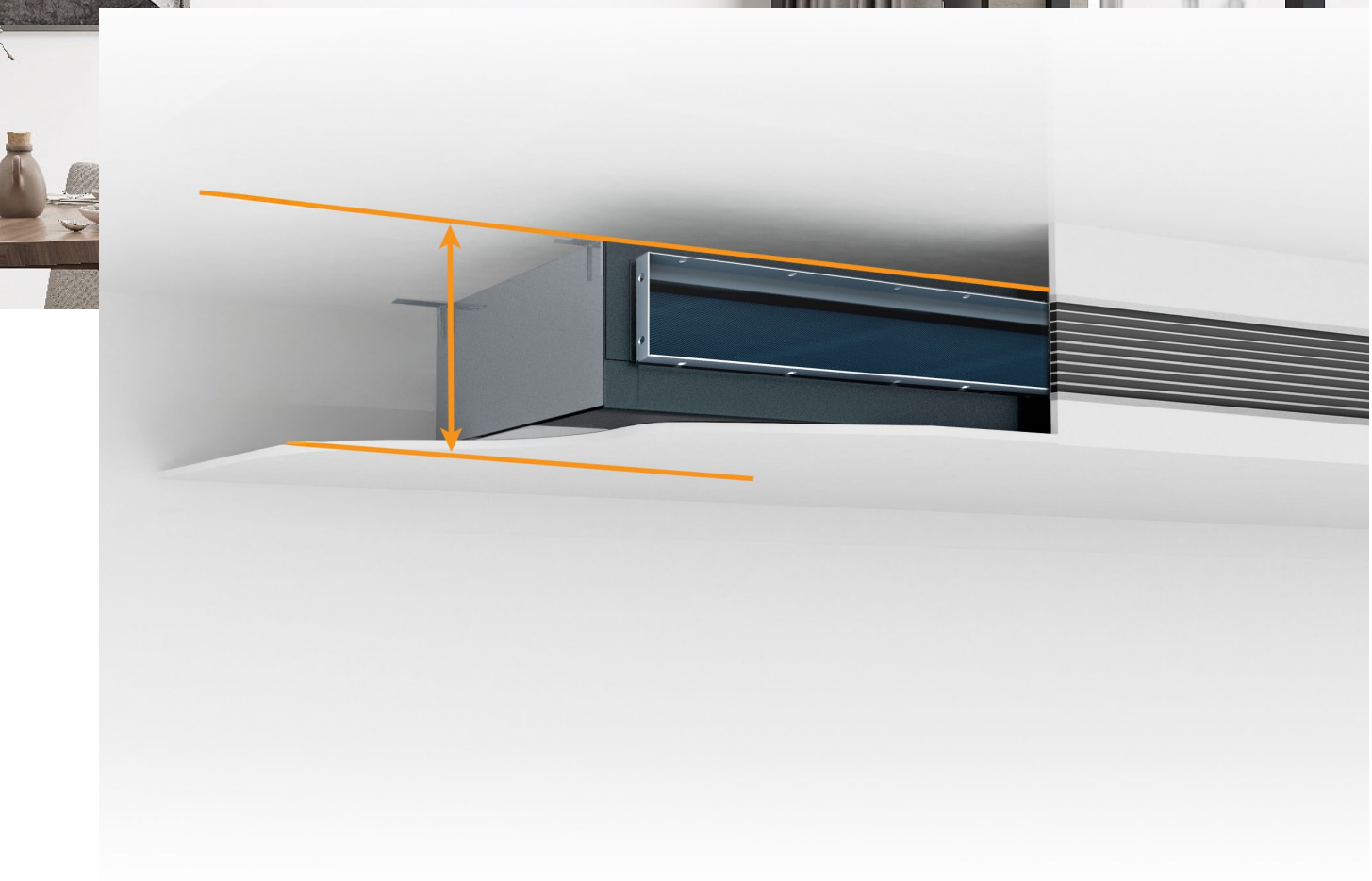
HAVA Duct-type
HHD Series

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

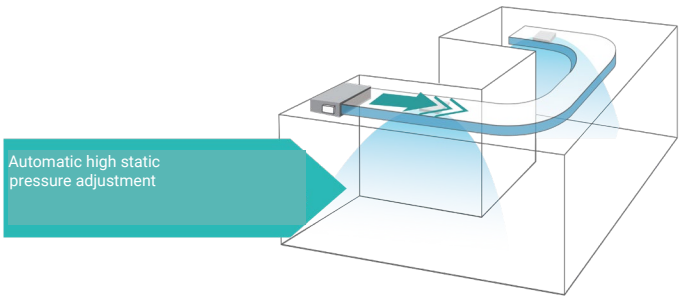
The elegant air discharge panel, equipped with three-dimensional adjustable louvers and an LED display for temperature and humidity, is available as an optional accessory for low-profile ceiling duct units. The 3D louvers ensure wide air distribution, maintaining thermal comfort in every corner of the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

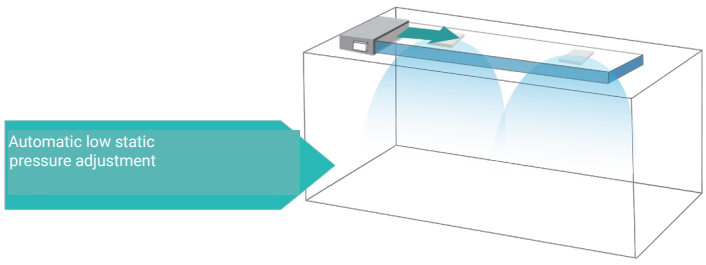


01

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.

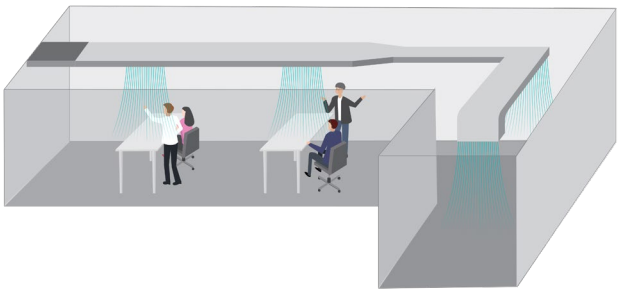




02

Comfortable cooling mode

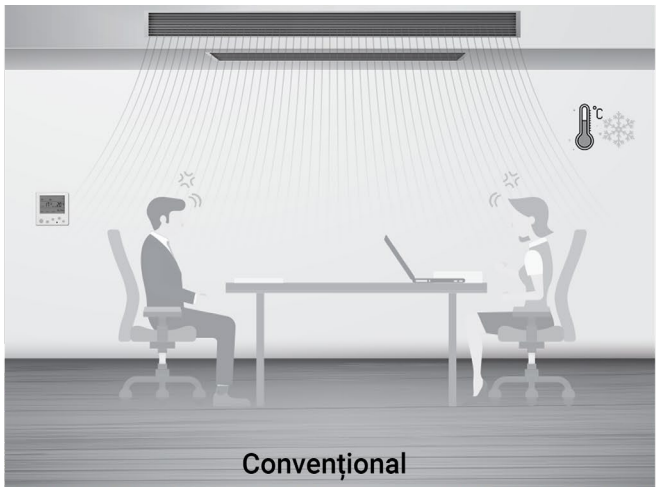
The unit provides comfortable cooling with three temperature levels (cool/cooler/warmer), selectable directly from the controller. The system continuously compares actual temperature with the setpoint and intelligently adjusts operating frequency, ensuring an indoor environment perfectly suited to user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

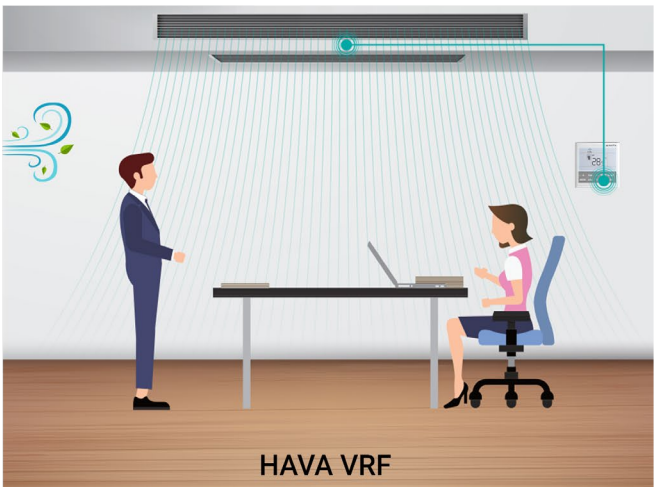


Self-cleaning function

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.

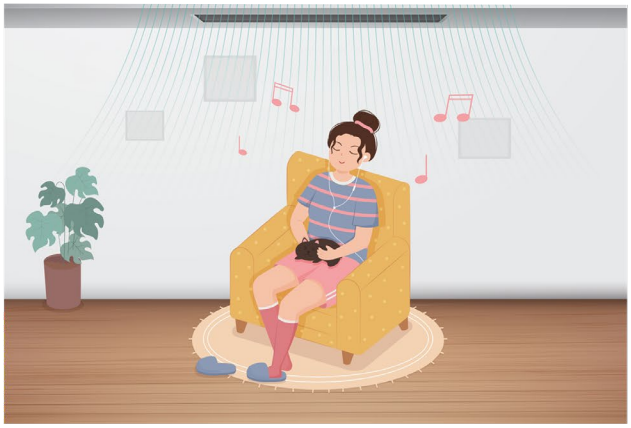
Precise temperature control





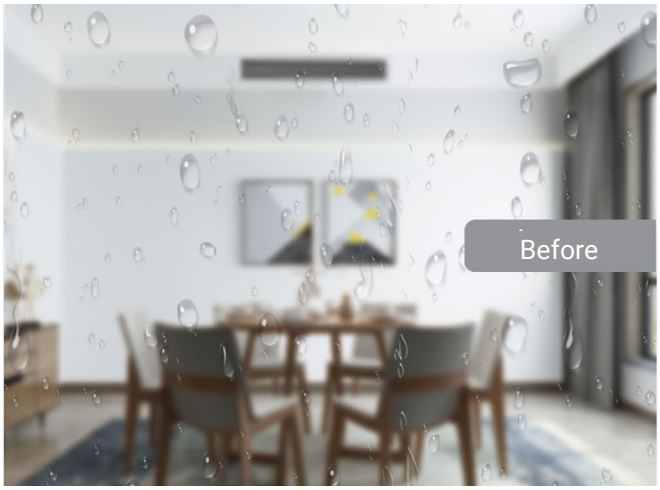
The unit is equipped with two temperature sensors that send real-time signals to the controller for more precise temperature control.

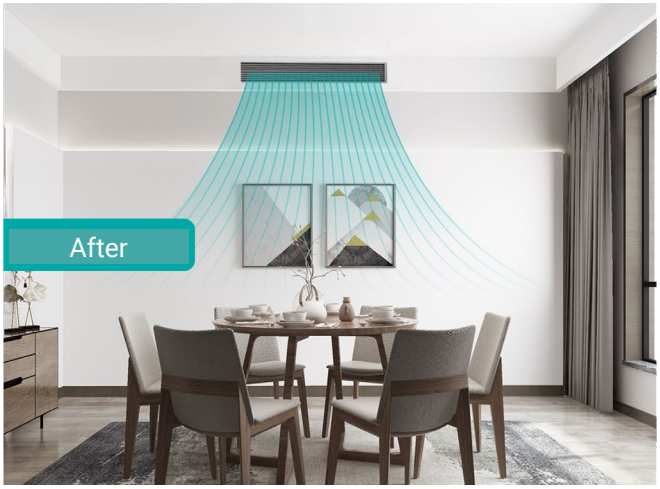
Comfortable cooling mode



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

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