Heat Pump V6-i Side Discharge Series VRF

Features

- High efficiency DC inverter compressor and DC fan motors
- Wide operating range: cooling from °5-C to °55C; heating from °20-C to °24C
- Refrigerant cooling PCB, guaranteeing reliable operation at high temperature
- Smaller foot print by side air-discharge
- Connect up to 20 indoor units
- Flexible piping design
- Precise oil control technology
- Auto addressing

DC Inverter Compressor

DC inverter compressors make the output of the outdoor unit to be modulated by the cooling or heating demands of the zone that it controls. This advanced system ensures precise temperature regulation and highly efficient energy usage, making a significant contribution to the environment.

DC Compressor
(Twin Rotary)

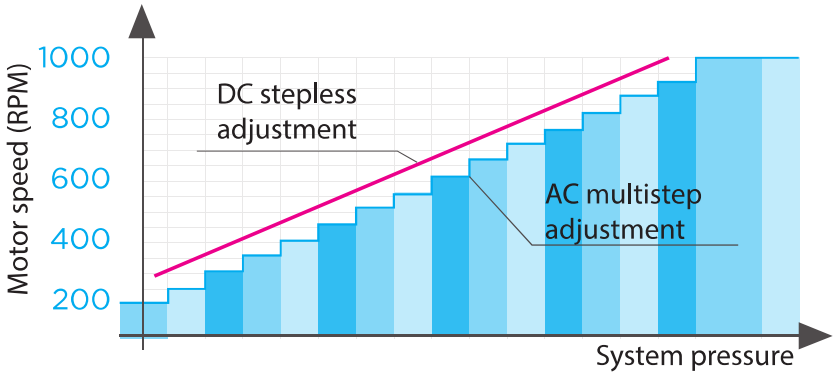
Highly Efficient DC Motor:
- Creative motor core design
- High density neodymium magnet
- Concentrated type stator
-Wider operating frequency range

Better Balance and Extremely Low Vibration:
- Twin eccentric cams
- 2 balance weights

Highly Stable Moving Parts:
- Optimal material matching rollers and vanes
-Optimize compressor drive technology
- Highly robust bearings
-Compact structure

DC Fan Motor

According to the running load and pressure, the outdoor unit controls the speed of DC fan to achieve the minimum power consumption.



Flexible Indoor Units Connection

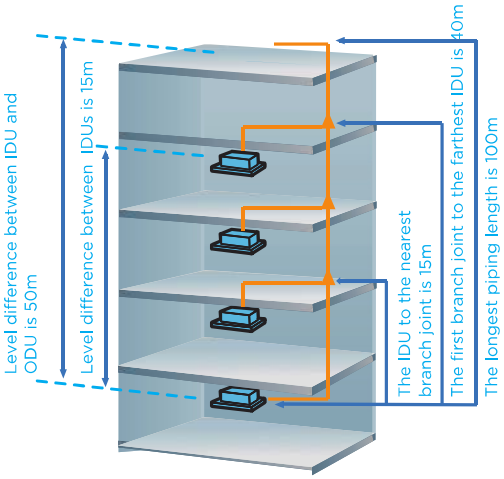
A single outdoor unit supports up to 20 indoor units, freeing up considerable space outside. Use your backyard more wisely with much more space available created by less number of outdoor units.

- *Max. 11 indoor units for a 20.0kW outdoor unit installation*
- *Max. 13 indoor units for a 22.4kW outdoor unit installation*
- *Max. 15 indoor units for a 26kW outdoor unit installation*
- *Max. 16 indoor units for a 28kW outdoor unit installation*
- *Max. 20 indoor units for a 33.5kW outdoor unit installation*

Heat Pump V6-i Side Discharge Series VRF

Flexible Piping Design

It provides a total piping length possibility of 150m, a maximum height difference between outdoor and indoor units of 50m. The height difference between indoor units can be up to 15m.



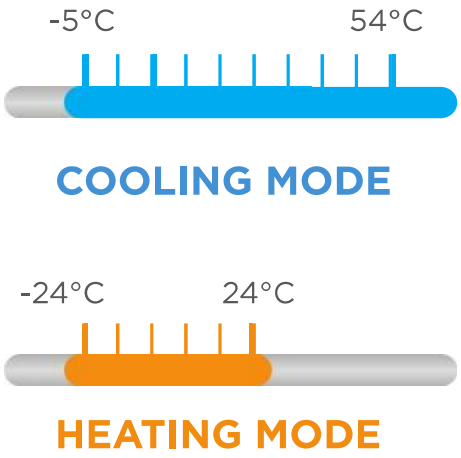
- *Total piping length: 150m*
- *Longest length - actual (equivalent): 100m (120m)*
- *Longest length after first branch: 40m*
- *Longest length after nearest branch: 15m*
- *Largest height difference between indoor and outdoor units ODU up (down): 50m (40m)*
- *Largest height difference between indoor units: 15m*

Refrigerant Cooling PCB

It uses refrigerant cooling technology to cool the electric control box which can decrease the average temperature of electrical control components by about 8 degrees, guaranteeing the stable and safe running of the control system even at 55oC.

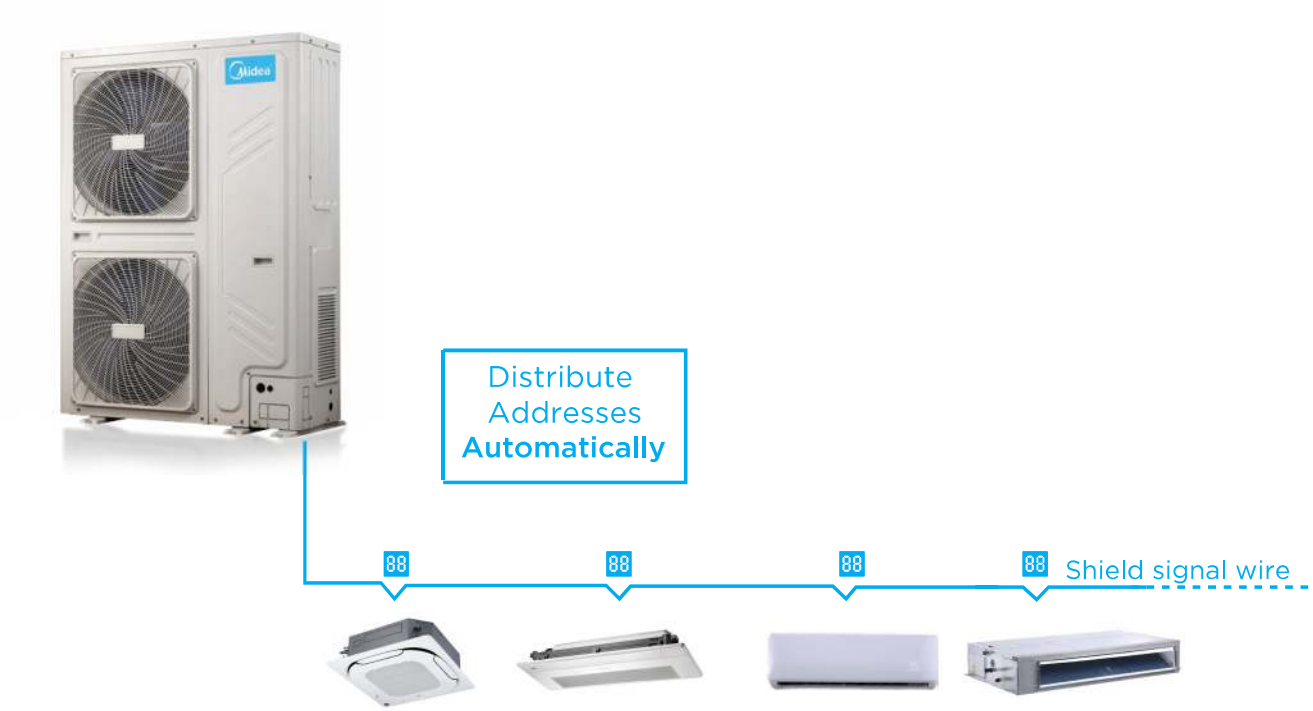
Wide Operation Range

It can operate cooling mode from -5oC to as high as 55oC and heating mode from -20oC to 24oC.



Auto Addressing

Outdoor unit can distribute addresses for indoor unit automatically. Wireless and wired controllers can query and modify each indoor unit's address.



V6-i VRF 50/60Hz | 1 Specifications

Table 2-1.1: 7/8/9HP specifications

HP			7	8	9
Model name			MVi-200WV2GN1(A)	MVi-224WV2GN1(A)	MVi-260WV2GN1(A)
Power supply		V/Ph/Hz	380-415/3/50(60)		
Cooling[1]	Capacity	kW	20	22.4	26.0
	Power input	kW	5.6	6.3	7.6
	EER		3.57	3.56	3.42
Heating[2] (Rated)	Capacity	kW	20	22.4	26.0
	Power input	kW	4.7	5.3	6.6
	COP		4.26	4.23	3.94
Heating[3] (Max.)	Capacity	kW	22.5	25.0	28.5
	Power input	kW	5.4	6.0	7.3
	COP		4.17	4.17	3.90
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity		
	Maximum quantity		11	13	15
Compressor	Type		DC inverter rotary		
	Quantity		1		
	Oil type		RB75EA		
	Start-up method		Soft start		
Fan	Type		Propeller		
	Motor type		DC		
	Quantity		2		
	Motor output	kW	0.17×2	0.17×2	0.17×2
	Air flow rate	m^3/h	9000	9000	10000
	Drive type		Direct		
Refrigerant	Type		R410A		
	Factory charge	kg	6.5	6.5	6.5
Pipe connections[4]	Liquid pipe	mm	Φ12.7	Φ12.7	Φ12.7
	Gas pipe	mm	Φ19.1	Φ19.1	Φ22.2
Sound pressure level[5]		dB(A)	58	58	59
Net dimensions (W×H×D)		mm	1120×1558×528		
Packed dimensions (W×H×D)		mm	1270×1720×565		
Net weight		kg	143	143	144
Gross weight		kg	159	159	160
Ambient Temp. operation range	Cooling	°C	-5~55		
	Heating	°C	-20~24		

Notes:
1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
3. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
4. Diameters given are those of the unit's stop valves.
5. Sound pressure level is measured at a position 1m in front of the unit and 1m above the floor in a semi-anechoic chamber.

V6-i VRF 50/60Hz | 1 Specifications

Table 2-1.2: 10/12HP specifications

HP			10	12
Model name			MVi-280WV2GN1(A)	MVi-335WV2GN1(A)
Power supply		V/Ph/Hz	380-415/3/50(60)	
Cooling[1]	Capacity	kW	28.5	33.5
	Power input	kW	8.4	9.2
	EER		3.39	3.64
Heating[2] (Rated)	Capacity	kW	28.5	33.5
	Power input	kW	7.3	8.1
	COP		3.90	4.14
Heating[3] (Max.)	Capacity	kW	31.5	37.5
	Power input	kW	8.1	9.2
	COP		3.89	4.08
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity	
	Maximum quantity		16	20
Compressor	Type		DC inverter rotary	DC inverter rotary
	Quantity		1	1
	Oil type		RB75EA	FV50S
	Start-up method		Soft start	Soft start
Fan	Type		Propeller	
	Motor type		DC	
	Quantity		2	
	Motor output	kW	0.17×2	0.17×2
	Air flow rate	m^3/h	11000	11300
	Drive type		Direct	
Refrigerant	Type		R410A	
	Factory charge	kg	6.5	8
Pipe connections[4]	Liquid pipe	mm	Φ12.7	Φ12.7
	Gas pipe	mm	Φ22.2	Φ22.2
Sound pressure level[5]		dB(A)	60	61
Net dimensions (W×H×D)		mm	1120×1558×528	
Packed dimensions (W×H×D)		mm	1270×1720×565	
Net weight		kg	144	157
Gross weight		kg	160	173
Ambient Temp. operation range	Cooling	°C	-5~55	
	Heating	°C	-20~24	

Notes:
1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
3. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
4. Diameters given are those of the unit's stop valves.
5. Sound pressure level is measured at a position 1m in front of the unit and 1m above the floor in a semi-anechoic chamber.

ATOM SERIES MINI VRF

EFFECTIVE CONTROL IN HIGH-EFFICIENT OFFICE

Group Control for Maximum 9 IDUs

Centralized Control with Other VRF Systems

Cloud Control

Long Piping Capability for Flexible Installation

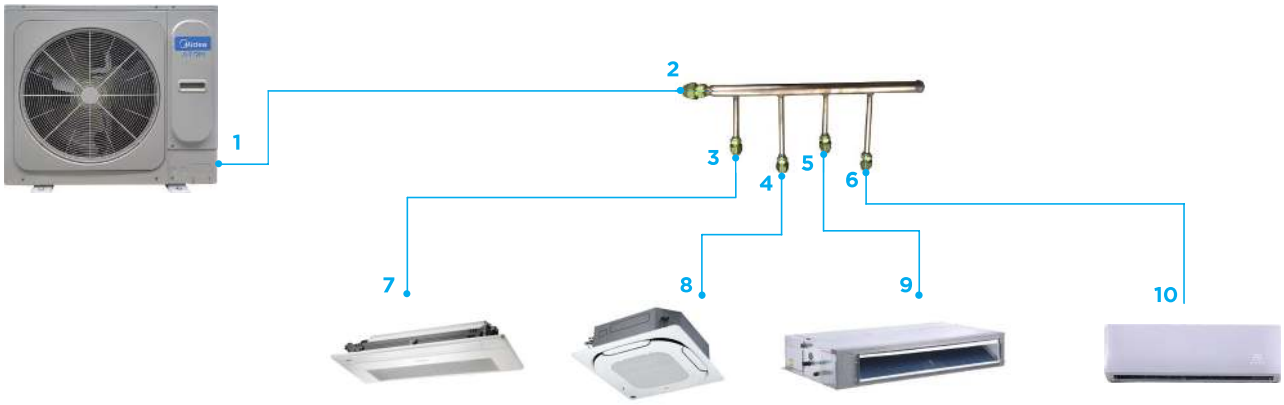
THE EASIEST VRF TO INSTALL

DISCOVER easyCOMFORT


AC-35
Indoor temperature 25℃
30
26
25
AUTO
COOL
HEAT
FAN
DRY
MED
MODE
COOL Ts
HEAT Ts
FAN SP
REMOTE
COOL
LOCK

All Flare Connections, The Easiest VRF to Install

The ATOM B series VRF system uses all flare connection which can greatly simplify installation. The multiple branch header with 1 to 2, 3, 4,5 or 6 options further simplify installation.



1 to 10 are all flare connections

1 to 9 Indoor Units Connection

A single outdoor unit supports 1 to 9 indoor units, freeing up considerable space outside. Use your backyard more wisely with much more space available created by less number of outdoor units.

Mini VRF

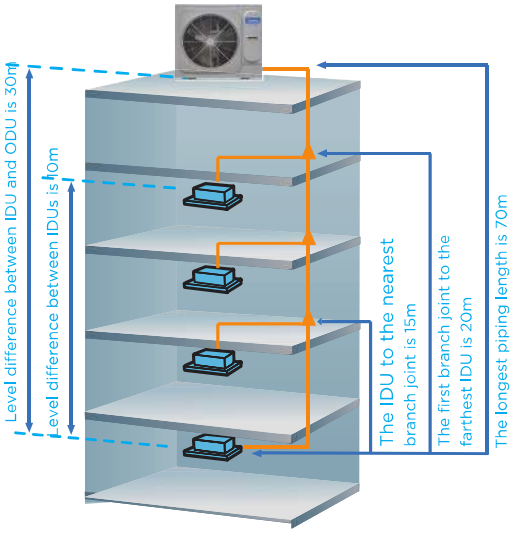
DISCOVER easyCOMFORT

Perfect for commercial & residential applications: small offices, villas apartments, shops, etc.

Midea

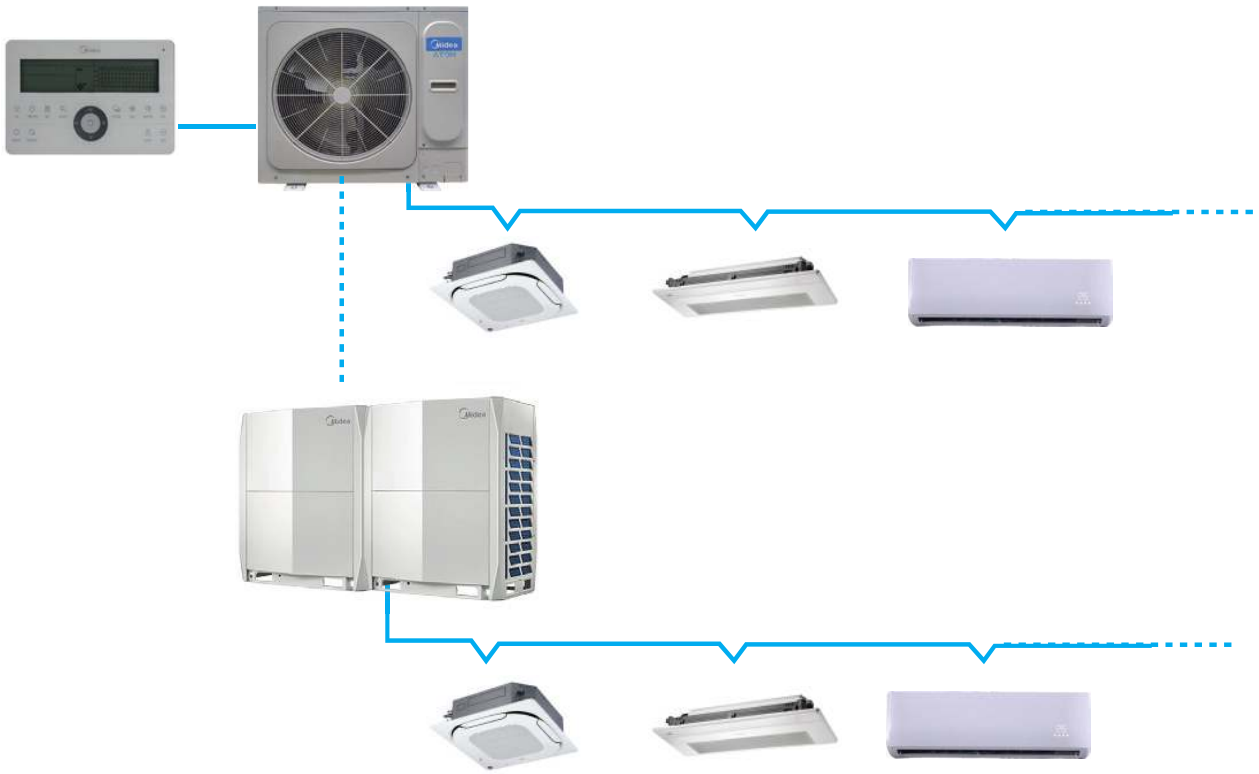
Long Piping Length

The ATOM B series system and other VRF system with up to 64 indoor units and 8 systems can be controlled in one centralized control system, it is very convenient for administrators to manage equipment uniformly.



Centralized Control with Other VRF System, Convenient for Unified Management

The ATOM B series system and other VRF system with up to 64 indoor units and 8 systems can be controlled in one centralized control system, it is very convenient for administrators to manage equipment uniformly.



Atom B Series VRF 50/60Hz | 1 Specifications

MDV-V28WDHN1(AtB) / MDV-V36WDHN1(AtB) / MDV-V42WDHN1(AtB)

Table 2-1.1: 28/36/42 model specifications

Model			MDV-V28WDHN1(AtB)	MDV-V36WDHN1(AtB)	MDV-V42WDHN1(AtB)
Power supply		V-Ph-Hz	220-240/1/ 50(60)		
Cooling[1]	Capacity	kBtu/h	27	34	41
		kW	8	10	12
	Input	kW	2.1	2.66	3.31
	EER	kW/ KW	3.81	3.76	3.63
Heating[2]	Capacity	kBtu/h	30	41	47
		kW	9	12	14
	Input	kW	2.04	3.15	3.64
	COP	kW/ kW	4.41	3.81	3.85
Connectable indoor unit	Total capacity		45~130% of outdoor unit capacity		
	Quantity		1~4	1~6	1~7
Compressor	Type		DC inverter	DC inverter	DC inverter
	Quantity		1	1	1
	Oil type		RB74AF	RB74AF	RB74AF
Fan	Motor type		DC motor	DC motor	DC motor
	Quantity		1	1	1
	Output	W	80	170	170
Outdoor air flow		m3/h	3700	5200	5000
Sound pressure level[3]		dB(A)	54	54	56
Net dimensions (W×H×D)[4]		mm	910 x 712 x 426	950 x 840 x 440	950 x 840 x 440
Packed dimensions (W×H×D)		mm	1045 x 810 x 485	1025 x950 x 510	1025 x950 x 510
Net weight		kg	49	59.5	63
Gross weight		kg	53	66.5	70
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	g	1700	2300	2400
	Throttle type		Electronic expansion valve		
Pipe connections	Liquid pipe	mm	Φ9.53	Φ9.53	Φ9.53
	Gas pipe	mm	Φ15.9	Φ15.9	Φ15.9
Ambient Temp. operation range	Cooling	°C	-5~55		
	Heating	°C	-15~27		

Notes:

1. The cooling conditions: indoor temp: 27 oC DB (80.6 oF), 19 oC WB (66.2 oF) outdoor temp: 35 oC DB (95 oF) equivalent pipe length: 5m drop length: 0m.
2. The heating conditions: indoor temp: 20 oC DB (68 oF), 15 oC WB (44.6 oF) outdoor temp.: 7 oC DB (42.8 oF) equivalent pipe length: 5m drop length: 0m.
3. Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1m for 28/26 model, 1.2m for 42 model. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
4. Diameters given are those of the unit's stop valves.
5. The above data may be changed without notice for future improvement on quality and performance.

Atom B Series VRF 50/60Hz

MDV-V48WDHN1(AtB) / MDV-V56WDHN1(AtB) / MDV-V60WDHN1(AtB)

Table 2-1.2: 48/52/60 model specifications

Model			MDV-V48WDHN1(AtB)	MDV-V56WDHN1(AtB)	MDV-V60WDHN1(AtB)
Power supply		V-Ph-Hz	220-240/1/ 50(60)		
Cooling[1]	Capacity	kBtu/h	47	52	59
		kW	14	15.5	17.5
	Input	kW	3.97	4.87	6.12
	EER	kW/ KW	3.53	3.18	2.86
Heating[2]	Capacity	kBtu/h	54	61	66
		kW	16	18	19.5
	Input	kW	3.98	4.82	5.57
	COP	kW/ kW	4.02	3.73	3.50
Connectable indoor unit	Total capacity		45~130% of outdoor unit capacity		
	Quantity		1~8	1~9	1~9
Compressor	Type		DC inverter	DC inverter	DC inverter
	Quantity		1	1	1
	Oil type		RB74AF	RB74AF	RB74AF
Fan	Motor type		DC motor	DC motor	DC motor
	Quantity		1	1	1
	Output	W	170	170	170
Outdoor air flow		m3/h	5200	5000	5300
Sound pressure level[3]		dB(A)	56	56	57
Net dimensions (W×H×D)[4]		mm	950 x 840 x 440	950 x 840 x 440	1040 x 410 x 865
Packed dimensions (W×H×D)		mm	1025 x950 x 510	1025 x950 x 510	1120 x 865 x 560
Net weight		kg	75	77.5	90.5
Gross weight		kg	82	84.5	99
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	g	3100	3600	4600
	Throttle type		Electronic expansion valve		
Pipe connections	Liquid pipe	mm	Φ9.53	Φ9.53	Φ9.53
	Gas pipe	mm	Φ15.9	Φ19.1	Φ19.1
Ambient Temp. operation range	Cooling	℃	-5~55		
	Heating	℃	-15~27		

Notes:

1. The cooling conditions: indoor temp: 27 oC DB (80.6 oF), 19 oC WB (66.2 oF) outdoor temp: 35 oC DB (95 oF) equivalent pipe length: 5m drop length: 0m.
2. The heating conditions: indoor temp: 20 oC DB (68 oF), 15 oC WB (44.6 oF) outdoor temp.: 7 oC DB (42.8 oF) equivalent pipe length: 5m drop length: 0m.
3. Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1m for 28/26 model, 1.2m for 42 model. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
4. Diameters given are those of the unit's stop valves.
5. The above data may be changed without notice for future improvement on quality and performance.

Atom B Series VRF 50/60Hz

2 Dimensions (unit: mm)

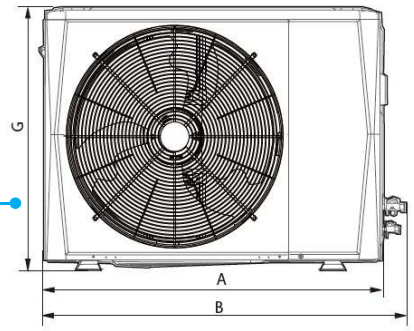


Figure 2-2.1: Model 28 Front view dimensions

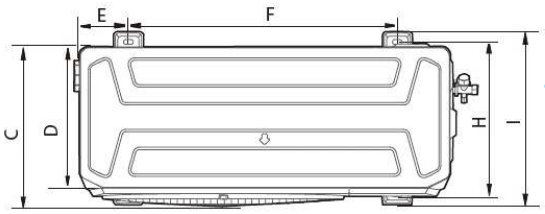


Figure 2-2.2: Model 28 Top view dimensions

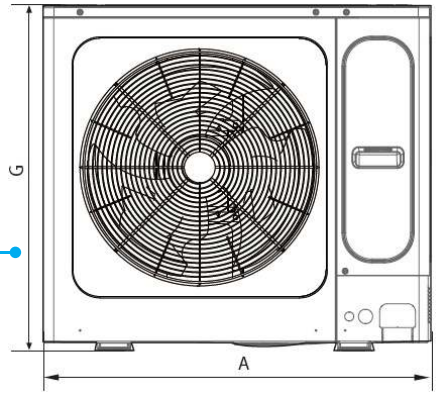


Figure 2-2.3: Model 36-56 Front view dimensions

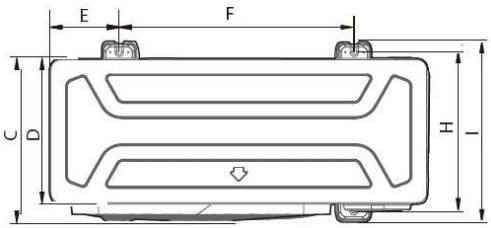


Figure 2-2.4: Model 36-56 Top view dimensions

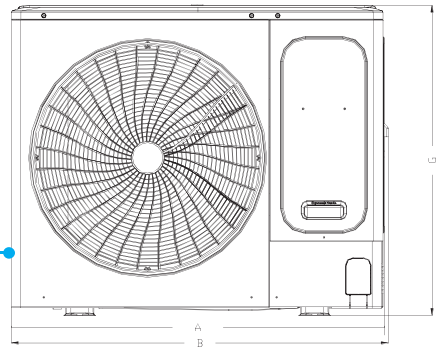


Figure 2-2.5: Model 60 Front view dimensions

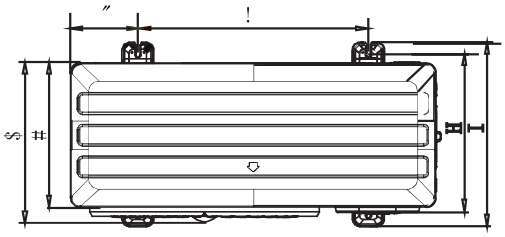


Figure 2-2.6: Model 60 Top view dimensions

Model	A	B	C	D	E	F	G	H	I
28	910	982	390	345	120	663	712	375	426
36/42/48/56	950	/	406	360	175	590	840	390	440
60	1040	1053	452	410	191	656	865	463	523

3 Installation Space Requirements

Table 2-1.2: 48/52/60 model specifications

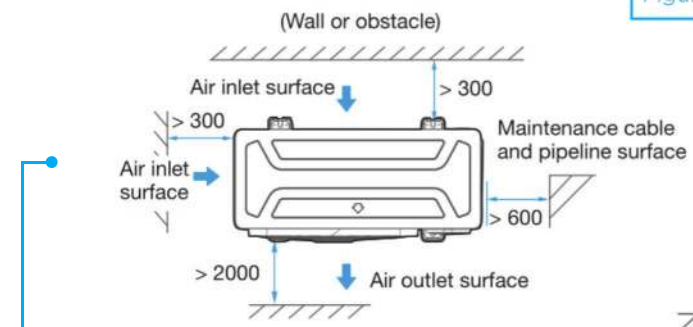


Figure 2-3.1: Single unit installation top view (unit: mm)

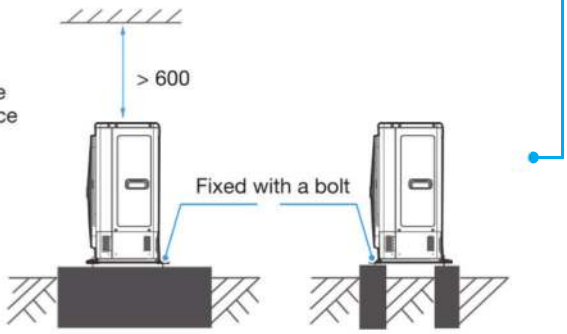


Figure 2-3.2: Single unit installation side view (unit: mm)

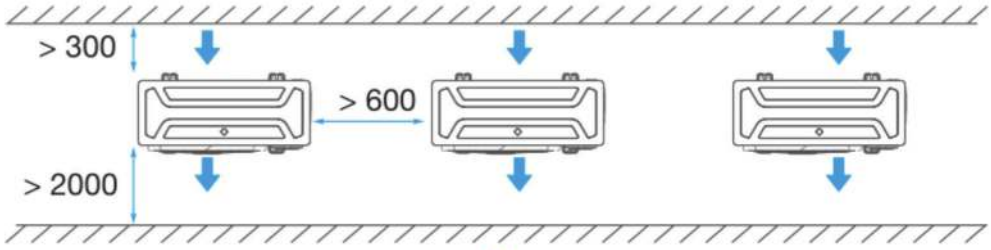


Figure 2-3.3: Multiple unit installation top view (unit: mm)

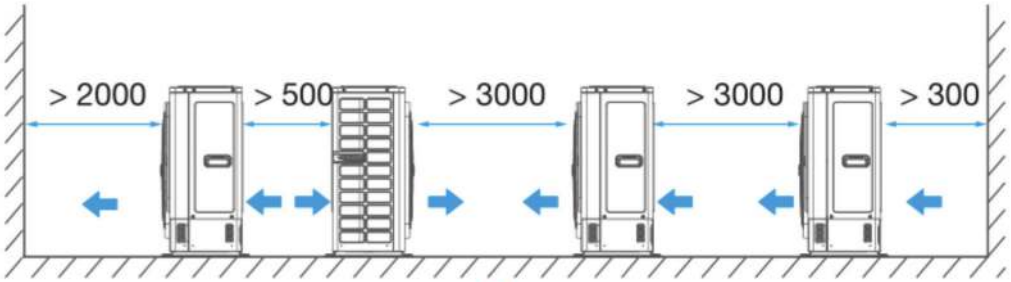


Figure 2-3.4: Multiple unit installation side view (unit: mm)