	DC inverter
	Quantity		2	2	2	2	2	2
Fan Motor	Type		AC motor	AC motor	AC motor	AC motor	AC motor	AC motor
	Quantity		2	2	2	2	2	2
Max. No. of Indoor Units		unit	36	39	43	46	50	53
Connection Ratio			50~130%	50~130%	50~130%	50~130%	50~130%	50~130%
Dimension (WxDxH)	Net	mm	1590×765×1600	1590×765×1600	2350×765×1600	2350×765×1600	2350×765×1600	2350×765×1600
	Packing	mm	1650×815×1770	1650×815×1770	2410×815×1770	2410×815×1770	2410×815×1770	2410×815×1770
Weight	Net	kg	400	400	500	500	500	500
	Gross	kg	420	420	515	515	515	515
Refrigerant Type			R410A	R410A	R410A	R410A	R410A	R410A
Pipe Diameter	Liquid Side	mm	15.88	15.88	19.05	19.05	19.05	19.05
	Gas Side	mm	28.6	28.6	34.9	34.9	34.9	34.9
Operation Range	Cooling	°C	-5~52	-5~52	-5~52	-5~52	-5~52	-5~52
	Heating	°C	-20~27	-20~27	-20~27	-20~27	-20~27	-20~27
Stuffing Quantity	20/40/40H	unit	7/14/14	7/14/14	4/8/8	4/8/8	4/8/8	4/8/8

Notes:
1.Cooling Capacity: Indoor temperature 27°C DB/19°C WB; Outdoor temperature: 35°C DB/ 24°C WB.
2.Heating Capacity:Indoor temperature 20°C DB; Outdoor temperature:7°C DB/ 6°C WB.
3.Piping Length:Equivalent piping length: 7.5m, level difference: 0m.
4.Anechoic chamber conversion value, measured in test room. During actual operation.These values are normally somewhat higher as a result of ambient conditions.
5.The above designs and specifications are subject to change without prior notice. Final specifications please refer to technical specification provided by sales representative.
6.Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1.3m above the floor.

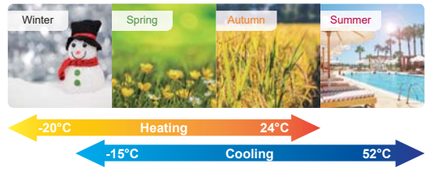
Outdoor Units - LVRF Individual Series

Outdoor Units

LVRF Mini Series

Wide Operation Range

The unit could operate perfectly between 52°C in hot summer and -15°C in cold winter making you feel like spring all year around with advanced system design and strict matching test(cooling in -15°C).

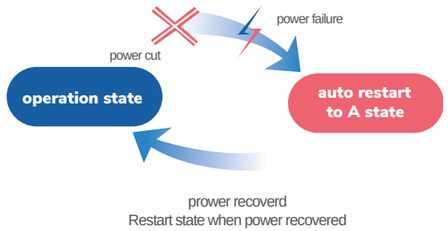


DC Inverter Compressor

Made of rare earth permanent magnetic material, the rotor could change the motor's round speed by changing the DC voltage motor, thus overcome the electromagnetic noise and rotor loss of AC inverter compressor, then achieves high efficiency as well as low noise.

Auto Restart Function

The AC can automatically memorize the operation setting when power is cut of accidently. It can return to previous setting when power resumes.
Recover the former operation state when power is re-stored , no need restart the unit manually.



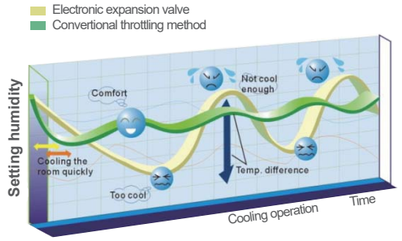
Fast Cooling/Heating Technology

The DC Inverter Compressor system reaches full load rapidly providing less temperature fluctuation and an improved living environment, bringing great user experience.

Outdoor Units - LVRF Mini Series

Accurate Temperature Control

According to change trend of indoor ambient temperature, the unit can use PI algorithm to calculate capacity demand percentage of indoor unit, control operating frequency of compressor in real time and reach accurate control of room temperature.

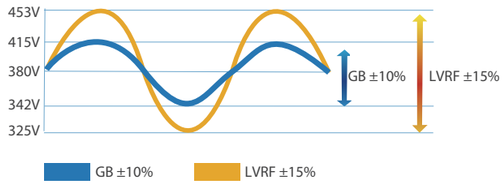


Flexible And Diversified Matching Of Indoor And Outdoor Unit

LUFT offers a variety indoor units, more than 100 models of 7 types. Capacity ranges are from 2.2Kw to 14Kw. It is full compliance with **residential and light commercial place. Our systems can operate up to 130% of capacity which allows any system to be designed to the customers and applications needs.**

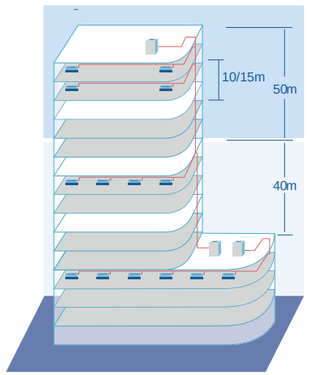
Wide Voltage Design

In country with unstable voltage, LUFT can also run stably.



Long Piping Length

Max. Total piping length — 100/150m
Max. Actual piping length — 60/100m
Max. Level difference between indoor units — 10/15m
Max. Level difference between ODU and IDU units — 40/50m
Max. piping length from 1st indoor branch to the farthest indoor unit — 20m/40m



LVRF Mini Series

All DC Inverter
50Hz/60Hz

Model	Outdoor		LVRF_T1HP_03_41_ACA	LVRF_T1HP_3.5_41_ACA	LVRF_T1HP_04_41_ACA	LVRF_T1HP_05_41_ACA	LVRF_T1HP_5.5_41_ACA
Capacity	Cooling	kW	8.00	10.00	12.30	14.00	16.00
	Heating	kW	9.00	11.50	13.20	16.50	18.00
Electric Data	Power Supply	V~,Hz,Ph	220~240,50/60,1	220~240,50/60,1	220~240,50/60,1	220~240,50/60,1	220~240,50/60,1
	Cooling Power Input	kW	2.30	3.00	3.25	3.95	4.80
	Heating Power Input	kW	2.40	3.20	3.41	4.05	4.80
	Cooling Current	A	10.10	13.20	14.30	17.30	21.10
	Heating Current	A	10.50	14.00	15.00	17.80	21.10
	EER		3.48	3.33	3.78	3.54	3.33
	COP		3.75	3.59	3.87	4.07	3.75
	SEER		6.20	6.10	6.10	6.10	6.10
	SCOP		4.20	4.10	4.10	4.00	4.00
Performance	Air Flow Volume	m^3/h	4154	4154	7200	7200	7200
	Noise Level	dB(A)	56	56	57	57	57
Piping Limite	Level difference between IDU and ODU	m	50	50	50	50	50
	Level difference between IDU and IDU	m	10	10	15	15	15
	Between the first brance and the Farthest IDU	m	20	20	40	40	40
	Total Pipe length	m	100	100	150	150	150
Max. No. of Indoor Units		unit	4	5	7	8	9
Connection Ratio		%	50~130	50~130	50~130	50~130	50~130
Dimension (WxDxH)	Net	mm	970×395×805	970×395×805	940×370×1325	940x370x1325	940x370x1325
	Packing	mm	1105×495×895	1105×495×895	1080×430×1440	1080x430x1440	1080x430x1440
Weight	Net	kg	66	66	86	86	93
	Gross	kg	71	71	91	91	98
Refrigerant Type			R410a	R410a	R410a	R410a	R410a
Pipe Diameter	Liquid Side	mm(inch)	9.52(3/8)	9.52(3/8)	9.52(3/8)	9.52(3/8)	9.52(3/8)
	Gas Side	mm(inch)	15.88(5/8)	15.88(5/8)	15.88(5/8)	15.88(5/8)	19.05(3/4)
Operation Range	Cooling	℃	-15~49	-15~49	-15~49	-15~49	-15~49
	Heating	℃	-15~27	-15~27	-15~27	-15~27	-15~27
Stuffing Quantity	20/40/40H	unit	44/96/144	44/96/144	26/54/54	26/54/54	26/54/54

LVRF Mini Series 50Hz

Model	Outdoor		LVRF_T1HP_08_31_ACA	LVRF_T1HP_10_31_ACA
Capacity	Cooling	kW	22.40	26.00
	Heating	kW	24.50	28.50
Electric Data	Power Supply	V~,Hz,Ph	380~415,50,3	380~415,50,3
	Cooling Power Input	kW	7.20	8.40
	Heating Power Input	kW	6.70	7.90
	Cooling Current	A	11.60	13.50
	Heating Current	A	11.00	13.00
	EER		3.11	3.10
	COP		3.66	3.61
Performance	Air Flow Volume	m^3/h	9000	9000
	Noise Level	dB(A)	60	60
Piping Limit	Vertical Pipe Length	m	≤30	≤30
	Actual Pipe Length	m	45	45
	Equivalent Pipe Length	m	50	50
	Total Pipe length	m	100	100
Max. No. of Indoor Units		unit	11	12
Connection Ratio		%	50~130	50~130
Dimension (WxDxH)	Net	mm	1120×400×1510	1120×400×1510
	Packing	mm	1270×560×1710	1270×560×1710
Weight	Net	kg	150	150
	Gross	kg	170	170
Refrigerant Type			R410a	R410a
Pipe Diameter	Liquid Side	mm(inch)	9.52(3/8)	9.52(3/8)
	Gas Side	mm(inch)	22.22(7/8)	22.22(7/8)
Operation Range	Cooling	℃	-10~52	-10~52
	Heating	℃	-15~24	-15~24
Stuffing Quantity	20/40/40H	unit	17/37/37	17/37/37

Notes:
1.Cooling Capacity: Indoor temperature 27°C DB/ 19°C WB; Outdoor temperature:35°C DB/ 24°C WB.
2.Cooling Capacity (Tropical): Indoor temperature 27°C DB/19°C WB;Outdoor temperature:46.1°C DB.
3.Heating Capacity: Indoor temperature 20°C DB; Outdoor temperature: 7°C DB/ 6°C WB.
4.Piping Length: Equivalent piping length: 7.5m, level difference: 0m.
5.Anechoic chamber conversion value, measured in test room. During actual operation. These values are normally somewhat higher as a result of ambient c onditions.
6.The above designs and specifications are subject to change without prior notice. Final specifications please refer to technical specification provided by sales representative.

Outdoor Units - LVRF Mini Series

Indoor Units

Cassette Series

One-way Cassette

Two-way Cassette

Compact
Four-way Cassette

Four-way Cassette

FEATURES

optional standard

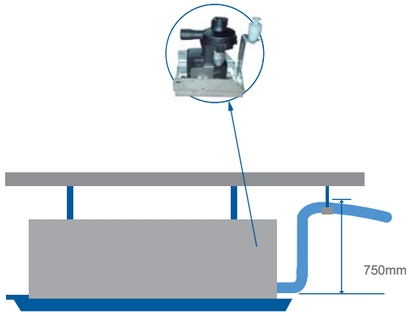
- Independent Dehumidification
- Digital Tube Display
- Sleep Mode
- Built-in Drain Pump
- Fast Cooling/Heating
- 3D Air Flow
- Fresh Air Intake
- Wired Control
- Central Control

Indoor Units - Cassette Series

One-Way Cassette

High-Lift Pump

Standard built-in drain pump with 750mm pumphead.



Fresh Air, Improved Air Quality

Fresh air makes indoor air healthy and comfortable.

Specification AC 50Hz

Model	Indoor		LVRF_1WS_028_1AC_1A	LVRF_1WS_036_1AC_1A	LVRF_1WS_045_1AC_1A	LVRF_1WS_056_1AC_1A	LVRF_1WS_071_1AC_1A
Capacity	Cooling	kW	2.8	3.6	4.5	5.6	7.1
	Heating	kW	3.2	4.0	5.0	6.3	8.0
Electric Data	Power Supply	V~,Hz,Ph	220~240,50,1	220~240,50,1	220~240,50,1	220~240,50,1	220~240,50,1
	Rated Power	W	40	40	45	45	50
Performance	Air Flow Volume(Hi/Mid/Low)	m^3/h	510/410/310	600/480/360	720/570/450	910/830/700	1000/850/750
	Noise Level(Hi/Mid/Low)	dB(A)	36/34/30	38/28/26	42/39/35	45/41/39	47/43/40
Dimension (WxDxH)	Net(Body)	mm	870×460×250	870×460×250	870×460×250	1180×495×290	1180×495×290
	Packing(Body)	mm	1130×570×355	1130×570×355	1130×570×355	1440×660×385	1440×660×385
	Net(Panel)	mm	1070×520×33	1070×520×33	1070×520×33	1380×550×33	1380×550×33
	Packing(Panel)	mm	1085×555×175	1085×555×175	1085×555×175	1400×585×175	1400×585×175
Weight	Net/Gross(Body)	kg	24/31	26/33	26/33	38/45	38/45
	Net/Gross(Panel)	kg	3/5	3/5	3/5	5/7	5/7
Refrigerant Type			R410A	R410A	R410A	R410A	R410A
Pipe Diameter	Liquid Side	mm(inch)	6.35(1/4)	6.35(1/4)	6.35(1/4)	6.35(1/4)	9.52(3/8)
	Gas Side	mm(inch)	12.7(1/2)	12.7(1/2)	12.7(1/2)	12.7(1/2)	15.88(5/8)
	Drainage	mm(inch)	R3/4in(DN20)	R3/4in(DN20)	R3/4in(DN20)	R3/4in(DN20)	R3/4in(DN20)
Stuffing Quantity	20/40/40H	unit	88/186/210	88/186/210	88/186/210	60/120/123	60/120/123

Notes:
1.Cooling Capacity: Indoor temperature 27°C DB/19°C WB;Outdoor temperature:35°C DB/24°C WB.
2.Heating Capacity:Indoor temperature 20°C DB;Outdoor temperature:7°C DB/6°C WB.
3.Piping Length:Equivalent piping length: 7.5m,l evel difference: 0m.
4.Sound level is measured at 1.4m below the unit.
5.The above designs and specifications are subject to change without prior notice. Final specifications please refer to technical specification provided by sales representative.

Two-Way Cassette

Ultra Slim Design

Only 315mm in height, save installation space.

Quiet Operation

Innovative 3D spiral wind leaf increases air volume and makes the air supply more quietly and smoothly.

High Air flow

High airflow for high ceiling application guarantees comfort in large space .Guarantees even airflow and temperature throughout the room.

Specification AC 50Hz

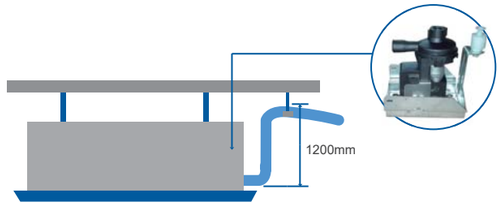
Model	Indoor		LVRF_2WS_028_1AC_1A	LVRF_2WS_036_1AC_1A	LVRF_2WS_045_1AC_1A	LVRF_2WS_056_1AC_1A	LVRF_2WS_071_1AC_1A
Capacity	Cooling	kW	2.8	3.6	4.5	5.6	7.1
	Heating	kW	3.2	4.0	5.0	6.3	8.0
Electric Data	Power Supply	V~,Hz,Ph	220~240,50,1	220~240,50,1	220~240,50,1	220~240,50,1	220~240,50,1
	Rated Power	W	60	62	68	85	94
Performance	Air Flow Volume(Hi/Mid/Low)	m^3/h	500/426/376	616/523/462	773/657/310	900/765/657	1165/990/873
	Noise Level(Hi/Mid/Low)	dB(A)	37/31/25	39/36/32	43/37/31	45/41/39	47/43/40
Dimension (WxDxH)	Net(Body)	mm	960x520x315	960x520x315	960x520x315	1200x520x315	1200x520x315
	Packing(Body)	mm	1265x685x395	1265x685x395	1265x685x395	1506x685x395	1506x685x395
	Net(Panel)	mm	1203x630x33	1203x630x33	1203x630x33	1443x630x33	1443x630x33
	Packing(Panel)	mm	1220x665x175	1220x665x175	1220x665x175	1460x665x175	1460x665x175
Weight	Net/Gross(Body)	kg	32/39	32/39	37/44	37/44	40/47
	Net/Gross(Panel)	kg	4.5/6.5	4.5/6.5	5/7	5/7	7.5/9.5
Refrigerant Type			R410a	R410a	R410a	R410a	R410a
Pipe Diameter	Liquid Side	mm(inch)	6.35(1/4)	6.35(1/4)	6.35(1/4)	9.52(3/8)	9.52(3/8)
	Gas Side	mm(inch)	12.7(1/2)	12.7(1/2)	12.7(1/2)	15.88(5/8)	15.88(5/8)
	Drainage	mm(inch)	R3/4in(DN20)	R3/4in(DN20)	R3/4in(DN20)	R3/4in(DN20)	R3/4in(DN20)
Stuffing Quantity	20/40/40H	unit	56/116/135	56/116/135	56/116/135	54/102/117	54/102/117

Notes:
1.Cooling Capacity: Indoor temperature 27°C DB/19°C WB;Outdoor temperature:35°C DB/24°C WB.
2.Heating Capacity:Indoor temperature 20°C DB;Outdoor temperature:7°C DB/6°C WB.
3.Piping Length:Equivalent piping length: 7.5m,l evel difference: 0m.
4.Sound level is measured at 1.4m below the unit.
5.The above designs and specifications are subject to change without prior notice. Final specifications please refer to technical specification provided by sales representative.

Compact Four-Way Cassette

Built-in Water Drainage Pump

Digital tube displays all contents: indoor temperature, setting temperature, operation mode, etc.
Clearly to check the running status, more convenient for trouble shooting.



Optimized Electric Box

Better fire-proof and easy to maintenance.

Ultra Slim Design

Only 250mm in height, save installation space.

Fresh Air Intake

Fresh air makes indoor air healthy and comfortable.

Quiet Operation

Innovative 3D spiral wind leaf increases air volume and makes the air supply more quietly and smoothly.

Digital Tube Display

Digital tube displays all contents: indoor temperature, setting temperature, operation mode, etc.
Clearly to check the running status, more convenient for trouble shooting.

Fan Motor Options

Choose either AC or DC fan motors.

Panel Options

4-way and around-way panels can be chosen

Compact Four-Way Cassette

Specification-DC fan motor

Model	Indoor		LVRF_4WM_028_4DC_1A	LVRF_4WM_036_4DC_1A	LVRF_4WM_045_4DC_1A	LVRF_4WM_056_4DC_1A	LVRF_4WS_071_4DC_1A	LVRF_4WS_080_4DC_1A
Capacity	Cooling	kW	2.8	3.6	4.5	5.6	7.1	8
	Heating	kW	3	4.3	5	6	8	10
Electric Data	Power Supply	V~,Hz,Ph	220~240,50/60,1	220~240,50/60,1	220~240,50/60,1	220~240,50/60,1	220~240,50/60,1	220~240,50/60,1
	Rated Power	W	33.5	33.5	33.5	33.5	40	40
Performance	Air Flow Volume(Hi/Mid/Low)	m^3/h	700/600/530	700/600/530	700/600/530	700/600/530	1250/1040/910	1250/1040/910
	Noise Level(Hi/Mid/Low)	dB(A)	45/41/35	45/41/35	45/41/35	45/41/35	38/34/30	38/34/30
Dimension (WxDxH)	Net(Body)	mm	570×630×260	570×630×260	570×630×260	570×630×260	835×835×250	835×835×250
	Packing(Body)	mm	650×710×290	650×710×290	650×710×290	650×710×290	910×910×310	910×910×310
	Net(Panel)	mm	650×650×55	650×650×55	650×650×55	650×650×55	950×950×55	950×950×55
	Packing(Panel)	mm	710×710×80	710×710×80	710×710×80	710×710×80	1000×1000×100	1000×1000×100
Weight	Net/Gross(Body)	kg	19/21	19/21	19/21	19/21	24/29	24/29
	Net/Gross(Panel)	kg	2.2/3.7	2.2/3.7	2.2/3.7	2.2/3.7	5.3/7.8	5.3/7.8
Refrigerant Type			R410a	R410a	R410a	R410a	R410a	R410a
Pipe Diameter	Liquid Side	mm(inch)	6.35(1/4)	6.35(1/4)	6.35(1/4)	6.35(1/4)	9.52(3/8)	9.52(3/8)
	Gas Side	mm(inch)	12.7(1/2)	12.7(1/2)	12.7(1/2)	12.7(1/2)	15.88(5/8)	15.88(5/8)
	Drainage	mm(inch)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)
Stuffing Quantity	20/40/40H	unit	140/312/354	140/312/354	140/312/354	140/312/354	78/168/184	78/168/184

Specification-DC fan motor

Model	Indoor		LVRF_4WS_090_4DC_1A	LVRF_4WS_100_4DC_1A	LVRF_4WS_112_4DC_1A	LVRF_4WS_125_4DC_1A	LVRF_4WS_140_4DC_1A
Capacity	Cooling	kW	9	10	11.2	12.5	14
	Heating	kW	11	12	12.8	13.3	15
Electric Data	Power Supply	V~,Hz,Ph	220~240,50/60,1	220~240,50/60,1	220~240,50/60,1	220~240,50/60,1	220~240,50/60,1
	Rated Power	W	65	65	101	101	101
Performance	Air Flow Volume(Hi/Mid/Low)	m^3/h	1500/1200/1050	1500/1200/1050	1800/1440/1260	1800/1440/1260	1800/1440/1260
	Noise Level(Hi/Mid/Low)	dB(A)	43/39/38	43/39/38	45/42/40	45/42/40	45/42/40
Dimension (WxDxH)	Net(Body)	mm	835×835×250	835×835×250	835×835×290	835×835×290	835×835×290
	Packing(Body)	mm	910×910×310	910×910×310	910×910×350	910×910×350	910×910×350
	Net(Panel)	mm	950×950×55	950×950×55	950×950×55	950×950×55	950×950×55
	Packing(Panel)	mm	1000×1000×100	1000×1000×100	1000×1000×100	1000×1000×100	1000×1000×100
Weight	Net/Gross(Body)	kg	25/30	25/30	26/31	26/31	26/31
	Net/Gross(Panel)	kg	5.3/7.8	5.3/7.8	5.3/7.8	5.3/7.8	5.3/7.8
Refrigerant Type			R410a	R410a	R410a	R410a	R410a
Pipe Diameter	Liquid Side	mm(inch)	9.52(3/8)	9.52(3/8)	9.52(3/8)	9.52(3/8)	9.52(3/8)
	Gas Side	mm(inch)	15.88(5/8)	15.88(5/8)	15.88(5/8)	15.88(5/8)	15.88(5/8)
	Drainage	mm(inch)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)
Stuffing Quantity	20/40/40H	unit	78/168/184	78/168/184	68/150/170	68/150/170	68/150/170

Notes:
1.Cooling Capacity: Indoor temperature 27°C DB/19°C WB;Outdoor temperature:35°C DB/24°C WB.
2.Heating Capacity:Indoor temperature 20°C DB;Outdoor temperature:7°C DB/6°C WB.
3.Piping Length:Equivalent piping length: 7.5m,l evel difference: 0m.
4.Sound level is measured at 1.4m below the unit.
5.The above designs and specifications are subject to change without prior notice. Final specifications please refer to technical specification provided by sales representative.

Four-Way Cassette

Specification-50Hz AC fan motor

Model	Indoor		LVRF_4WS_071_1AC_1A	LVRF_4WS_080_1AC_1A	LVRF_4WS_090_1AC_1A	LVRF_4WS_100_1AC_1A	LVRF_4WS_112_1AC_1A	LVRF_4WS_125_1AC_1A	LVRF_4WS_140_1AC_1A
Capacity	Cooling	kW	7.1	8.0	9.0	10.0	11.2	12.5	14.0
	Heating	kW	8.0	10.0	11.0	12.0	12.8	13.3	15.0
Electric Data	Power Supply	V~,Hz,Ph	220~240,50,1	220~240,50,1	220~240,50,1	220~240,50,1	220~240,50,1	220~240,50,1	220~240,50,1
	Rated Power	W	100	100	176	176	200	200	200
Performance	Air Flow Volume(Hi/Mid/Low)	m^3/h	1250/1040/910	1250/1040/910	1500/1200/1050	1500/1200/1050	1800/1440/1260	1800/1440/1260	1800/1440/1260
	Noise Level(Hi/Mid/Low)	dB(A)	38/34/30	38/34/30	41/37/34	41/37/34	41/38/35	41/38/35	41/38/35
Dimension (WxDxH)	Net(Body)	mm	835×835×250	835×835×250	835×835×250	835×835×250	835×835×290	835×835×290	835×835×290
	Packing(Body)	mm	910×910×310	910×910×310	910×910×310	910×910×310	910×910×350	910×910×350	910×910×350
	Net(Panel)	mm	950×950×55	950×950×55	950×950×55	950×950×55	950×950×55	950×950×55	950×950×55
	Packing(Panel)	mm	1000×1000×100	1000×1000×100	1000×1000×100	1000×1000×100	1000×1000×100	1000×1000×100	1000×1000×100
Weight	Net/Gross(Body)	kg	27/34	27/34	28/35	28/35	30/37	30/37	30/37
	Net/Gross(Panel)	kg	5/7	5/7	5/7	5/7	5/7	5/7	5/7
Refrigerant Type			R410A	R410A	R410A	R410A	R410A	R410A	R410A
Pipe Diameter	Liquid Side	mm(inch)	9.52(3/8)	9.52(3/8)	9.52(3/8)	9.52(3/8)	9.52(3/8)	9.52(3/8)	9.52(3/8)
	Gas Side	mm(inch)	15.88(5/8)	15.88(5/8)	15.88(5/8)	15.88(5/8)	15.88(5/8)	15.88(5/8)	15.88(5/8)
	Drainage	mm(inch)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)
Stuffing Quantity	20/40/40H	unit	78/168/184	78/168/184	78/168/184	78/168/184	68/150/170	68/150/170	68/150/170

Specification-60Hz AC fan motor

Model	Indoor		LVRF_4WS_071_2AC_1A	LVRF_4WS_080_2AC_1A	LVRF_4WS_090_2AC_1A	LVRF_4WS_100_2AC_1A	LVRF_4WS_112_2AC_1A	LVRF_4WS_125_2AC_1A	LVRF_4WS_140_2AC_1A
Capacity	Cooling	kW	7.1	8.0	9.0	10.0	11.2	12.5	14.0
	Heating	kW	8.0	10.0	11.0	12.0	12.8	13.3	15.0
Electric Data	Power Supply	V~,Hz,Ph	220~240,60,1	220~240,60,1	220~240,60,1	220~240,60,1	220~240,60,1	220~240,60,1	220~240,60,1
	Rated Power	W	95	95	122	122	165	165	165
Performance	Air Flow Volume(Hi/Mid/Low)	m^3/h	1250/1040/910	1250/1040/910	1500/1200/1050	1500/1200/1050	1800/1440/1260	1800/1440/1260	1800/1440/1260
	Noise Level(Hi/Mid/Low)	dB(A)	38/34/30	38/34/30	41/37/34	41/37/34	41/38/35	41/38/35	41/38/35
Dimension (WxDxH)	Net(Body)	mm	835×835×250	835×835×250	835×835×250	835×835×250	835×835×290	835×835×290	835×835×290
	Packing(Body)	mm	910×910×310	910×910×310	910×910×310	910×910×310	910×910×350	910×910×350	910×910×350
	Net(Panel)	mm	950×950×55	950×950×55	950×950×55	950×950×55	950×950×55	950×950×55	950×950×55
	Packing(Panel)	mm	1000×1000×100	1000×1000×100	1000×1000×100	1000×1000×100	1000×1000×100	1000×1000×100	1000×1000×100
Weight	Net/Gross(Body)	kg	27/34	27/34	28/35	28/35	30/37	30/37	30/37
	Net/Gross(Panel)	kg	5/7	5/7	5/7	5/7	5/7	5/7	5/7
Pipe Diameter	Liquid Side	mm(inch)	9.52(3/8)	9.52(3/8)	9.52(3/8)	9.52(3/8)	9.52(3/8)	9.52(3/8)	9.52(3/8)
	Gas Side	mm(inch)	15.88(5/8)	15.88(5/8)	15.88(5/8)	15.88(5/8)	19.05(3/4)	19.05(3/4)	19.05(3/4)
	Drainage	mm(inch)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)
Stuffing Quantity	20/40/40H	unit	78/168/184	78/168/184	78/168/184	78/168/184	68/150/170	68/150/170	68/150/170

Notes:
1.Cooling Capacity: Indoor temperature 27°C DB/19°C WB;Outdoor temperature:35°C DB/24°C WB.
2.Heating Capacity:Indoor temperature 20°C DB;Outdoor temperature:7°C DB/6°C WB.
3.Piping Length:Equivalent piping length: 7.5m, level difference: 0m.
4.Sound level is measured at 1.4m below the unit.
5.The above designs and specifications are subject to change without prior notice. Final specifications please refer to technical specification provided by sales representative.

Duct Series

Slim Duct

Mid ESP Duct

High ESP Duct

Fresh Air Processor

FEATURES

optional standard

- Wired Control
- Intelligent Defrosting
- Sleep Mode
- Fast Cooling /Heating
- 3D Air Flow
- Fresh Air Intake
- Remote Control
- Central Control

Slim Duct

2 Ways Draining Connection

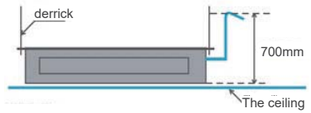
There two outlet in left and right, both left and right side of unit are possible for drainage hose connection, easy for installation.

The left outlet

The right outlet

Built-in Water Pump

The built-in pump can lift condensing water up to 700mm high from the drainage pan.installation.



Ultra Slim Design

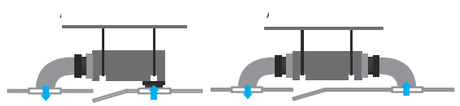
The thickness is only 185mm, save installation space.

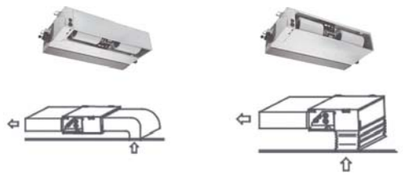
Air Outlet Panel Options

Digital tube displays all contents: indoor temperature, setting temperature, operation mode, etc.
Clearly to check the running status, more convenient for trouble shooting.

Flexible Air Intake Options

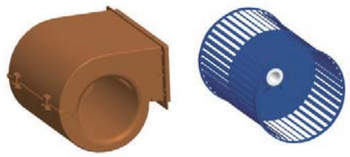
Air intake from rear as standard, from bottom is optional.
The size of the plate from bottom is the same as the flange from back, which makes it convenient to change installation style due to different decoration requirements.

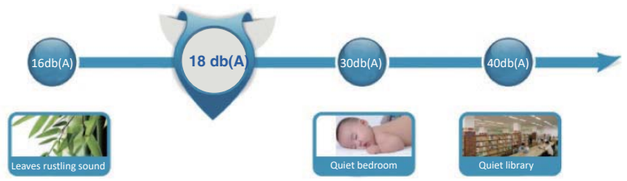




Silence Operation

Innovative centrifugal fan for large diameter and a new design of the spiral duct system equipped with high-quality motor at the same time, making the air supply more quiet and smooth. The lowest noise is 18 db(A).
The lowest operation noise is 18 db(A), the industry's most advanced mute value.





Fan Motor Options

Choose either AC or DC fan motors.

Slim Duct

Specification-DC fan motor

Model	Indoor		LVRF_DSS_022_4DC_1A	LVRF_DSS_028_4DC_1A	LVRF_DSS_036_4DC_1A	LVRF_DSS_045_4DC_1A	LVRF_DSS_056_4DC_1A	LVRF_DSS_071_4DC_1A
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1
	Heating	kW	2.5	3.0	4.3	5.0	6.0	8.0
Electric Data	Power Supply	V~,Hz,Ph	220~240,50/60,1	220~240,50/60,1	220~240,50/60,1	220~240,50/60,1	220~240,50/60,1	220~240,50/60,1
	Rated Power	W	57	57	61	80	80	90
Performance	Air Flow Volume(Hi/Mid/Low)	m^3/h	480/390/320	480/390/320	560/430/390	850/680/575	850/680/575	1000/810/685
	Noise Level(Hi/Mid/Low)	dB(A)	30/26/23	30/26/23	32/28/25	38/35/32	38/35/32	39/36/32
	External Static Pressure(ESP)	Pa	10/30	10/30	10/30	10/30	10/30	10/30
Dimension (WxDxH)	Net	mm	840×460×185	840×460×185	840×460×185	1160×460×185	1160×460×185	1160×460×185
	Packing	mm	1030×545×250	1030×545×250	1030×545×250	1350×545×250	1350×545×250	1350×545×250
Weight		kg	15.5/19	15.5/19	16.5/20	20/24	20/24	22/26
Pipe Diameter	Liquid Side	mm(inch)	6.35(1/4)	6.35(1/4)	6.35(1/4)	6.35(1/4)	6.35(1/4)	9.52(3/8)
	Gas Side	mm(inch)	9.52(3/8)	9.52(3/8)	12.7(1/2)	12.7(1/2)	12.7(1/2)	15.88(5/8)
	Drainage	mm(inch)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)
Stuffing Quantity	20/40/40H	unit	198/414/460	198/414/460	198/414/460	153/306/340	153/306/340	153/306/340

Specification-50Hz AC fan motor

Model	Indoor		LVRF_DSS_022_1AC_1A	LVRF_DSS_028_1AC_1A	LVRF_DSS_036_1AC_1A	LVRF_DSS_045_1AC_1A	LVRF_DSS_056_1AC_1A	LVRF_DSS_071_1AC_1A
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1
	Heating	kW	2.5	3.0	4.3	5.0	6.0	8.0
Electric Data	Power Supply	V~,Hz,Ph	220~240,50,1	220~240,50,1	220~240,50,1	220~240,50,1	220~240,50,1	220~240,50,1
	Rated Power	W	59	59	65	91	91	113
Performance	Air Flow Volume(Hi/Mid/Low)	m^3/h	480/390/320	480/390/320	560/430/390	850/680/575	850/680/575	1000/810/685
	Noise Level(Hi/Mid/Low)	dB(A)	30/26/23	30/26/23	32/28/25	38/35/32	38/35/32	39/36/32
	External Static Pressure(ESP)	Pa	10/30	10/30	10/30	10/30	10/30	10/30
Dimension (WxDxH)	Net	mm	840×460×185	840×460×185	840×460×185	1160×460×185	1160×460×185	1160×460×185
	Packing	mm	1030×545×250	1030×545×250	1030×545×250	1350×545×250	1350×545×250	1350×545×250
Weight		kg	15.5/19	15.5/19	16.5/20	20/24	20/24	22/26
Pipe Diameter	Liquid Side	mm(inch)	6.35(1/4)	6.35(1/4)	6.35(1/4)	6.35(1/4)	6.35(1/4)	9.52(3/8)
	Gas Side	mm(inch)	9.52(3/8)	9.52(3/8)	12.7(1/2)	12.7(1/2)	12.7(1/2)	15.88(5/8)
	Drainage	mm(inch)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)
Stuffing Quantity	20/40/40H	unit	198/414/460	198/414/460	198/414/460	153/306/340	153/306/340	153/306/340

Specification-60Hz AC fan motor

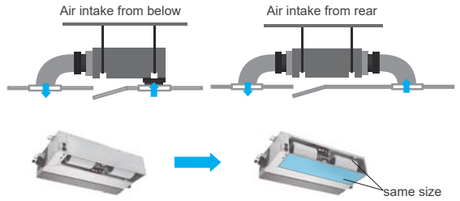
Model	Indoor		LVRF_DSS_022_2AC_1A	LVRF_DSS_028_2AC_1A	LVRF_DSS_036_2AC_1A	LVRF_DSS_045_2AC_1A	LVRF_DSS_056_2AC_1A	LVRF_DSS_071_2AC_1A
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1
	Heating	kW	2.5	3.0	4.3	5.0	6.0	8.0
Electric Data	Power Supply	V~,Hz,Ph	220~240,60,1	220~240,60,1	220~240,60,1	220~240,60,1	220~240,60,1	220~240,60,1
	Rated Power	W	59	59	65	97	97	113
Performance	Air Flow Volume(Hi/Mid/Low)	m^3/h	480/390/320	480/390/320	560/430/390	850/680/575	850/680/575	1000/810/685
	Noise Level(Hi/Mid/Low)	dB(A)	30/26/23	30/26/23	32/28/25	38/35/32	38/35/32	39/36/32
	External Static Pressure(ESP)	Pa	10/30	10/30	10/30	10/30	10/30	10/30
Dimension (WxDxH)	Net	mm	840×460×185	840×460×185	840×460×185	1160×460×185	1160×460×185	1160×460×185
	Packing	mm	1030×545×250	1030×545×250	1030×545×250	1350×545×250	1350×545×250	1350×545×250
Weight		kg	15.5/19	15.5/19	16.5/20	20/24	20/24	22/26
Pipe Diameter	Liquid Side	mm(inch)	6.35(1/4)	6.35(1/4)	6.35(1/4)	6.35(1/4)	6.35(1/4)	9.52(3/8)
	Gas Side	mm(inch)	9.52(3/8)	9.52(3/8)	12.7(1/2)	12.7(1/2)	12.7(1/2)	15.88(5/8)
	Drainage	mm(inch)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)
Stuffing Quantity	20/40/40H	unit	198/414/460	198/414/460	198/414/460	153/306/340	153/306/340	153/306/340

Notes:
1.Cooling Capacity: Indoor temperature 27°C DB/19°C WB;Outdoor temperature:35°C DB/24°C WB.
2.Heating Capacity:Indoor temperature 20°C DB;Outdoor temperature:7°C DB/6°C WB.
3.Piping Length:Equivalent piping length: 7.5m,l evel difference: 0m.
4.Sound level is measured at 1.4m below the unit.
5.The above designs and specifications are subject to change without prior notice. Final specifications please refer to technical specification provided by sales representative.

Mid ESP Duct

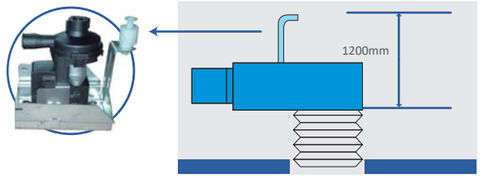
Flexible Air Intake Options

Air intake from rear as standard, from bottom is optional. The size of the plate from bottom is the same as the flange from back, which makes it convenient to change installation style according to different decoration requirements.



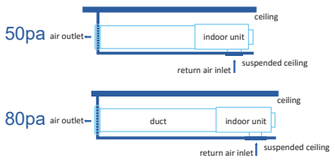
Built-in Water Pump (Optional)

The built-in pump can lift condensing water up to 1200mm high from the drainage pan.



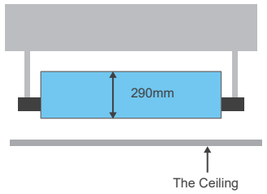
Optional ESP

50Pa and 80Pa are both optional.



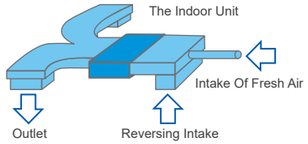
Ultra Slim Design

Only 290mm in height, save installation space.



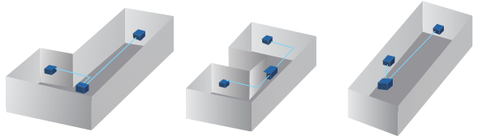
Fresh Air Intake

Fresh air makes indoor air healthy and comfortable.



Applicable To A Variety Of Room Types

Specific ESP design can be applied to various room types easily, like rooms of L type or U type; the air outlet can be set separately from the indoor unit, so the air flow can be equally distributed even the room is in irregular structure.



Room1: L Type | Room2: U Type | Room3: Narrow Type

Fan Motor Options

Choose either AC or DC fan motors.

Mid ESP Duct

Specification-DC fan motor

Model	Indoor		LVRF_DMS_045_4DC_1A	LVRF_DMS_056_4DC_1A	LVRF_DMS_071_4DC_1A	LVRF_DMS_080_4DC_1A	LVRF_DMS_090_4DC_1A
Capacity	Cooling	kW	4.5	5.6	7.1	8.0	9.0
	Heating	kW	5.1	6.3	8.0	9.0	10.0
Electric Data	Power Supply	V~,Hz,Ph	220~240,50/60,1	220~240,50/60,1	220~240,50/60,1	220~240,50/60,1	220~240,50/60,1
	Rated Power	W	73	73	106	106	126
Performance	Air Flow Volume(Hi/Mid/Low)	m^3/h	950/850/700	950/850/700	1300/1100/850	1300/1100/850	1400/1200/950
	Noise Level(Hi/Mid/Low)	dB(A)	40/37/33	40/37/33	41/39/36	41/39/36	44/41/39
	External Static Pressure(ESP)	Pa	50/80	50/80	50/80	50/80	50/80
Dimension (WxDxH)	Net	mm	890×735×290	890×735×290	890×735×290	890×735×290	890×735×290
	Packing	mm	1070×800×360	1070×800×360	1070×800×360	1070×800×360	1070×800×360
Weight	Net/Gross	kg	29.5/34	29.5/34	30.5/35	30.5/35	32.5/37
Pipe Diameter	Liquid Side	mm(inch)	6.35(1/4)	6.35(1/4)	9.52(3/8)	9.52(3/8)	9.52(3/8)
	Gas Side	mm(inch)	12.7(1/2)	12.7(1/2)	15.88(5/8)	15.88(5/8)	15.88(5/8)
	Drainage	mm(inch)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)
Stuffing Quantity	20/40/40H	unit	84/180/210	84/180/210	84/180/210	84/180/210	84/180/210

Specification-DC fan motor

Model	Indoor		LVRF_DMS_100_4DC_1A	LVRF_DMS_112_4DC_1A	LVRF_DMS_125_4DC_1A	LVRF_DMS_140_4DC_1A	LVRF_DMS_150_4DC_1A
Capacity	Cooling	kW	10.0	11.2	12.5	14.0	15.0
	Heating	kW	11.2	12.5	14.0	15.0	17.0
Electric Data	Power Supply	V~,Hz,Ph	220~240,50/60,1	220~240,50/60,1	220~240,50/60,1	220~240,50/60,1	220~240,50/60,1
	Rated Power	W	126	191	191	220	220
Performance	Air Flow Volume(Hi/Mid/Low)	m^3/h	1400/1200/950	2000/1700/1400	2000/1700/1400	2200/1850/1550	2200/1850/1550
	Noise Level(Hi/Mid/Low)	dB(A)	44/41/39	45/42/39	45/42/39	47/43/41	47/43/41
	External Static Pressure(ESP)	Pa	50/80	50/80	50/80	50/80	50/80
Dimension (WxDxH)	Net	mm	890×735×290	1250×735×290	1250×735×290	1250×735×290	1250×735×290
	Packing	mm	1070×800×360	1430×800×360	1430×800×360	1430×800×360	1430×800×360
Weight	Net/Gross	kg	32.5/37	42/47	42/47	42/47	42/47
Pipe Diameter	Liquid Side	mm(inch)	9.52(3/8)	9.52(3/8)	9.52(3/8)	9.52(3/8)	9.52(3/8)
	Gas Side	mm(inch)	15.88(5/8)	15.88(5/8)	15.88(5/8)	15.88(5/8)	15.88(5/8)
	Drainage	mm(inch)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)
Stuffing Quantity	20/40/40H	unit	84/180/210	66/138/161	66/138/161	66/138/161	66/138/161

Specification-50Hz AC fan motor

Model	Indoor		LVRF_DMS_045_1AC_1A	LVRF_DMS_056_1AC_1A	LVRF_DMS_071_1AC_1A	LVRF_DMS_080_1AC_1A	LVRF_DMS_090_1AC_1A
Capacity	Cooling	kW	4.5	5.6	7.1	8.0	9.0
	Heating	kW	5.0	6.0	8.0	10.0	11.0
Electric Data	Power Supply	V~,Hz,Ph	220~240,50,1	220~240,50,1	220~240,50,1	220~240,50,1	220~240,50,1
	Rated Power	W	100	100	160	160	160
Performance	Air Flow Volume(Hi/Mid/Low)	m^3/h	950/850/700	950/850/700	1300/1100/850	1300/1100/850	1400/1200/950
	Noise Level(Hi/Mid/Low)	dB(A)	40/37/33	40/37/33	41/39/36	41/39/36	44/41/39
	External Static Pressure(ESP)	Pa	50/80	50/80	50/80	50/80	50/80
Dimension (WxDxH)	Net	mm	890×735×290	890×735×290	890×735×290	890×735×290	890×735×290
	Packing	mm	1070×800×360	1070×800×360	1070×800×360	1070×800×360	1070×800×360
Weight	Net/Gross	kg	29.5/34	29.5/34	30.5/35	30.5/35	32.5/37
Pipe Diameter	Liquid Side	mm(inch)	6.35(1/4)	6.35(1/4)	9.52(3/8)	9.52(3/8)	9.52(3/8)
	Gas Side	mm(inch)	12.7(1/2)	12.7(1/2)	15.88(5/8)	15.88(5/8)	15.88(5/8)
	Drainage	mm(inch)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)
Stuffing Quantity	20/40/40H	unit	84/180/210	84/180/210	84/180/210	84/180/210	84/180/210

Notes:
1.Cooling Capacity: Indoor temperature 27°C DB/ 19°C WB;Outdoor temperature:35°C DB/ 24°C WB.
2.Heating Capacity: Indoor temperature 20°C DB; Outdoor temperature: 7°C DB/ 6°C WB.
3.Piping Length: Equivalent piping length: 7.5m, level difference: 0m.
4.Sound level is measured at 1.4m below the unit.
5.The above designs and specifications are subject to change without prior notice. Final specifications please refer to technical specification provided by sales representative.

Mid ESP Duct

Specification-50Hz AC fan motors

Model	Indoor		LVRF_DMS_100_1AC_1A	LVRF_DMS_112_1AC_1A	LVRF_DMS_125_1AC_1A	LVRF_DMS_140_1AC_1A	LVRF_DMS_150_1AC_1A
Capacity	Cooling	kW	10.0	11.2	12.5	14.0	15.0
	Heating	kW	12.0	12.8	13.3	15.0	16.0
Electric Data	Power Supply	V~,Hz,Ph	220~240,50,1	220~240,50,1	220~240,50,1	220~240,50,1	220~240,50,1
	Rated Power	W	180	180	180	240	240
Performance	Air Flow Volume(Hi/Mid/Low)	m^3/h	1400/1200/950	2000/1700/1400	2000/1700/1400	2200/1850/1550	2200/1850/1550
	Noise Level(Hi/Mid/Low)	dB(A)	44/41/39	45/42/39	45/42/39	47/43/41	47/43/41
	External Static Pressure(ESP)	Pa	50/80	50/80	50/80	50/80	50/80
Dimension (WxDxH)	Net	mm	890×735×290	1250×735×290	1250×735×290	1250×735×290	1250×735×290
	Packing	mm	1070×800×360	1430×800×360	1430×800×360	1430×800×360	1430×800×360
Weight	Net/Gross	kg	32.5/37	42/47	42/47	42/47	42/47
Pipe Diameter	Liquid Side	mm(inch)	9.52(3/8)	9.52(3/8)	9.52(3/8)	9.52(3/8)	9.52(3/8)
	Gas Side	mm(inch)	15.88(5/8)	15.88(5/8)	15.88(5/8)	15.88(5/8)	15.88(5/8)
	Drainage	mm(inch)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)
Stuffing Quantity	20/40/40H	unit	84/180/210	66/138/161	66/138/161	66/138/161	66/138/161

Specification-60Hz AC fan motors

Model	Indoor		LVRF_DMS_045_2AC_1A	LVRF_DMS_056_2AC_1A	LVRF_DMS_071_2AC_1A	LVRF_DMS_080_2AC_1A	LVRF_DMS_090_2AC_1A
Capacity	Cooling	kW	4.5	5.6	7.1	8.0	9.0
	Heating	kW	5.0	6.0	8.0	10.0	11.0
Electric Data	Power Supply	V~,Hz,Ph	220~240,60,1	220~240,60,1	220~240,60,1	220~240,60,1	220~240,60,1
	Rated Power	W	100	100	160	160	160
Performance	Air Flow Volume(Hi/Mid/Low)	m^3/h	950/850/700	950/850/700	1300/1100/850	1300/1100/850	1400/1200/950
	Noise Level(Hi/Mid/Low)	dB(A)	40/37/33	40/37/33	41/39/36	41/39/36	44/41/39
	External Static Pressure(ESP)	Pa	50/80	50/80	50/80	50/80	50/80
Dimension (WxDxH)	Net	mm	890×735×290	890×735×290	890×735×290	890×735×290	890×735×290
	Packing	mm	1070×800×360	1070×800×360	1070×800×360	1070×800×360	1070×800×360
Weight	Net/Gross	kg	29.5/34	29.5/34	30.5/35	30.5/35	32.5/37
Pipe Diameter	Liquid Side	mm(inch)	6.35(1/4)	6.35(1/4)	9.52(3/8)	9.52(3/8)	9.52(3/8)
	Gas Side	mm(inch)	12.7(1/2)	12.7(1/2)	15.88(5/8)	15.88(5/8)	15.88(5/8)
	Drainage	mm(inch)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)
Stuffing Quantity	20/40/40H	unit	84/180/210	84/180/210	84/180/210	84/180/210	84/180/210

Specification-60Hz AC fan motors

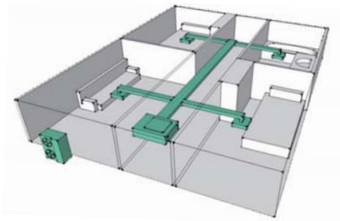
Model	Indoor		LVRF_DMS_100_2AC_1A	LVRF_DMS_112_2AC_1A	LVRF_DMS_125_2AC_1A	LVRF_DMS_140_2AC_1A	LVRF_DMS_150_2AC_1A
Capacity	Cooling	kW	10.0	11.2	12.5	14.0	15.0
	Heating	kW	12.0	12.8	13.3	15.0	16.0
Electric Data	Power Supply	V~,Hz,Ph	220~240,60,1	220~240,60,1	220~240,60,1	220~240,60,1	220~240,60,1
	Rated Power	W	180	180	180	240	240
Performance	Air Flow Volume(Hi/Mid/Low)	m^3/h	1400/1200/950	2000/1700/1400	2000/1700/1400	2200/1850/1550	2200/1850/1550
	Noise Level(Hi/Mid/Low)	dB(A)	44/41/39	45/42/39	45/42/39	47/43/41	47/43/41
	External Static Pressure(ESP)	Pa	50/80	50/80	50/80	50/80	50/80
Dimension (WxDxH)	Net	mm	890×735×290	1250×735×290	1250×735×290	1250×735×290	1250×735×290
	Packing	mm	1070×800×360	1430×800×360	1430×800×360	1430×800×360	1430×800×360
Weight	Net/Gross	kg	32.5/37	42/47	42/47	42/47	42/47
Pipe Diameter	Liquid Side	mm(inch)	9.52(3/8)	9.52(3/8)	9.52(3/8)	9.52(3/8)	9.52(3/8)
	Gas Side	mm(inch)	15.88(5/8)	15.88(5/8)	15.88(5/8)	15.88(5/8)	15.88(5/8)
	Drainage	mm(inch)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)
Stuffing Quantity	20/40/40H	unit	84/180/210	66/138/161	66/138/161	66/138/161	66/138/161

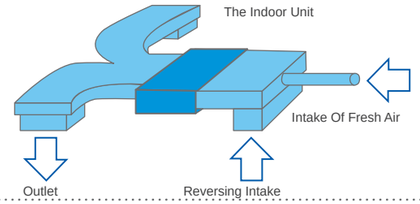
Notes:
1.Cooling Capacity: Indoor temperature 27°C DB/ 19°C WB; Outdoor temperature:35°C DB/ 24°C WB.
2.Heating Capacity: Indoor temperature 20°C DB; Outdoor temperature:7°C DB/ 6°C WB.
3.Piping Length: Equivalent piping length: 7.5m, level difference: 0m.
4.Sound level is measured at 1.4m below the unit.
5.The above designs and specifications are subject to change without prior notice. Final specifications please refer to technical specification provided by sales representative.

High ESP Duct

Long Distance Air Supply

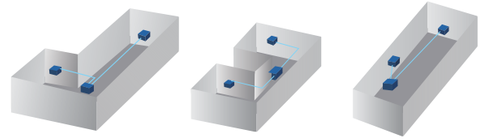
High ESP makes the air supply distance up to 50m.





Applicable To A Variety Of Room Types

Specific ESP design can be applied to various room types easily, like rooms of L type or U type; the air outlet can be set separately from the indoor unit, so the air flow can be equally distributed even the room is in irregular structure.



Room1: L Type Room2: U Type Room3: Narrow Type

Specification-50Hz AC fan motor

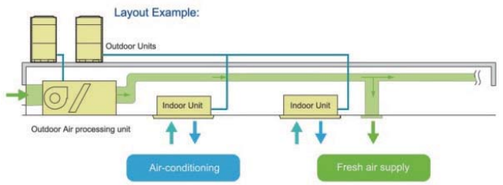
Model	Indoor		LVRF_DHS_112_1AC_1A	LVRF_DHS_125_1AC_1A	LVRF_DHS_140_1AC_1A	LVRF_DHS_150_1AC_1A	LVRF_DHS_220_1AC_1A	LVRF_DHS_280_1AC_1A	LVRF_DHS_450_3AC_1A	LVRF_DHS_560_3AC_1A
Capacity	Cooling	kW	11.2	12.5	14.0	15.0	22.4	28.0	45.0	56.0
	Heating	kW	12.8	13.3	15.0	16.0	25.0	31.5	49.5	61.5
Electric Data	Power Supply	V~,Hz,Ph	220~240,50,1	220~240,50,1	220~240,50,1	220~240,50,1	220~240,50,1	220~240,50,1	380~415,50,3	380~415,50,3
	Rated Power	W	600	600	600	600	1250	1250	2220	2220
Performance	Air Flow Volume(Hi/Mid/Low)	m^3/h	2000/1600/1400	2000/1600/1400	2000/1600/1400	2000/1600/1400	4000/3200/2600	4000/3200/2600	8000	8000
	Noise Level(Hi/Mid/Low)	dB(A)	60/57/51	60/57/51	60/57/51	60/57/51	55	55	63	63
	External Static Pressure(ESP)	Pa	196	196	196	196	220	220	200	200
Dimension (WxDxH)	Net	mm	1200×719×380	1200×719×380	1200×719×380	1200×719×380	1350×700×460	1350×700×460	2115×990×855	2115×990×855
	Packing	mm	1235×760×415	1235×760×415	1235×760×415	1235×760×415	1540×810×610	1540×810×610	2225×1025×1015	2225×1025×1015
Weight	Net/Gross	kg	56/59	56/59	56/59	56/59	91/110	91/110	225/260	225/260
Pipe Diameter	Liquid Side	mm(inch)	9.52(3/8)	9.52(3/8)	9.52(3/8)	9.52(3/8)	12.7(1/2)	12.7(1/2)	12.7(1/2)x2	12.7(1/2)x2
	Gas Side	mm(inch)	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)	22.2(7/8)	22.2(7/8)	22.2(7/8)x2	22.2(7/8)x2
	Drainage	mm	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN25	DN25	DN25	DN25
Stuffing Quantity	20/40/40H	unit	65/140/168	65/140/168	65/140/168	65/140/168	30/63/84	30/63/84	10/22/22	10/22/22

Notes:
1.Cooling Capacity: Indoor temperature 27°C DB/19°C WB; Outdoor temperature:35°C DB/ 24°C WB.
2.Heating Capacity: Indoor temperature 20°C DB; Outdoor temperature: 7°C DB/ 6°C WB.
3.Piping Length: Equivalent piping length: 7.5m, l evel difference: 0m.
4.Sound level is measured at 1.4m below the unit.
5.The above designs and specifications are subject to change without prior notice. Final specifications please refer to technical specification provided by sales representative.

Fresh Air Processor

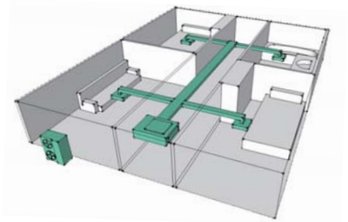
Innovative Air Supply Technology For Excellent Room Temperature Control

Fall all models, return air bellow and air filter are standard configuration.



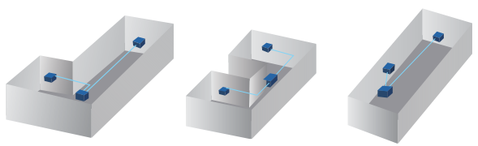
Long Distance Air Supply

High ESP makes the air supply distance up to 50m.



Applicable To A Variety Of Room Types

Specific ESP design can be applied to various room types easily, like rooms of L type or U type; the air outlet can be set separately from the indoor unit, so the air flow can be equally distributed even the room is in irregular structure.



Room1: L Type　Room2: U Type　Room3: Narrow Type

Specification-50Hz AC fan motor

Model	Indoor		LVRF_DFS_220_1AC_1A	LVRF_DFS_280_1AC_1A	LVRF_DFS_450_3AC_1A	LVRF_DFS_560_3AC_1A
Capacity	Cooling	kW	22.4	28.0	45.0	56.0
	Heating	kW	18.0	22.0	49.5	61.5
Electric Data	Power Supply	V~,Hz,Ph	220~240,50,1	220~240,50,1	380~415,50,3	380~415,50,3
	Rated Power	W	1000	1000	1520	1520
Performance	Air Flow Volume(Hi/Mid/Low)	m^3/h	3200	3200	4000	5000
	Noise Level(Hi/Mid/Low)	dB(A)	55	55	57	59
	External Static Pressure(ESP)	Pa	220	220	220	220
Dimension (WxDxH)	Net	mm	1350×700×460	1350×700×460	1820×990×855	2115×990×855
	Packing	mm	1540×810×610	1540×810×610	1935×1025×1015	2225×1025×1015
Weight	Net/Gross	kg	91/110	91/110	150/170	225/255
Pipe Diameter	Liquid Side	mm(inch)	12.7(1/2)	12.7(1/2)	12.7(1/2)x2	12.7(1/2)x2
	Gas Side	mm(inch)	22.2(7/8)	22.2(7/8)	22.2(7/8)x2	22.2(7/8)x2
	Drainage	mm	DN25	DN25	DN25	DN25
Stuffing Quantity	20/40/40H	unit	30/63/84	30/63/84	10/22/22	10/22/22

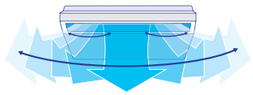
Notes:
1.Cooling Capacity: Outdoor temperature 35°C DB/24°C WB.
2.Heating Capacity: Outdoor temperature 7°C DB/6°C WB.
3.Piping Length: Equivalent piping length: 7.5m, level difference: 0m.
4.Sound level is measured at 1.4m below the unit.
5.The above design and specifications are subject to change without prior notice. Final specifications please refer to technical specification provided by sales representative.
Connection Conditions:
When only outdoor-air processing units are connected, the total capacity of the outdoor-air processing units must be within 50%~100% of the outdoor units.
When outdoor-air processing units and other type indoor units are connected, the total capacity of the outdoor-air processing units must not exceed 30% of the outdoor units.

Ceiling&Floor

Ceiling & Floor

4D Air Swing

Vertical and horizontal swing makes air below to every corner of the room.



Ultra Slim Design

The thickness is only 205mm, saving installation space.

Innovative Centrifugal Fan

All units are equipped with 3-speed fan mode, adjusting the air flow rate in accordance with the ceiling height. Innovative centrifugal fan provides larger air volume but lower noise, making the air supply more quietly and smoothly.

Flexible Installation

Can be vertically installed against the wall or horizontally installed under the ceiling.

Ceiling&Floor

Specification-50Hz AC fan motor

Model	Indoor		LVRF_CFS_045_1AC_1A	LVRF_CFS_056_1AC_1A	LVRF_CFS_071_1AC_1A	LVRF_CFS_080_1AC_1A
Capacity	Cooling/Heating	kW	4.5	5.6	7.1	8.0
		kW	5.0	6.0	8.0	10.0
Electric Data	Power Supply	V~,Hz,Ph	220~240,50,1	220~240,50,1	220~240,50,1	220~240,50,1
	Cooling/Heating Power Input	W	80	80	140	140
Performance	Air Flow Volume(Hi/Mid/Low)	m^3/h	950/760/665	950/760/665	1300/1040/910	1500/1200/1050
	Sound Power Noise Level	dB(A)	42/39/36	42/39/36	45/42/39	47/44/41
Dimension (W×D×H)	Net	mm	929×660×205	929×660×205	1280×660×205	1280×660×205
	Packing	mm	1010×720×290	1010×720×290	1360×720×290	1360×720×290
Weight	Net/Gross	kg	26/29	26/29	35/39	35/39
Pipe Diameter	Liquid Side	mm(inch)	6.35(1/4)	6.35(1/4)	9.52(3/8)	9.52(3/8)
	Gas Side	mm(inch)	12.7(1/2)	12.7(1/2)	15.88(5/8)	15.88(5/8)
	Drainage	mm(inch)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)
Stuffing Quantity	20/40/40H	unit	136/280/315	136/280/315	96/200/225	96/200/225

Specification-50Hz AC fan motor

Model	Indoor		LVRF_CFS_090_1AC_1A	LVRF_CFS_100_1AC_1A	LVRF_CFS_112_1AC_1A	LVRF_CFS_125_1AC_1A	LVRF_CFS_140_1AC_1A
Capacity	Cooling/Heating	kW	9.0	10.0	11.2	12.5	14.0
		kW	11.0	12.0	12.8	13.3	15.0
Electric Data	Power Supply	V~,Hz,Ph	220~240,50,1	220~240,50,1	220~240,50,1	220~240,50,1	220~240,50,1
	Cooling/Heating Power Input	W	140	140	210	210	210
Performance	Air Flow Volume(Hi/Mid/Low)	m^3/h	1500/1200/1050	1500/1200/1050	1800/1440/1260	1800/1440/1260	1800/1440/1260
	Sound Power Noise Level	dB(A)	47/44/41	47/44/41	48/45/42	48/45/42	48/45/42
Dimension (W×D×H)	Net	mm	1280×660×205	1280×660×205	1631×660×205	1631×660×205	1631×660×205
	Packing	mm	1360×720×290	1360×720×290	1710×720×290	1710×720×290	1710×720×290
Weight	Net/Gross	kg	35/39	35/39	45/51	45/51	45/51
Pipe Diameter	Liquid Side	mm(inch)	9.52(3/8)	9.52(3/8)	9.52(3/8)	9.52(3/8)	9.52(3/8)
	Gas Side	mm(inch)	15.88(5/8)	15.88(5/8)	15.88(5/8)	15.88(5/8)	15.88(5/8)
	Drainage	mm(inch)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)
Stuffing Quantity	20/40/40H	unit	96/200/225	96/200/225	80/168/189	80/168/189	80/168/189

Notes:
1.Cooling Capacity: Indoor temperature 27°C DB/19°C WB; Outdoor temperature:35°C DB/24°C WB.
2.Heating Capacity:Indoor temperature 20°C DB;Outdoor temperature:7°C DB/6°C WB.
3.Piping Length:Equivalent piping length: 7.5m ,level difference: 0m.
4.Floor standing:Sound level is measured 1m from air-outlet in horizontal distance, 1m above the floor in vertical distance.
5.Ceiling mounted: Sound level is measured 1m from air-outlet in horizontal distance,1m from air-outlet in vertical distance.
6.The above designs and specifications are subject to change without prior notice. Final specifications please refer to technical specification provided by sales representative.

Ceiling&Floor

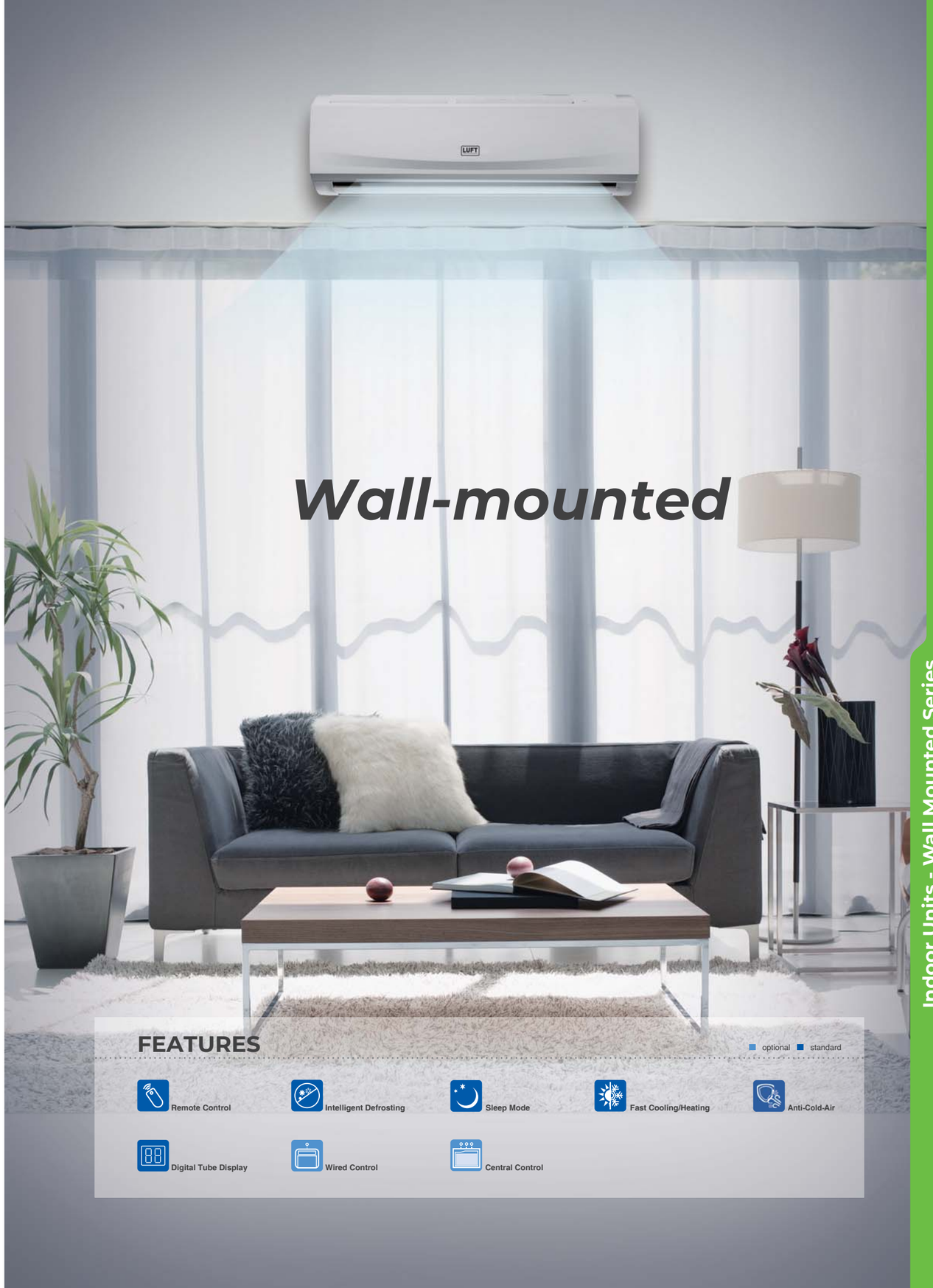
Specification-50Hz AC fan motor

Model	Indoor		LVRF_CFS_045_2AC_1A	LVRF_CFS_056_2AC_1A	LVRF_CFS_071_2AC_1A	LVRF_CFS_080_2AC_1A
Capacity	Cooling/Heating	kW	4.5	5.6	7.1	8.0
		kW	5.0	6.0	8.0	10.0
Electric Data	Power Supply	V~,Hz,Ph	220~240,60,1	220~240,60,1	220~240,60,1	220~240,60,1
	Cooling/Heating Power Input	W	96	96	168	168
Performance	Air Flow Volume(Hi/Mid/Low)	m^3/h	950/760/665	950/760/665	1300/1040/910	1500/1200/1050
	Sound Power Noise Level	dB(A)	42/39/36	42/39/36	45/42/39	47/44/41
Dimension (W×D×H)	Net	mm	929×660×205	929×660×205	1280×660×205	1280×660×205
	Packing	mm	1010×720×290	1010×720×290	1360×720×290	1360×720×290
Weight	Net/Gross	kg	26/29	26/29	35/39	35/39
Pipe Diameter	Liquid Side	mm(inch)	6.35(1/4)	6.35(1/4)	9.52(3/8)	9.52(3/8)
	Gas Side	mm(inch)	12.7(1/2)	12.7(1/2)	15.88(5/8)	15.88(5/8)
	Drainage	mm(inch)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)
Stuffing Quantity	20/40/40H	unit	136/280/315	136/280/315	96/200/225	96/200/225

Specification-50Hz AC fan motor

Model	Indoor		LVRF_CFS_090_2AC_1A	LVRF_CFS_100_2AC_1A	LVRF_CFS_112_2AC_1A	LVRF_CFS_125_2AC_1A	LVRF_CFS_140_2AC_1A
Capacity	Cooling/Heating	kW	9.0	10.0	11.2	12.5	14.0
		kW	11.0	12.0	12.8	13.3	15.0
Electric Data	Power Supply	V~,Hz,Ph	220~240,60,1	220~240,60,1	220~240,60,1	220~240,60,1	220~240,60,1
	Cooling/Heating Power Input	W	168	168	252	252	252
Performance	Air Flow Volume(Hi/Mid/Low)	m^3/h	1500/1200/1050	1500/1200/1050	1800/1440/1260	1800/1440/1260	1800/1440/1260
	Sound Power Noise Level	dB(A)	47/44/41	47/44/41	48/45/42	48/45/42	48/45/42
Dimension (W×D×H)	Net	mm	1280×660×205	1280×660×205	1631×660×205	1631×660×205	1631×660×205
	Packing	mm	1360×720×290	1360×720×290	1710×720×290	1710×720×290	1710×720×290
Weight	Net/Gross	kg	35/39	35/39	45/51	45/51	45/51
Pipe Diameter	Liquid Side	mm(inch)	9.52(3/8)	9.52(3/8)	9.52(3/8)	9.52(3/8)	9.52(3/8)
	Gas Side	mm(inch)	15.88(5/8)	15.88(5/8)	15.88(5/8)	15.88(5/8)	15.88(5/8)
	Drainage	mm(inch)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)
Stuffing Quantity	20/40/40H	unit	96/200/225	96/200/225	80/168/189	80/168/189	80/168/189

Notes:
1.Cooling Capacity: Indoor temperature 27°C DB/19°C WB; Outdoor temperature:35°C DB/24°C WB.
2.Heating Capacity:Indoor temperature 20°C DB;Outdoor temperature:7°C DB/6°C WB.
3.Piping Length:Equivalent piping length: 7.5m ,level difference: 0m.
4.Floor standing:Sound level is measured 1m from air-outlet in horizontal distance, 1m above the floor in vertical distance.
5.Ceiling mounted: Sound level is measured 1m from air-outlet in horizontal distance,1m from air-outlet in vertical distance.
6.The above designs and specifications are subject to change without prior notice. Final specifications please refer to technical specification provided by sales representative.



Wall-mounted

A Variety Of Panels

A variety of panels can be chosen

Wired Control

Remote controller is standard, and wired controller is optional. Wired controller can be fixed on the wall to avoid mislaying. It's mainly used for commercial zone and makes air conditioner control more convenient.

2 Ways Draining Connection

Both left and right sides of unit are possible for drainage pipe connection, easy for installation.

Convenient Installation

EXV is built-in the indoor unit,compact size.Adopts new type fixing plate,stable and easy to install.

Fan Motor Options

Choose either AC or DC fan motors.

Wall-mounted

Specification-DC fan motor

Model	Indoor		LVRF_HWS_022_4DC_1A	LVRF_HWS_028_4DC_1A	LVRF_HWS_036_4DC_1A	LVRF_HWS_045_4DC_1A	LVRF_HWS_056_4DC_1A	LVRF_HWS_071_4DC_1A
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1
	Heating	kW	2.5	3.0	4.3	5.0	6.0	8.0
Electric Data	Power Supply	V~,Hz,Ph	220~240,50/60,1	220~240,50/60,1	220~240,50/60,1	220~240,50/60,1	220~240,50/60,1	220~240,50/60,1
	Rated Power	W	14	14	14	25	25	35
Performance	Air Flow Volume(Hi/Mid/Low)	m^3/h	650/600/580	650/600/580	650/600/580	850/750/650	850/750/650	1200/950/800
	Noise Level(Hi/Mid/Low)	dB(A)	38/33/27	38/33/27	38/33/27	45/41/35	45/41/35	48/45/39
Dimension (WxDxH)	Net	mm	850×300×198	850×300×198	850×300×198	970×315×235	970×315×235	1100×330×235
	Packing	mm	905×357×267	905×357×267	905×357×267	1010*370*300	1010*370*300	1140*385*300
Weight	Net/Gross	kg	10/13	10/13	10/13	14/18	14/18	16/20
Pipe Diameter	Liquid Side	mm(inch)	6.35(1/4)	6.35(1/4)	6.35(1/4)	6.35(1/4)	6.35(1/4)	9.52(3/8)
	Gas Side	mm(inch)	9.52(3/8)	9.52(3/8)	9.52(3/8)	12.7(1/2)	12.7(1/2)	15.88(5/8)
	Drainage	mm(inch)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)
Stuffing Quantity	20/40/40H	unit	328/680/850	328/680/850	328/680/850	238/490/560	238/490/560	210/434/496

Specification-50Hz AC fan motor

Model	Indoor		LVRF_HWS_022_1AC_1A	LVRF_HWS_028_1AC_1A	LVRF_HWS_036_1AC_1A	LVRF_HWS_045_1AC_1A	LVRF_HWS_056_1AC_1A	LVRF_HWS_071_1AC_1A
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1
	Heating	kW	2.5	3.0	4.3	5.0	6.0	8.0
Electric Data	Power Supply	V~,Hz,Ph	220~240,50,1	220~240,50,1	220~240,50,1	220~240,50,1	220~240,50,1	220~240,50,1
	Rated Power	W	38	38	38	68	68	82
Performance	Air Flow Volume(Hi/Mid/Low)	m^3/h	650/600/580	650/600/580	650/600/580	850/750/650	850/750/650	1200/950/800
	Noise Level(Hi/Mid/Low)	dB(A)	38/33/27	38/33/27	38/33/27	45/41/35	45/41/35	48/45/39
Dimension (WxDxH)	Net	mm	850×300×198	850×300×198	850×300×198	970×315×235	970×315×235	1100×330×235
	Packing	mm	905×357×267	905×357×267	905×357×267	1010*370*300	1010*370*300	1140*385*300
Weight	Net/Gross	kg	10/13	10/13	10/13	14/18	14/18	16/20
Pipe Diameter	Liquid Side	mm(inch)	6.35(1/4)	6.35(1/4)	6.35(1/4)	6.35(1/4)	6.35(1/4)	9.52(3/8)
	Gas Side	mm(inch)	9.52(3/8)	9.52(3/8)	9.52(3/8)	12.7(1/2)	12.7(1/2)	15.88(5/8)
	Drainage	mm(inch)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)
Stuffing Quantity	20/40/40H	unit	328/680/850	328/680/850	328/680/850	238/490/560	238/490/560	210/434/496

Specification-60Hz AC fan motor

Model	Indoor		LVRF_HWS_022_2AC_1A	LVRF_HWS_028_2AC_1A	LVRF_HWS_036_2AC_1A	LVRF_HWS_045_2AC_1A	LVRF_HWS_056_2AC_1A	LVRF_HWS_071_2AC_1A
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1
	Heating	kW	2.5	3.0	4.3	5.0	6.0	8.0
Electric Data	Power Supply	V~,Hz,Ph	220~240,60,1	220~240,60,1	220~240,60,1	220~240,60,1	220~240,60,1	220~240,60,1
	Rated Power	W	39	39	39	88	88	88
Performance	Air Flow Volume(Hi/Mid/Low)	m^3/h	650/600/580	650/600/580	650/600/580	850/750/650	850/750/650	1200/950/800
	Noise Level(Hi/Mid/Low)	dB(A)	38/33/27	38/33/27	38/33/27	45/41/35	45/41/35	48/45/39
Dimension (WxDxH)	Net	mm	850×300×198	850×300×198	850×300×198	970×315×235	970×315×235	1100×330×235
	Packing	mm	905×357×267	905×357×267	905×357×267	1010*370*300	1010*370*300	1140*385*300
Weight	Net/Gross	kg	10/13	10/13	10/13	14/18	14/18	16/20
Pipe Diameter	Liquid Side	mm(inch)	6.35(1/4)	6.35(1/4)	6.35(1/4)	6.35(1/4)	6.35(1/4)	9.52(3/8)
	Gas Side	mm(inch)	9.52(3/8)	9.52(3/8)	9.52(3/8)	12.7(1/2)	12.7(1/2)	15.88(5/8)
	Drainage	mm(inch)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)
Stuffing Quantity	20/40/40H	unit	328/680/850	328/680/850	328/680/850	238/490/560	238/490/560	210/434/496

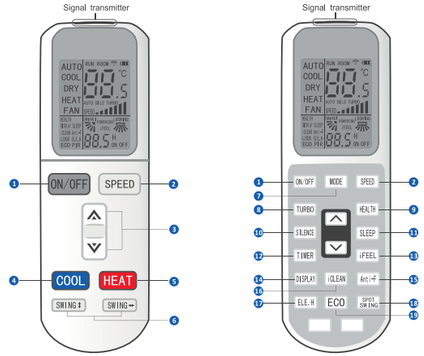
Notes:
1.Cooling Capacity: Indoor temperature 27°C DB/19°C WB;Outdoor temperature:35°C DB/24°C WB.
2.Heating Capacity:Indoor temperature 20°C DB;Outdoor temperature:7°C DB/6°C WB.
3.Piping Length:Equivalent piping length: 7.5m,l evel difference: 0m.
4.Sound level is measured 1m below the air outlet horizontally and vertically.
5.The above designs and specifications are subject to change without prior notice. Final specifications please refer to technical specification provided by sales representative.

Indoor Units - Wall Mounted Series

Control System

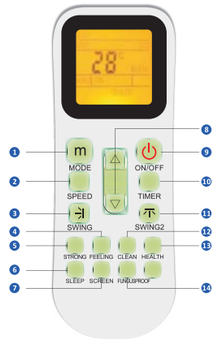
Remote Controller

LVRF_YK-L



1. ON/OFF
2. Fan Speed Setting HIGH/MED/LOW/AUTO
3. Temperature-Setting /Timer Range Setting
4. Cooling Mode
5. Heating Mode
6. Vertical Swing/Horizontal Swing
7. Mode Setting AUTO/COOL/DRY/HEAT/FAN
8. Turbo Wind
9. Health Function
10. Silence Function
11. Sleep Function
12. Timer On/Off
13. I Feel Function
14. LED Display On/Off
15. Anti-fungus Function
16. Clean Function
17. Auxiliary Electric Heating
18. Spot Swing
19. Economic Function

LVRF_YK-K



1. Mode Setting AUTO/COOL/DRY/HEAT/FAN
2. Fan Speed Setting HIGH/MED/LOW/AUTO
3. Vertical Swing
4. Feeling Function
5. Strong Wind
6. Sleep Function
7. LED Display On/Off
8. Temperature-Setting /Timer Range Setting
9. ON/OFF
10. Timer On/Off
11. Horizontal Swing
12. Clean Function
13. Health Function
14. Fungusproof Function

***YK-L -for commissioning**

Function

1. Background light

The background light allows users to operate the device in a dark room. The device lights up when a button is pressed, and turns off when a given operation is completed.

2. Setting addresses

Besides the machine's auto addressing function, users can set the indoor unit's address on the remote controller YK-L.

Specifications

Model	LVRF_YK-L 	LVRF_YK-K 
Dimesion (WxHxD) (mm)	52x160x25(max)	50x140x28.5(max)
Power(V)	3V(1.5V×2)	3V(1.5V×2)

Control System

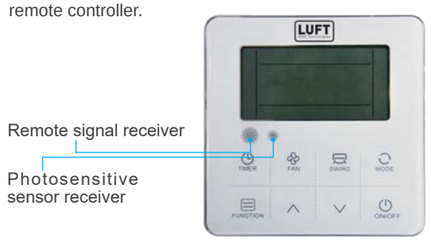
Wired Controller

LVRF_XK-05A

Features

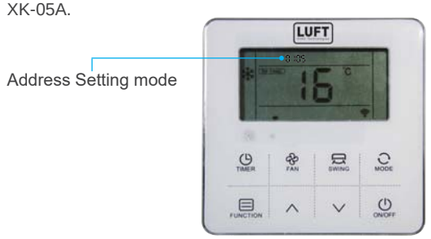
Built-In Remote Signal Receiver

A signal receiver is built-in the remote controller. Signal from remote controller can be received by wired controller, so the system status could be adjusted using a remote controller.



Addresses Setting

The address setting function is coupled with easy installation and simple future maintenance. Service personnel can set the address for the indoor unit using XK-05A.

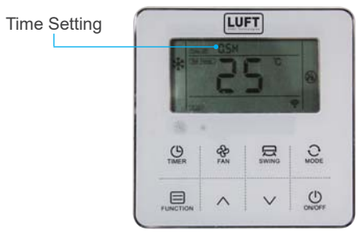


Follow Me

With the follow me function, the indoor unit responds to the temperature measured by the temperature sensor built-in the wired controller, rather temperature sensor in the indoor unit itself, so the temperature is measured closer to the user, rather than at the ceiling or floor height.

Built-in Timer

The built-in daily timer allows the systems automatically start and stop according to user-defined time setting.



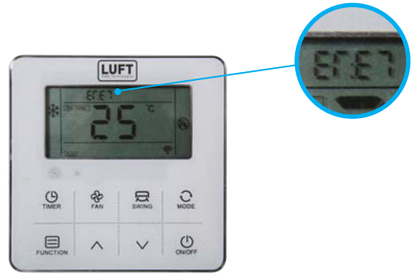
Indoor unit set to stop in 0.5 hours.

User-Friendly & Elegant Design

The XK-05A is a hidden-mode controller specially designed for hotels, hospitals,schools,offices.
Fitted with a background light as standard, easy to use in the dark night.

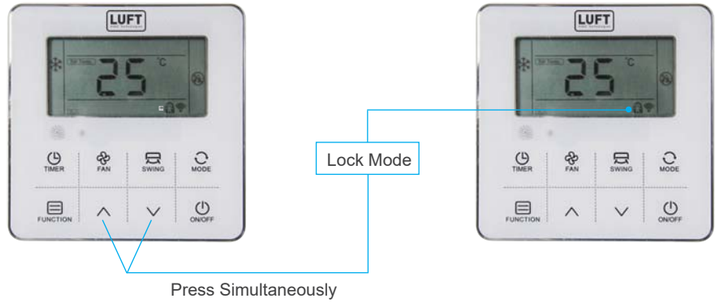
Error Reporting

If there is a malfunction, error codes are displayed in the temperature setting area of the controller's display screen.



Keyboard Locking

The locking function cloud prevent other people changing the setting state at will in public places.



Features

Specifications

Model	LVRF_XK-05A 
Dimesion (WxHxD) (mm)	120×120×18
Power Supply(V)	DC 12V by IDU

Centralized Controllers and monitors

Touch Screen Centralized Control

LUFT touch screen centralized controller is a multifunctional device that can control up to 256 indoor units within a maximum connection length of 1200meters.Users could enjoy the flexibility of either controlling multiple units as a group or controlling each unit individually.

Multi-system Control

256 indoor units with no repeated address from different outdoor systems could be centralized controlled together. this greatly reduces system limitations.

Multiple Lock function

The new centralized controller could not only lock their own keyboards, it could also enable the users lock each unit's setting mode or remote controller.

Weekly Schedule Control

The CC-02 centralized controller's weekly schedule timer function allows users to set up to four scheduled periods per day ,each with its own operation mode and temperature setting.

Indoor Units Operation Status Display

Error and protection codes are shown directly on centralized controller's displays, no need to access outdoor unit's PCBs to obtain codes .The building management professionals could inquire a wide range of historical error and protection codes to get the system status information before contacting a service engineer.

Flexible Wiring

The centralized controllers could be connected directly to the master outdoor unit or any indoor unit of each system .so it significantly simply wiring configuration.

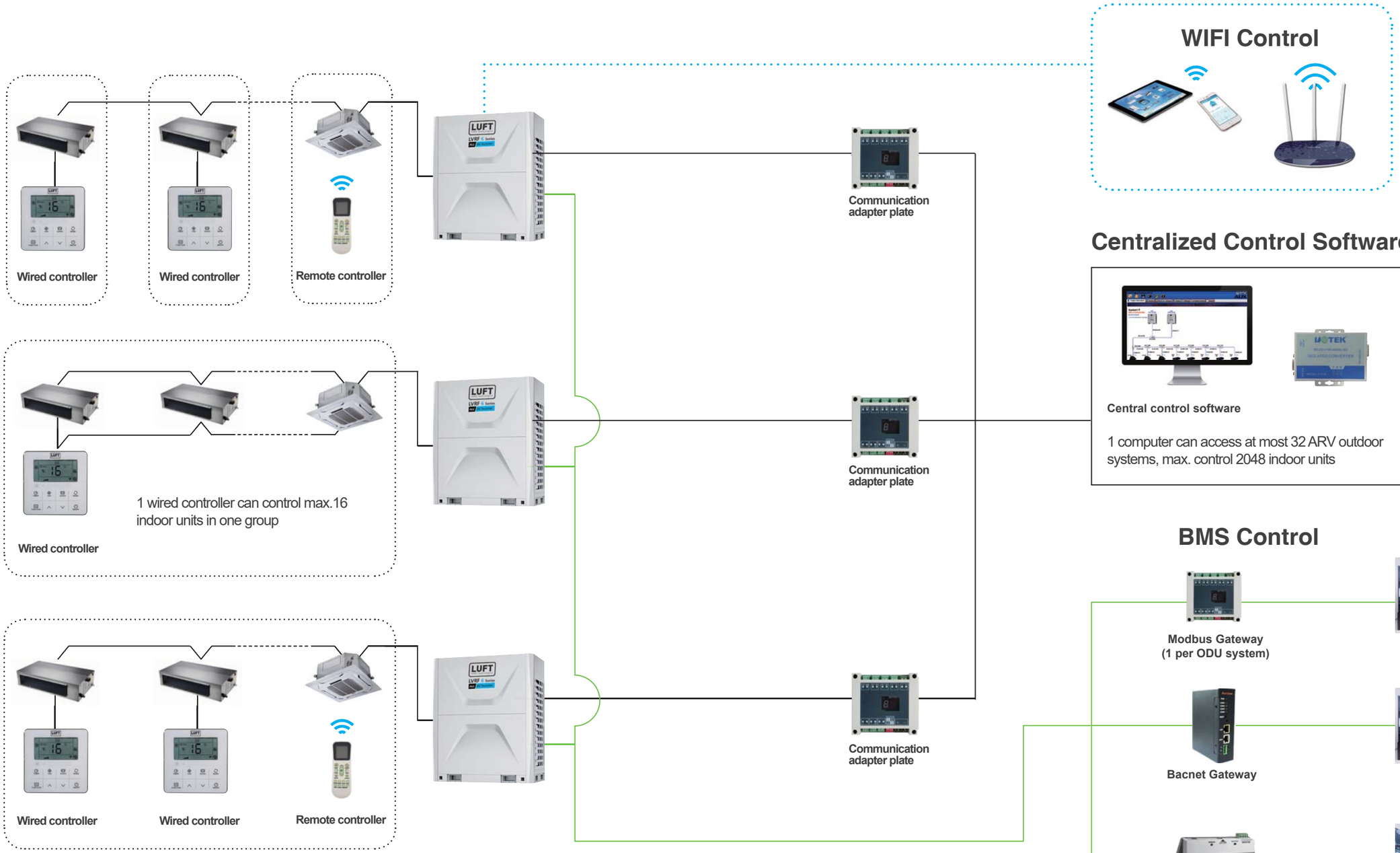
CC02

1 touch screen centralized controller can control up to 256 indoor units.

Specifications

Model	LVRF_CC-02 
Dimension(W×H×D) (mm)	176x116x12 (Outside the wall) 120x60x25 (Inside the wall)
Power supply	AC 180-240V (50/60Hz)

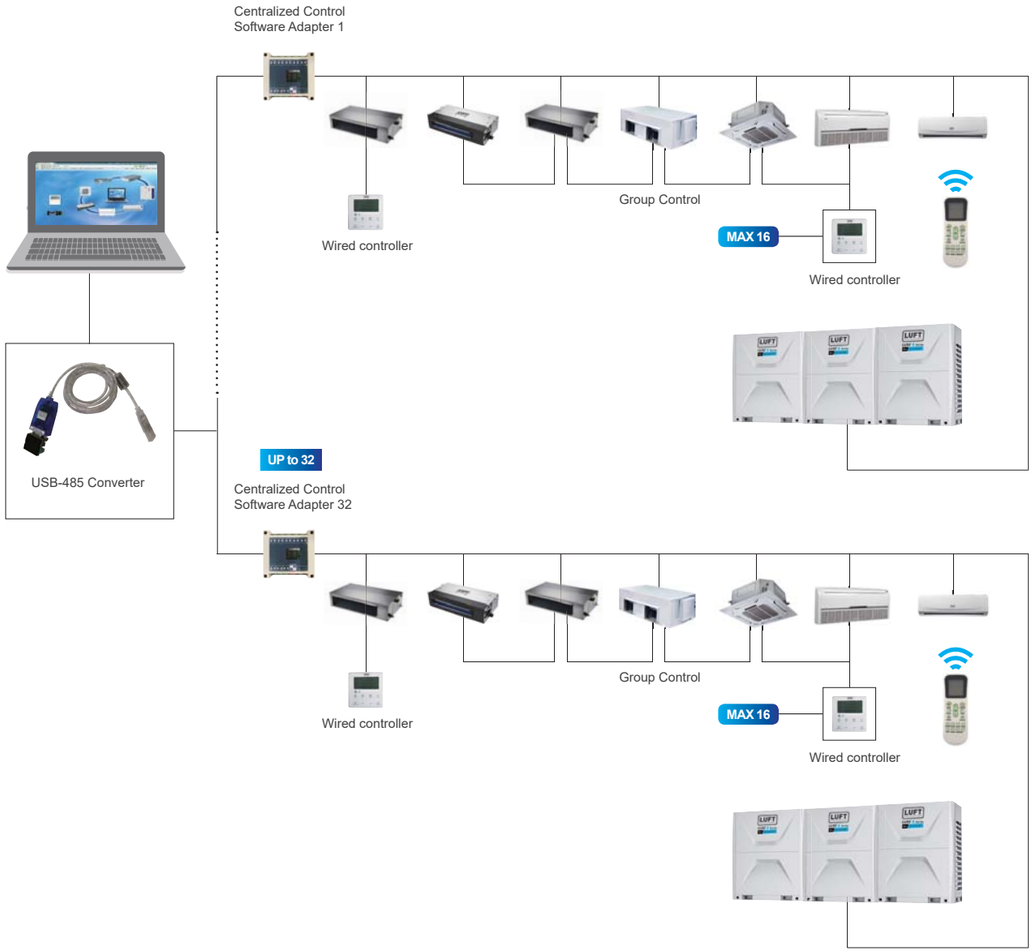
Network Control Software



Control System

Centralized Control Software

System Overview



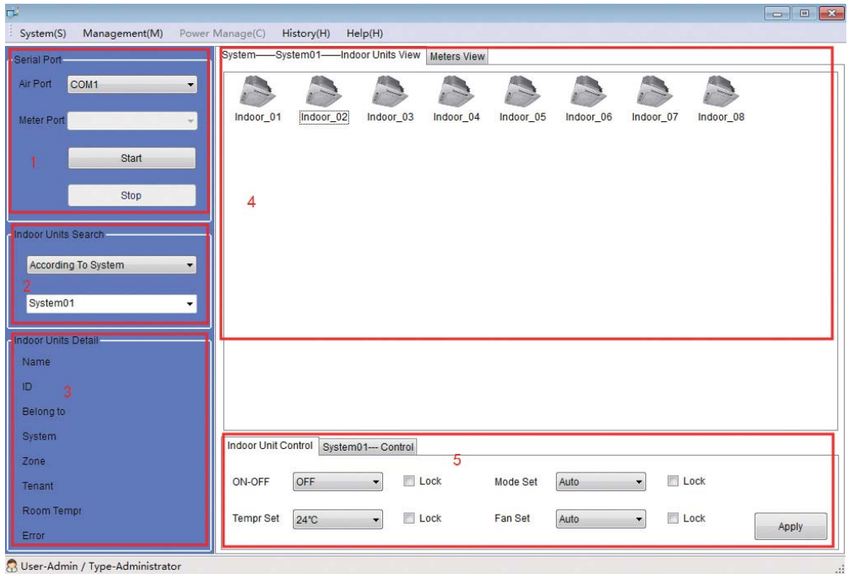
System Overview

Users do not need to go to the harsh environment of the site, they can monitor the function of units just through computer. This greatly improves convenience of daily management and the efficiency of central air conditioners;
Timely find the fault and save the maintenance cost of air conditioner units, minimize losses ;
Timer function with multi-period week, fully automated schedule planning of unit;
Each LVRF system could connect at most 64 indoor units;
This system can access at most 32 LVRF outdoor systems, it need to access repeater to increase RS485 network equipment if the outdoor systems are more than 30.

Main Components Of Centralized Control System

No	Main Components	Requirement & Function
1	Host Computer 	Operation system:Windows XP SP2 and above, Windows 7
2	Communications adapter plate 	Computer and communication protocol and unit end communication protocol are incompatible with each other, must add communication adapter plate to make both communicate. Each LVRF system matches 1 adapter plate.
3	RS-232 to RS-485/422 converter 	The centralized control system RS485 network signal conversion for RS232 serial signal to achieve the interconnection of computers with centralized control system.
	USB to RS-485/422 converter 	The centralized control system RS485 network signal conversion for USB to achieve the interconnection of laptops with centralized control system.
4	RS-485/422 Repeater 	Extend the communication distance and increase the number of RS-485 bus network. The repeater is not required, only when there is more than 30 systems or communication distance is more than 800 meters.

Software Introduction Main Interface



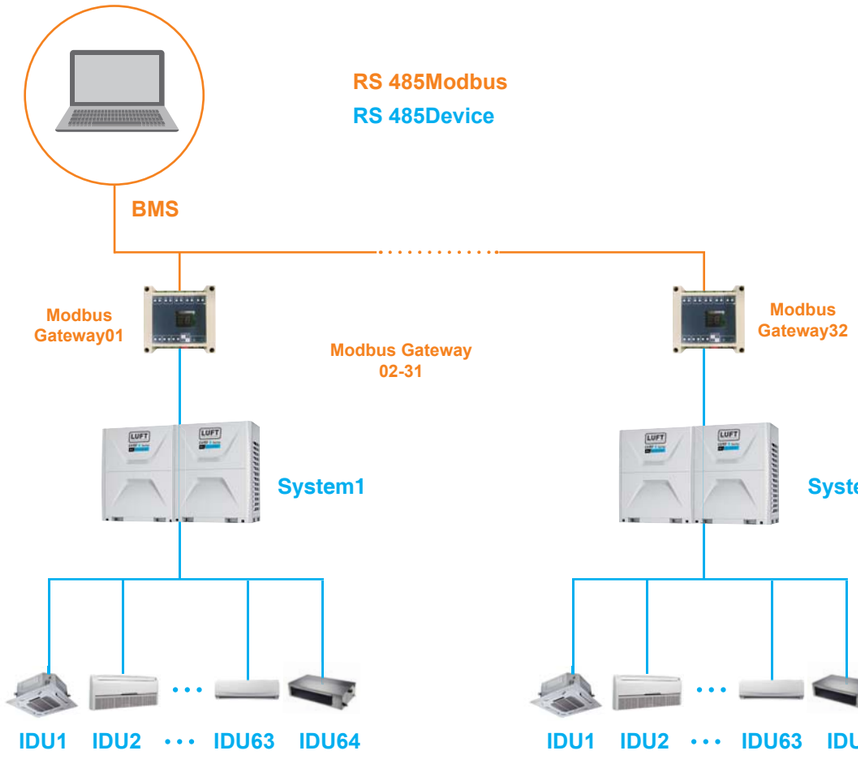
Area 1 -- Serial setting area, choose the serial and press “Start Working button, system will in operation, press “Stop Working” button, system will stop working;
Area 2 -- The inquire area for air conditioner unit, it can be divided into the system inquire and user-defined group inquire, the inquired unit will be displayed in area 4.
Area 3 -- Display area of single air conditioner indoor unit, select one of indoor units in area 4, then the area will display the name, ID (address of indoor unit) , system belonged ,group belonged, current condition, the room temperature of indoor unit , failure etc.
Area 4 -- Display area of air conditioner group, as shown in above picture, it displayed all the indoor units in the group System01.
Area 5 -- Control area of air conditioner, it can control one single air conditioner and some air conditioner group, this will be described in detail later.

Control System

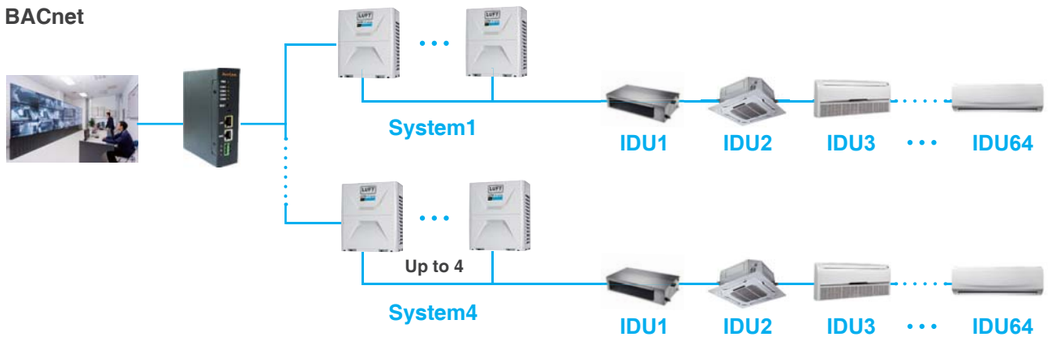
BMS System

Overall Structure

Modbus

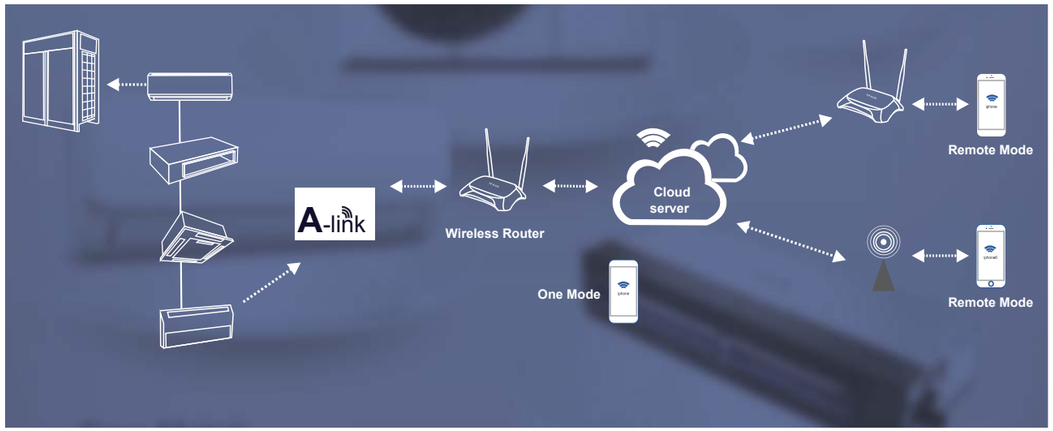


BACnet



Wireless Network Control

Schematic Diagram



Features

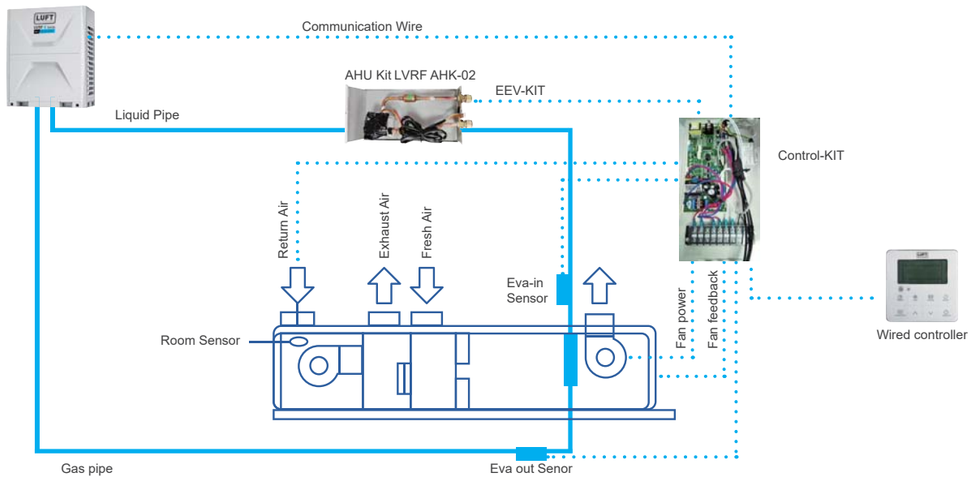
1. LUFT air conditioner can connect to intelligent terminal through WIFI or GPRS network,customers can enjoy fun and convenience of remote control the AC via iphone, ipad and other mobile terminals(Android and IOS) at anytime and anywhere.
2. The function of software on Mobile terminal includes mode control,temperature control, swing control, timing control.
3. Customers can set schedule to plan their day, also the scene mode can be set conveniently.

Accessories-AHU Kit

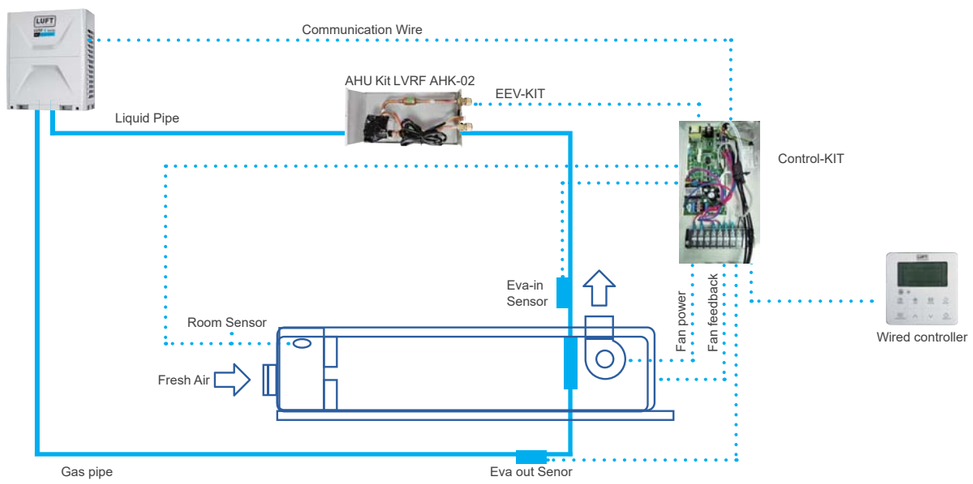
LVRF_AHK-01	LVRF_AHK-02
	

Overall Structure

Partial fresh air system

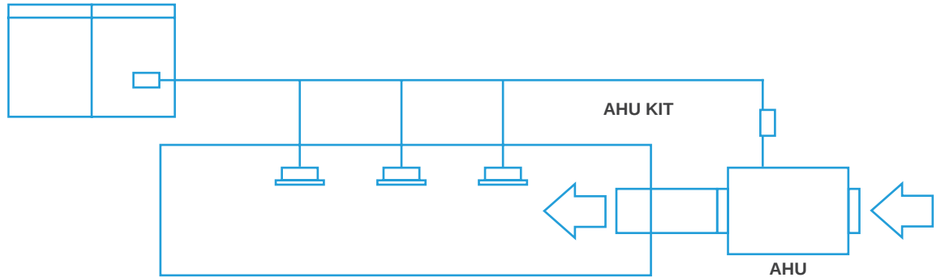


All fresh air system

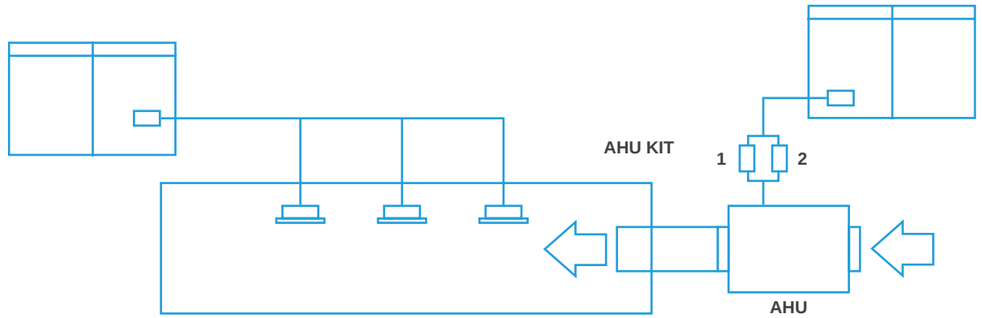


Structure Diagram

Mixed connected with other indoor units



Mixed connected with other indoor units



Specifications

AHU Kit Mode	Allowed heat exchanger capacity	Power(V~,Hz,Ph)	Air Flow Volume (m^3/h)		Weight(kg)		Dimension(W×D×H)(mm)
			Min	Max	Net	Gross	Packing
LVRF_AHK-01	≤10HP	220~240,50,1	2500	5000	5.7	7.2	450×430×160
LVRF_AHK-02	≤20HP	220~240,50,1	5000	9000	6	7.5	450×430×160

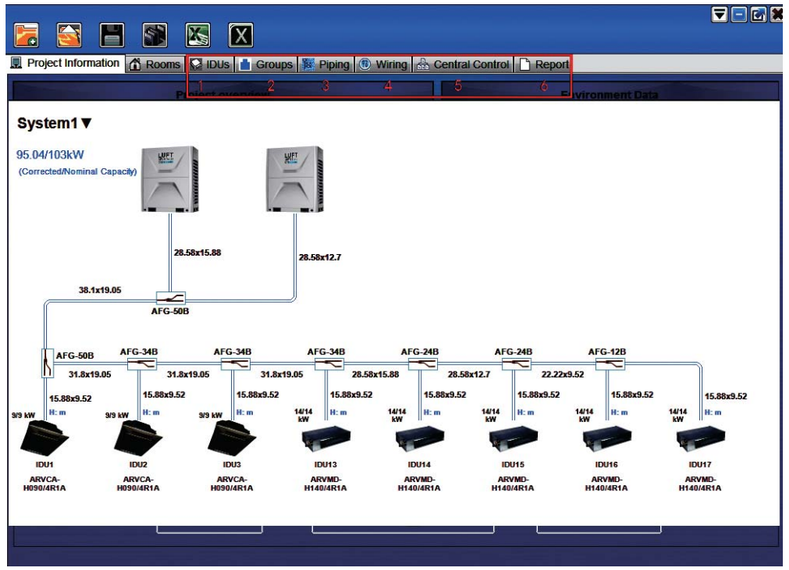
Accessories-Selection Software

To meet the customers' requirements, LUFT has developed the advanced selection software. The software provides quick and convenient selectable options for users, supports multiple languages, greatly improves the selection and installation process.

6 Parts Of The LVRF Selection

No	Steps	Instruction
1	Selecting indoor units	Selecting indoor unit for project according the capacity, air flow volume and room information.
2	Selecting outdoor units	Automatic selection suitable outdoor unit for project according to the capacity of indoor units,the capacity ratio between indoor and outdoor unit, and the temperature of indoor and outdoor unit.
3	Drawing piping diagram	Every outdoor system can draw corresponding piping diagram. The system will auto select branch pipe,gas pipe and liquid pipe according to selected indoor and outdoor unit. The pipe length can be input according to the project diagram if the project need. Ability compensation also can be displayed for the software.
4	Drawing wiring diagram	Every outdoor system can draw wiring diagram. The wiring length can be input according to the project diagram if the project need. Wring includes: power cable, signal cable and so on. Remote controller and wired controller can be chosen according to the customer's demands.
5	Selecting BMS or Centralized Controller	The software can be used to select either BMS or centralized controller and draw connecting wiring diagram.
6	Output the report	The report can be output in 3 kinds of forms, PDF, word and CAD.

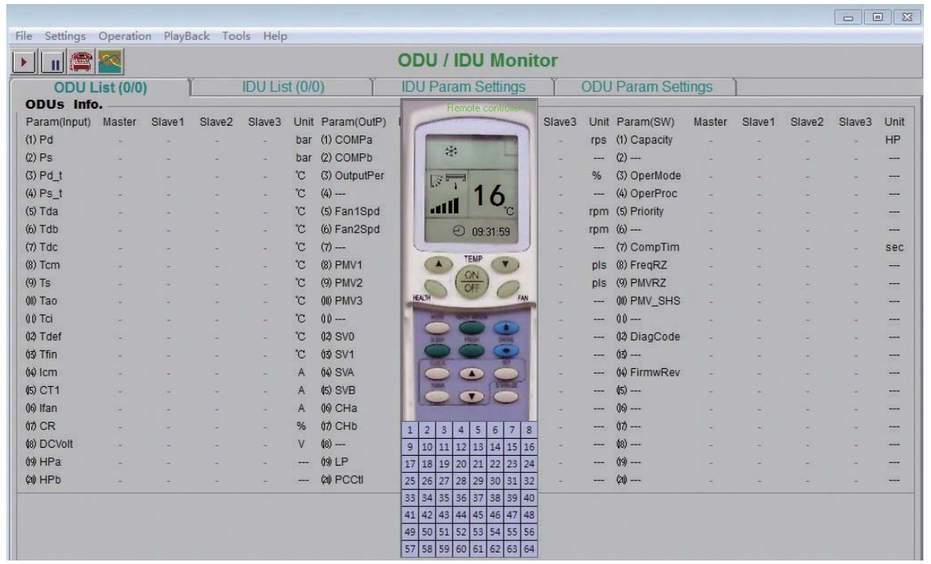
The Result As Below



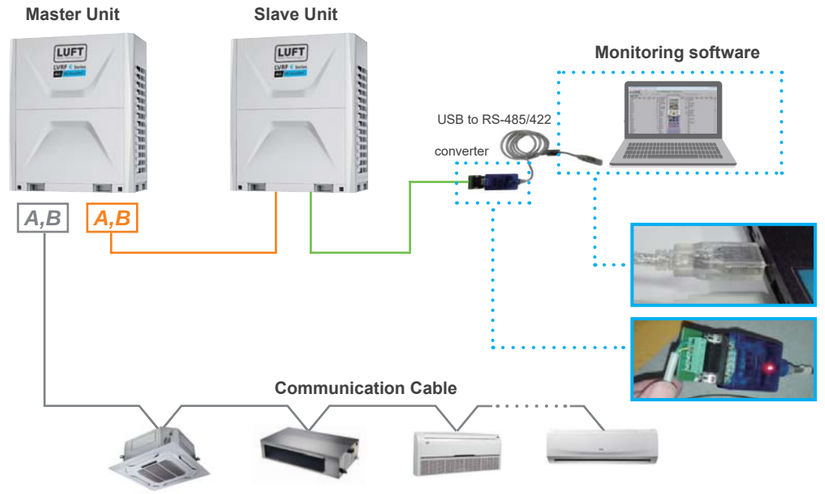
Accessories-Monitoring Software

Self-diagnosis software can be used as remote controller, it is recommended for commissioning. It can monitor the running state of the outdoor and indoor units real time. And display the malfunctions, be convenient to do the commissioning and trouble-shooting work.

Monitoring Software (LVRF6)



Installation Diagram



Control System

LHRV-Heat Recovery Ventilator

Nomenclature

L HRV - 00 / 4

- 4 — Power Supply:
  1:220-240V , 1Ph, 50Hz
  3:380-415V , 3Ph,50Hz
- 00 — Air Flow Volum(m^3/h)
- HRV — Heat Recovery Ventilator
- L — LHRV

FEATURES

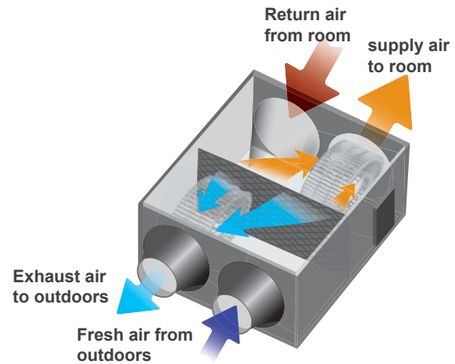
optional standard

- Remote Control
- Intelligent Defrosting
- Sleep Mode
- Fast Cooling/Heating
- Anti-Cold-Air
- Fresh Air Intake
- Wired Control
- Central Control

LHRV-Heat Recovery Ventilator

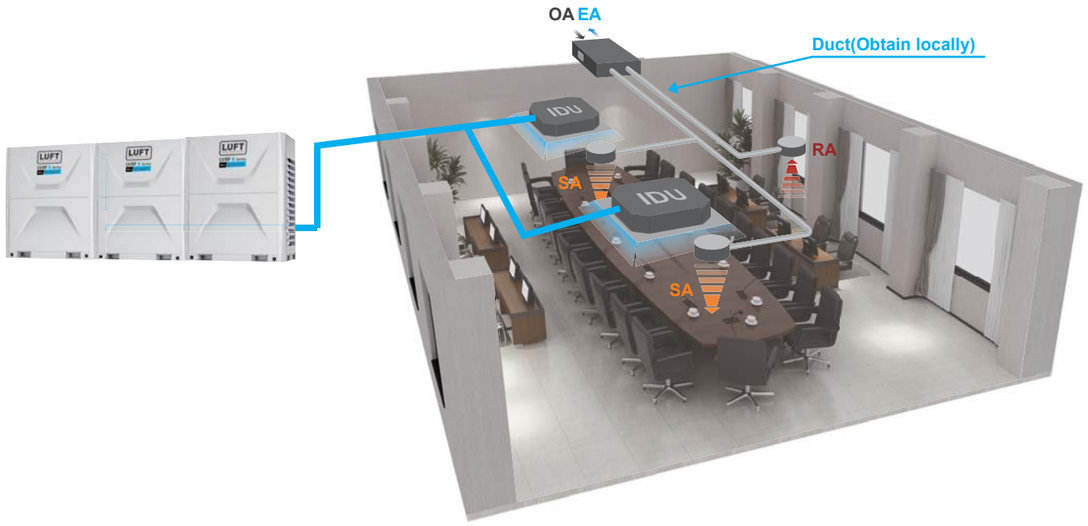
Adopt Centrifugal Fan With Lower Power Consumption And Longer Air Supply Distance; Easy Control, Friendly Operation.

All units are equipped with 3-speed fan mode, adjusting the air flow rate in accordance with the ceiling height. Innovative centrifugal fan provides larger air volume but lower noise, making the air supply more quietly and smoothly.



Different Modes For Your Choice

Exhausting mode (Hi/Mid/Low fan speed can be chosen)
Air supply mode (Hi/Mid/Low fan speed can be chosen)
By pass mode (Hi/Mid/Low fan speed can be chosen)
In this mode, there is no heat exchanging happened, which is more energy saving.
For example:
If outdoor temperature is lower than indoor, we don't need heat exchanging, but we need fresh air. We can choose by pass mode.
Remark: this mode is only available for LHRV-200~1000.
Heat exchanging mode (Hi/Mid/Low fan speed can be chosen)
In this mode, supply air flow=exhaust air flow.
Auto mode
In this mode, the unit will run at heat exchange mode or by pass mode judged by outdoor temperature and indoor temperature with low speed air flow.



LHRV

LHRV

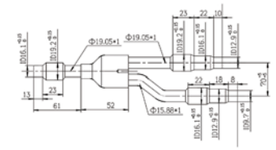
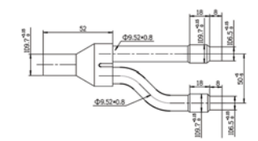
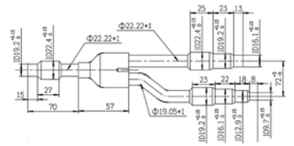
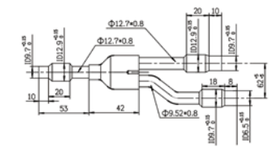
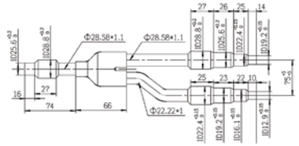
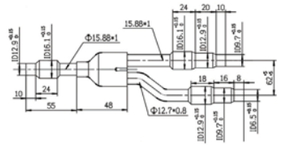
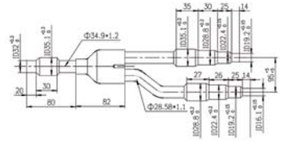
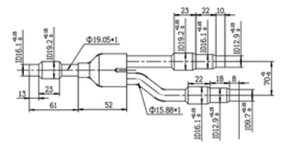
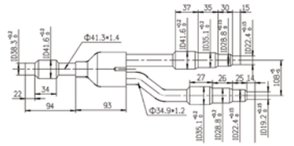
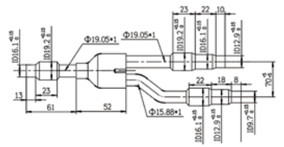
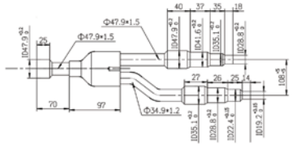
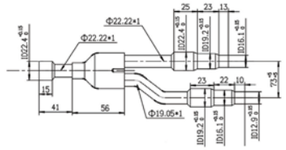
Specification-HRV

Model			LHRV_200_1	LHRV_300_1	LHRV_400_1	LHRV_500_1	LHRV_600_1	LHRV_800_1	LHRV_1000_1
Volume		m^3/h	200	300	400	500	600	800	1000
		CFM	118	176	235	294	353	471	588
External static pressure		Pa	75	75	100	110	110	120	120
Electric Data	Power Supply	V~,Hz,Ph	220~240,50,1	220~240,50,1	220~240,50,1	220~240,50,1	220~240,50,1	220~240,50,1	220~240,50,1
	Power Input	W	65	130	200	220	220	410	510
Cooling	Temp. Efficiency	%	62	63	61	60	63	63	62
	Enthalpy Efficiency	%	56	56	56	54	55	54	52
Heating	Temp. Efficiency	%	72	71.5	71	70	72	71	71
	Enthalpy Efficiency	%	58	56	56	56	62	62	62
Noise Level		dB(A)	34	34.8	36	36	37.5	38.5	41.5
Net Dimension(WxDxH)		mm	660x580x264	744x599x270	744x804x270	828x904x264	824x904x270	1116x884x388	1116x1134x388
Flange		mm	⊄ 144	⊄ 144	⊄ 144	⊄ 194	⊄ 194	⊄ 243	⊄ 243
Net Weight		kg	23	27	33	46	48	63	79
Stuffing Quantity	20/40/40H	unit	280/568/710	216/456/513	168/344/387	112/244/280	112/224/252	72/156/156	60/120/120

Specification-HRV

Model			LHRV_1500_3	LHRV_2000_3	LHRV_2500_3	LHRV_3000_3	LHRV_4000_3	LHRV_5000_3
Volume		m^3/h	1500	2000	2500	3000	4000	5000
		CFM	882	1176	1471	1765	2353	2941
External static pressure		Pa	160	170	180	200	220	240
Electric Data	Power Supply	V~,Hz,Ph	380~415,50,3	380~415,50,3	380~415,50,3	380~415,50,3	380~415,50,3	380~415,50,3
	Power Input	W	1000	1200	2000	2100	2400	3000
Cooling	Temp. Efficiency	%	62	60	62	64	64	64
	Enthalpy Efficiency	%	51	52	50	55	51	55
Heating	Temp. Efficiency	%	70.5	70	70	72	71	72
	Enthalpy Efficiency	%	62	63	63	64	64	65
Noise Level		dB(A)	51	53	55	57	64	64
Net Dimension(WxDxH)		mm	1500×1200×540	1500×1200×540	1500×1200×540	1500×1200×540	1620×1330×990	1620×1330×990
Flange		mm	320x300	320x300	320x300	320x300	323x253	500x690
Net Weight		kg	173	186	200	270	300	320
Stuffing Quantity	20/40/40H	unit	20/40/40	20/40/40	20/40/40	20/40/40	8/18/18	8/18/18

Branch Pipe

Model	Appearance	Dimension	
		Gas side joints	Liquid side joints
LFG-00A			
LFG-12A			
LFG-24A			
LFG-34A			
LFG-50A			
LFG-64A			

Model	Packing Dimension(mm)	Gross Weight(kg)	Description
LVRF_LFG-00A	300x95x40	0.31/0.35	A* ＜ 8HP
LVRF_LFG-12A	330x100x40	0.44/0.49	8HP≤A*≤12HP
LVRF_LFG-24A	370x115x45	0.71/0.77	12HP ＜ A*≤24HP
LVRF_LFG-34A	440x140x50	1.11/1.20	24HP ＜ A*≤34HP
LVRF_LFG-50A	480x160x65	1.65/1.76	34HP ＜ A*≤50HP
LVRF_LFG-64A	480x160x65	1.88/1.98	50HP ＜ A*≤88HP

A*：The total capacity of indoor units which is connected to this branch joint

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