HAVA

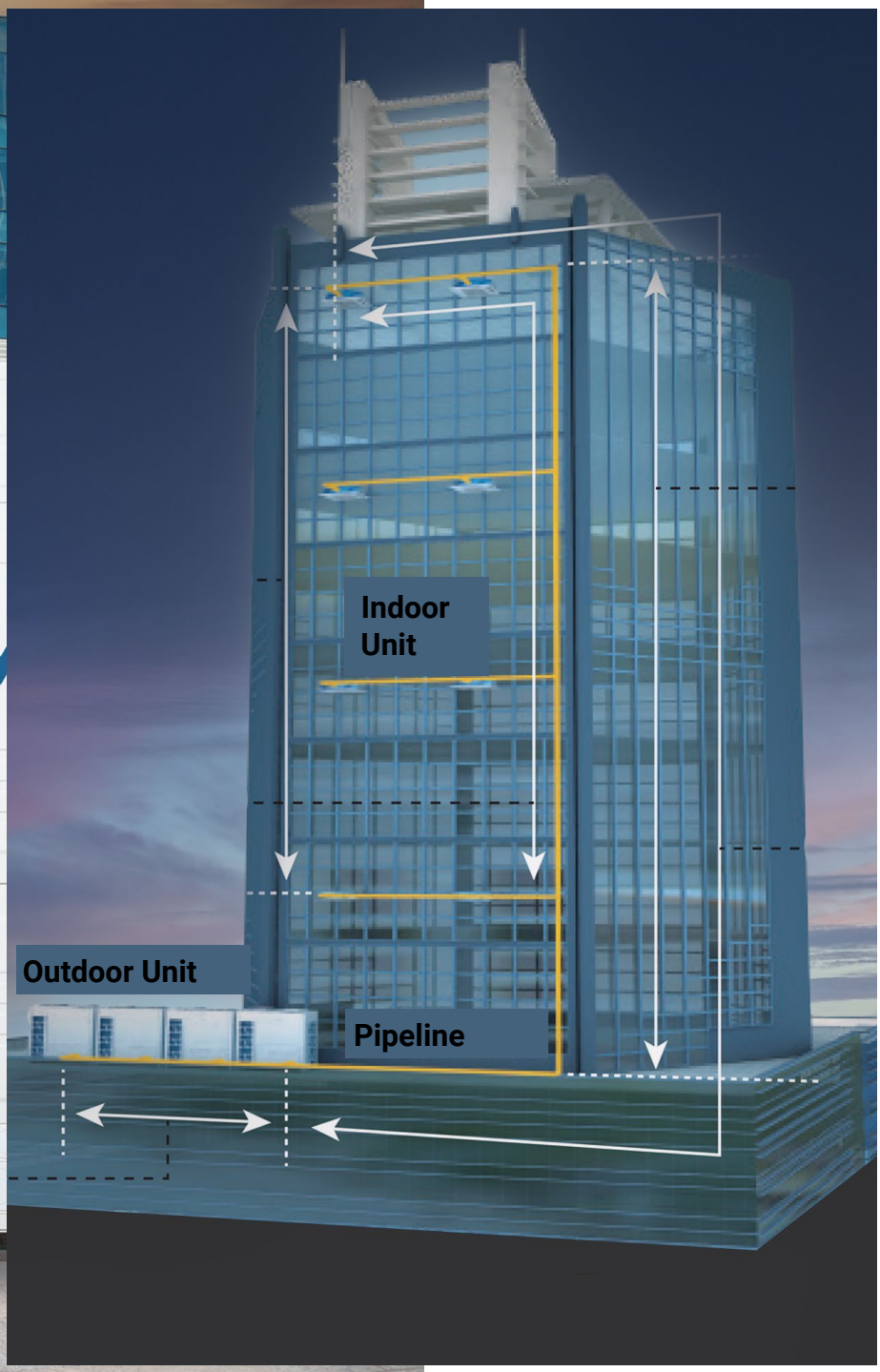
VRF & Chiller Product Catalog

HAVA VRF

Complete range of
air conditioning products

Contents


HAVA VRF
HHV Series
HAVA
HAVA



Projects with extended piping lengths

The elevation difference between the indoor and outdoor units can reach up to 90 metres*, providing greater installation flexibility.

*For additional details, please contact the MIT Clima technical team.

High-performance compressor

The HAVA VRF HHV series adopts a new generation of scroll compressors with an innovative mechanism called FCM (Frame Compliant Mechanism), which significantly improves the overall system efficiency, particularly during part-load operation.

Direct suction

Higher volumetric efficiency.

Asymmetric scroll

Reduces compressor stress and improves efficiency and reliability.

Heavy-duty bearing

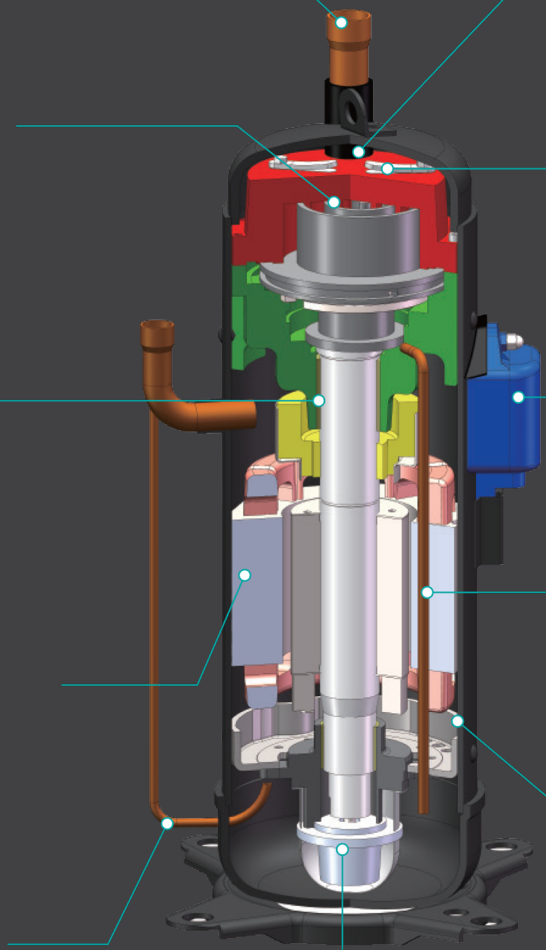
High-reliability sliding bearing with high load capacity, reduced noise, and enhanced wear resistance.

High-efficiency motor

High-performance permanent magnet motor with a specially engineered structure.

Oil equalization pipe

High reliability through oil level balancing between MULTIPLE compressors.



Check valve

Improves efficiency and ensures reliability during high-load operation.

Pressure-reducing valve design

Power terminal cover

Ensures a secure and protected electrical connection.

Internal oil separator tube

Ensures internal oil circulation, reducing component wear and preventing losses caused by overheating.

High-pressure chamber

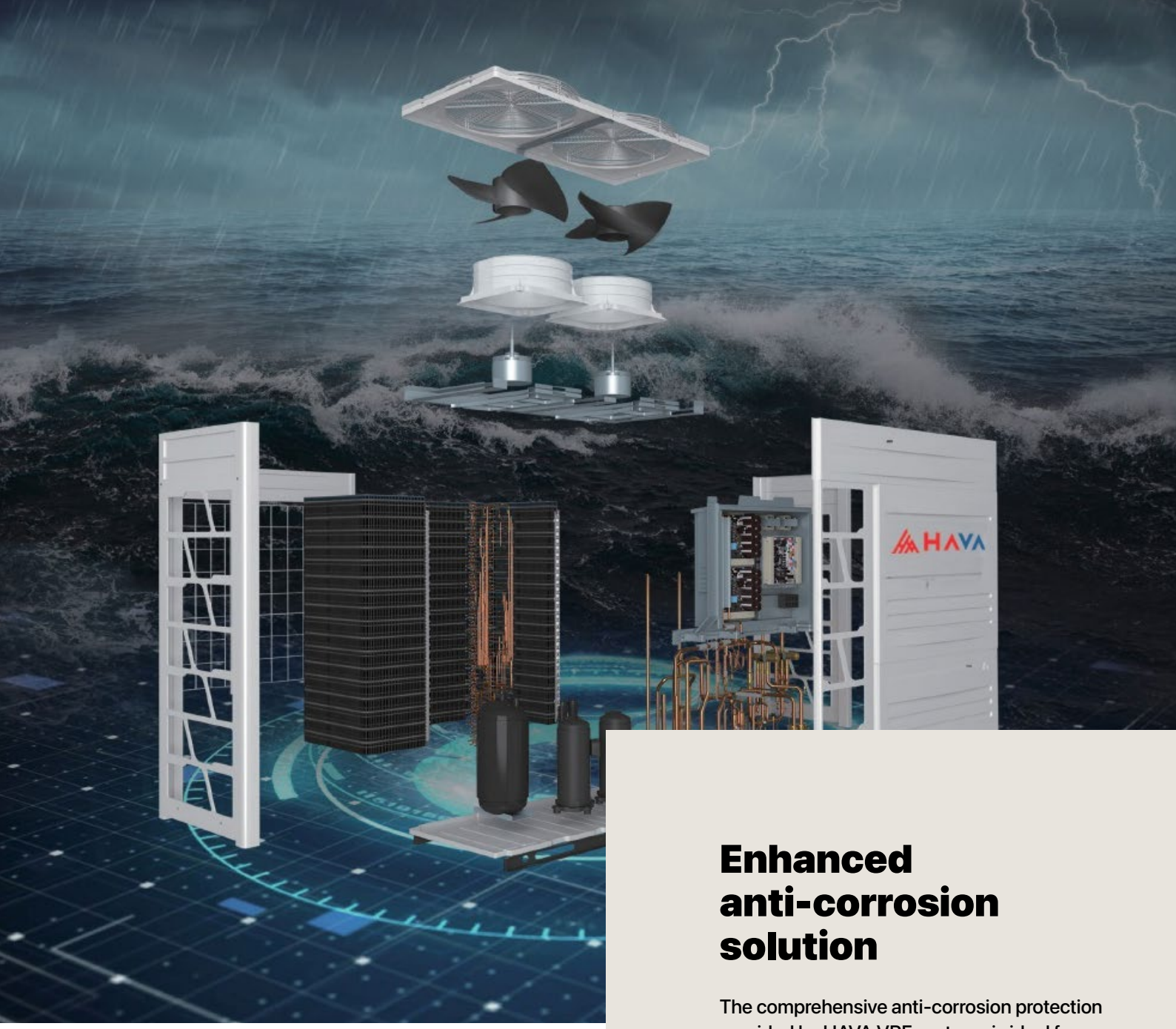
Large gas discharge buffer chamber to reduce noise and vibrations generated by airflow during operation.

Reliable oil supply system

Adequate oil delivery is ensured based on oil pressure differential, even under low-speed and part-load operating conditions.

Revolutionary HVAC compressor

The new-generation scroll compressor is now patented and features high-performance vapor injection technology, increasing capacity by up to 25% compared to conventional scroll compressors.



01

Front panel

Galvanized steel treated with zirconium and a 100 µm coating, plus a 180 µm zinc-rich epoxy primer and a pure polyester topcoat.

02

Heat exchanger

Dark grey fins with epoxy resin and acrylic resin coatings, plus a hydrophilic film, and copper tubes.

03

Electrical box

Galvanized steel treated with zirconium and a pure polyester coating of 50 µm to 120 µm.

04

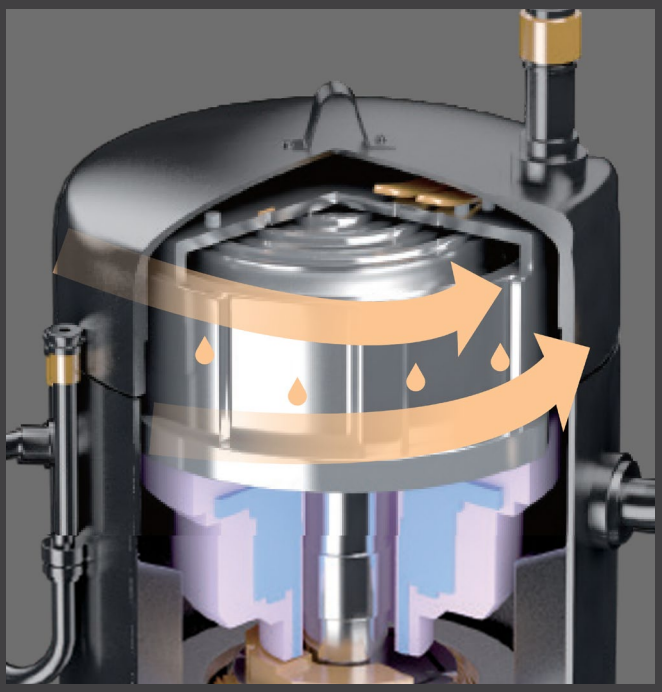
Fan motor

Coated with a 10 µm to 30 µm acrylic resin layer.

Enhanced anti-corrosion solution

The comprehensive anti-corrosion protection provided by HAVA VRF systems is ideal for coastal areas and industrial environments exposed to chemical compounds such as sulfur. It ensures a high level of resistance, extends equipment service life, and reduces maintenance costs.

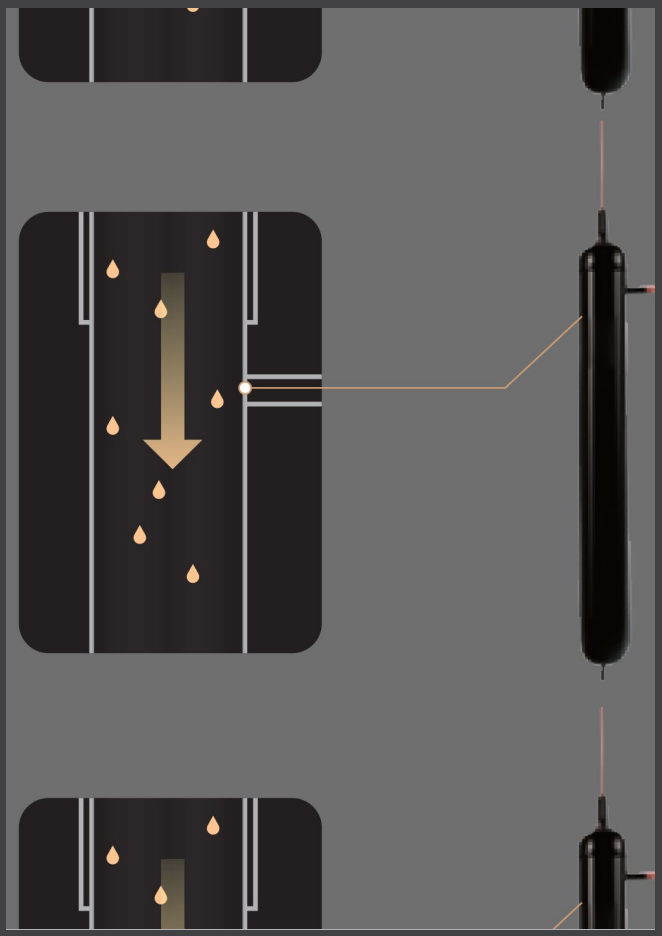
All components benefit from special protective treatments, and the systems are UL certified, confirming high standards of safety and quality.



#firststage

Oil separation and recirculation

In the first separation stage, oil is extracted through an efficient internal structure within the compressor and the high-pressure chamber. Only a small amount of oil is discharged from the compressor.



#secondstage

Oil separation and recirculation

In the second separation stage, residual oil from the compressor is efficiently removed by a high-capacity centrifugal separator, ensuring an efficiency of over 99%.

Self-diagnostics

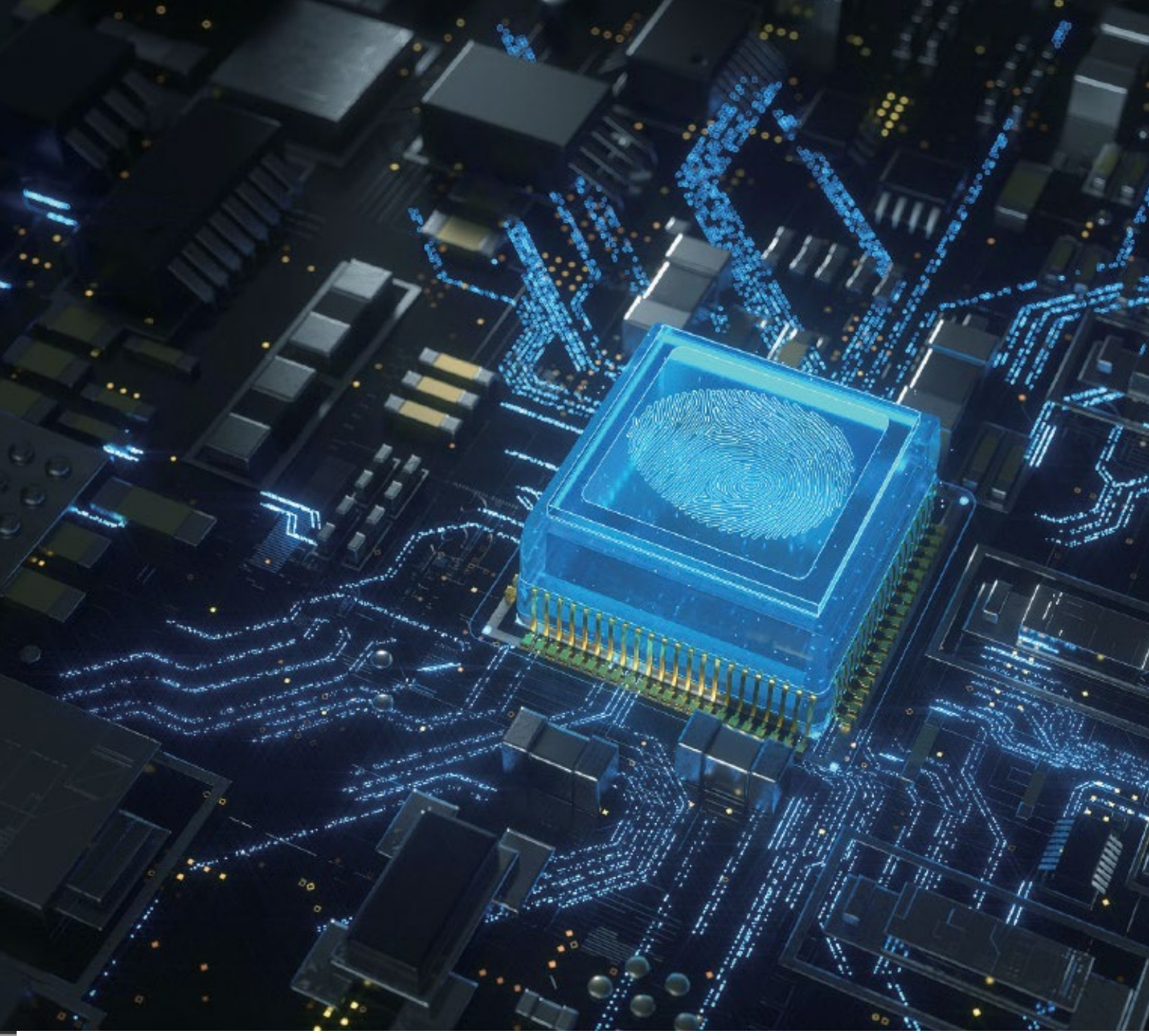
The VRF unit is designed to simplify monitoring and maintenance, providing clear indications in the event of errors. Alarm codes are automatically displayed, allowing technicians to quickly identify problems during testing and enabling end users to easily understand the nature of faults. In addition, operating status information such as temperature, pressure, compressor frequency, and other parameters can be accessed directly from the controller or from the outdoor unit, contributing to efficient maintenance and rapid troubleshooting.

HAVA VRF systems can protect themselves through built-in algorithms that determine the necessary protective actions based on sensor readings and operating parameters, including safety protections.

Intelligent backup operation

Operating loads are intelligently distributed among higher-capacity modules, ensuring optimal balancing and preventing overload of individual components. This strategy extends system service life and guarantees reliable long-term performance.

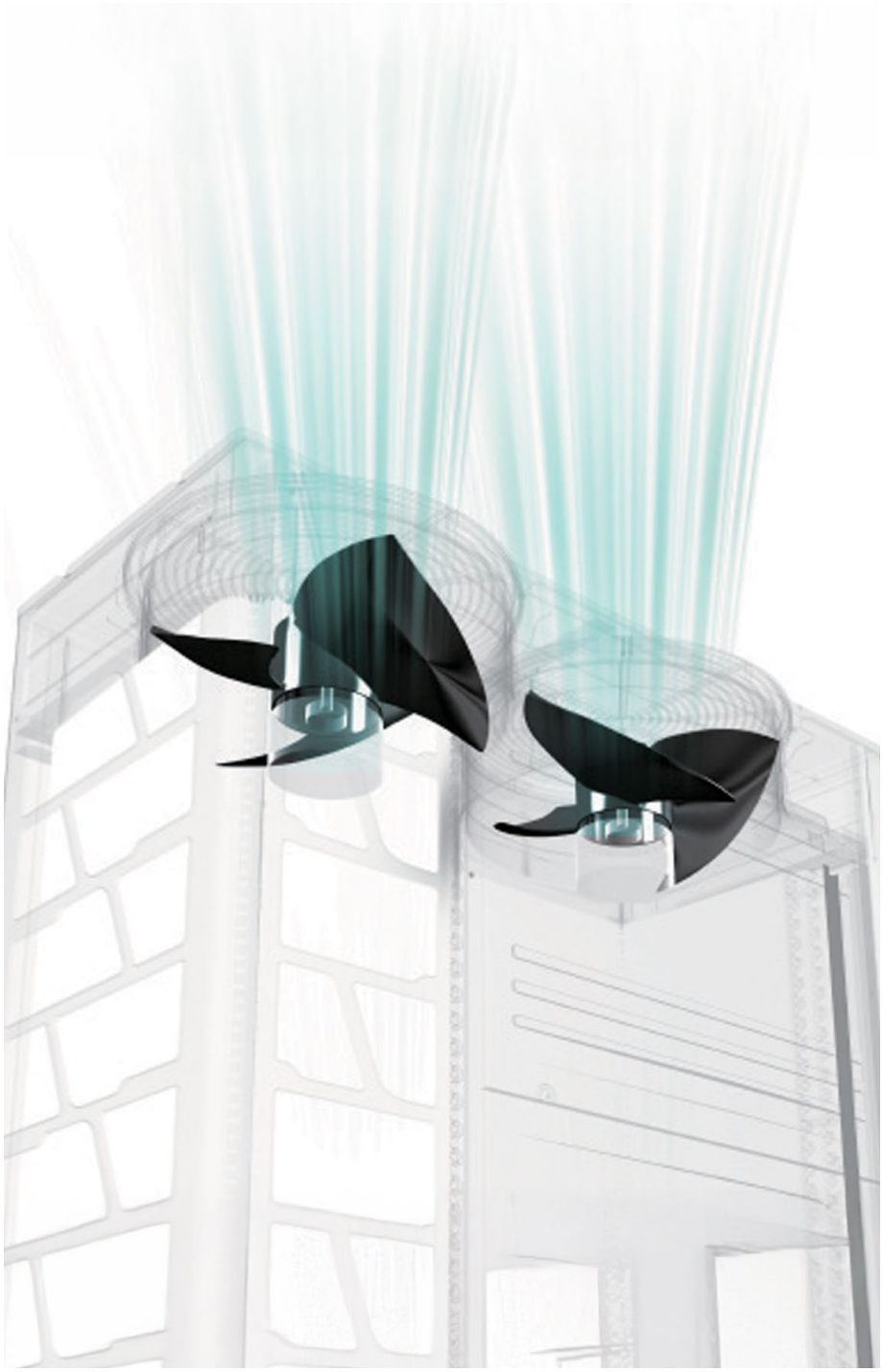
If one module in a combined system develops a fault, the remaining modules can take over the load and continue operating, ensuring uninterrupted equipment operation until service personnel intervene.



Effective protection against overvoltage and electromagnetic interference

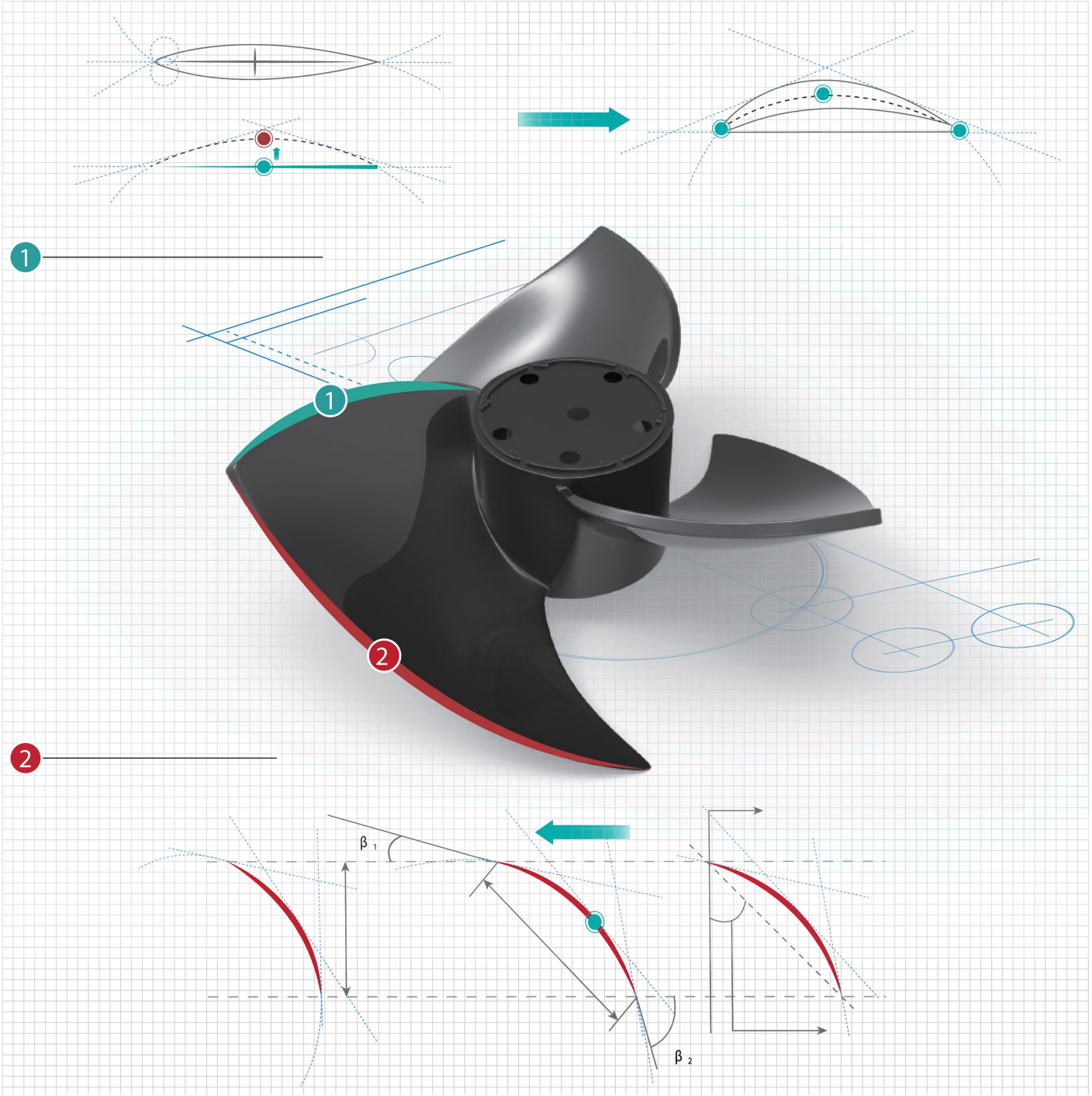
HAVA VRF commercial units comply with strict electromagnetic protection and quality control requirements, preventing interference caused by electromagnetic fields and avoiding the generation of disturbances to nearby equipment.

One of the main risk factors for electronic component reliability is external overvoltage, such as lightning-induced surges during storms. To ensure system resistance to such events, the units are subjected to 4000 V surge tests as part of extensive electromagnetic testing programs conducted in specialized laboratories and certified to international standards.



Continuous and smooth fan speed control

Inverter fan motors are widely used due to their increased efficiency of up to 40%. In HAVA VRF systems, brushless DC (BLDC) fan motors are implemented, delivering a higher level of energy efficiency while significantly reducing energy consumption and noise levels compared to conventional inverter motors.



Efficient air discharge

The bearings connecting the motor and the fan are treated with a special anti-corrosion coating to protect against rain, and the fan blades, made of glass-fiber composite, provide superior corrosion resistance.

The fan blades are aerodynamically designed to minimize energy losses caused by unnecessary power conversion into noise, directing available energy toward improving airflow rate and static pressure. Integration with the brushless DC fan motor further optimizes system efficiency and significantly reduces the overall noise level of the fan assembly.

Technical specifications

HAVA VRF

HHV-76/96/114/136/164/170/190YSM+

Capacity (HP)			8 HP	10 HP	12 HP	14 HP	16 HP	18 HP
Model			HHV-76YSM+	HHV-96YSM+	HHV-114YSM+	HHV-136YSM+	HHV-154YSM+	HHV-170YSM+
Power Supply			AC 3Φ, 380-415V/50/60Hz					
Cooling	Capacity	kW	22,4	28,0	33,5	40,0	45,0	50,0
		kBtu/h	76,4	95,5	114,3	136,5	153,5	170,6
	Power Input	kW	4,79	6,60	7,96	10,34	12,26	14,04
	EER	kW/kW	4,68	4,24	4,21	3,87	3,67	3,56
Heating	Capacity	kW	25,0	31,5	37,5	45,0	50,0	56,0
		kBtu/h	85,3	107,5	128,0	153,5	170,6	191,1
	Power Input	kW	5,13	6,79	8,50	10,84	12,20	14,81
	COP	kW/kW	4,87	4,64	4,41	4,15	4,10	3,78
Airflow	Airflow Rate	m^3/min	183	183	183	200	200	200
	Number of fans		1	1	1	2	2	2
	External static pressure	Pa	110	110	110	110	110	110
Sound pressure level	Normal mode	dB(A)	56	57	59	59	60	61
	Night Shift mode	dB(A)	41	42	44	44	45	46
Compressor	Type	-	Scroll Compressor					
	Number of compressors	pcs	1	1	1	1	1	1
Refrigerant	Type	-	R410A					
	Factory pre-charged quantity	kg	5,3	5,3	6,2	8,0	8,0	9,6
Weight	Net weight	kg	217	219	223	272	273	296
	Gross weight	kg	246	248	252	306	307	330
Dimensions	Outdoor unit (H×W×D	mm	1730x950x750	1730x950x750	1730x950x750	1730x1210x750	1730x1210x750	1730x1210x750
	Packaging (H×W×D)	mm	1950x1015x790	1950x1015x790	1950x1015x790	1950x1275x790	1950x1275x790	1950x1275x790
Cabinet color			Grayish white	Grayish white	Grayish white	Grayish white	Grayish white	Grayish white
Refrigerant piping	Gas pipe	mm	Φ19,05	Φ22,20	Φ25,40	Φ25,40	Φ28,60	Φ28,60
		inch	3/4	7/8	1	1	1-1/8	1-1/8
	Liquid pipe	mm	Φ9.53	Φ9,53	Φ12,70	Φ12,70	Φ12,70	Φ15,88
		inch	3/8	3/8	1/2	1/2	1/2	5/8
Connectable indoor units	Quantity	pcs	13	16	19	23	26	29
	Total capacity ratio	-	50%-150%	50%-150%	50%-150%	50%-150%	50%-150%	50%-150%
Piping configuration	Height difference between outdoor and indoor units	m (above)	50(90[*1])	50(90[*1])	50(90[*1])	50(90[*1])	50(90[*1])	50(90[*1])
		m (below)	40(90[*1])	40(90[*1])	40(90[*1])	40(90[*1])	40(90[*1])	40(90[*1])
	Height difference between indoor units	m	30	30	30	30	30	30
	Maximum piping length	m	1000	1000	1000	1000	1000	1000
Operating range[*2]	Cooling	℃	-5 ~ 52	-5~52	-5 ~ 52	-5 ~ 52	-5 ~ 52	-5 ~ 52
	Heating	℃	-25~16,5	-25~16,5	-25~16,5	-25~16,5	-25~16,5	-25~16,5

Note:
1. The nominal capacity is tested under the following conditions:
Piping length: 7.5 m, piping height difference: 0 m;
Cooling mode: indoor air inlet temperature 27°C DB / 19°C WB, outdoor ambient temperature 35°C DB;
Heating mode: indoor air inlet temperature 20°C DB, outdoor ambient temperature 7°C DB / 6°C WB.
2. The above noise values are measured in an anechoic chamber with no sound reflections.
Measurement point: 1 m from the service panel surface and 1.5 m above floor level.
*1. For a height difference between the outdoor unit and indoor unit greater than 50 m (40 m), please contact our professional engineer.
*2. When the operating temperature is below 48°C DB to 52°C DB or –25°C WB to –20°C WB, the system may operate intermittently. Please contact our professional engineer.

Technical specifications

HAVA VRF

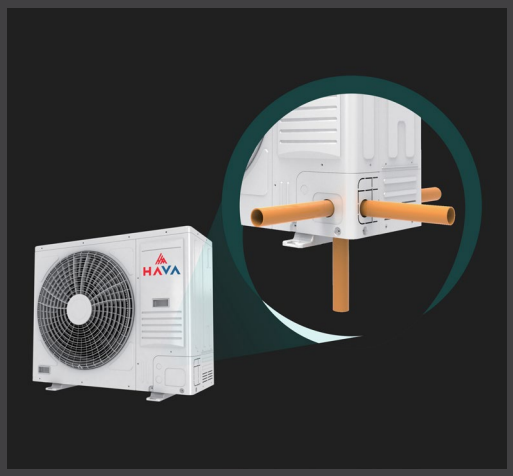
HHV-212/232/250/272YSM+

Capacity (HP)			20 HP	22 HP	24 HP	26 HP	28 HP
Model			HHV-190YSM+	HHV-212YSM+	HHV-232YSM+	HHV-250YSM+	HHV-272YSM+
Power Supply			AC 3Φ, 380-415/50/60Hz				
Cooling	Capacity	kW	56,0	61,5	68,0	72,5	80.0
		kBtu/h	191,1	209,8	232,0	247,4	273,0
	Power Input	kW	15,38	17,83	19,88	20,83	24,10
	EER	kW/kW	3,64	3,45	3,42	3,48	3,32
Heating	Capacity	kW	63,0	69,0	75,0	80,0	90,0
		kBtu/h	215,0	235,4	255,9	273,0	307,1
	Power Input	kW	16,36	18,70	20,72	21,98	25,57
	COP	kW/kW	3,85	3,69	3,62	3,64	3,52
Airflow	Airflow Rate	m^3/min	267	296	296	350	350
	Number of fans		2	2	2	2	2
	External static pressure	Pa	110	110	110	110	110
Sound pressure level	Normal mode	dB(A)	62	63	63	64	64
	Night Shift mode	dB(A)	47	48	48	49	49
Compressor	Type	-	Scroll Compressor				
	Number of compressors	pcs	1	2	2	2	2
Refrigerant	Type	-	R410A				
	Factory pre-charged quantity	kg	10,3	12,2	12,2	12,0	12,0
Weight	Net weight	kg	316	363	365	391	392
	Gross weight	kg	347	400	402	433	434
Dimensions	Outdoor unit (H×W×D)	mm	1730x1350x750	1730x1350x750	1730x1350x750	1730x1600x750	1730x1600x750
	Packaging (H×W×D)	mm	1950x1420x790	1950x1420x790	1950x1420x790	1950x1665x790	1950x1665x790
Cabinet color			Grayish white	Grayish white	Grayish white	Grayish white	Grayish white
Refrigerant piping	Gas pipe	mm	Φ28,60	Φ28,60	Φ28,60	Φ31,75	Φ31,75
		inch	1-1/8	1-1/8	1-1/8	1-1/4	1-1/4
	Liquid pipe	mm	Φ15,88	Φ15,88	Φ15,88	Φ19,05	Φ19,05
		inch	5/8	5/8	5/8	3/4	3/4
Connectable indoor units	Quantity	pcs	33	36	40	43	47
	Total capacity ratio	-	50%-150%	50%-150%	50%-150%	50%-150%	50%-150%
Piping configuration	Height difference between outdoor and indoor units	m (above)	50(90[*1])	50(90[*1])	50(90[*1])	50(90[*1])	50(90[*1])
		m (below)	40(90[*1])	40(90[*1])	40(90[*1])	40(90[*1])	40(90[*1])
	Height difference between indoor units	m	30	30	30	30	30
	Maximum piping length	m	1000	1000	1000	1000	1000
Operating range[2]	Cooling	℃	-5 ~ 52	-5 ~ 52	-5 ~ 52	-5 ~ 52	-5 ~ 52
	Heating	℃	-25~16,5	-25~16,5	-25~16,5	-25~16,5	-25~16,5

Note:
1. The nominal capacity is tested under the following conditions:
Piping length: 7.5 m, piping height difference: 0 m;
Cooling mode: indoor air inlet temperature 27°C DB / 19°C WB, outdoor ambient temperature 35°C DB;
Heating mode: indoor air inlet temperature 20°C DB, outdoor ambient temperature 7°C DB / 6°C WB.
2. The above noise values are measured in an anechoic chamber with no sound reflections.
Measurement point: 1 m from the service panel surface and 1.5 m above floor level.
*1. For a height difference between the outdoor unit and indoor unit greater than 50 m (40 m), please contact our professional engineer.
*2. When the operating temperature is below 48°C DB to 52°C DB or –25°C WB to –20°C WB, the system may operate intermittently. Please contact our professional engineer.

HAVA mini-VRF
HHMV-HV Series

Thanks to its compact dimensions, the outdoor unit of the HAVA HHMV-HV system occupies minimal space, allowing efficient use of balconies, courtyards, or other limited areas. In addition, the mini-VRF outdoor units require only a single piping set to connect MULTIPLE indoor units, reducing wall penetrations and helping maintain the building's clean architectural appearance.

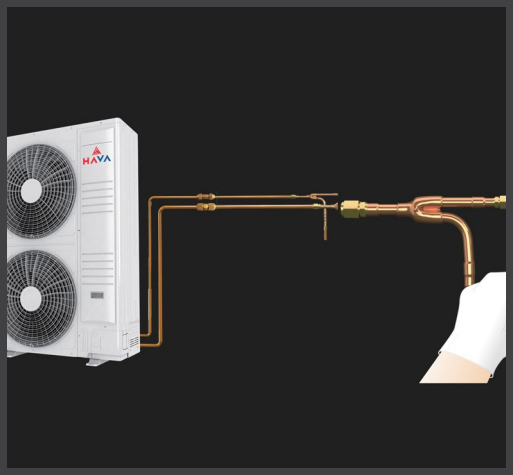


Four-direction piping connection

Installation space constraints do not represent an obstacle for the HAVA mini-VRF system, thanks to the flexibility of its piping layout, which allows front, bottom, right-side, or rear connections.

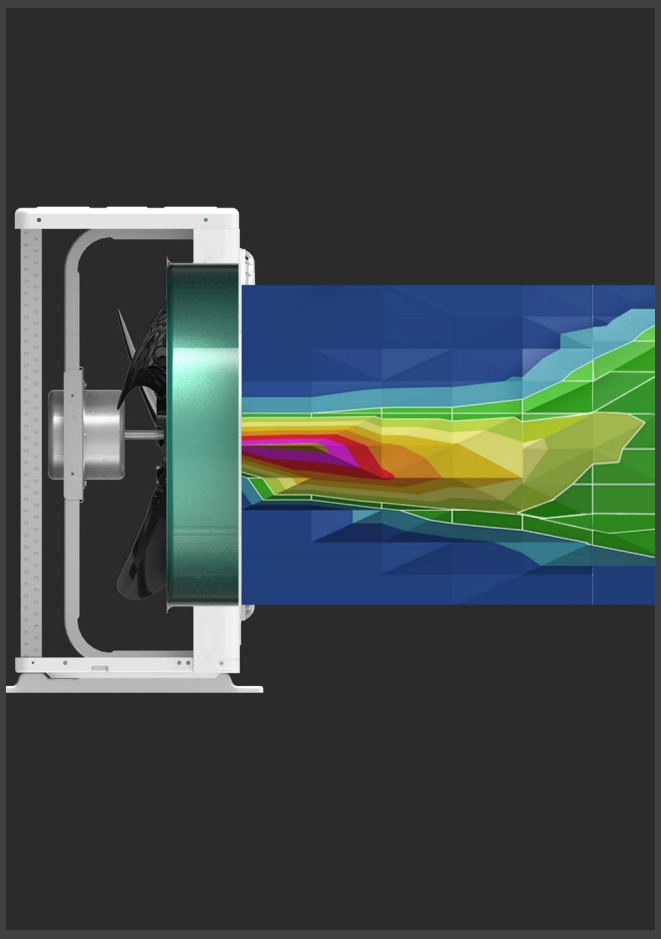
No welding required! New flare-nut connection method for fast and secure installation

The HAVA mini-VRF system adopts newly developed branch piping equipped with flare-nut connections, bringing innovation to the traditional copper-pipe joining method. Welding is replaced by a simple and safe connection approach based on flare nuts.



Safe and easy installation

1) Fast and easy installation without special equipment.
2) Significant reduction in installation time and cost.
3) Increased safety by eliminating open-flame work.
4) Elimination of leakage risks caused by incorrect welding.
5) No permit required for work in high-temperature conditions.
6) Compatible branch piping design.
7) Robust double-flare-nut connector for secure sealing.



#innovation

Improved air discharge

An additional channel, similar to an air duct, is integrated around the fan to optimize air discharge and prevent recirculation of the exhausted air. In addition, thanks to an external static pressure of 30 Pa, tests have demonstrated that the air is discharged up to 24% farther compared to conventional systems.

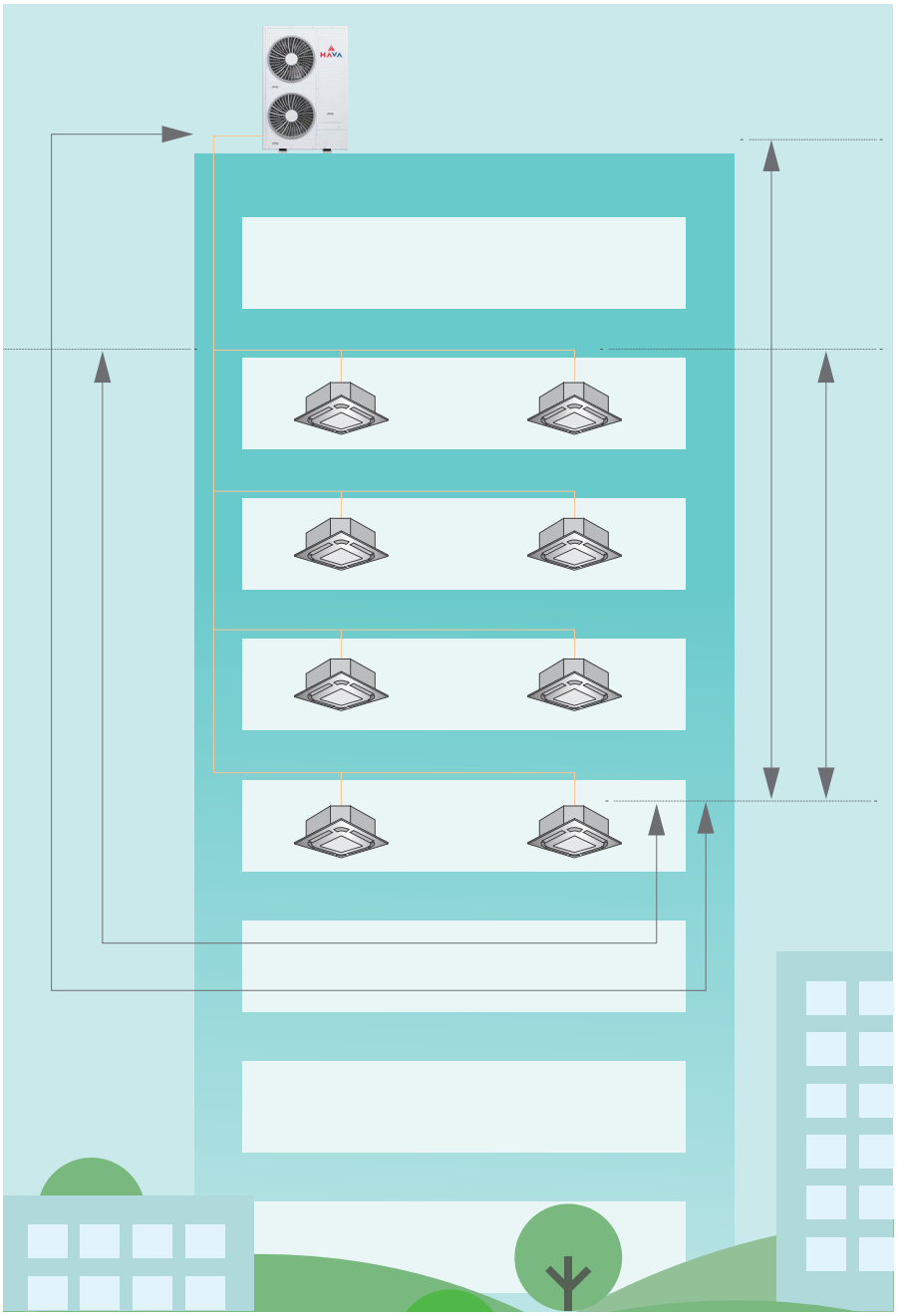
Extended refrigerant piping length

The extended piping length provides increased flexibility in design and installation. HAVA inverter technology, together with the two-stage cooling system, ensures the possibility of using extended piping routes and considerable elevation differences. As a result, the air conditioning system can be implemented with enhanced adaptability according to the building's architectural requirements.

Maximum piping length: L1

Maximum piping length: L2

Maximum piping length between the first branch and the indoor unit: L3



Outdoor unit positioned higher: H1

Outdoor unit positioned lower: H2

Maximum height difference between indoor units: H3

Power supply	AC 1Φ, 220-240V/ 50/60Hz			AC 1Φ, 220-240V/ 50/60Hz	AC 3Φ, 380-415V/ 50/60Hz	AC 3Φ, 380-415V/ 50/60Hz
Capacity (HP)	3 HP	4 HP	5 HP	4/5/6 HP	8 HP	10/12 HP
Maximum piping length L1	30	40	60	120	150	250
Maximum piping length L2	25	25	50	75	100	100
Maximum length between the first branch pipe and the farthest indoor unit L3	10	15	20	30	30	40
Outdoor unit positioned higher H1	20	20	20	30	50	50
Outdoor unit positioned lower H2	20	20	20	30	40	40
Height difference between indoor units H3	3.5	3.5	3.5	10	15	15

Technical specifications

HAVA mini-VRF

HHMV-28/34/43/38/48/54HV

Capacity (HP)			3 HP	4 HP	5 HP	4 HP	5 HP	6 HP
Model			HHMV-28HV	HHMV-34HV	HHMV-43HV	HHMV-38HV	HHMV-48HV	HHMV-54HV
Power Supply			AC 1Φ, 220V-240V/50/60Hz					
Cooling	Capacity	kW	8,0	10,0	12,5	11,2	14,0	15,5
		kBtu/h	27,3	34,1	42,7	38,2	47,8	52,9
	Power Input	kW	1,93	2,43	2,98	2,60	3,46	4,21
	EER	kW/kW	4,15	4,27	4,19	4,31	4,05	3,68
Heating	Capacity	kW	9,5	11,2	14,0	12,5	16,0	18,0
		kBtu/h	32,4	38,2	47,8	42,7	54,6	61,4
	Power Input	kW	2,37	3,01	4,15	2,78	3,71	4,47
	COP	kW/kW	4,01	3,72	3,37	4,50	4,31	4,03
Airflow	Airflow Rate	m^3/min	46,5	69,0	78,0	90,0	90,0	100,0
Sound pressure level	Sound pressure (Heating/Cooling)	dB(A)	50/52	53/55	54/57	50/52	52/54	53/55
Compressor	Type	-	Twin rotary					
Refrigerant	Type	-	R410A					
	Pre-charged quantity	kg	2,5	2,8	2,8	3,8	3,8	4,1
Weight	Net weight	kg	65	73	78	93	95	97
	Gross weight	kg	72	81	86	111	111	111
Dimensions	Outdoor unit (H×W×D)	mm	800x950x370	800x950x370	800x950x370	1380x950x370	1380x950x370	1380x950x370
	Packaging (H×W×D)	mm	951x1070x515	951x1070x515	951x1070x515	1531x1070x515	1531x1070x515	1531x1070x515
Cabinet color			Grayish white	Grayish white	Grayish white	Grayish white	Grayish white	Grayish white
Refrigerant piping	Gas pipe	mm	Φ15,88	Φ15,88	Φ15,88	Φ15,88	Φ15,88	Φ15,88
		inch	5/8	5/8	5/8	5/8	5/8	5/8
	Liquid pipe	mm	Φ9,53	Φ9,53	Φ9,53	Φ9,53	Φ9,53	Φ9,53
		inch	3/8	3/8	3/8	3/8	3/8	3/8
Connectable indoor units	Quantity	pcs	5	6	8	9	11	11
	Total capacity ratio	-	50%-125%	50%-125%	50%-125%	50%-150%	50%-150%	50%-150%
Piping configura-tion	Height difference between outdoor and indoor units	m (above)	20	20	20	30	30	30
		m (below)	20	20	20	30	30	30
	Height difference between indoor units	m	3,5	3,5	3,5	10	10	10
	Maximum piping length	m	25	25	50	75	75	75
	Total piping length	m	-	-	-	-	-	-
Operating range	Cooling	℃	-5~46	-5~46	-5~46	-5~46	-5~46	-5~46
	Heating	℃	-15~15,5	-15~15,5	-15~15,5	-20~15,5	-20~15,5	-20~15,5

Note:
1.The nominal cooling capacity and nominal heating capacity are tested under the following conditions:
Cooling mode: indoor air inlet temperature 27°C DB / 19°C WB, outdoor air inlet temperature 35°C DB, piping length 7.5 m, piping height difference 0 m.
Heating mode: indoor air inlet temperature 20°C DB, outdoor air inlet temperature 7°C DB / 6°C WB, piping length 7.5 m, piping height difference 0 m.
The sound pressure level is based on the following conditions: measured 1.5 m below the unit.
2. The above data were measured in an anechoic chamber, therefore reflected sound should be considered in field conditions.

Technical specifications

HAVA mini-VRF

HHMV-76/96/114HV

Capacity (HP)			8 HP	10 HP	12 HP
Model			HHMV-76HV	HHMV-96HV	HHMV-114HV
Power Supply			AC 3Φ, 380-415V/50/60Hz		
Cooling	Capacity	kW	22,4	28,0	33,5
		kBtu/h	76,5	95,6	114,3
	Power Input	kW	6,37	7,75	10,30
	SEER	kW/kW	6,62	6,85	6,29
	EER	kW/kW	3,52	3,61	3,25
Heating	Capacity	kW	25,0	31,5	37,5
		kBtu/h	85,3	107,5	128
	Power Input	kW	5,84	7,00	10,00
	SCOP	kW/kW	4,10	4,21	3,98
	COP	kW/kW	4,28	4,50	3,75
Airflow	Airflow Rate	m^3/min	127,0	150,0	163,0
Sound pressure level	Sound pressure level (Heating/Cooling)	dB(A)	57/58	58/59	59/60
Compressor	Type	-	Twin rotary		
Refrigerant	Type	-	R410A		
	Factory pre-charged quantity	kg	5,63	5,50	6,50
Weight	Net weight	kg	124	145	158
	Gross weight	kg	139	161	175
Dimensions	Outdoor unit (H×W×D)	mm	1380x950x370	1650x1100x390	1650x1100x390
	Packaging (H×W×D)	mm	1531x1070x515	1806x1185x530	1806x1185x530
Cabinet color			Grayish white	Grayish white	Grayish white
Refrigerant piping	Gas	mm	Φ19,05	Φ22,2	Φ25,4
		inch	3/4	7/8	1
	Liquid pipe	mm	Φ9,53	Φ12,7	Φ12,7
		inch	3/8	1/2	1/2
Connectable indoor units	Quantity	pcs	15	17	19
	Total capacity ratio	-	50%-150%	50%-150%	50%-150%
Piping configuration	Height difference between outdoor and indoor units	m (above)	50	50	50
		m (below)	40	40	40
	Height difference between indoor units	m	15	15	15
	Maximum piping length	m	100	100	100
	Total piping length	m	150	250	250
Operating range	Cooling	℃	-5~50	-5~50	-5~50
	Heating	℃	-20~15,5	-20~15,5	-20~15,5

Note:
1.The nominal cooling capacity and nominal heating capacity are tested under the following conditions:
Cooling mode: indoor air inlet temperature 27°C DB / 19°C WB, outdoor air inlet temperature 35°C DB, piping length 7.5 m, piping height difference 0 m.
Heating mode: indoor air inlet temperature 20°C DB, outdoor air inlet temperature 7°C DB / 6°C WB, piping length 7.5 m, piping height difference 0 m.
The sound pressure level is based on the following conditions: measured 1.5 m below the unit.
2. The above data were measured in an anechoic chamber, therefore reflected sound should be considered in field conditions.

HAVA Modular Chiller
HHCM Series

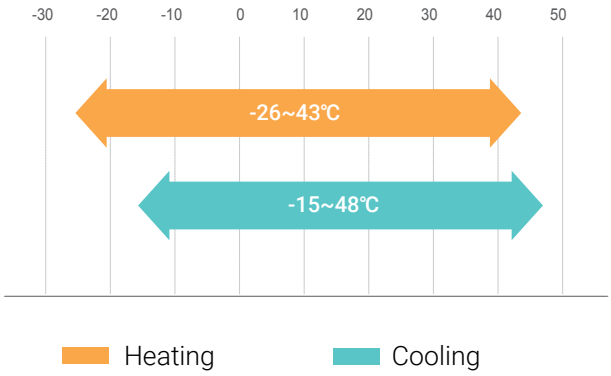
High-efficiency heating

The new generation of DC inverter scroll compressors with EVI (Enhanced Vapor Injection) technology ensures excellent heating performance even at low outdoor temperatures, significantly contributing to increased energy efficiency and overall system performance.

MODULAR AIR-CONDITIONING SYSTEM WITH UP TO 16 UNITS

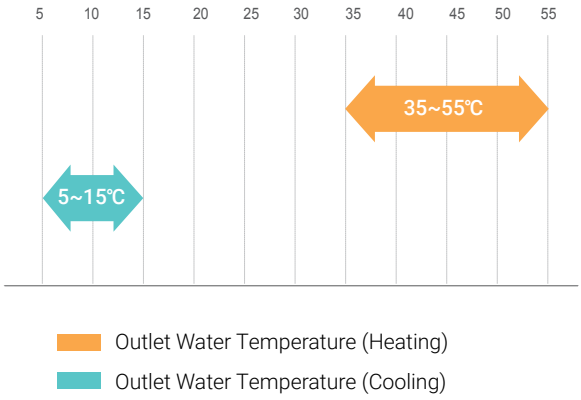
MODULAR DESIGN, MULTIPLE POSSIBILITIES

The main and secondary units are designed identically, allowing any unit to be configured as a master unit, which significantly simplifies the combination and installation process. Free combination of units with different specifications within the same system is possible. The hydraulic system allows parallel connection of up to 16 units, providing a total cooling capacity ranging from 65 kW to 2080 kW. The piping connection direction is standardized for all units, thus facilitating transportation, installation, and system commissioning.



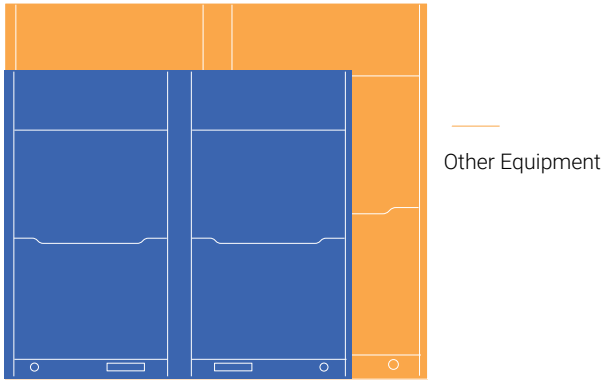
Extended operating range and application versatility

The HAVA HHCM series stands out through a wide hot-water temperature range and the ability to satisfy the requirements of various heating terminals, such as traditional cast-iron radiators, modern copper–aluminium radiators, fan coil units, underfloor heating systems, and others.



MULTIPLE HVAC applications

This series is widely used in data centers, electronics manufacturing plants, the pharmaceutical industry, the chemical industry, and in process cooling applications. It can also provide heating throughout the year for sectors such as animal breeding or flower cultivation.



The 63 kW unit covers an area of only 1.64 m²

Compact design and space saving

The system features a well-optimized structure, enabling significant reductions in occupied volume and footprint, facilitating transportation and installation, and considerably lowering the space required for installation and the associated costs.

Dual systems, independent operation

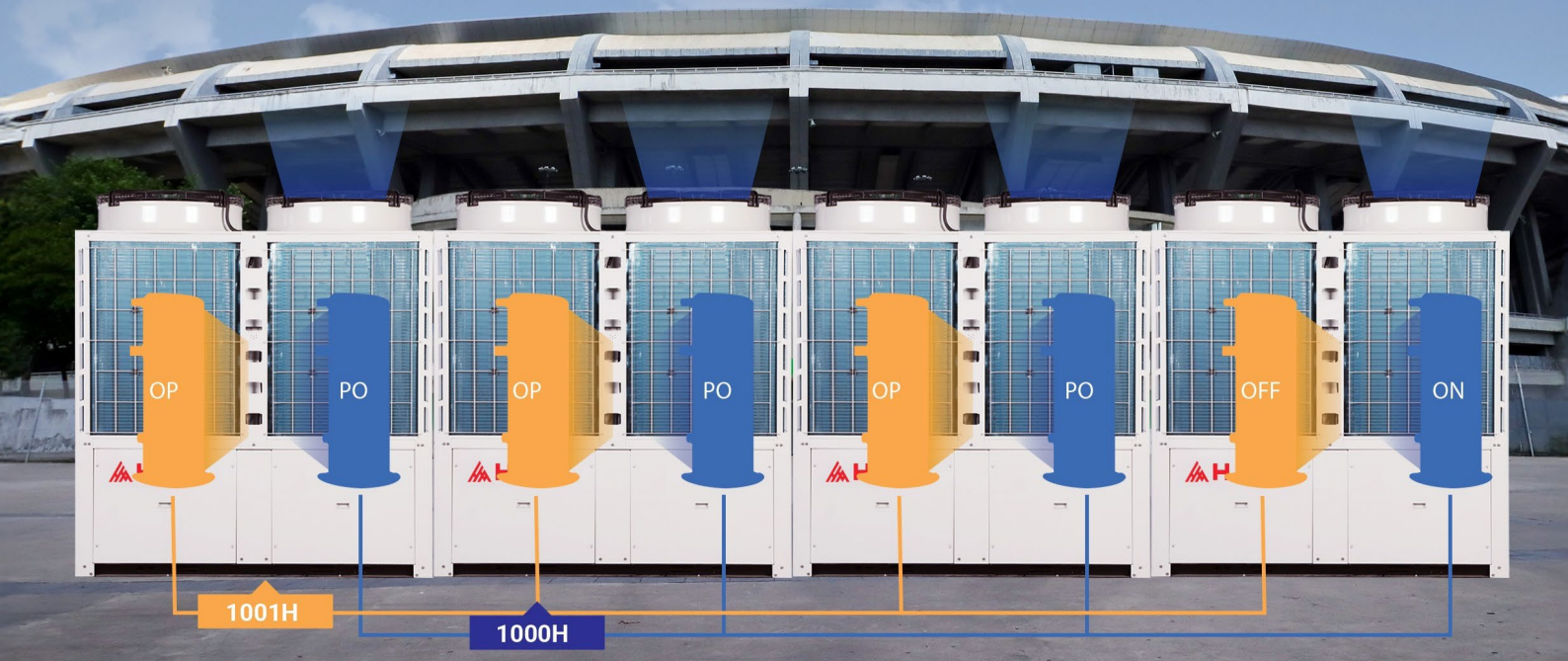
The condensers and fans of the two systems are completely separated and operate independently, without interference between them.

The two systems operate in mutual standby mode, ensuring a high level of reliability.

Under partial-load conditions, when one system is active, the controller of the cellular system can prioritize operation in order to reduce energy consumption and increase operating efficiency.

Intelligent operation through compressor rotation

Operating loads are intelligently balanced among modules, preventing overload and premature wear of individual units and thereby extending the service life of the entire system.



#performance

Efficient oil management

Equipped with a high-efficiency external oil separator, the system achieves an oil separation efficiency of up to 98%, significantly reducing incorrect oil circulation in the circuit (below 2%) and improving the unit's energy efficiency.

The compressors are fitted with an integrated oil filter that keeps the lubricating oil clean while ensuring optimal lubrication throughout the equipment's service life.

In addition, the compressor is equipped with an integrated positive-displacement gear oil pump, which supplies oil continuously regardless of speed, ensuring safe and continuous lubrication.

#quiet

Designed for quiet operation

The compressor is standard-equipped with a fully enclosed sound-insulating casing, designed to significantly reduce operating noise and ensure quiet operation of the entire unit.

The sound-insulation system uses galvanized steel sheet combined with a generous 20 mm layer of sound-absorbing wool, allowing compressor noise reduction of up to 3–4 dB(A).

In addition, the unit is equipped with a fan motor featuring reduced noise levels and specially profiled blades designed to attenuate aerodynamic noise. These improvements allow a further reduction of up to 5 dB(A), achieving sound levels as low as 63 dB(A) for the 65 model and 67 dB(A) for the 130 model, thus contributing to a quieter and more comfortable operating environment.

Intelligent defrosting

The heat exchanger is equipped with two temperature sensors that ensure precise detection of frost formation and rapidly initiate the defrost cycle, depending on ambient temperature, evaporation temperature, and operating duration. Defrosting time is intelligently automated to eliminate inefficient cycles, thereby optimizing heating performance and efficiency.

When MULTIPLE modules are combined, between one and sixteen defrosting systems can be configured to operate simultaneously, adapting to the specific requirements of the installation. Under standard conditions, the maximum interval between defrost cycles is set to two hours, with adjustment possible to further optimize performance. Each unit is designed with a dual system, with one water circuit and two refrigerant circuits (fluorinated), the air-side heat exchanger being common, while the water-side heat exchanger is separate. Heating load control is achieved by monitoring total inlet and outlet water temperatures. The dual fan systems operate independently and are completely separated, allowing alternating defrost cycles for maximum efficiency and extended equipment durability.

The variable-speed system achieves load control by regulating compressor frequency. In multi-module configurations, each system can automatically regulate its frequency. As a result, outlet water temperature fluctuates slightly, and the COP can increase by 15%–20%.

Technical specifications

HAVA Modular Chiller

HHCM-65/130SSA/DDA

Model			HHCM-65SSA	HHCM-130DDA
Cooling capacity		kW	63	126
Heating capacity		kW	68	136
Cooling power input		kW	22,1	43,4
Heating power input		kW	22,4	44,6
Maximum power input		kW	26,5	53
Cooling current		A	36	72
Heating current		A	37	74
Maximum current		A	48	96
COPc/COPh		-	2,85/3,04	2,9/3,05
SEER		-	4,71	4,61
SCOP (45℃ water outlet)		-	2,87	2,91
Capacity regulation of single unit		-	Inverter stepless	
Power supply		-	AC 3 Φ , 380~415V/50Hz	
Rated water flow rate		m^3/h	10,8	21,7
Water resistance (without Fliter)		kPa	35	35
Water resistance (with Fliter)		kPa	45	45
Pipe diameter (Inlet / Outlet)		-	G2-1/2"external thread	
Max.pressure bearing of water side HEX		MPa	1,0	
Operation type		-	Automatic operation controlled by microcomputer	
Compressor type		-	DC Inverter Scroll Compressor	
Number of compressors		pcs	1	2
Fan	Type	-	DC inverter axial low-noise blade	
	Total volume	m^3/h	24400	43000
	Quantity	pcs	2	2
Refrigerant	Type	-	R410A	
	Total charge	kg	15,5	2x14,0
External dimension	L×W×H	mm	1950×765×1725	2190×1100×2360
Packaging dimensions	L×W×H	mm	2030×840×1860	2250×1160×2485
Weight	Net	kg	490	910
	Gross	kg	520	940
	Operation	kg	510	930
Sound power level		dB(A)	81	84
Ambient temperature	Cooling	℃	-15~48	
	Heating	℃	-26~43	
Outlet water temperature	Cooling	℃	5~15	
	Heating	℃	35~55	

Note:
1. Cooling capacity and cooling power input are measured at the rated water flow rate, leaving water temperature of 7°C, and outdoor ambient dry-bulb temperature of 35°C. Heating capacity and heating power input are measured at the rated water flow rate, leaving water temperature of 45°C, outdoor ambient dry-bulb temperature of 7°C, and wet-bulb temperature of 6°C.
2. Operation in heating mode is prohibited when the ambient temperature is below −26°C.
3. The specifications and parameters of this product are subject to change due to product improvements without prior notice.
4. The above modules may be used in combination, and up to 16 modules can be combined.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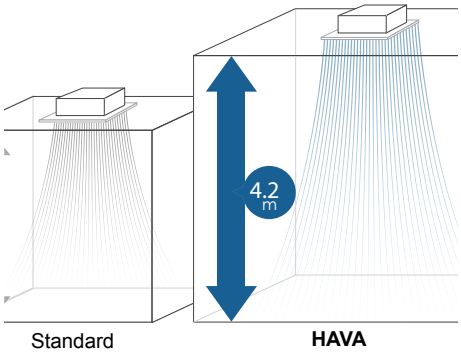
HAVA 4-way Cassette

Mini-HHCPC and HHCP Series

Compact and elegant design

Our four-way air-conditioning cassettes impress with their ultra-slim design, with a height of only 238 mm, while the mini version features an elegant profile of just 215 mm.

These dimensions make them the ideal solution for discreet integration into suspended ceilings with limited space. In addition, the fresh-air front panel blends harmoniously with any interior aesthetic, providing a refined and almost imperceptible presence.



01

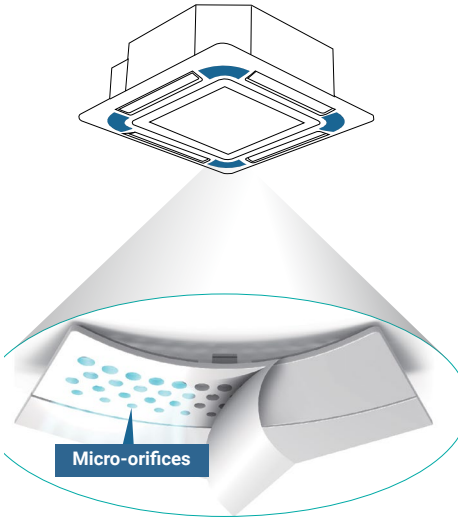
High-ceiling installation

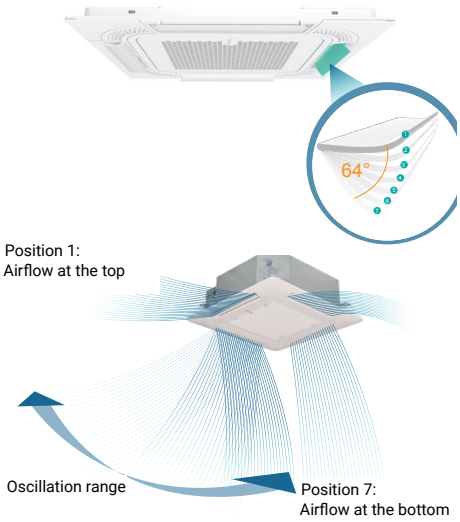
The cassette-type unit is capable of supplying air from ceiling heights of up to 4.2 m, ensuring efficient air distribution even in rooms with high ceilings

02

Gentle airflow for everyone

In the new Breeze mode, cool air is blown through the panel's micro-orifices, and the unit operates quietly, allowing direct drafts toward occupants to be avoided and achieving a more uniform and comfortable airflow.





03

Individually controllable louvers

The four-way cassette louvers can now be individually controlled, allowing you to choose how the air-conditioning unit delivers air depending on different needs, applications, and room layouts. Each louver has seven angle settings, adjustable up to a maximum of 64°.

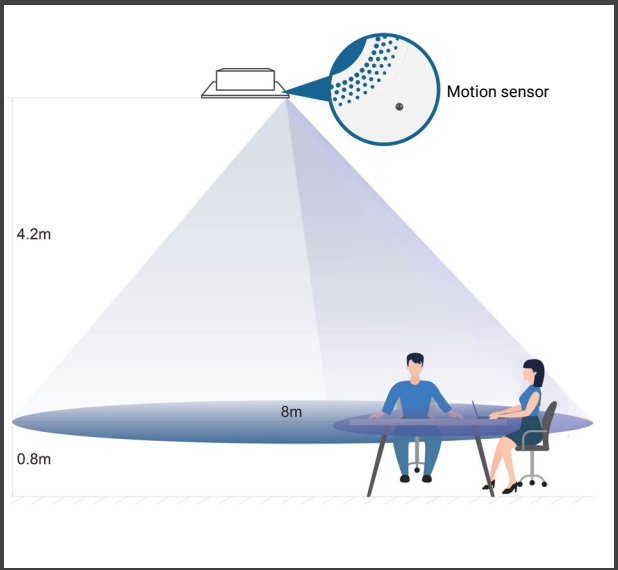
Position 1
Upward airflow
Free oscillation
Intermediate airflow

Position 7
Downward airflow

Self-cleaning function

The cassette-type unit is equipped with a self-cleaning function. With a simple press on the remote control, the unit cleans itself automatically, without external intervention. This function not only ensures clean and healthy air distribution but also saves both time and money.

Pre-treatment modes | Rapid freezing | Defrosting

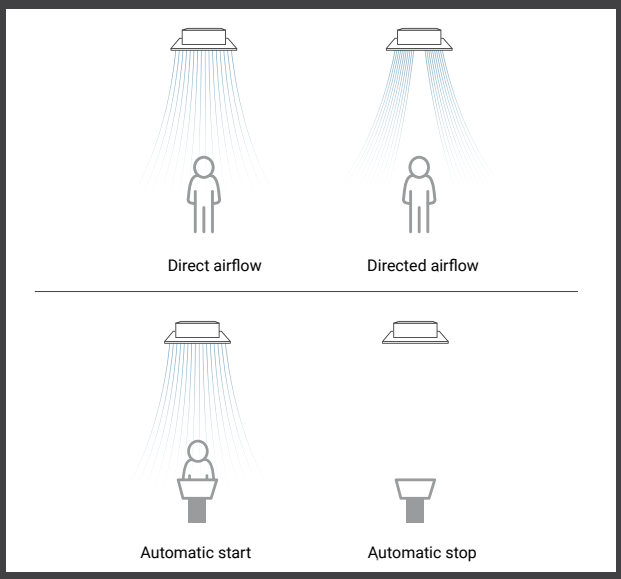


Motion sensor for added comfort

This cassette-type unit redefines the comfort concept through the integration of an advanced human-presence sensor. It accurately detects occupants, intelligently managing unit operation, starting and stopping the system, and finely adjusting airflow direction, either toward or away from occupants, to deliver optimal comfort.

MULTIPLE benefits from a single function

Furthermore, when the space becomes more crowded, the system anticipates the need for additional cooling and reduces the set temperature, ensuring a consistently pleasant environment. As the number of occupants decreases, the temperature is adjusted accordingly, optimizing not only comfort but also energy efficiency. It is a solution that adapts to your needs without requiring special intervention.



Technical specifications

HAVA 4-Way cassette

HHCP-22/24/27/30/38/48/54A

Model				HHCP-22A	HHCP-24A	HHCP-27A	HHCP-30A	HHCP-38A	HHCP-48A	HHCP-54A
Power Supply				AC 1Φ, 220V-240V/50/60Hz						
Capacity	Cooling		kW	6,3	7,1	8.0	9,0	11,2	14,0	16,0
			Btu/h	21.500	24.200	27.300	30.700	38.200	47.800	54.600
	Heating		kW	7,1	8,0	9,0	10,0	12,5	16,0	18,0
			Btu/h	24.200	27.300	30.700	34.100	42.700	54.600	61.400
Power Input	Cooling		W	50	60	70	70	80	130	130
	Heating		W	50	60	70	70	80	130	130
Sound pressure			dB(A)	36/33/32/	36/33/32/	37/36/35/	37/36/35/	42/40/38/	46/44/40/	46/44/41/
			dB(A)	31/29/28	31/29/28	33/31/30	33/31/30	36/34/33	38/36/34	40/38/36
Airflow Rate			m^3/min	26,0/20,0/	27,0/21,1/	25,0/21,1/	25,0/22,3/	31,0/29,5/	37,0/33,5/	37,0/34,0/
			m^3/min	18,3/17,0/	19,1/18,0/	19,6/17,9/	20,3/18,3/	28,7/26,0/	29,6/27,2/	30,7/28,9/
			m^3/min	15,1/13,0	15,8/14,7	16,1/14,7	16,9/15,3	23,5/20,5	24,2/22,4	25,6/23,8
Piping	Connection type		-	Flare-nut connection(with flare nut)						
	Liquid pipe		mm	Φ6,35	Φ9,53	Φ9,53	Φ9,53	Φ9,53	Φ9,53	Φ9,53
			inch	(1/4)	(3/8)	(3/8)	(3/8)	(3/8)	(3/8)	(3/8)
	Gas pipe		mm	Φ12,7	Φ15,88	Φ15,88	Φ15,88	Φ15,88	Φ15,88	Φ15,88
			inch	(1/2)	(5/8)	(5/8)	(5/8)	(5/8)	(5/8)	(5/8)
	Condensate drain pipe		-	O.D. 32						
Weight	Net weight		kg	21	21	23	23	26	26	26
	Gross weight		kg	25	25	27	27	31	31	31
Dimensions	External	H	mm	238	238	238	238	288	288	288
		W	mm	840	840	840	840	840	840	840
		D	mm	840	840	840	840	840	840	840
	Packaging	H	mm	292	292	292	292	342	342	342
		W	mm	945	945	945	945	945	945	945
		D	mm	945	945	945	945	945	945	945
Decoration panel	Model		-	HHCP-PA900						
	Color		-	Neutral white						
	Body dimensions		mm	47	47	47	47	47	47	47
			mm	950	950	950	950	950	950	950
			mm	950	950	950	950	950	950	950
	Packaging dimensions		mm	100	100	100	100	100	100	100
			mm	1022	1022	1022	1022	1022	1022	1022
			mm	1022	1022	1022	1022	1022	1022	1022
	Net weight		kg	5,7	5,7	5,7	5,7	5,7	5,7	5,7
	Gross weight		kg	8,0	8,0	8,0	8,0	8,0	8,0	8,0

Note:
1.The nominal cooling capacity and nominal heating capacity are based on the following conditions:
Cooling operating conditions
Indoor air inlet temperature: 27°C DB (80°F DB), 19.0°C WB (66.2°F WB)
Outdoor air inlet temperature: 35°C DB (95°F DB)
Piping length: 7.5 m

Heating operating conditions
Indoor air inlet temperature: 20°C DB (68°F DB)
Outdoor air inlet temperature: 7°C DB (45°F DB), 6°C WB (43°F WB)

2. The sound pressure level is based on the following conditions: measured 1.5 m below the unit.
The above data were measured in an anechoic chamber; therefore, reflected sound should be taken into account under field conditions.

Technical specifications

HAVA mini-cassette

HHCPC-05/07/09/12/15/17/19A

Model				HHCPC-05A	HHCPC-07A	HHCPC-09A	HHCPC-12A	HHCPC-15A	HHCPC-17A	HHCPC-19A
Power Supply				AC 1Φ, 220V-240V/50/60Hz						
Capacity	Cooling		kW	1,5	2,2	2,8	3,6	4,5	5,0	5,6
			Btu/h	5.100	7.500	9.600	12.300	15.300	17.000	19.100
	Heating		kW	2,0	2,5	3,3	4,2	5,0	5,6	6,3
			Btu/h	6.800	8.500	11.200	14.300	17.000	19.100	21.500
Power Input	Cooling		W	14	14	14	16	22	30	40
	Heating		W	14	14	14	16	22	30	40
Sound pressure			dB(A)	30/29/28/26	30/29/28/26	32/30/28/26	34/32/29/26	38/36/31/28	42/39/36/31	45/42/38/34
Airflow Rate			m^3/min	7,2/6,5/6,2/5,6	7,2/6,5/6,2/5,6	7,8/7,2/6,5/5,8	7,8/7,2/6,5/5,8	9,3/8,7/7,1/6,7	11,0/9,5/8,7/7,1	12,5/10,8/9,3/8,0
Piping	Connection type		-	Flare-nut connection(with flare nut)						
	Liquid pipe		mm	Φ6,35	Φ6,35	Φ6,35	Φ6,35	Φ6,35	Φ6,35	Φ6,35
			inch	(1/4)	(1/4)	(1/4)	(1/4)	(1/4)	(1/4)	(1/4)
	Gas pipe		mm	Φ12,7	Φ12,7	Φ12,7	Φ12,7	Φ12,7	Φ12,7	Φ12,7
			inch	(1/2)	(1/2)	(1/2)	(1/2)	(1/2)	(1/2)	(1/2)
	Condensate drain pipe		-	O.D. 32						
Weight	Net weight		kg	14,5	14,5	14,8	14,8	15,8	15,8	15,8
	Gross weight		kg	17,3	17,3	17,6	17,6	18,6	18,6	18,6
Dimensions	External	H	mm	215	215	215	215	215	215	215
		W	mm	570	570	570	570	570	570	570
		D	mm	570	570	570	570	570	570	570
	Packaging	H	mm	292	292	292	292	292	292	292
		W	mm	730	730	730	730	730	730	730
		D	mm	668	668	668	668	668	668	668
Decoration panel	Model		-	HHCPC-PA600						
	Color		-	Neutral white						
	Body dimensions	H	mm	37	37	37	37	37	37	37
		W	mm	620	620	620	620	620	620	620
		D	mm	620	620	620	620	620	620	620
	Packaging dimensions	H	mm	115	115	115	115	115	115	115
		W	mm	690	690	690	690	690	690	690
		D	mm	680	680	680	680	680	680	680
	Net weight		kg	2,7	2,7	2,7	2,7	2,7	2,7	2,7
	Gross weight		kg	4,0	4,0	4,0	4,0	4,0	4,0	4,0

Note:
1.The nominal cooling capacity and nominal heating capacity are based on the following conditions:
Cooling operating conditions
Indoor air inlet temperature: 27°C DB (80°F DB), 19.0°C WB (66.2°F WB)
Outdoor air inlet temperature: 35°C DB (95°F DB)
Piping length: 7.5 m

Heating operating conditions
Indoor air inlet temperature: 20°C DB (68°F DB)
Outdoor air inlet temperature: 7°C DB (45°F DB), 6°C WB (43°F WB)
2. The sound pressure level is based on the following conditions: measured 1.5 m below the unit.
The above data were measured in an anechoic chamber; therefore, reflected sound should be taken into account under field conditions.

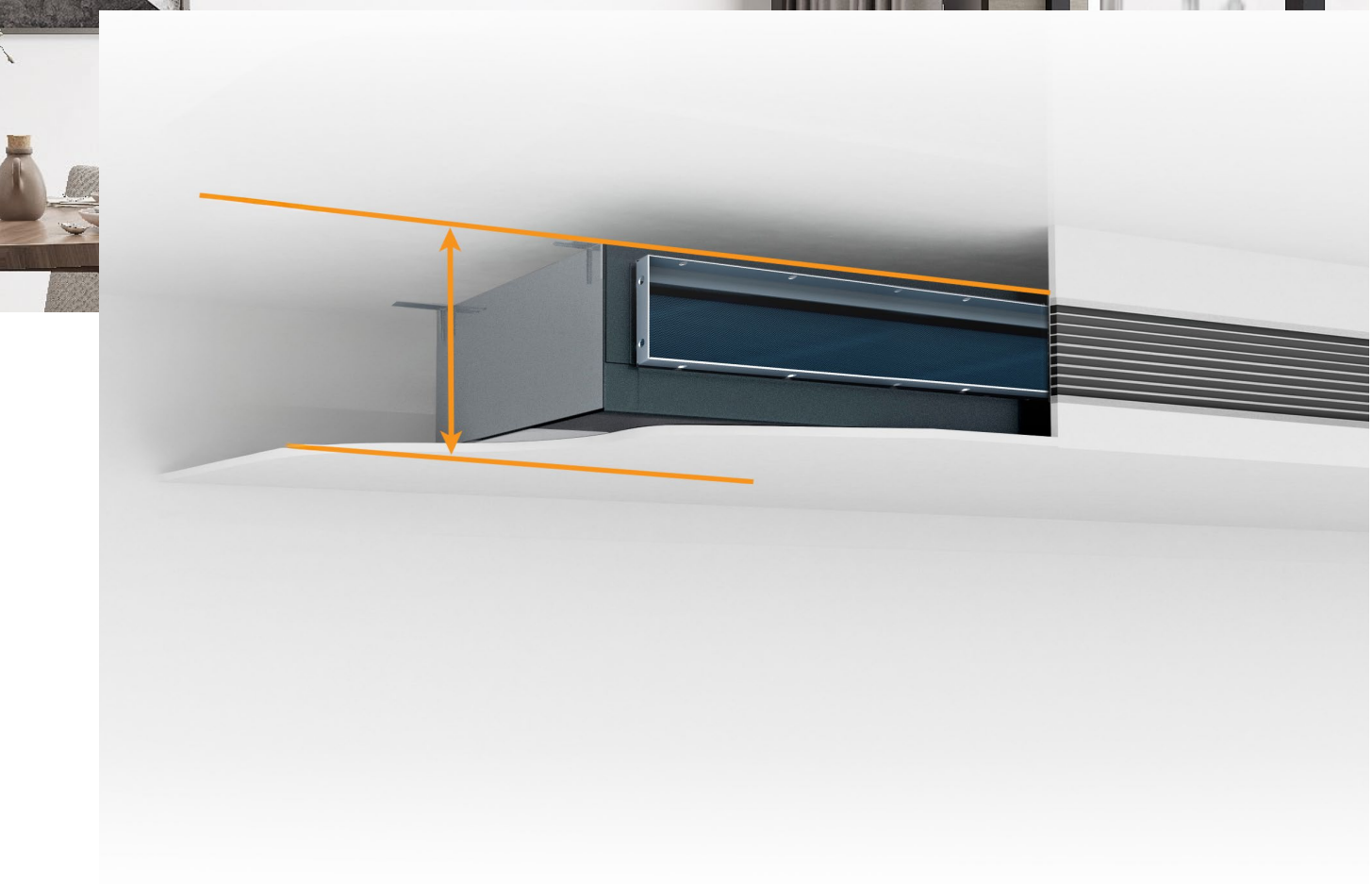
HAVA Duct-type
HHD Series

Slim and smart design

The AC/DC duct unit with reduced height has a thickness of only 270 mm, making it ideal for installation in the narrowest ceiling spaces. This optimizes the available space, allowing for increased room height without affecting user comfort and satisfaction.

Airflow

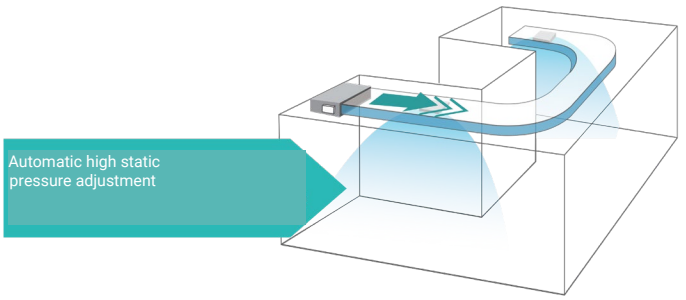
The elegant air discharge panel, equipped with three-dimensional adjustable louvers and an LED display for temperature and humidity, is available as an optional accessory for low-profile ceiling duct units. The 3D louvers ensure wide air distribution, maintaining thermal comfort in every corner of the room, regardless of the season.

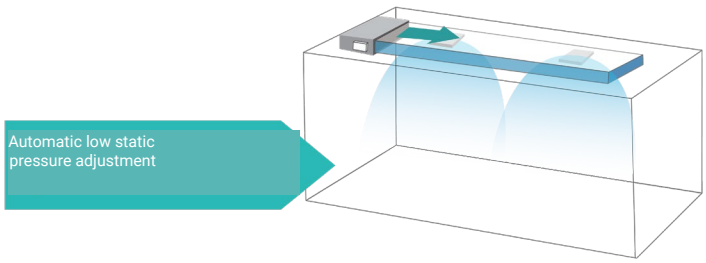


01

Automatic external static pressure control

Frequently, after installation, the actual duct resistance can differ significantly from the initially calculated values, resulting in airflow that is too low or too high. The automatic external static pressure (ESP) adjustment function has been designed to effectively solve this problem.
During initial commissioning, the system is able to automatically select the most suitable ESP value, precisely adapting to the actual resistance of the duct system. This ensures optimized airflow, delivering the designed performance and superior comfort.

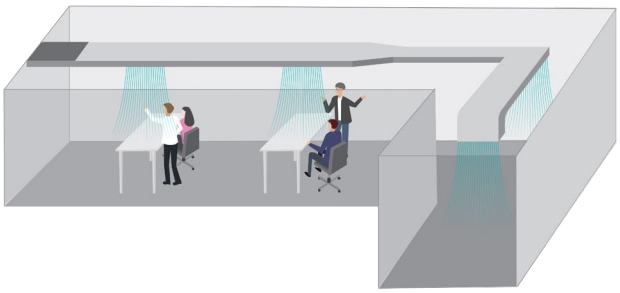




02

Comfortable cooling mode

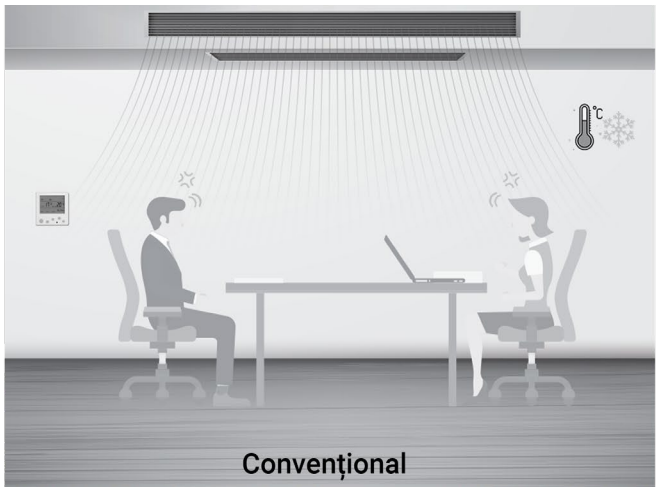
The unit provides comfortable cooling with three temperature levels (cool/cooler/warmer), selectable directly from the controller. The system continuously compares actual temperature with the setpoint and intelligently adjusts operating frequency, ensuring an indoor environment perfectly suited to user needs.

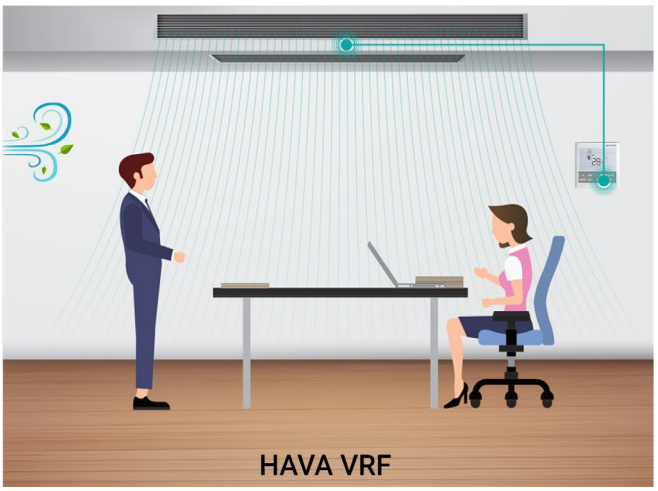


Self-cleaning function

With a simple press on the remote control, the unit cleans itself automatically, without manual intervention. This not only ensures the supply of clean and healthy air but also saves both time and money.

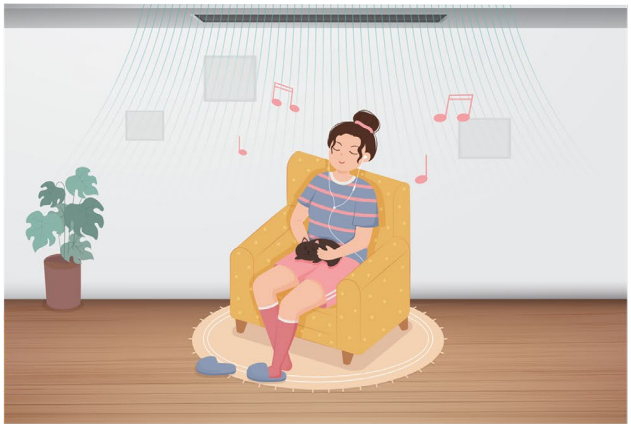
Precise temperature control





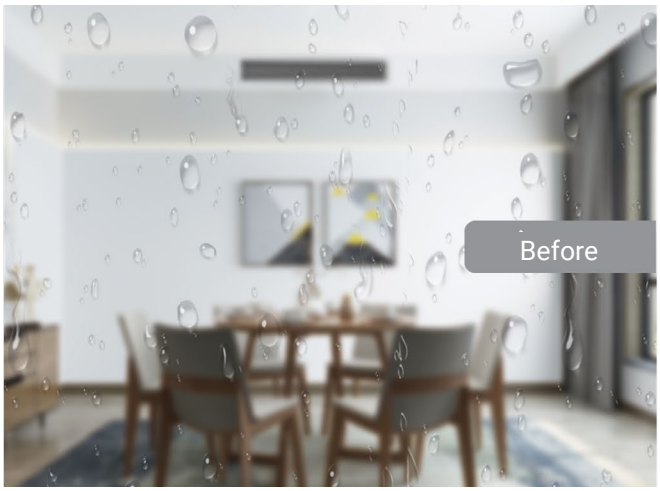
The unit is equipped with two temperature sensors that send real-time signals to the controller for more precise temperature control.

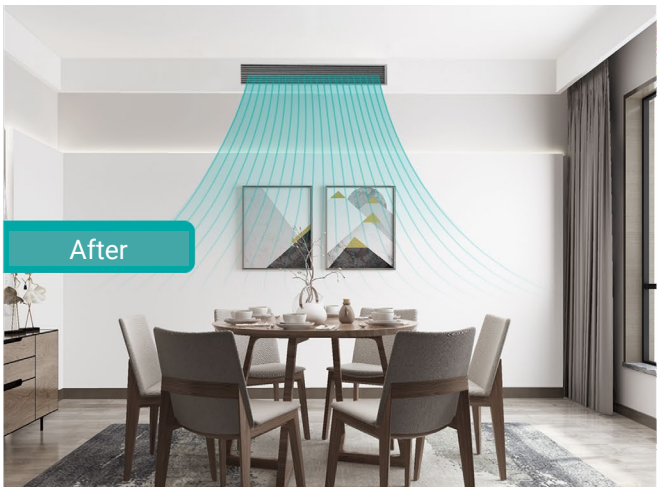
Comfortable cooling mode



The indoor unit is capable of providing comfortable cooling by setting three air-temperature levels (cool/comfortable/warm). The system evaluates the actual air temperature against the set temperature on the controller and intelligently adjusts the operating frequency to create a pleasant environment for the user (12–16°C).

Automatic dehumidification





The unit is equipped with a special fresh-air connection that allows direct introduction of outside air, representing 10% of the total airflow, to ensure a constant supply of fresh air to the indoor space.

HAVA duct-type indoor unit HHD Series

Technical specifications

HAVA duct-type unit

HHD-07/09/12/15/19/22/24HPA

Model				HHD-07HPA	HHD-09HPA	HHD-12HPA	HHD-15HPA	HHD-19HPA	HHD-22HPA	HHD-24HPA
Power Supply				AC 1Φ, 220V-240V/50/60Hz						
Capacity	Cooling		kW	2,2	2,8	3,6	4,5	5,6	6,3	7,1
			Btu/h	7.500	9.600	12.300	15.400	19.100	21.600	24.200
	Heating		kW	2,5	3,2	4,0	5,0	6,3	7,1	8,0
			Btu/h	8.500	10.900	13.700	17.100	21.600	24.200	27.400
Power Input	Cooling		kW	0,10(0,13[*2])	0,10(0,13[*2])	0,13(0,16[*2])	0,13(0,16[*2])	0,14(0,21[*2])	0,19(0,24[*2])	0,19(0,24[*2])
	Heating		kW	0,10(0,13[*2])	0,10(0,13[*2])	0,13(0,16[*2])	0,13(0,16[*2])	0,14(0.21[*2])	0,19(0,24[*2])	0,19(0,24[*2])
Sound pressure	220-240V/50Hz		dB(A)	32/27/25	32/27/25	35/32/26	35/32/26	36/35/30	39/32/25	39/32/25
	208V/60Hz		dB(A)	33/28/24	33/28/24	37/34/29	37/34/29	37/35/29	39/32/25	39/32/25
	230V/60Hz		dB(A)	37/33/28	37/33/28	40/38/33	40/38/33	42/40/34	43/37/30	43/37/30
Airflow Rate			m3/min	9/7/6	9/7/6	12/10/8,5	12/10/8,5	15/13/10	19/14/10	19/14/10
External static pressure externă	220-240V/50Hz 208V/60Hz		Pa	50(80)	50(80)	50(80)	50(80)	50(80)	50(80)	50(80)
	230V/60Hz		Pa	80(105)	80(105)	90(115)	90(115)	90(115)	90(115)	90(115)
Piping	Connection type -			Flare-nut connection(with flare nut)						
	Liquid pipe		mm	Φ 6,35	Φ 6,35	Φ 6,35	Φ 6,35	Φ 6,35	Φ 9,53	Φ 9,53
			inch	1/4	1/4	1/4	1/4	1/4	3/8	3/8
	Gas pipe		mm	Φ12,70	Φ12.70	Φ12.70	Φ12.70	Φ 15,88	Φ 15,88	Φ 15,88
			inch	1/2	1/2	1/2	1/2	5/8	5/8	5/8
	Condensate drain		mm	I.D.32						
Weight	Net weight		kg	25 (24[*1])	25 (24[*1])	25 (24[*1])	25 (24[*1])	30 (31[*1])	30 (31[*1])	30 (31[*1])
	Gross weight		kg	31 (30[*1])	31 (30[*1])	31 (30[*1])	31 (30[*1])	36 (38[*1])	37 (38[*1])	37 (38[*1])
Dimensions	External	H	mm	270	270	270	270	270	270	270
		W	mm	650+75	650+75	650+75	650+75	900+75	900+75	900+75
		D	mm	720	720	720	720	720	720	720
	Packaging	H	mm	385	385	385	385	385	385	385
		W	mm	895	895	895	895	1140	1140	1140
		D	mm	870	870	870	870	870	870	870

Note:
1. The nominal cooling capacity and nominal heating capacity are calculated based on the following conditions:

Cooling operating conditions
Indoor unit air inlet temperature: 27°C DB (80°F DB), 19.0°C WB (66.2°F WB)
Outdoor unit air inlet temperature: 35°C DB (95°F DB)
Total piping length: 7.5 m

Heating operating conditions
Indoor unit air inlet temperature: 20°C DB (68°F DB)
Outdoor unit air inlet temperature: 7°C DB (45°F DB), 6°C WB (43°F WB)

2. The sound pressure level is determined under the following conditions:
measured 1.5 m below the unit;
with a 2.0 m air discharge duct and a 1.0 m return air duct.
The above data were measured in an anechoic chamber; therefore, sound reflection should be taken into account during installation.

3.When bottom air intake is adopted, the sound pressure level will increase depending on factors such as the installation method and room structure.
*1: The value marked *1 applies to indoor units with a power supply of 208–230 V / 60 Hz.

Technical specifications

HAVA duct-type unit

HHD-27/30/38/48/54/76/96HPA

Model				HHD-27HPA	HHD-30HPA	HHD-38HPA	HHD-48HPA	HHD-54HPA	HHD-76HPA	HHD-96HPA
Power Supply				AC 1Φ, 220V-240V/50/60Hz						
Capacity	Cooling		kW	8,0	9,0	11,2	14,0	16,0	22,4	28,0
			Btu/h	27.400	30.800	38.000	48.000	54.500	76.500	95.600
	Heating		kW	9,0	10,0	12,5	16,0	18,0	25,0	31,5
			Btu/h	30.800	34.200	42.500	54,500	61.500	85.300	107.500
Power Input	Cooling		kW	0,25(0,34*2)	0,25(0,34*2)	0,25(0,34*2)	0,34(0,45*2)	0,43(0,59*2)	0,61	0,83
	Heating		kW	0,25(0,34*2)	0,25(0,34*2)	0,25(0,34*2)	0,34(0,45*2)	0,43(0,59*2)	0,61	0,83
Sound pressure	220-240V/50Hz		dB(A)	42/39/34	42/39/34	42/39/34	43/40/35	46/40/35	49/48/47/ 46/45/44	53/52/50/ 49/47/45
	208V/60Hz		dB(A)	42/38/33	42/38/33	42/38/33	44/39/34	45/40/34		
	230V/60Hz		dB(A)	44/42/37	44/42/37	44/42/37	47/43/38	46/42/38		
Airflow Rate			m^3/min	28/24/19,5	28/24/19,5	28/24/19,5	35,5/29/24	39/31/24	57/54/52/ 51/49/48	72/68/65/ 61/58/50
External static pressure externă	220-240V/50Hz 208V/60Hz		Pa	120(90)	120(90)	120(90)	120(90)	120(90)	150(50~250)	150(50~250)
	230V/60Hz		Pa	170(150)	170(150)	170(150)	170(150)	170(150)		
Piping	Connection type -			Flare-nut connection(with flare nut)					Sudare prin lipire tare	
	Liquid pipe		mm	Φ 9,53	Φ 9,53	Φ 9,53	Φ 9,53	Φ 9,53	Φ9,53	Φ9,53
			inch	3/8	3/8	3/8	3/8	3/8	3/8	3/8
	Gas pipe		mm	Φ 15,88	Φ 15,88	Φ 15,88	Φ 15,88	Φ 15,88	Φ22,2	Φ22,2
			inch	5/8	5/8	5/8	5/8	5/8	7/8	7/8
	Condensate drain		mm	I.D.32						
Weight	Net weight		kg	45 (44*1)	45 (44*1)	45 (44*1)	53 (50*1)	53 (50*1)	104	104
	Gross weight		kg	52 (52*1)	52 (52*1)	52 (52*1)	61 (59*1)	61 (59*1)	125	125
Dimensions	External	H	mm	300	300	300	300	300	470	470
		W	mm	1100+75	1100+75	1100+75	1400+75	1400+75	1250	1250
		D	mm	800	800	800	800	800	1120	1120
	Packaging	H	mm	415	415	415	415	415	546	546
		W	mm	1345	1345	1345	1640	1640	1466	1466
		D	mm	950	950	950	950	950	1345	1345

Note:
1. The nominal cooling capacity and nominal heating capacity are calculated based on the following conditions:

Cooling operating conditions
Indoor unit air inlet temperature: 27°C DB (80°F DB), 19.0°C WB (66.2°F WB)
Outdoor unit air inlet temperature: 35°C DB (95°F DB)
Total piping length: 7.5 m

Heating operating conditions
Indoor unit air inlet temperature: 20°C DB (68°F DB)
Outdoor unit air inlet temperature: 7°C DB (45°F DB), 6°C WB (43°F WB)

2. The sound pressure level is determined under the following conditions:
measured 1.5 m below the unit;
with a 2.0 m air discharge duct and a 1.0 m return air duct.
The above data were measured in an anechoic chamber; therefore, sound reflection should be taken into account during installation.

3.When bottom air intake is adopted, the sound pressure level will increase depending on factors such as the installation method and room structure.
*1: The value marked *1 applies to indoor units with a power supply of 208–230 V / 60 Hz.

HAVA Wall-mounted Split

HHP Series

Wall-mounted installation

The wall-mounted unit represents an efficient solution for cooling and heating, which can be installed quickly and easily.

High-efficiency DC motor

Equipped with a DC inverter, the unit has an energy consumption almost 60% lower compared to conventional products, thus ensuring operation at reduced running costs.

Optimal noise control

Six indoor fan speeds are available to meet user needs under different conditions.

Self-cleaning function

The unit is equipped with a self-cleaning function. With a simple press on the remote control, the unit cleans itself automatically, without manual intervention.

Healthy air

The HAVA HHP Series unit is designed to maintain clean and healthy airflow, and its functions help reduce the need for frequent maintenance, preventing additional costs.

Flexible temperature setting

Allows precise temperature adjustment, providing optimal comfort and a pleasant indoor environment at any time.


HAVA
50m
50m

Technical specifications

HAVA Wall-mounted unit

HHP-05/07/09/12/15/19/24/28WMA

Model			HHP-05WMA	HHP-07WMA	HHP-09WMA	HHP-12WMA	HHP-15WMA	HHP-19WMA	HHP-24WMA	HHP-28WMA
Power Supply				AC 1Φ, 220V-240V/50/60Hz						
Capacity	Cooling	kW	1,7	2,2	2,8	3,6	4,5	5,6	7,1	8,4
		Btu/h	5.800	7.500	9.600	12.300	15.400	19.100	24.200	28.700
	Heating	kW	2,0	2,5	3,3	4,0	5,0	6,3	8,0	8,4
		Btu/h	6.500	8.500	11.300	13.700	17.100	21.500	27.300	28.700
Power input	Cooling	W	20	20	20	30	20	30	50	80
	Heating	W	20	20	20	30	30	30	70	80
Sound pressure		dB(A)	33/32/32/ 30/30/28	36/35/33/ 32/30/28	36/35/33/ 32/30/28	38/35/33/ 32/30/28	38/37/36/ 32/31/29	40/38/36/ 35/33/31	45/42/41/ 38/35/31	50/48/45/ 41/36/33
Airflow Rate		m^3/ min	8,7/8,3/8,2/ 7,5/7,2/7,0	9,8/9,2/8,7/ 8,2/7,5/7,0	9,8/9,2/8,7/ 8,2/7,5/7,0	10,3/9,2/8,7/ 8,2/7,5/7,0	11,5/11,0/10,3/ 9,0/8,7/8,0	16,2/15,0/14,2/ 13,3/12,2/11,5	20,0/18,0/17,0/ 15,0/13,3/11,7	23,3/22,0/20,0/ 17,0/14,2/12,2
Piping	Connecti- on type		Flare-nut connection(with flare nut)							
	Liquid pipe	mm	Φ6,35	Φ6,35	Φ6,35	Φ6,35	Φ6,35	Φ9,53	Φ9,53	Φ9,53
		inch	1/4	1/4	1/4	1/4	1/4	3/8	3/8	3/8
	Gas pipe	mm	Φ9.53	Φ9,53	Φ9,53	Φ9,53	Φ12,7	Φ15,88	Φ15,88	Φ15,88
		inch	3/8	3/8	3/8	3/8	1/2	5/8	5/8	5/8
	Conden- sate drain		O.D. 22							
Weight	Net weight	kg	9,5	9,5	9,5	9,5	13,0	14,4	14,4	14,4
	Gross weight	kg	13,4	13,4	13,4	13,4	17,8	19,4	19,4	19,4
Dimensions	External	mm	270	270	270	270	315	315	315	315
		mm	845	845	845	845	960	1120	1120	1120
		mm	203	203	203	203	230	230	230	230
	Packag- ing	mm	375	375	375	375	430	430	430	430
		mm	943	943	943	943	1058	1223	1223	1223
		mm	310	310	310	310	328	328	328	328

Note:
1. The nominal capacity is based on the following conditions:
Cooling conditions: indoor air inlet temperature 27°C DB / 19°C WB, outdoor air inlet temperature 35°C DB, piping length 7.5 m, piping height difference 0 m.
Heating conditions: indoor air inlet temperature 20°C DB, outdoor air inlet temperature 7°C DB / 6°C WB, piping length 7.5 m, piping height difference 0 m.

2. The above noise values were measured in an anechoic chamber; therefore, reflected sound should be taken into account during actual operation.
The above noise values are measured in Fan mode at a point located 1 m in front of the unit and 0.8 m below the unit.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