Contents

※The specifications, designs, and information in this book are subject to change without notice for product improvement.

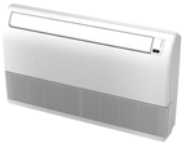
Part 1 General Information

1. Model Names of Indoor

Type	Model Name (MDVi-D)									
Compact Four-way Cassette	22Q4/CN1	28Q4/CN1	36Q4/CN1	45Q4/BN1	56Q4/BN1					
Four- way Cassette (New Designed)	28Q4/N1-C	36Q4/N1-C	45Q4/N1-C	56Q4/N1-C	71Q4/N1-C	80Q4/N1-C	90Q4/N1-C	100Q4/N1-C	112Q4/N1-C	140Q4/N1-C
Low Static Pressure Duct	18T3/N1-A	22T3/N1-A	28T3/N1-A	36T3/N1-A	45T3/N1-A	56T3/N1-A				
Medium Static Pressure Duct	45T2/CN1	56T2/CN1	71T2/CN1	80T2/CN1	90T2/CN1	112T2/CN1	140T2/CN1			
Medium Static Pressure Duct——A5 Type	45T2/N1-A5	56T2/N1-A5	71T2/N1-A5	80T2/N1-A5	90T2/N1-A5	112T2/N1-A5	140T2/N1-A5			
10HP High Static Pressure Duct	200T1/N1	250T1/N1	280T1/N1							
Ceiling & Floor	36DL/N1-B	45DL/N1-B	56DL/N1-B	71DL/N1-B	80DL/N1-B	90DL/N1-B	112DL/N1-B	140DL/N1-B		
Wall-mounted (E1/E7 Type)	22G/N1-E1	28G/N1-E1	36G/N1-E1	45G/N1-E1	56G/N1-E1					
Wall-mounted (EXV Integrated)	22G/(D)N1Y	28G/(D)N1Y	36G/(D)N1Y	45G/(D)N1Y	56G/(D)N1Y					
Concealed Floor-standing	22Z/N1-F3	28Z/N1-F3	36Z/N1-F3	45Z/N1-F3	56Z/N1-F3	71Z/N1-F3	80Z/N1-F3			
Exposed Floor-standing	22Z/N1-F1/F2	28Z/N1-F1/F2	36Z/N1-F1/F2	45Z/N1-F1/F2	56Z/N1-F1/F2	71Z/N1-F1/F2	80Z/N1-F1/F2			
Console	22Z/DN1-A	28Z/DN1-A	36Z/DN1-A	45Z/DN1-A						

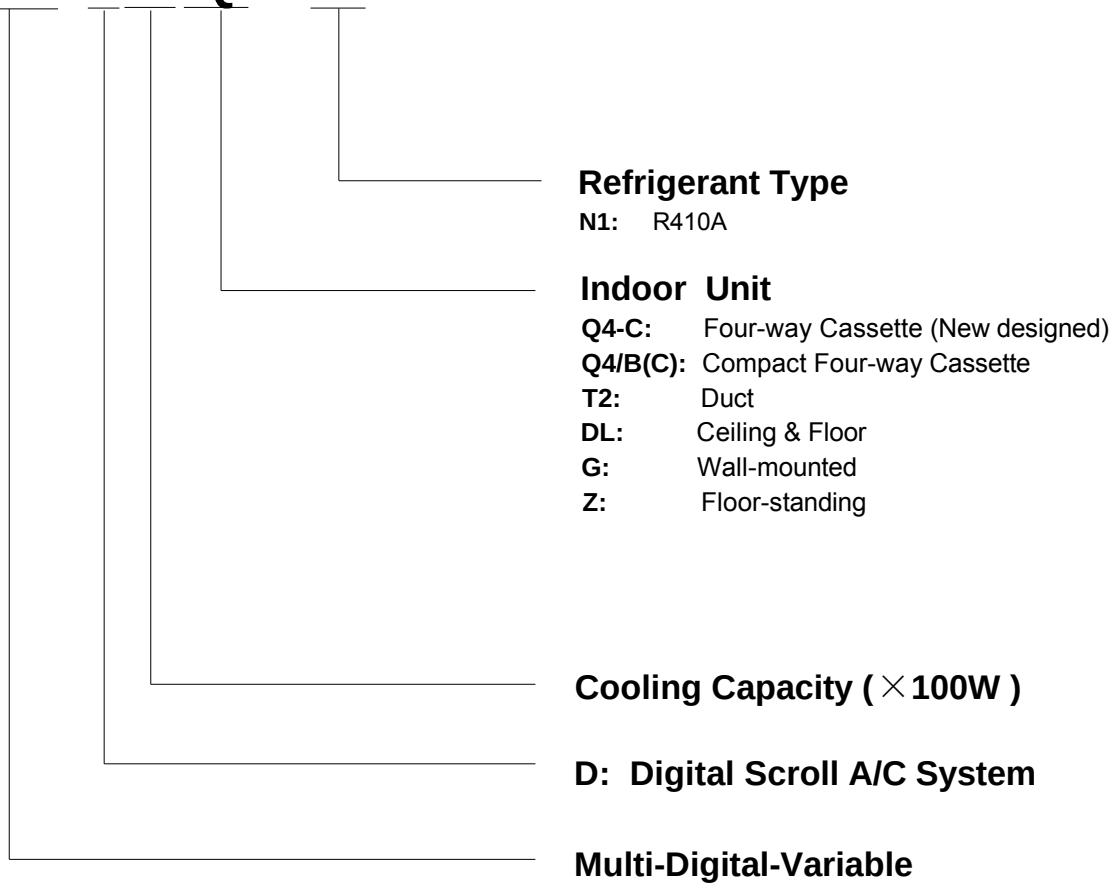
Power supply of all the indoor units is 1 phase, 220-240V, 50Hz

2. External Appearance

External Appearance	Model Name	External Appearance	Model Name
Four-way Cassette (New designed) 	MDVi-D28Q4/N1-C MDVi-D36Q4/N1-C MDVi-D45Q4/N1-C MDVi-D56Q4/N1-C MDVi-D71Q4/N1-C MDVi-D80Q4/N1-C MDVi-D90Q4/N1-C MDVi-D100Q4/N1-C MDVi-D112Q4/N1-C MDVi-D140Q4/N1-C	Compact Four-way Cassette  EEV Beside	MDVi-D22Q4/CN1 MDVi-D28Q4/CN1 MDVi-D36Q4/CN1 MDVi-D45Q4/BN1 MDVi-D56Q4/BN1
Wall-mounted (EXV Integrated)  EEVI Inside	MDVi-D22G/(D)N1Y MDVi-D28G/(D)N1Y MDVi-D36G/(D)N1Y MDVi-D45G/(D)N1Y MDVi-D56G/(D)N1Y	Wall-mounted(E1/E7 Type)  EEV Separated	MDVi-D22G/N1-E1/E7 MDVi-D28G/N1-E1/E7 MDVi-D36G/N1-E1/E7 MDVi-D45G/N1-E1/E7 MDVi-D56G/N1-E1/E7
Ceiling & Floor  EEV Inside	MDVi-D36DL/N1-B MDVi-D45DL/N1-B MDVi-D56DL/N1-B MDVi-D71DL/N1-B MDVi-D80DL/N1-B MDVi-D90DL/N1-B MDVi-D112DL/N1-B MDVi-D140DL/N1-B	Medium Static Pressure Duct  EEV Beside	MDVi-D45T2/CN1 MDVi-D56T2/CN1 MDVi-D71T2/CN1 MDVi-D80T2/CN1 MDVi-D90T2/CN1 MDVi-D112T2/CN1 MDVi-D140T2/CN1
Medium Static Pressure Duct A5 TYPE 	MDVi-D45T2/N1-A5 MDVi-D56T2/N1-A5 MDVi-D71T2/N1-A5 MDVi-D80T2/N1-A5 MDVi-D90T2/N1-A5 MDVi-D112T2/N1-A5 MDVi-D140T2/N1-A5	Low Static Pressure Duct 	MDVi-D18T3/N1-A MDVi-D22T3/N1-A MDVi-D28T3/N1-A MDVi-D36T3/N1-A MDVi-D45T3/N1-A MDVi-D56T3/N1-A
Concealed Floor-standing 	MDVi-D22Z/N1-F3 MDVi-D28Z/N1-F3 MDVi-D36Z/N1-F3 MDVi-D45Z/N1-F3 MDVi-D56Z/N1-F3 MDVi-D71Z/N1-F3 MDVi-D80Z/N1-F3	Exposed Floor-standing 	MDVi-D22Z/N1-F1/F2 MDVi-D28Z/N1-F1/F2 MDVi-D36Z/N1-F1/F2 MDVi-D45Z/N1-F1/F2 MDVi-D56Z/N1-F1/F2 MDVi-D71Z/N1-F1/F2 MDVi-D80Z/N1-F1/F2
Console 	MDVi-D22Z/DN1-A MDVi-D28Z/DN1-A MDVi-D36Z/DN1-A MDVi-D45Z/DN1-A	10 HP High Static Pressure Duct 	MDVi-D200T1/N1 MDVi-D250T1/N1 MDVi-D280T1/N1

3. Nomenclature

MDVi-D28Q4 / N1 - C



Part 2 Indoor Units

Compact Four-way Cassette Type

1. Features

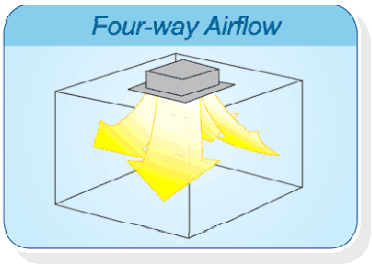
(1) Low operation noise

---Streamline plate ensures quietness

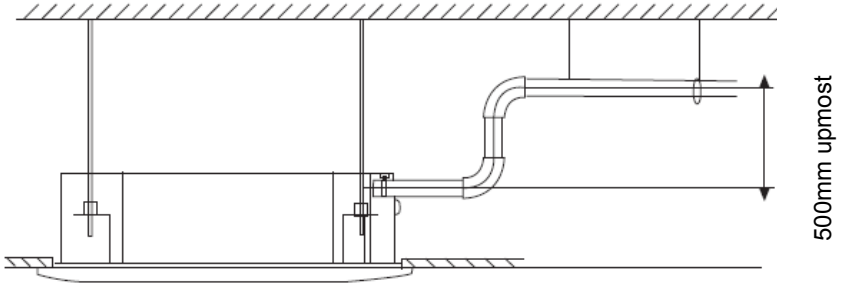
---Creates natural and comfortable environment

(2) Efficient cooling

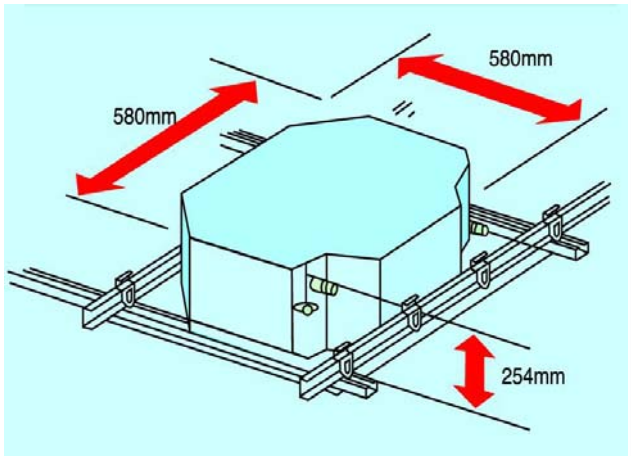
---Equal, fast and wide—range cooling

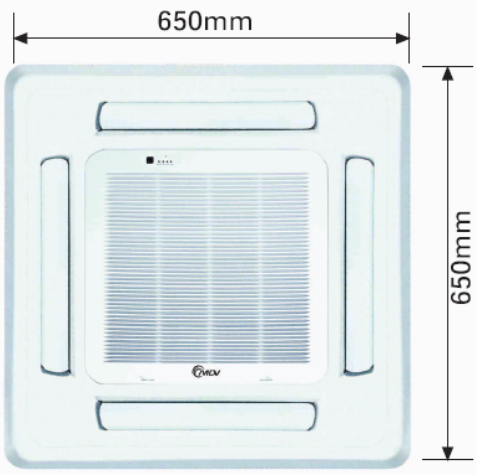


(3) Built-in water pump which pumping head is 500mm up most



(4) Compact design makes it easy for installation and maintenance





2. Specifications

Sale Model				MDVi-D22Q4/CN1	MDVi-D28Q4/CN1	MDVi-D36Q4/CN1
Power supply			V-ph-Hz	220~240-1-50	220~240-1-50	220~240-1-50
Cooling	Capacity		kW	2.2	2.8	3.6
	Input		W	58	58	58
	Rated current		A	0.26	0.26	0.26
Heating	Capacity		kW	2.6	3.2	4.0
	Input		W	58	58	58
	Rated current		A	0.26	0.26	0.26
Indoor fan motor	Model			YDK45-4F-3	YDK45-4F-3	YDK45-4F-3
	Type			AC MOTOR	AC MOTOR	AC MOTOR
	Brand			Welling	Welling	Welling
	Input		W	65/59/55	65/59/55	65/59/55
	Capacitor		uF	1.5	1.5	1.5
	Speed(hi/mi/lo)		r/min	930/845/770	930/845/770	930/845/770
Indoor coil	Number of rows			1	1	1
	Tube pitch(a)x row pitch(b)		mm	21x13.37	21x13.37	21x13.37
	Fin spacing		mm	1.4	1.4	1.4
	Fin type (code)			Hydrophilic aluminum		
	Tube outside dia. and type		mm	Φ7	Φ7	Φ7
				Inner groove tube		
	Coil length x height x width		mm	1188x210x13.37	1188x210x13.37	1188x210x13.37
	Number of circuits			3	3	3
Indoor air flow (Hi/Mi/Lo)			m^3/h	880/850/730	880/850/730	880/850/730
Sound level (sound pressure)			dB(A)	38/36/34	38/36/34	38/36/34
Indoor unit	Dimension (W x H x D)		mm	580 x 254 x580	580x254 x580	580x254 x580
	Packing (W x H x D)		mm	750x340 x745	750x340 x745	750x340 x745
	Net/Gross weight		kg	18/25	18/25	18/25
Panel	Dimension (W x H x D)		mm	650 x30 x650	650 x30 x650	650 x30 x650
	Packing (W x H x D)		mm	715 x115 x715	715 x115 x715	715 x115 x715
	Net/Gross weight		kg	3/5	3/5	3/5
Refrigerant piping	Type			R410A	R410A	R410A
Design pressure			MPa	4.2/2.0	4.2/2.0	4.2/2.0
Refrigerant piping	Liquid side/ Gas side		mm	Φ6.4/Φ12.7	Φ6.4/Φ12.7	Φ6.4/Φ12.7
Connection wiring	Power wiring		mm^2	3×2.5(L≤20m); 3×3.5(L≤50m)		
	Signal wiring		mm^2	3×1.0		
Drainage water pipe dia.			mm	Φ25	Φ25	Φ25
Wireless remote controller				R51/E(standard)		
Operation temp			℃	17～30		

Notes:

1.Nominal cooling capacities are based on the following conditions: return air temp.: 27°CDB, 19°CWB, and outdoor temp.:35°CDB, equivalent ref. piping: 8m (horizontal)

2.Nominal heating capacities are based on the following conditions: return air temp.: 20°CDB, outdoor temp.: 7°CDB, 6°CWB, and equivalent ref. Piping: 8m (horizontal)

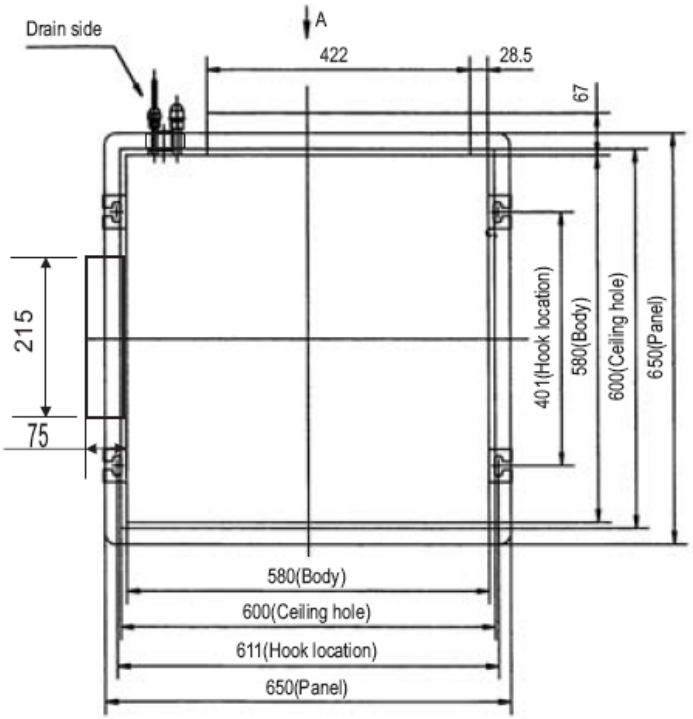
Sale Model				MDVi-D45Q4/BN1	MDVi-D56Q4/BN1
Power supply			V-ph-Hz	220~240-1-50	220~240-1-50
Cooling	Capacity		kW	4.5	5.6
	Input		W	63	63
	Rated current		A	0.28	0.28
Heating	Capacity		kW	5.0	6.3
	Input		W	63	63
	Rated current		A	0.28	0.28
Indoor fan motor	Model			YDK45-4F	YDK45-4F
	Type			AC MOTOR	AC MOTOR
	Input		W	64/57/48	64/57/48
	Capacitor		uF	2.5	2.5
	Speed(hi/mi/lo)		r/min	930/845/680	930/845/680
Indoor coil	Number of rows			2	2
	Tube pitch(a)x row pitch(b)		Mm	21x13.37	21x13.37
	Fin spacing		Mm	1.4	1.4
	Fin type (code)			Hydrophilic aluminum	
	Tube outside dia. and type		Mm	Φ7	Φ7
				Inner groove tube	
	Coil length x height x width		Mm	1247x26.74 x210	1247x210x26.7
	Number of circuits			5	5
Indoor air flow (Hi/Mi/Lo)			m^3/h	920/870/750	920/870/750
Sound level (sound pressure)			dB(A)	39/36/34	39/36/34
Indoor unit	Dimension (W x H x D)		Mm	580x 254 x 580	580x254 x580
	Packing (W x H x D)		Mm	750x 340 x 745	750x340 x745
	Net/Gross weight		Kg	24/30	24/30
Panel	Dimension (W x H x D)		Mm	650 x30 x650	650 x30 x650
	Packing (W x H x D)		Mm	715 x115 x715	715 x115 x715
	Net/Gross weight		Kg	3/5	3/5
Refrigerant	Type			R410A	R410A
Design pressure			MPa	4.2/2.0	4.2/2.0
Refrigerant piping	Liquid side/ Gas side		Mm	Φ6.4/Φ12.7	Φ9.5/Φ15.9
Connection wiring	Power wiring		mm^2	3×2.5(L≤20m); 3×3.5(L≤50m)	
	Signal wiring		mm^2	3×1.0	
Drainage water pipe dia.			Mm	Φ25	Φ25
Wireless remote controller				R51/E(standard)	
Operation temp			℃	17～30	

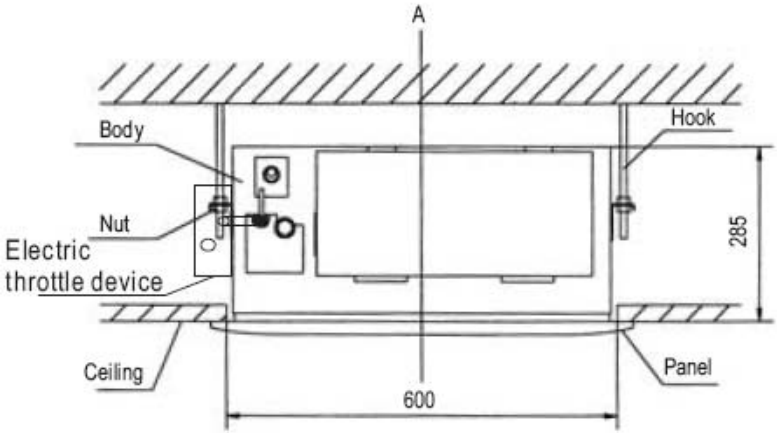
Notes:

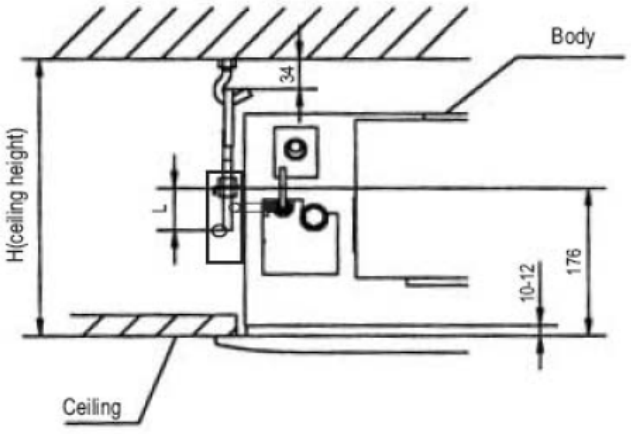
1.Nominal cooling capacities are based on the following conditions: return air temp.: 27°CDB, 19°CWB, and outdoor temp.:35°CDB, equivalent ref. piping: 8m (horizontal)

2.Nominal heating capacities are based on the following conditions: return air temp.: 20°CDB, outdoor temp.: 7°CDB, 6°CWB, and equivalent ref. Piping: 8m (horizontal)

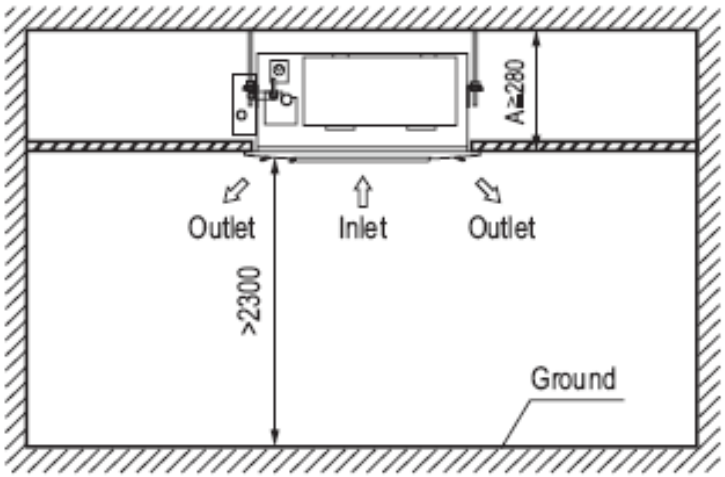
3. Dimensions

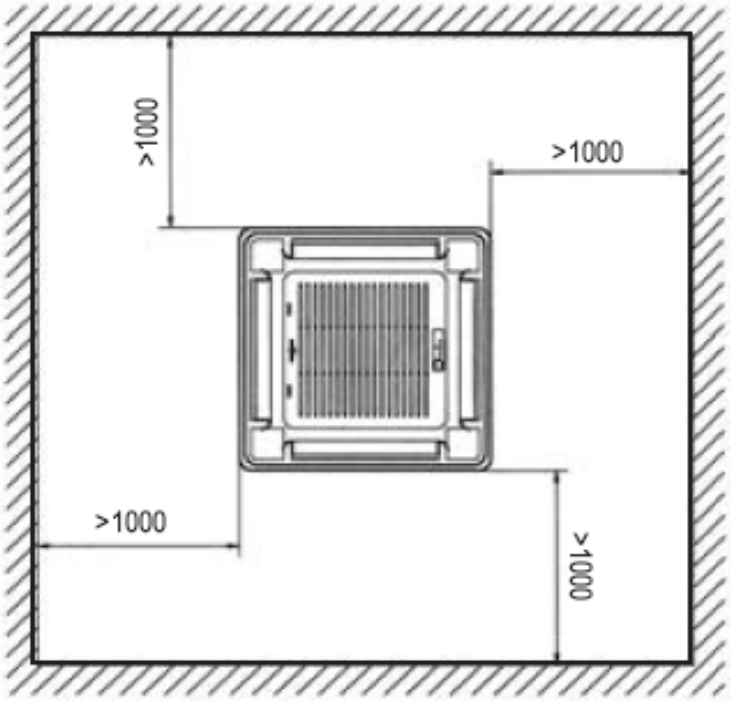






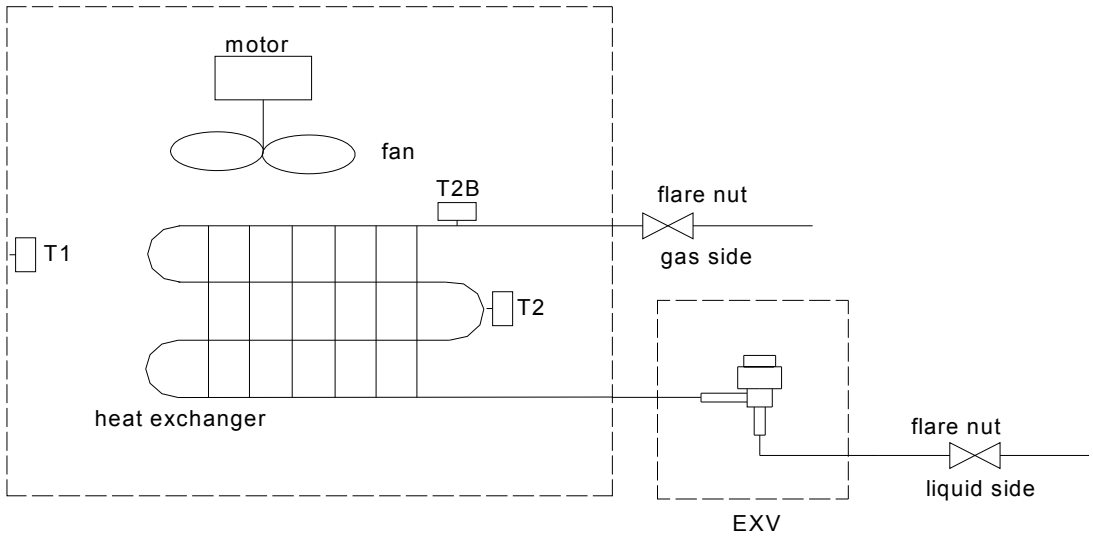
4. Service Space





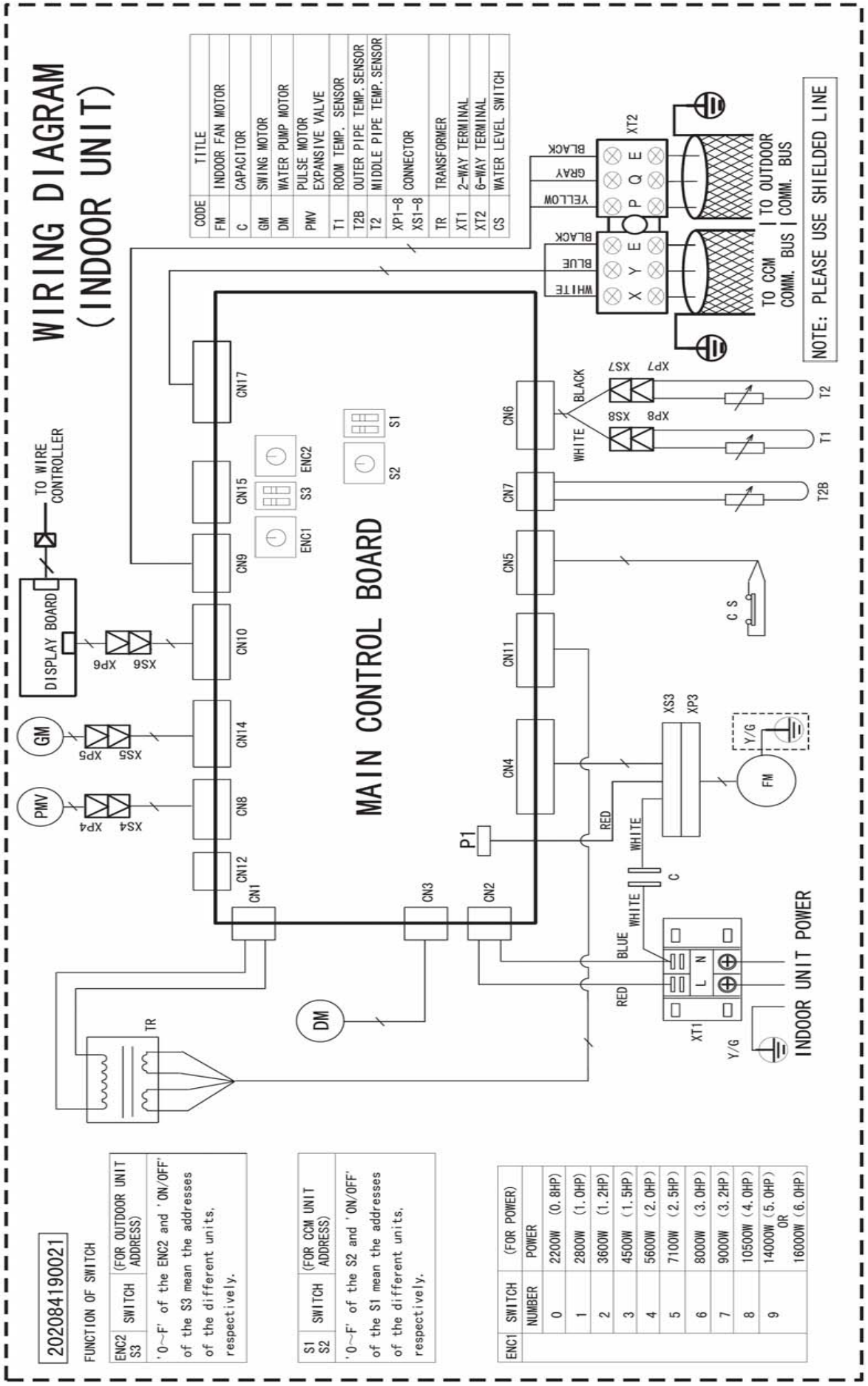
5. Piping Diagram

MDVi-D22Q4/CN1 MDVi-D28Q4/CN1 MDVi-D36Q4/CN1 MDVi-D45Q4/BN1 MDVi-D56Q4/BN1

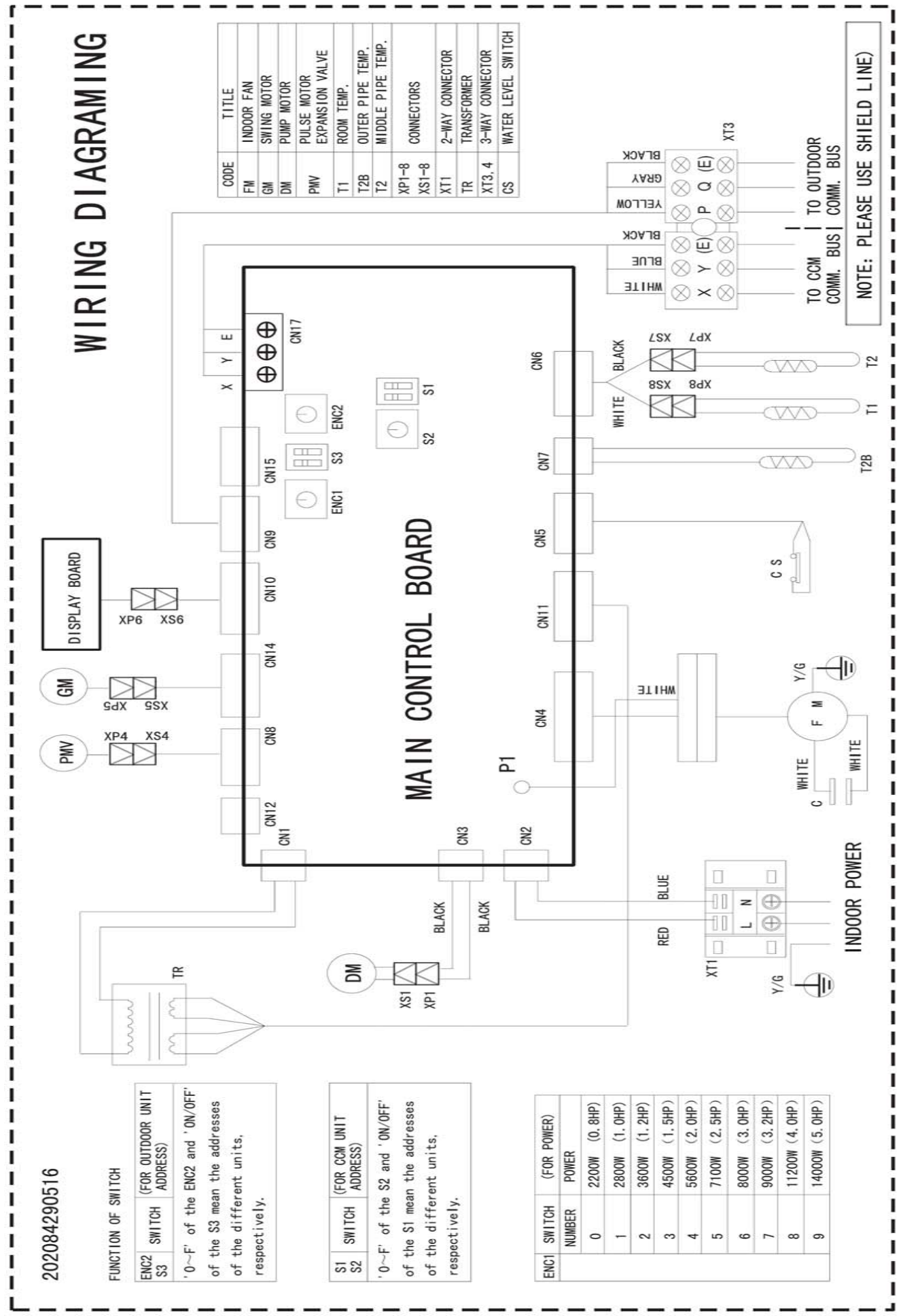


6. Wiring Diagrams

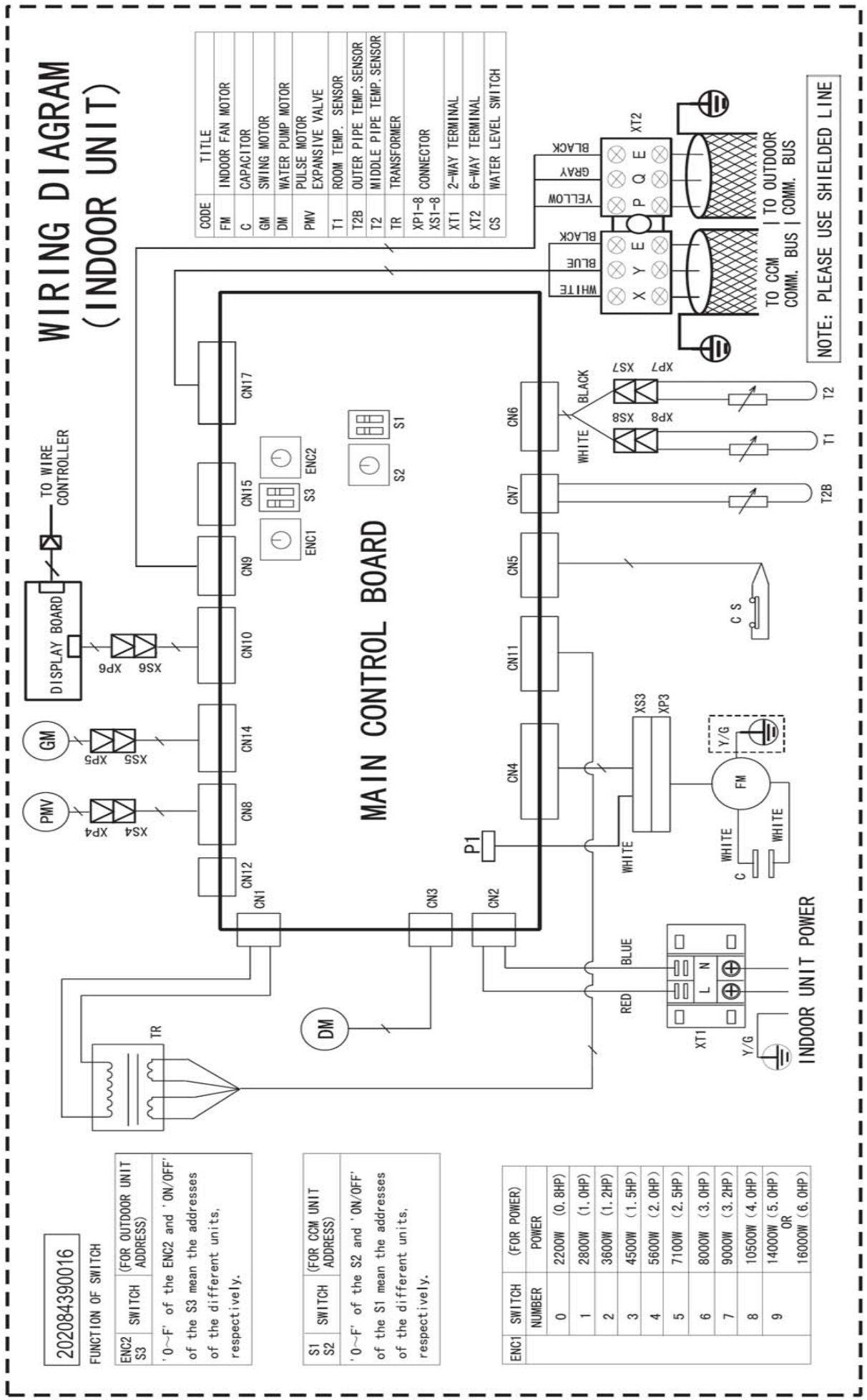
MDVi-D22Q4/CN1 MDVi-D28Q4/CN1 MDVi-D36Q4/CN1



MDVi-D45Q4/BN1

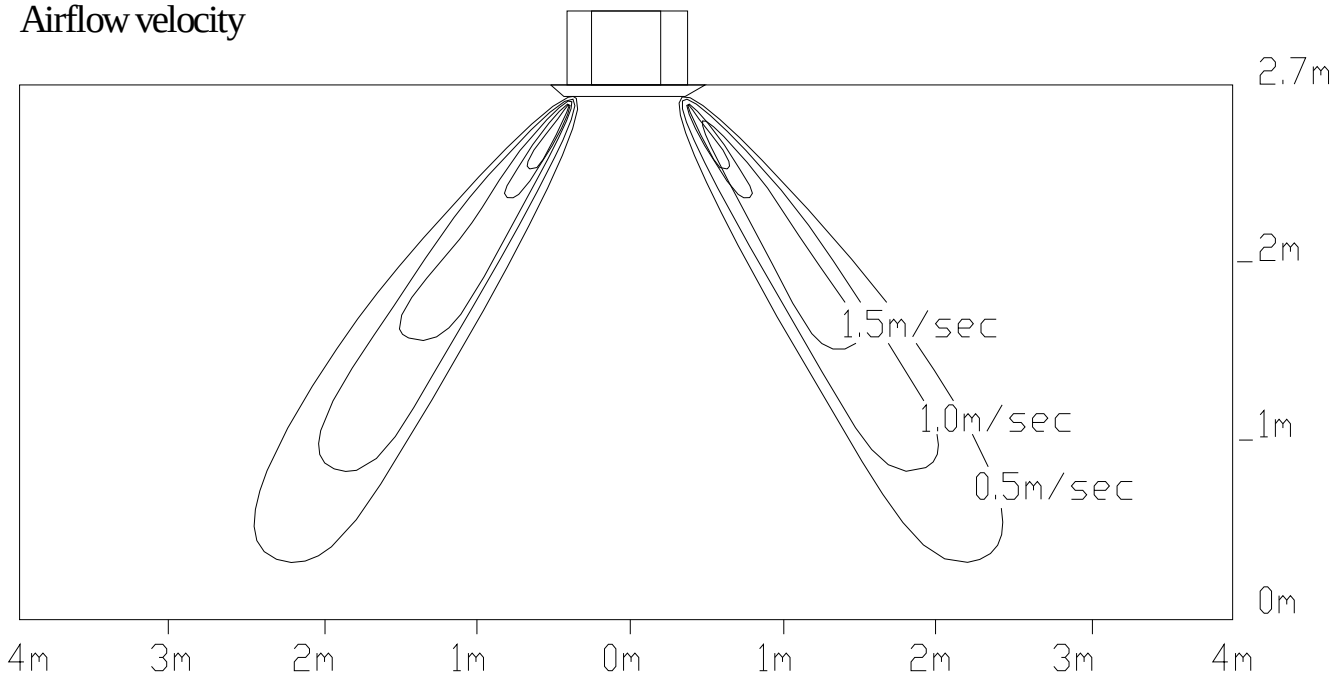


MDVi-D56Q4/BN1

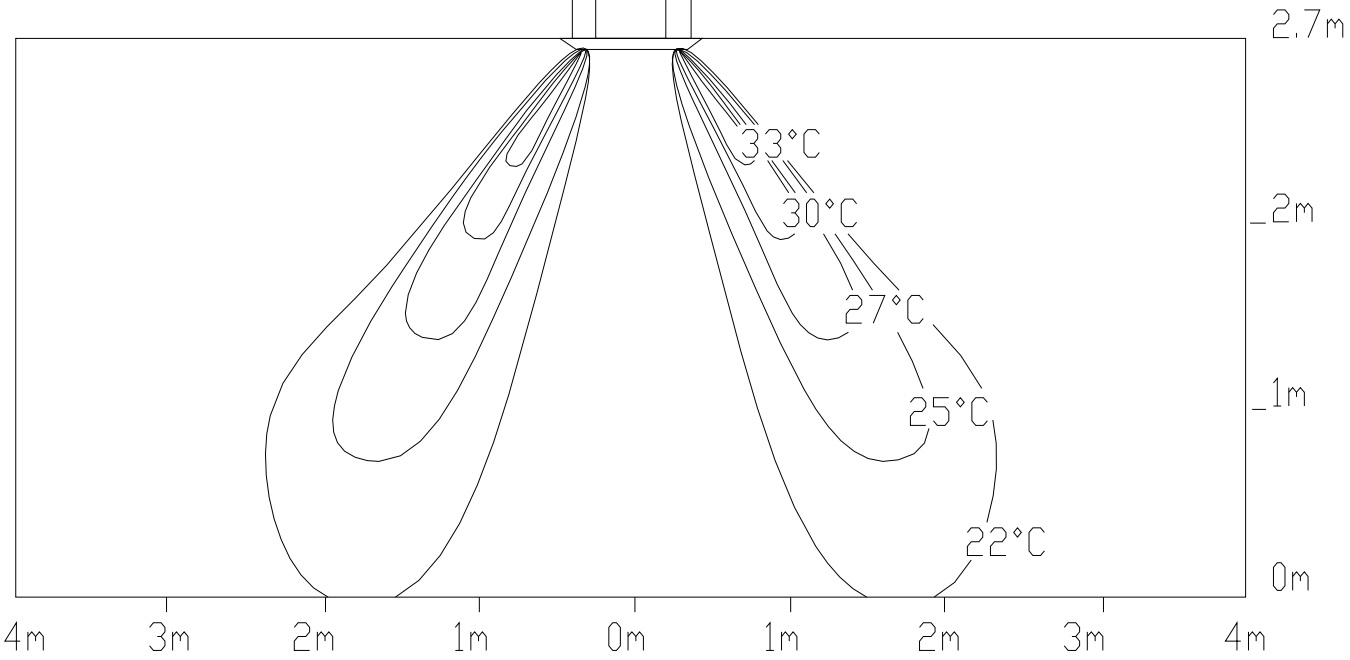


7. Air Velocity and Temperature Distributions

Airflow velocity



Temperature



8. Capacity Tables

8.1 Cooling

TC: total capacity **SC**: sensible capacity **WB**: wet-bulb temperature **DB**: dry-bulb temperature

Indoor Unit size (kW)	Outdoor temperature (℃ DB)	Indoor temperature (℃WB/DB)													
		14/20		16/23		18/26		19/27		20/28		22/30		24/32	
		TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
2.2	10	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.9	1.7
	12	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.8	1.6
	14	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.8	1.6
	16	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.8	1.6
	18	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.8	1.6
	20	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.7	1.5
	21	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.7	1.5
	23	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.5	1.6	2.7	1.5
	25	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.5	1.6	2.6	1.5
	27	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.5	1.6	2.6	1.5
	29	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.4	1.5	2.5	1.5
	31	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.4	1.5	2.5	1.5
	33	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.4	1.5	2.4	1.5
	35	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.3	1.5	2.4	1.5
	37	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.3	1.5	2.3	1.5
	39	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.2	1.6	2.3	1.5	2.3	1.5
2.8	10	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.7	2.1
	12	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.6	2.1
	14	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.6	2.1
	16	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.6	2.0
	18	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.5	2.0
	20	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.4	1.9
	21	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.4	1.9
	23	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.2	2.1	3.4	1.9
	25	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.2	2.0	3.3	1.9
	27	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.2	2.0	3.3	1.9
	29	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.1	2.0	3.2	1.9
	31	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.1	2.0	3.2	1.9
	33	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.1	2.0	3.1	2.0
	35	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.1	2.9	1.9	3.1	2.0
	37	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.1	2.9	1.9	2.9	1.9
	39	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.8	2.0	2.9	1.9	2.9	1.9
3.6	10	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.8	2.8
	12	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.6	2.7
	14	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.6	2.7
	16	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.5	2.7
	18	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.5	2.7
	20	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.4	2.7
	21	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.4	2.7

	23	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.4	2.7
	25	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.1	2.7	4.2	2.6
	27	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.1	2.7	4.2	2.6
	29	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.0	2.6	4.1	2.5
	31	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.0	2.6	4.1	2.4
	33	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.0	2.6	4.0	2.4
	35	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.7	2.6	3.9	2.6	4.0	2.4
	37	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.7	2.6	3.9	2.6	3.9	2.3
	39	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.7	2.6	3.9	2.7	3.9	2.4
4.5	10	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.9	3.4
	12	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.9	3.4
	14	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.8	3.3
	16	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.6	3.2
	18	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.6	3.2
	20	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.5	3.2
	21	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.4	3.1
	23	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.2	3.2	5.4	3.1
	25	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.2	3.2	5.3	3.0
	27	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.0	3.0	5.3	3.0
	29	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.0	3.0	5.1	2.9
	31	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.3	3.5	5.1	3.0
	33	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.3	3.5	4.9	2.9
	35	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.3	3.5	4.8	2.8
	37	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.6	3.2	4.8	3.1	4.8	2.9
	39	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.6	3.2	4.8	3.1	4.8	2.9
5.6	10	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.3	4.1
	12	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.3	4.1
	14	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.2	4.1
	16	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	6.9	4.0
	18	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.1	4.1
	20	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.1	4.1
	21	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.0	4.1
	23	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	6.9	4.0
	25	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.5	4.1	6.8	3.9
	27	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.4	4.0	6.5	3.8
	29	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.3	4.0	6.4	3.7
	31	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.2	3.9	6.3	3.7
	33	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.0	3.8	6.3	3.7
	35	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	5.9	3.7	6.2	3.6
	37	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	5.9	3.9	6.1	3.5
	39	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	5.7	3.8	5.8	3.8	6.0	3.5

8.2 Heating

TC: total capacity **WB**: wet-bulb temperature **DB**: dry-bulb temperature

Indoor Unit size (kW)	Outdoor temperature (℃)		Indoor temperature (℃ DB)					
			16.00	18.00	20.00	21.00	22.00	24.00
			TC	TC	TC	TC	TC	TC
	WB	DB	kW	kW	kW	kW	kW	kW
2.20	-15.00	-14.70	1.64	1.64	1.64	1.64	1.64	1.64
	-13.00	-12.60	1.74	1.74	1.74	1.74	1.74	1.74
	-11.00	-10.50	1.82	1.82	1.82	1.82	1.82	1.82
	-10.00	-9.50	1.90	1.90	1.90	1.90	1.90	1.90
	-9.10	-8.50	1.95	1.95	1.95	1.95	1.95	1.95
	-7.60	-7.00	1.98	1.98	1.98	1.98	1.98	1.98
	-5.60	-5.00	2.05	2.05	2.05	2.05	2.05	2.05
	-3.70	-3.00	2.16	2.16	2.16	2.16	2.16	2.16
	-0.70	0.00	2.31	2.31	2.31	2.31	2.31	2.18
	2.20	3.00	2.44	2.44	2.44	2.44	2.39	2.18
	4.10	5.00	2.52	2.52	2.52	2.52	2.39	2.18
	6.00	7.00	2.60	2.60	2.60	2.52	2.39	2.18
	7.90	9.00	2.68	2.68	2.60	2.52	2.39	2.18
	9.80	11.00	2.76	2.76	2.60	2.52	2.39	2.18
	11.80	13.00	2.86	2.81	2.60	2.52	2.39	2.18
	13.70	15.00	2.94	2.81	2.60	2.52	2.39	2.18
2.80	-15.00	-14.70	2.02	2.02	2.02	2.02	2.02	2.02
	-13.00	-12.60	2.14	2.14	2.14	2.14	2.14	2.14
	-11.00	-10.50	2.24	2.24	2.24	2.24	2.24	2.24
	-10.00	-9.50	2.34	2.34	2.34	2.34	2.34	2.34
	-9.10	-8.50	2.40	2.40	2.40	2.40	2.40	2.40
	-7.60	-7.00	2.43	2.43	2.43	2.43	2.43	2.43
	-5.60	-5.00	2.53	2.53	2.53	2.53	2.53	2.53
	-3.70	-3.00	2.66	2.66	2.66	2.66	2.66	2.66
	-0.70	0.00	2.85	2.85	2.85	2.85	2.85	2.69
	2.20	3.00	3.01	3.01	3.01	3.01	2.94	2.69
	4.10	5.00	3.10	3.10	3.10	3.10	2.94	2.69
	6.00	7.00	3.20	3.20	3.20	3.10	2.94	2.69
	7.90	9.00	3.30	3.30	3.20	3.10	2.94	2.69
	9.80	11.00	3.39	3.39	3.20	3.10	2.94	2.69
	11.80	13.00	3.52	3.46	3.20	3.10	2.94	2.69
	13.70	15.00	3.62	3.46	3.20	3.10	2.94	2.69
3.60	-15.00	-14.70	2.52	2.52	2.52	2.52	2.52	2.52
	-13.00	-12.60	2.68	2.68	2.68	2.68	2.68	2.68
	-11.00	-10.50	2.80	2.80	2.80	2.80	2.80	2.80
	-10.00	-9.50	2.92	2.92	2.92	2.92	2.92	2.92
	-9.10	-8.50	3.00	3.00	3.00	3.00	3.00	3.00
	-7.60	-7.00	3.04	3.04	3.04	3.04	3.04	3.04
	-5.60	-5.00	3.16	3.16	3.16	3.16	3.16	3.16
	-3.70	-3.00	3.32	3.32	3.32	3.32	3.32	3.32
	-0.70	0.00	3.56	3.56	3.56	3.56	3.56	3.36

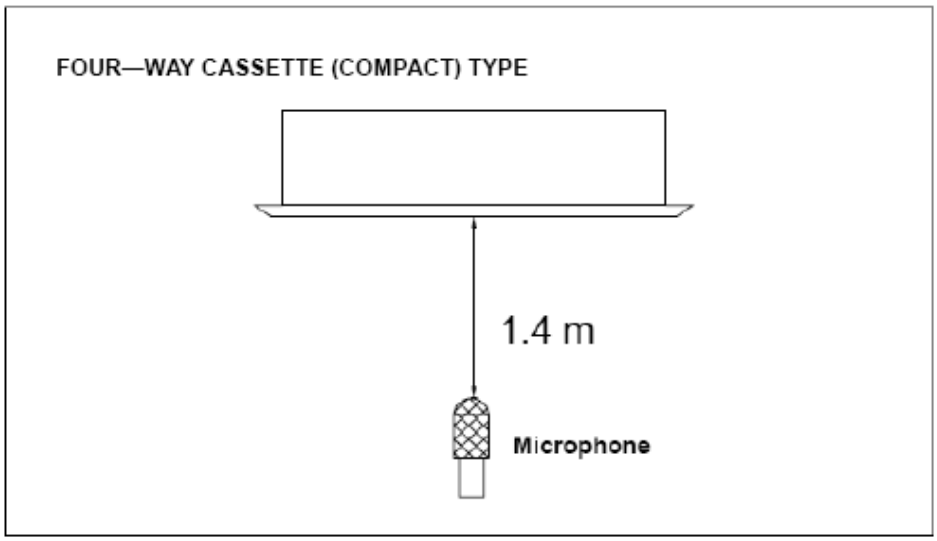
	2.20	3.00	3.76	3.76	3.76	3.76	3.68	3.36
	4.10	5.00	3.88	3.88	3.88	3.88	3.68	3.36
	6.00	7.00	4.00	4.00	4.00	3.88	3.68	3.36
	7.90	9.00	4.12	4.12	4.00	3.88	3.68	3.36
	9.80	11.00	4.24	4.24	4.00	3.88	3.68	3.36
	11.80	13.00	4.40	4.32	4.00	3.88	3.68	3.36
	13.70	15.00	4.52	4.32	4.00	3.88	3.68	3.36
4.50	-15.00	-14.70	3.15	3.15	3.15	3.15	3.15	3.15
	-13.00	-12.60	3.35	3.35	3.35	3.35	3.35	3.35
	-11.00	-10.50	3.50	3.50	3.50	3.50	3.50	3.50
	-10.00	-9.50	3.65	3.65	3.65	3.65	3.65	3.65
	-9.10	-8.50	3.75	3.75	3.75	3.75	3.75	3.75
	-7.60	-7.00	3.80	3.80	3.80	3.80	3.80	3.80
	-5.60	-5.00	3.95	3.95	3.95	3.95	3.95	3.95
	-3.70	-3.00	4.15	4.15	4.15	4.15	4.15	4.15
	-0.70	0.00	4.45	4.45	4.45	4.45	4.45	4.20
	2.20	3.00	4.70	4.70	4.70	4.70	4.60	4.20
	4.10	5.00	4.85	4.85	4.85	4.85	4.60	4.20
	6.00	7.00	5.00	5.00	5.00	4.85	4.60	4.20
	7.90	9.00	5.15	5.15	5.00	4.85	4.60	4.20
	9.80	11.00	5.30	5.30	5.00	4.85	4.60	4.20
	11.80	13.00	5.50	5.40	5.00	4.85	4.60	4.20
	13.70	15.00	5.65	5.40	5.00	4.85	4.60	4.20
5.60	-15.00	-14.70	3.97	3.97	3.97	3.97	3.97	3.97
	-13.00	-12.60	4.22	4.22	4.22	4.22	4.22	4.22
	-11.00	-10.50	4.41	4.41	4.41	4.41	4.41	4.41
	-10.00	-9.50	4.60	4.60	4.60	4.60	4.60	4.60
	-9.10	-8.50	4.73	4.73	4.73	4.73	4.73	4.73
	-7.60	-7.00	4.79	4.79	4.79	4.79	4.79	4.79
	-5.60	-5.00	4.98	4.98	4.98	4.98	4.98	4.98
	-3.70	-3.00	5.23	5.23	5.23	5.23	5.23	5.23
	-0.70	0.00	5.61	5.61	5.61	5.61	5.61	5.29
	2.20	3.00	5.92	5.92	5.92	5.92	5.80	5.29
	4.10	5.00	6.11	6.11	6.11	6.11	5.80	5.29
	6.00	7.00	6.30	6.30	6.30	6.11	5.80	5.29
	7.90	9.00	6.49	6.49	6.30	6.11	5.80	5.29
	9.80	11.00	6.68	6.68	6.30	6.11	5.80	5.29
	11.80	13.00	6.93	6.80	6.30	6.11	5.80	5.29
	13.70	15.00	7.12	6.80	6.30	6.11	5.80	5.29

9. Electric Characteristics

Model	Indoor Unit				Power Supply	IFM	
	Hz	Voltage	Min.	Max.	MFA	kW	FLA
MDVi-D22Q4/CN1	50	220-240	198	254	15	0.045	0.3
MDVi-D28Q4/CN1	50	220-240	198	254	15	0.045	0.3
MDVi-D36Q4/CN1	50	220-240	198	254	15	0.045	0.3
MDVi-D45Q4/BN1	50	220-240	198	254	15	0.045	0.29
MDVi-D56Q4/BN1	50	220-240	198	254	15	0.045	0.29

Remark:
MFA: Max. Fuse Amps. (A)
KW: Fan Motor Rated Output (KW)
FLA: Full Load Amps. (A)
IFM: Indoor Fan Motor

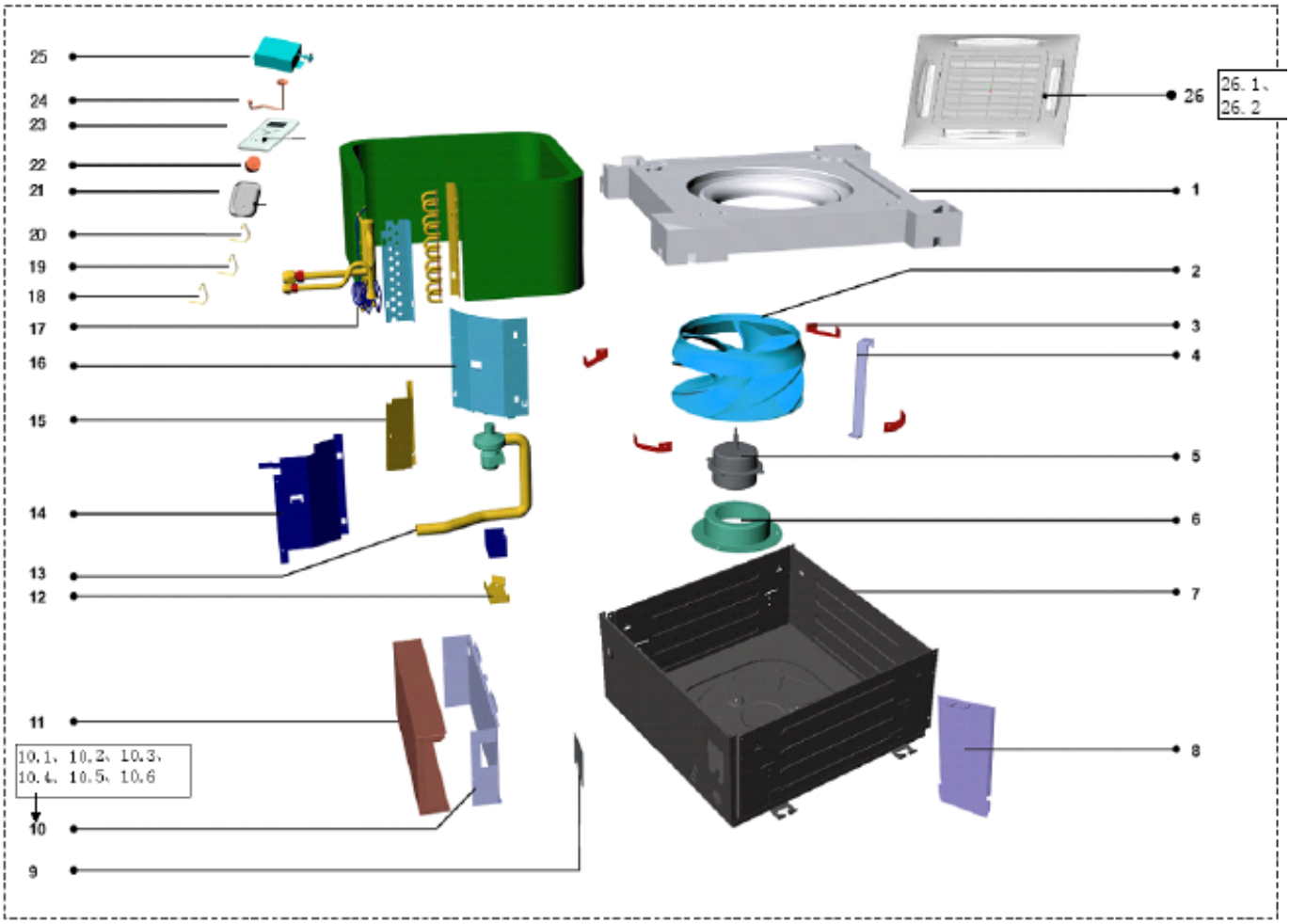
10. Sound Levels



Model	Noise level dB(A)		
	H	M	L
MDVi-D22Q4/CN1	38	36	34
MDVi-D28Q4/CN1	38	36	34
MDVi-D36Q4/CN1	38	36	34
MDVi-D45Q4/BN1	39	36	34
MDVi-D56Q4/BN1	39	36	34

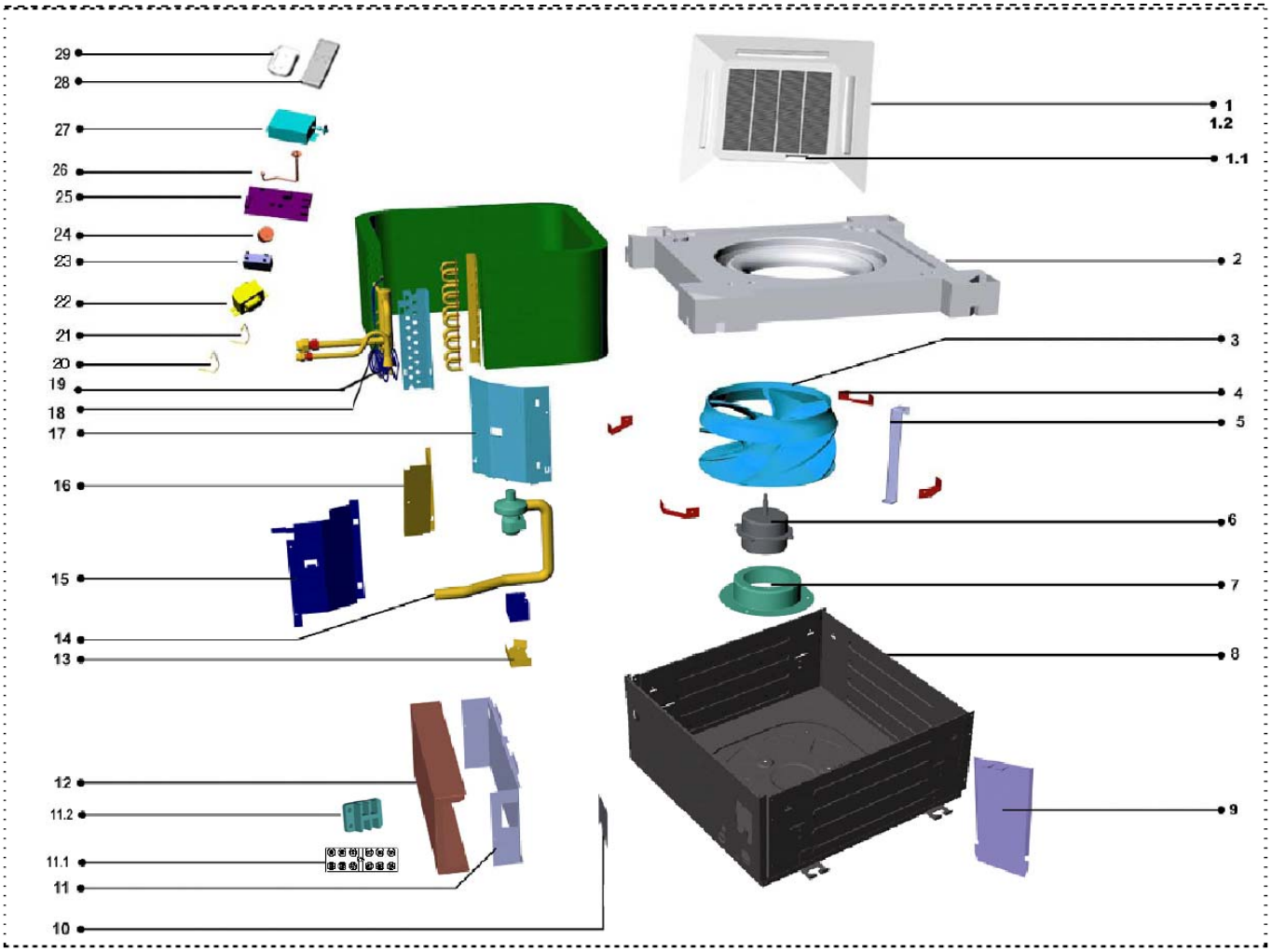
11. Exploded View

11.1 MDVi-D22Q4/CN1 MDVÐ28Q4/CN1 MDVi-D36Q4/CN1



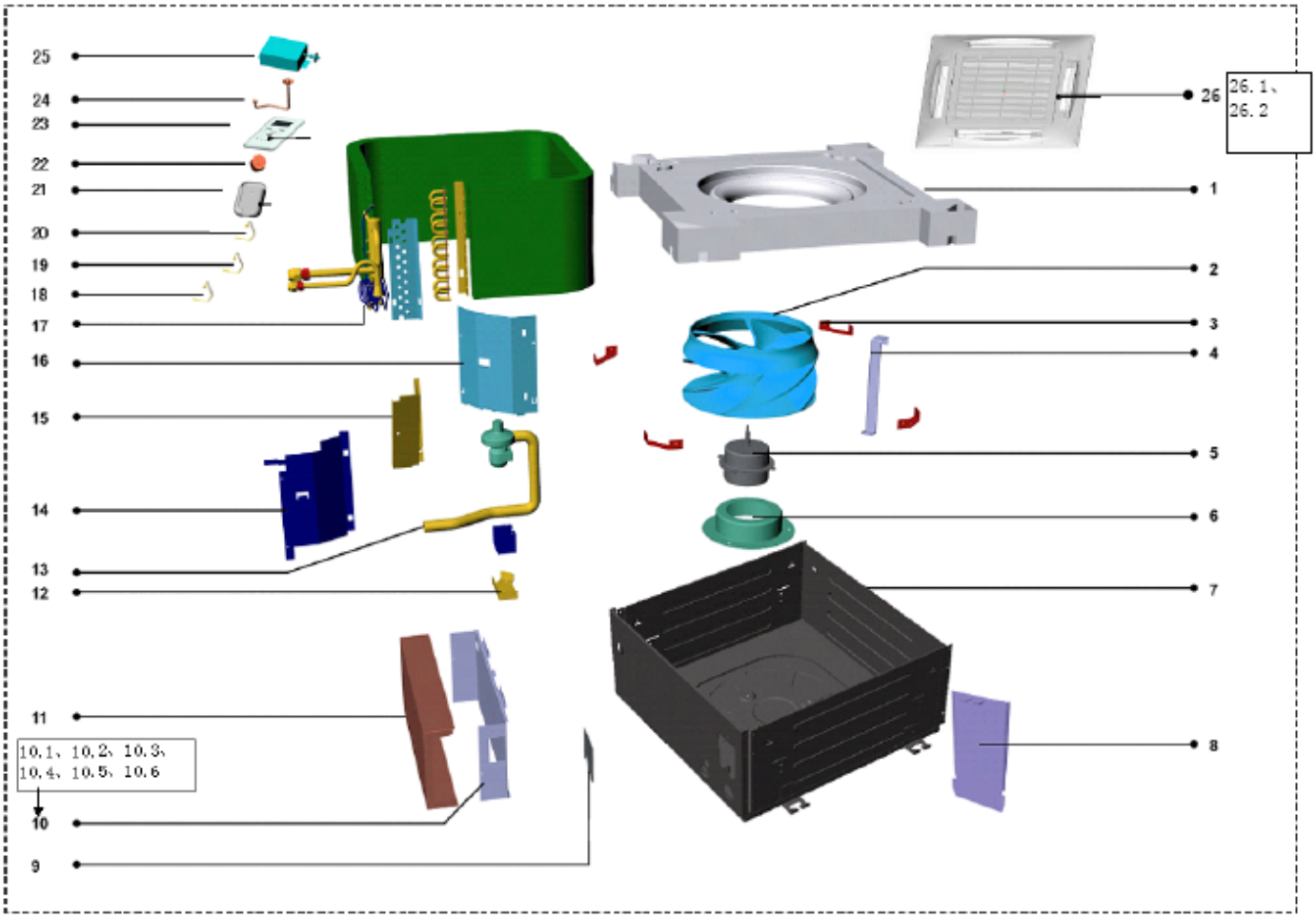
No.	Part Name	Quantity		No.	Part Name	Quantity
1	Drainage pan ass'y	1		12	Drain pump bracket	1
2	Centrifugal fan	1		13	Drain pump	1
3	Installation bracket	4		14	Right clapboard ass'y	1
4	Evaporator fixing hanger	1		15	Partition board	1
5	Motor	1		16	Evaporator fixing board ass'y	1
6	Motor base	1		17	Evaporator ass'y	1
7	Base ass'y	1		18	Temperature sensor	1
8	Board	1		19	Room temp sensor ass'y	1
9	Sealed board ass'y	1		20	Temperature sensor ass'y	1
10	E-part ass'y	1		21	Remote controller bracket ass'y	1
10.1	E-Parts box	1		22	Water level sensor ass'y	1
10.2	Main control board ass'y	1		23	Remote controller	1
10.3	Transformer	1		24	Connecting pipe ass'y	1
10.4	Wire joint, 2p	1		25	Electric throttle ass'y	1
10.5	Motor capacitor	1		26	Panel ass'y	1
10.6	Wire joint	1		26.1	Display board	1
11	E-Part box cover			26.2	Swing motor	1

11.2 MDVi-D45Q4/BN1



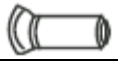
No.	Part Name	Quantity		No.	Part Name	Quantity
1	Panel ass'y	1		14	Drain pump	1
1.1	Swing motor	1		15	Right clapboard ass'y	1
1.2	Display board ass'y	1		16	Partition board	1
2	Drainage pan ass'y	1		17	Evaporator fixing board ass'y	1
3	Centrifugal fan	1		18	Evaporator ass'y	1
4	Installation bracket	4		19	Temperature sensor	1
5	Evaporator fixing hanger	1		20	Room temp sensor ass'y	1
6	Motor	1		21	Transformer	1
7	Motor base	1		22	Motor capacitor	1
8	Base ass'y	1		23	Water level sensor ass'y	1
9	Board	1		24	Main control board ass'y	1
10	Sealed board ass'y	1		25	Connecting pipe ass'y	1
11	E-part box ass'y	1		26	Electric throttle ass'y	1
11.1	Wire joint	1		27	Remote controller holder ass'y	1
11.2	Wire joint, 2p	1		28	Remote controller	1
12	E-Part box cover	1		29	Temp. sensor ass'y	1
13	Drain pump Holder	1				

11.3MDVi-D56Q4/BN1



No.	Part Name	Quantity		No.	Part Name	Quantity
1	Drainage pan ass'y	1		12	Drain pump bracket	1
2	Centrifugal fan	1		13	Drain pump	1
3	Installation bracket	4		14	Right clapboard ass'y	1
4	Evaporator fixing hanger	1		15	Partition board	1
5	Motor	1		16	Evaporator fixing board ass'y	1
6	Motor base	1		17	Evaporator ass'y	1
7	Base ass'y	1		18	Temperature sensor	1
8	Board	1		19	Room temp sensor ass'y	1
9	Sealed board ass'y	1		20	Temperature sensor ass'y	1
10	E-part ass'y	1		21	Remote controller bracket ass'y	1
10.1	E-Parts box	1		22	Water level sensor ass'y	1
10.2	Main control board ass'y	1		23	Remote controller	1
10.3	Transformer	1		24	Connecting pipe ass'y	1
10.4	Wire joint, 2p	1		25	Electric throttle ass'y	1
10.5	Motor capacitor	1		26	Panel ass'y	1
10.6	Wire joint	1		26.1	Display board	1
11	E-Part box cover			26.2	Swing motor	1

12. Accessories

Name	Quantity	Outline	Function
Installation manual	1	———	———
Remote controller subassembly	1	———	Remote controller the air-conditioner
Pipe insulation material	2		Heat insulation
Accessory drain pipe	1		To connect drain pipe
Adhesive tape for seal	1		To connect drain pipe
Branch pipe	1	———	To connect refrigerant pipe
Remote controller	1		———
Frame	1		———
Mounting screw (ST2.9x10-C-H)	2		———
Alkaline dry batteries(AM4)	2		———
Remote controller manual	2	———	———

Four-way Cassette Type (New Designed)

1. Features

(1) Low operation noise

—Streamline plate ensures quietness

—Creates natural and comfortable environment

(2) Efficient cooling——Equal, fast and wide range cooling

(3) Excellent performance. Higher heat-exchanging efficiency and lower noise.

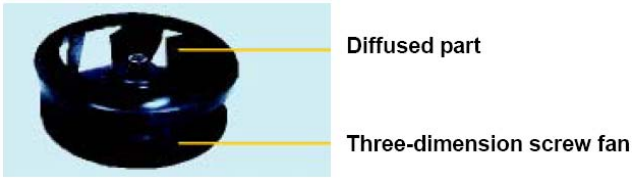
The optimal evaporator & sufficient airflow volume guarantees the excellent capacity

(4) The adoption of the most advanced 3- Dimensional Screw fan

—Reduces the air resistance passing through

—Smoothes the air flow

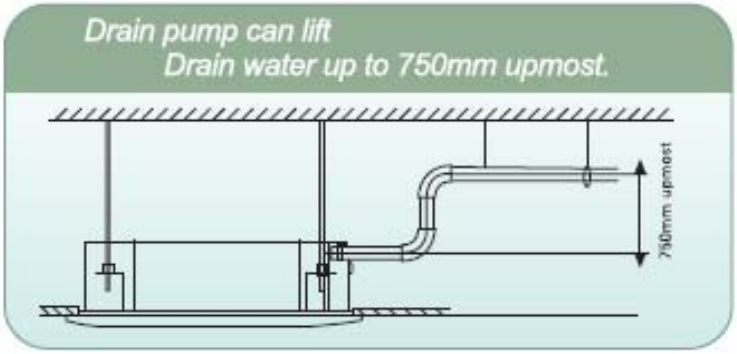
—Makes air speed distribution to the heat exchange uniform



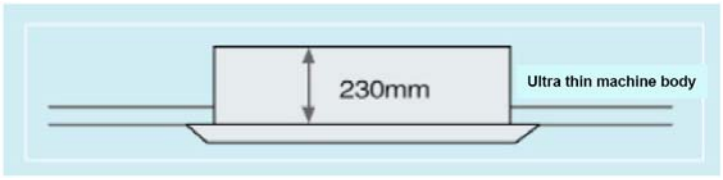
(5) Adding digital tube displaying on the display board. LED can display the Error Code to make the malfunction checking easier.

(6) Fresh air makes life healthier and more comfortable.

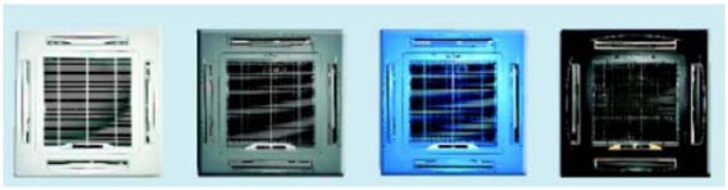
(7) Drainage pump can take up the condenser water to 750mm.



(8) Ultra thin machine body to easy installation and maintenance: 2.8kW~8.0kW:230mm, 9.0kW~11.2kW:300mm.

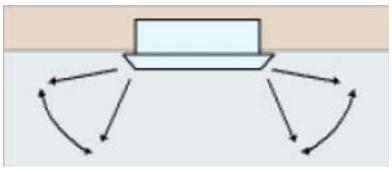


(9) Different color panels for choose: White、Gray、Blue、Black

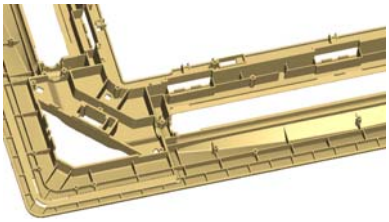


(10) Swing angle of louver

1) Add one more swing motor, one motor driving two louvers. Controlling the interspace of each part, minimizing the angle loss.
2) The swing angle of the first louver are 40~42 degrees and the second louver are 37~38 degrees. New evaporator and inner configuration designed can acquire high heat-exchanger effect.

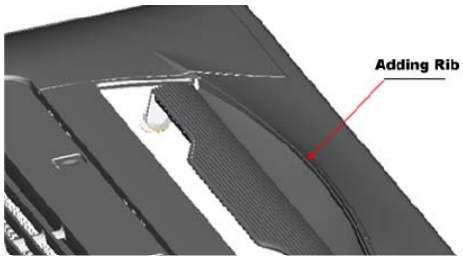


(11) More strengthening rib design around the panel, preventing the distortion for the panel.

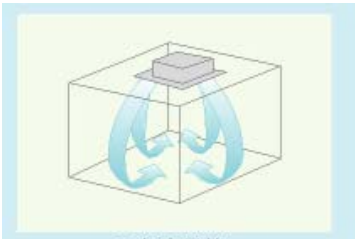


(12) New outlet frame design to make the phenomena of coagulation great improvement: prevent the condensing water from damaging the air guide strip.

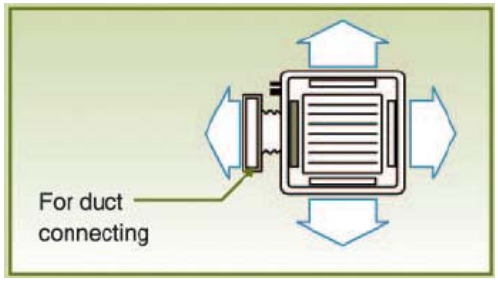
(13) Adding rib on the panel of fan outlet, which can avoid the air outlet direct flow to people.



(14) 4 speeds available, optional super high fan speed design suitable for the large building over 3m high.



(15) Reserve spaces for air side-outlet, it is available to connect duct pipe hence Air supplying from the four sides to nearby small room.



(16) Optimal design, smaller Control Box, Space saving and convenient for wiring,

Using fire resistance galvanized steel for E-box material. Metal box make the control part more stable and prevent damaging

2. Specifications

Model			MDVi-D28Q4/N1-C	MDVi-D36Q4/N1-C	MDVi-D45Q4/N1-C
Power supply		V-Ph-Hz	220-240V, 1Ph, 50Hz		
Cooling	Capacity	kW	2.8	3.6	4.5
	Input	W	90	90	90
	Rated current	A	0.4	0.4	0.4
Heating	Capacity	kW	3.2	4.0	5.0
	Input	W	90	90	90
	Rated current	A	0.4	0.4	0.4
Indoor fan motor	Model		YDK60-6F	YDK60-6F	YDK60-6F
	Type		AC motor	AC motor	AC motor
	Brand		Welling	Welling	Welling
	Input	W	98/85/75/70	98/85/75/70	98/85/75/70
	Capacitor	uF	3	3	3
	Speed (hi/mid/lo)	r/min	550/480/410	550/480/410	550/480/410
Indoor coil	Number of rows		1	1	2
	Tube pitch(a)x row pitch(b)	mm	21	21	21x13.37
	Fin spacing	mm	1.5	1.5	1.5
	Fin type		Hydrophilic Aluminum	Hydrophilic Aluminum	Hydrophilic Aluminum
	Tube outside dia. and type	mm	Φ7 Innergroove Tube	Φ7 Innergroove Tube	Φ7 Innergroove Tube
	Coil length x height x width	mm	1959.4x168x13.37	1959.4x168x13.37	1959.4x168x26.74
	Number of circuits		4	4	8
Indoor air flow (H/M/L)		m^3/h	950/800/650	950/800/650	950/800/650
Indoor noise level (Hi/Mid/Lo)		dB(A)	42/38/35	42/38/35	42/38/35
Indoor unit	Dimension (WxHxD)	mm	840x230x840	840x230x840	840x230x840
	Packing (WxHxD)	mm	955X247X955	955X247X955	955X247X955
	Net/Gross weight	kg	24/30	24/30	26/32
Panel	Dimension (WxHxD)	mm	950x46x950	950x46x950	950x46x950
	Packing (WxHxD)	mm	1035x90x1035	1035x90x1035	1035x90x1035
	Net/Gross weight	kg	6/9	6/9	6/9
Refrigerant type			R410A	R410A	R410A
Throttle			Electric expansive valve		
Design pressure		MPa	4.2/2.0	4.2/2.0	4.2/2.0
Refrigerant piping	Liquid side/ Gas side	mm	Φ6.4/Φ12.7	Φ6.4/Φ12.7	Φ6.4/Φ12.7
Connecting wiring	Power wiring	$Nb\times mm^2$	3×2.5(L≤20m)；3×3.5(L≤50m)		
	Signal wiring	$Nb\times mm^2$	3×1.0	3×1.0	3×1.0
Drainage water pipe dia.		mm	Φ32	Φ32	Φ32
Controller			Wireless remote controller (R05/BGE) (Standard)		
Operation temp		℃	17～30		

Notes:

1. Nominal cooling capacities are based on the following conditions: return air temp.: 27°CDB, 19°CWB, and outdoor temp.:35°CDB, equivalent ref. piping: 8m (horizontal)
2. Nominal heating capacities are based on the following conditions: return air temp.: 20°CDB, outdoor temp.: 7°CDB, 6°CWB, and equivalent ref. Piping: 8m (horizontal)

Model			MDVi-D56Q4/N1-C	MDVi-D71Q4/N1-C	MDVi-D80Q4/N1-C
Power supply		V- Ph-Hz	220-240V, 1Ph, 50Hz		
Cooling	Capacity	kW	5.6	7.1	8.0
	Input	W	90	115	115
	Rated current	A	0.4	0.5	0.5
Heating	Capacity	kW	6.3	8.0	9.0
	Input	W	90	115	115
	Rated current	A	0.4	0.5	0.5
Indoor fan motor	Model		YDK60-6F	YDK80-6E	YDK80-6E
	Type		AC motor	AC motor	AC motor
	Brand		Welling	Welling	Welling
	Input	W	98/85/75/70	120/110/100/90	120/110/100/90
	Capacitor	uF	3	3.5	3.5
	Speed (hi/mid/lo)	r/min	550/480/410	670/550/400	670/550/400
Indoor coil	Number of rows		2	2	2
	Tube pitch(a)x row pitch(b)	mm	21x13.37	21x13.37	21x13.37
	Fin spacing	mm	1.5	1.5	1.5
	Fin type		Hydrophilic Aluminum	Hydrophilic Aluminum	Hydrophilic Aluminum
	Tube outside dia. and type	mm	Φ7 Innergroove Tube	Φ7 Innergroove Tube	Φ7 Innergroove Tube
	Coil length x height x width	mm	1959.4x168x26.74	1959.4x168x26.74	1959.4x168x26.74
	Number of circuits		8	8	8
Indoor air flow (H/M/L)		m^3/h	950/800/650	1220/1010/820	1220/1010/820
Indoor noise level (Hi/Mid/Lo)		dB(A)	42/38/35	45/42/39	45/42/39
Indoor unit	Dimension (WxHxD)	mm	840x230x840	840x230x840	840x230x840
	Packing (WxHxD)	mm	955X247X955	955X247X955	955X247X955
	Net/Gross weight	kg	26/32	26/32	26/32
Panel	Dimension (WxHxD)	mm	950x46x950	950x46x950	950x46x950
	Packing (WxHxD)	mm	1035x90x1035	1035x90x1035	1035x90x1035
	Net/Gross weight	kg	6/9	6/9	6/9
Refrigerant type			R410A	R410A	R410A
Throttle			Electric expansive valve		
Design pressure		MPa	4.2/2.0	4.2/2.0	4.2/2.0
Refrigerant piping	Liquid side/ Gas side	mm	Φ9.5/Φ15.9	Φ9.5/Φ15.9	Φ9.5/Φ15.9
Connecting wiring	Power wiring	$Nb\times mm^2$	3×2.5(L≤20m)；3×3.5(L≤50m)		
	Signal wiring	$Nb\times mm^2$	3×1.0	3×1.0	3×1.0
Drainage water pipe dia.		mm	Φ32	Φ32	Φ32
Controller			Wireless remote controller (R05/BGE) (Standard)		
Operation temp		℃	17～30		

Notes:

1. Nominal cooling capacities are based on the following conditions: return air temp.: 27°CDB, 19°CWB, and outdoor temp.:35°CDB, equivalent ref. piping: 8m (horizontal)

2. Nominal heating capacities are based on the following conditions: return air temp.: 20°CDB, outdoor temp.: 7°CDB, 6°CWB, and equivalent ref. Piping: 8m (horizontal)

Model			MDVi-D90Q4/N1-C	MDVi-D100Q4/N1-C
Power supply		V- Ph-Hz	220-240V, 1Ph, 50Hz	
Cooling	Capacity	kW	9.0	10.0
	Input	W	160	160
	Rated current	A	0.7	0.7
Heating	Capacity	kW	10.0	11.0
	Input	W	160	160
	Rated current	A	0.7	0.7
Indoor fan motor	Model		YDK90-6E	YDK90-6E
	Type		AC motor	AC motor
	Brand		Welling	Welling
	Input	W	165/143/114/93	165/143/114/93
	Capacitor	uF	3.5	3.5
	Speed (hi/mid/lo)	r/min	770/640/550	770/640/550
Indoor coil	Number of rows		2	2
	Tube pitch(a)x row pitch(b)	mm	21x13.37	21x13.37
	Fin spacing	mm	1.5	1.5
	Fin type		Hydrophilic Aluminum	Hydrophilic Aluminum
	Tube outside dia. and type	mm	Φ7 Innergroove Tube	Φ7 Innergroove Tube
	Coil length x height x width	mm	1959.4x252x26.74	1959.4x252x26.74
	Number of circuits		8	8
Indoor air flow (H/M/L)		m^3/h	1540/1300/1120	1540/1300/1120
Indoor noise level (Hi/Mid/Lo)		dB(A)	48/45/43	48/45/43
Indoor unit	Dimension (WxHxD)	mm	840x300x840	840x300x840
	Packing (WxHxD)	mm	955X317X955	955X317X955
	Net/Gross weight	kg	32/39	32/39
Panel	Dimension (WxHxD)	mm	950x46x950	950x46x950
	Packing (WxHxD)	mm	1035x90x1035	1035x90x1035
	Net/Gross weight	kg	6/9	6/9
Refrigerant type			R410A	R410A
Throttle			Electric expansive valve	
Design pressure		MPa	4.2/2.0	4.2/2.0
Refrigerant piping	Liquid side/ Gas side	mm	Φ9.5/Φ15.9	Φ9.5/Φ15.9
Connecting wiring	Power wiring	$Nb\times mm^2$	3×2.5(L≤20m)；3×3.5(L≤50m)	
	Signal wiring	$Nb\times mm^2$	3×1.0	3×1.0
Drainage water pipe dia.		mm	Φ32	Φ32
Controller			Wireless remote controller (R05/BGE) (Standard)	
Operation temp		℃	17～30	

Notes:

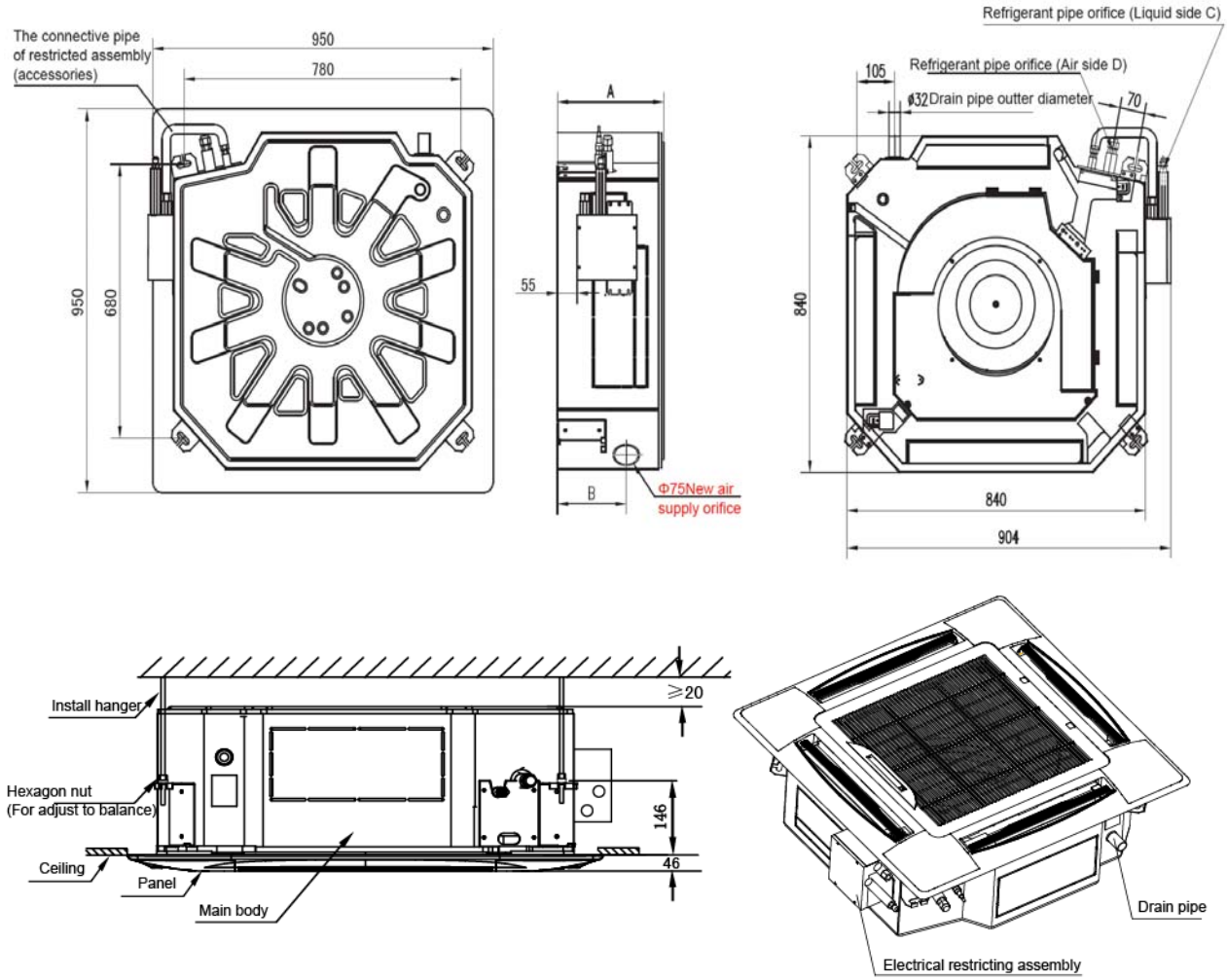
1. Nominal cooling capacities are based on the following conditions: return air temp.: 27°CDB, 19°CWB, and outdoor temp.:35°CDB, equivalent ref. piping: 8m (horizontal)
2. Nominal heating capacities are based on the following conditions: return air temp.: 20°CDB, outdoor temp.: 7°CDB, 6°CWB, and equivalent ref. Piping: 8m (horizontal)

Model			MDVi-D112Q4/N1-C	MDVi-D140Q4/N1-C
Power supply		V- Ph-Hz	220-240V, 1Ph, 50Hz	
Cooling	Capacity	kW	11.2	14.0
	Input	W	160	180
	Rated current	A	0.7	0.8
Heating	Capacity	kW	12.5	15.0
	Input	W	160	180
	Rated current	A	0.7	0.8
Indoor fan motor	Model		YDK90-6E	YDK90-6E-1
	Type		AC motor	AC motor
	Brand		Welling	Welling
	Input	W	165/143/114/93	204/175/140/120
	Capacitor	uF	3.5	4
	Speed (hi/mid/lo)	r/min	770/640/550	820/750/620
Indoor coil	Number of rows		2	2
	Tube pitch(a)x row pitch(b)	mm	21x13.37	21x13.37
	Fin spacing	mm	1.5	1.5
	Fin type		Hydrophilic Aluminum	Hydrophilic Aluminum
	Tube outside dia. and type	mm	Φ7 Innergroove Tube	Φ7 Innergroove Tube
	Coil length x height x width	mm	1959.4x252x26.74	1959.4x252x40.11
	Number of circuits		8	12
Indoor air flow (H/M/L)		m^3/h	1540/1300/1120	1800/1500/1280
Indoor noise level (Hi/Mid/Lo)		dB(A)	48/45/43	50/47/44
Indoor unit	Dimension (WxHxD)	mm	840x300x840	840x300x840
	Packing (WxHxD)	mm	955X317X955	955X317X955
	Net/Gross weight	kg	32/39	32/39
Panel	Dimension (WxHxD)	mm	950x46x950	950x46x950
	Packing (WxHxD)	mm	1035x90x1035	1035x90x1035
	Net/Gross weight	kg	6/9	6/9
Refrigerant type			R410A	R410A
Throttle			Electric expansive valve	
Design pressure		MPa	4.2/2.0	4.2/2.0
Refrigerant piping	Liquid side/ Gas side	mm	Φ9.5/Φ15.9	Φ9.5/Φ15.9
Connecting wiring	Power wiring	$Nb\times mm^2$	3×2.5(L≤20m)；3×3.5(L≤50m)	
	Signal wiring	$Nb\times mm^2$	3×1.0	6×0.75
Drainage water pipe dia.		mm	Φ32	Φ32
Controller			Wireless remote controller (R05/BGE) (Standard)	
Operation temp		℃	17～30	

Notes:

1. Nominal cooling capacities are based on the following conditions: return air temp.: 27°CDB, 19°CWB, and outdoor temp.:35°CDB, equivalent ref. piping: 8m (horizontal)
2. Nominal heating capacities are based on the following conditions: return air temp.: 20°CDB, outdoor temp.: 7°CDB, 6°CWB, and equivalent ref. Piping: 8m (horizontal)

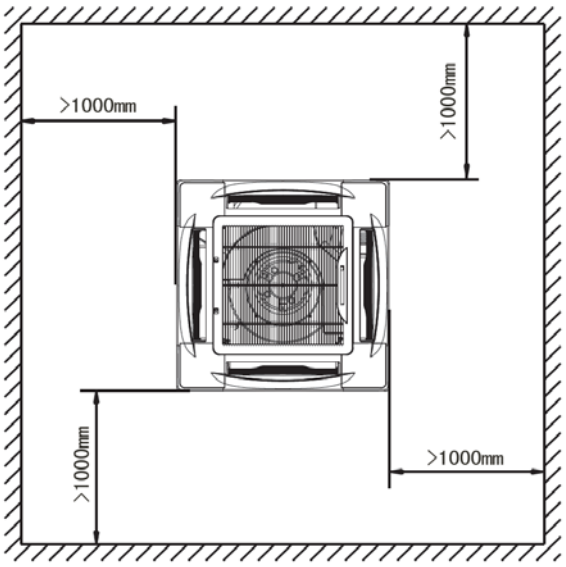
3. Dimensions

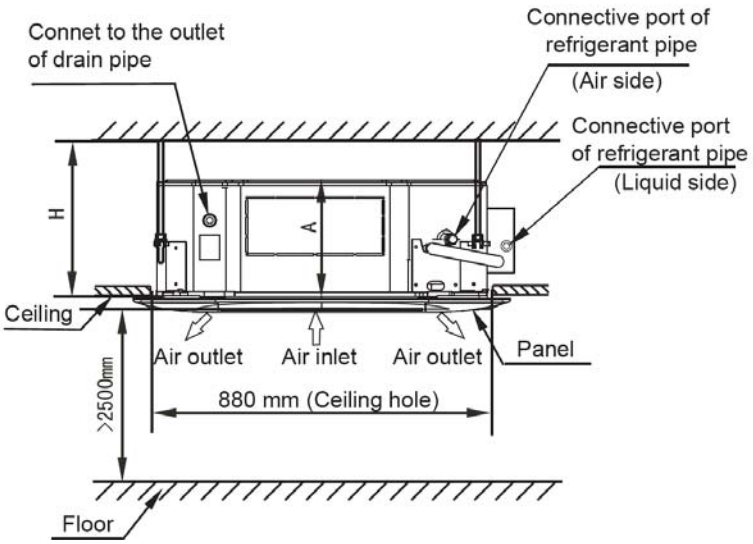


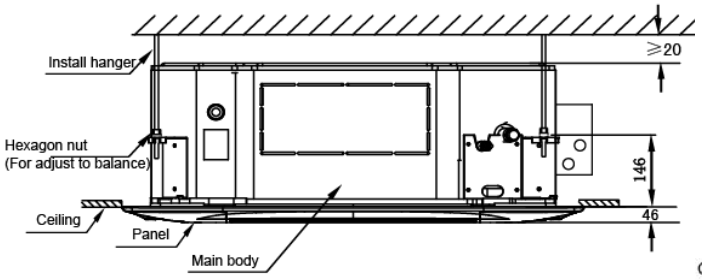
Indoor unit model	A(mm)	B(mm)	C(mm)	D(mm)
MDVi-D28Q4/N1-C ～ MDVi-D45Q4/N1-C	230	170	Φ6.4	Φ12.7
MDVi-D56Q4/N1-C ～ MDVi-D80Q4/N1-C	230	170	Φ9.5	Φ15.9
MDVi-D90Q4/N1-C ～ MDVi-D140Q4/N1-C	300	190	Φ9.5	Φ15.9

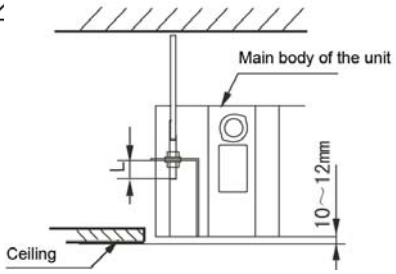
4. Service Space

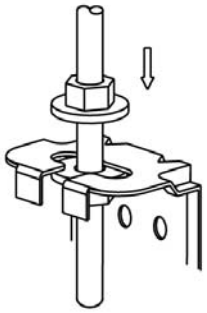
1) There is enough room for installation and maintenance.
2) The ceiling is horizontal, and its structure can endure the weight of the indoor unit.
3) The outlet and the inlet are not impeded, and the influence of external air is the least.
4) The air flow can reach throughout the room.
5) The connecting pipe and drainpipe could be extracted out easily.
6) There is no direct radiation from heaters.





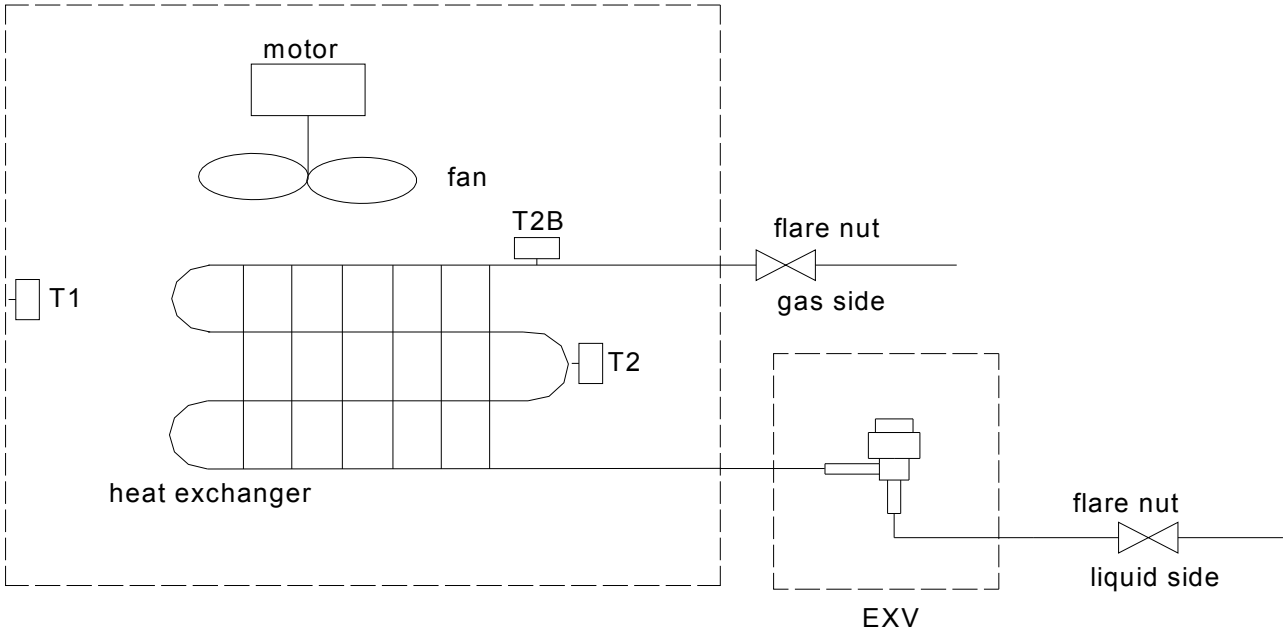






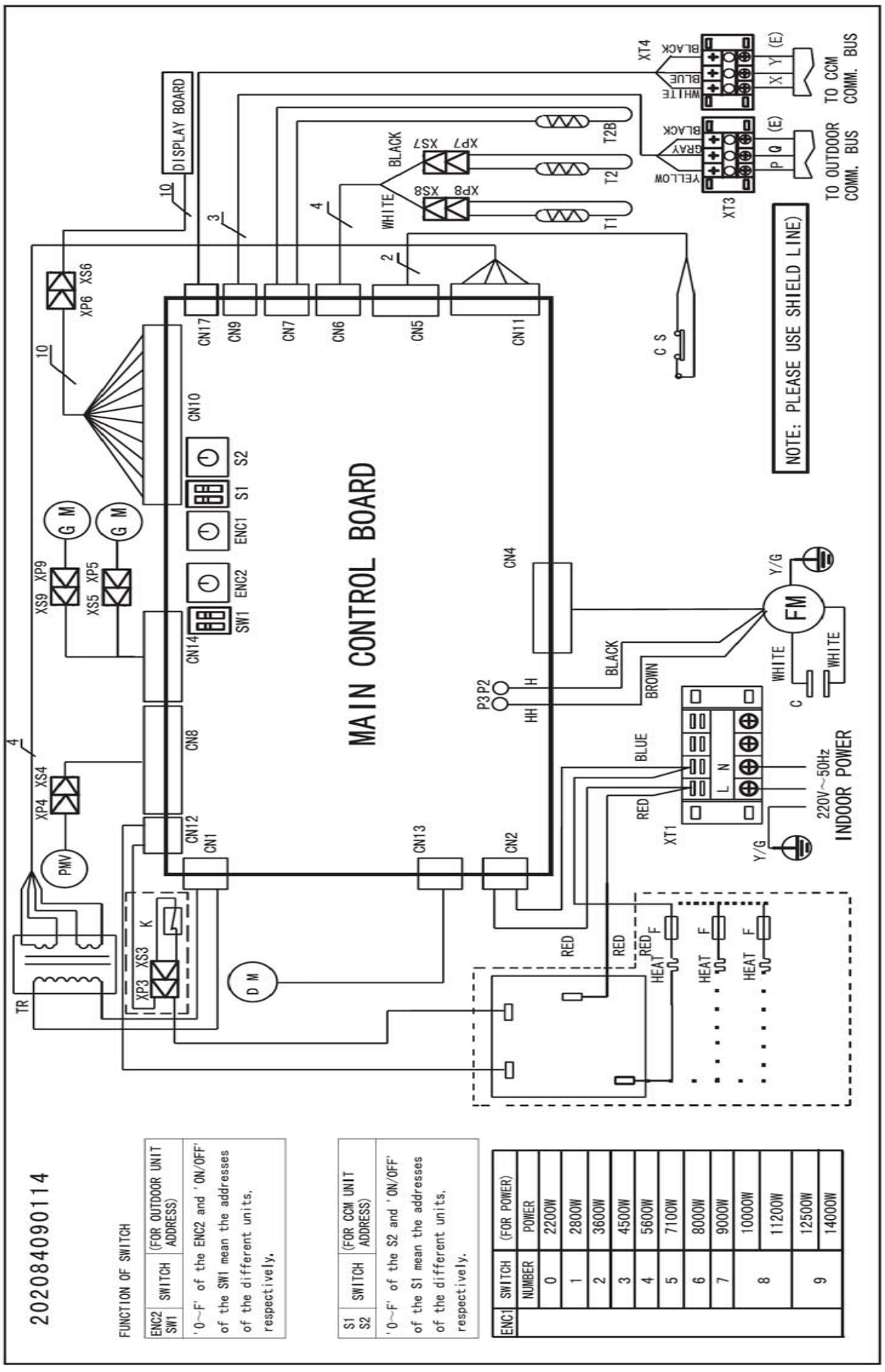
Indoor unit	A(mm)	H(mm)
MDVi-D28Q4/N1-C ～ MDVi-D80Q4/N1-C	230	≥260
MDVi-D90Q4/N1-C ～ MDVi-D140Q4/N1-C	300	≥330

5. Piping Diagram



6. Wiring Diagram

MDVi-D28Q4/N1-C MDVi-D36Q4/N1-C MDVi-D45Q4/N1-C MDVi-D56Q4/N1-C
MDVi-D71Q4/N1-C MDVi-D80Q4/N1-C MDVi-D90Q4/N1-C MDVi-D100Q4/N1-C
MDVi-D112Q4/N1-C MDVi-D140Q4/N1-C



7. Capacity Tables

7.1 Cooling

TC: total capacity **SC**: sensible capacity **WB**: wet-bulb temperature **DB**: dry-bulb temperature

Indoor Unit size (kW)	Outdoor temperature (℃ DB)	Indoor temperature (℃ WB/DB)													
		14/20		16/23		18/26		19/27		20/28		22/30		24/32	
		TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
2.8	10.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.7	2.1
	12.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.6	2.1
	14.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.6	2.1
	16.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.6	2.0
	18.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.5	2.0
	20.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.4	1.9
	21.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.4	1.9
	23.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.2	2.1	3.4	1.9
	25.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.2	2.0	3.3	1.9
	27.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.2	2.0	3.3	1.9
	29.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.1	2.0	3.2	1.9
	31.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.1	2.0	3.2	1.9
	33.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.1	2.0	3.1	2.0
	35.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.1	2.9	1.9	3.1	2.0
	37.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.1	2.9	1.9	2.9	1.9
	39.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.8	2.0	2.9	1.9	2.9	1.9
3.6	10.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.8	2.8
	12.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.6	2.7
	14.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.6	2.7
	16.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.5	2.7
	18.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.5	2.7
	20.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.4	2.7
	21.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.4	2.7
	23.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.4	2.7
	25.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.1	2.7	4.2	2.6
	27.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.1	2.7	4.2	2.6
	29.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.0	2.6	4.1	2.5
	31.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.0	2.6	4.1	2.4
	33.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.0	2.6	4.0	2.4
	35.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.7	2.6	3.9	2.6	4.0	2.4
	37.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.7	2.6	3.9	2.6	3.9	2.3
	39.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.7	2.6	3.9	2.7	3.9	2.4
4.5	10.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.9	3.4
	12.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.9	3.4
	14.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.8	3.3
	16.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.6	3.2
	18.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.6	3.2
	20.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.5	3.2
	21.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.4	3.1

	23.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.2	3.2	5.4	3.1
	25.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.2	3.2	5.3	3.0
	27.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.0	3.0	5.3	3.0
	29.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.0	3.0	5.1	2.9
	31.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.3	3.5	5.1	3.0
	33.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.3	3.5	4.9	2.9
	35.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.3	3.5	4.8	2.8
	37.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.6	3.2	4.8	3.1	4.8	2.9
	39.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.6	3.2	4.8	3.1	4.8	2.9
5.6	10.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.3	4.1
	12.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.3	4.1
	14.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.2	4.1
	16.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	6.9	4.0
	18.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.1	4.1
	20.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.1	4.1
	21.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.0	4.1
	23.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	6.9	4.0
	25.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.5	4.1	6.8	3.9
	27.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.4	4.0	6.5	3.8
	29.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.3	4.0	6.4	3.7
	31.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.2	3.9	6.3	3.7
	33.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.0	3.8	6.3	3.7
	35.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	5.9	3.7	6.2	3.6
	37.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	5.9	3.9	6.1	3.5
	39.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	5.7	3.8	5.8	3.8	6.0	3.5
7.1	10.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	9.2	4.9
	12.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	9.1	4.8
	14.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	9.0	4.8
	16.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	8.9	4.7
	18.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	8.7	4.7
	20.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	8.5	4.6
	21.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	8.4	4.5
	23.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	8.3	4.5
	25.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	8.2	4.4
	27.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.1	4.9	8.2	4.4
	29.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.0	4.8	8.1	4.5
	31.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	7.9	4.7	7.8	4.4
	33.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	7.8	4.7	7.8	4.4
	35.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	7.6	4.6	7.7	4.3
	37.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	7.5	4.5	7.6	4.3
	39.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.2	4.6	7.4	4.4	7.6	4.3
8.0	10.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	10.4	5.6
	12.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	10.2	5.5
	14.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	10.2	5.5
	16.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	10.0	5.4
	18.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	9.8	5.3
	20.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	9.6	5.2

	21.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	9.4	5.1
	23.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	9.4	5.1
	25.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	9.3	5.0
	27.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.1	5.3	9.2	5.1
	29.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.5	9.0	5.3	9.1	5.0
	31.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.5	8.9	5.2	8.8	4.8
	33.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.5	8.8	5.2	8.8	4.8
	35.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.5	8.6	5.1	8.6	4.8
	37.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.3	5.4	8.4	5.0	8.6	4.9
	39.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.1	5.3	8.3	5.0	8.6	4.9
9.0	10.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.6	6.6	11.7	6.6
	12.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.6	6.6	11.5	6.5
	14.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.6	6.6	11.4	6.4
	16.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.6	6.6	11.3	6.3
	18.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.6	6.6	11.0	6.3
	20.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.6	6.6	10.8	6.2
	21.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.6	6.6	10.6	6.1
	23.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.6	6.6	10.5	6.0
	25.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.6	6.6	10.4	6.0
	27.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.3	6.4	10.4	5.9
	29.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.1	6.2	10.3	5.8
	31.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.0	6.2	9.9	5.7
	33.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	9.9	6.1	9.9	5.7
	35.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.5	6.5	9.6	6.0	9.7	5.7
	37.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.3	6.3	9.5	5.9	9.6	5.8
	39.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.2	6.2	9.4	5.8	9.6	5.8
10.0	10.0	6.9	5.6	8.1	6.2	9.4	6.9	10.0	7.0	10.6	7.0	11.9	7.3	13.0	7.3
	12.0	6.9	5.6	8.1	6.2	9.4	6.9	10.0	7.0	10.6	7.0	11.9	7.3	12.8	7.2
	14.0	6.9	5.6	8.1	6.2	9.4	6.9	10.0	7.0	10.6	7.0	11.9	7.3	12.7	7.1
	16.0	6.9	5.6	8.1	6.2	9.4	6.9	10.0	7.0	10.6	7.0	11.9	7.3	12.5	7.0
	18.0	6.9	5.6	8.1	6.2	9.4	6.9	10.0	7.0	10.6	7.0	11.9	7.3	12.2	6.8
	20.0	6.9	5.6	8.1	6.2	9.4	6.9	10.0	7.0	10.6	7.0	11.9	7.3	12.0	6.7
	21.0	6.9	5.6	8.1	6.2	9.4	6.9	10.0	7.0	10.6	7.0	11.9	7.3	11.8	6.6
	23.0	6.9	5.6	8.1	6.2	9.4	6.9	10.0	7.0	10.6	7.0	11.7	7.3	11.7	6.6
	25.0	6.9	5.6	8.1	6.2	9.4	6.9	10.0	7.0	10.6	7.0	11.6	7.2	11.6	6.5
	27.0	6.9	5.6	8.1	6.2	9.4	6.9	10.0	7.0	10.6	7.0	11.5	7.1	11.5	6.6
	29.0	6.9	5.6	8.1	6.2	9.4	6.9	10.0	7.0	10.6	7.0	11.4	7.1	11.4	6.5
	31.0	6.9	5.6	8.1	6.2	9.4	6.9	10.0	7.0	10.6	7.0	11.3	7.0	11.0	6.3
	33.0	6.9	5.6	8.1	6.2	9.4	6.9	10.0	7.0	10.6	7.0	11.2	6.9	11.0	6.3
	35.0	6.9	5.6	8.1	6.2	9.4	6.9	10.0	7.0	10.5	6.9	10.8	6.7	10.8	6.3
	37.0	6.9	5.6	8.1	6.2	9.4	6.9	10.0	7.0	10.4	6.9	10.8	6.7	10.7	6.2
	39.0	6.9	5.6	8.1	6.2	9.4	6.9	10.0	7.0	10.2	6.7	10.4	6.6	10.7	6.3
11.2	10.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	13.3	8.3	15.5	9.0
	12.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	13.3	8.3	14.4	8.4
	14.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	13.3	8.3	14.2	8.2
	16.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	13.3	8.3	14.1	8.2
	18.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	13.3	8.3	14.0	8.1

	20.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	13.3	8.3	13.9	8.1
	21.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	13.3	8.3	13.8	8.0
	23.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	13.1	8.1	13.7	7.9
	25.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	13.0	8.1	13.6	7.9
	27.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	12.9	8.0	13.4	7.8
	29.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	12.8	7.9	13.3	7.9
	31.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	12.7	7.8	12.8	7.5
	33.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	12.5	7.8	12.5	7.4
	35.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.8	8.0	12.4	7.7	12.3	7.3
	37.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.6	7.9	12.3	7.6	12.1	7.1
	39.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.4	7.8	12.2	7.6	11.9	7.1
14.0	10	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.7	10.2	18.2	10.2
	12	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.7	10.2	17.9	10
	14	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.7	10.2	17.8	10
	16	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.7	10.2	17.5	9.8
	18	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.7	10.2	17.1	9.6
	20	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.7	10.2	16.8	9.4
	23	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.4	10.2	16.4	9.2
	25	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.2	10.1	16.2	9.1
	27	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.1	10	16.1	9.2
	29	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16	9.9	16	9.1
	31	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	15.8	9.8	15.4	8.8
	33	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	15.7	9.7	15.4	8.8
	35	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.7	9.7	15.1	9.4	15.1	8.8
	37	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.6	9.6	15.1	9.4	15	8.7
	39	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.3	9.4	14.6	9.2	15	8.8

7.2 Heating

TC: total capacity **WB**: wet-bulb temperature **DB**: dry-bulb temperature

Indoor Unit size (kW)	Outdoor temperature (℃)		Indoor temperature (℃ DB)					
			16.00	18.00	20.00	21.00	22.00	24.00
			TC	TC	TC	TC	TC	TC
	WB	DB	kW	kW	kW	kW	kW	kW
2.80	-15.00	-14.70	2.02	2.02	2.02	2.02	2.02	2.02
	-13.00	-12.60	2.14	2.14	2.14	2.14	2.14	2.14
	-11.00	-10.50	2.24	2.24	2.24	2.24	2.24	2.24
	-10.00	-9.50	2.34	2.34	2.34	2.34	2.34	2.34
	-9.10	-8.50	2.40	2.40	2.40	2.40	2.40	2.40
	-7.60	-7.00	2.43	2.43	2.43	2.43	2.43	2.43
	-5.60	-5.00	2.53	2.53	2.53	2.53	2.53	2.53
	-3.70	-3.00	2.66	2.66	2.66	2.66	2.66	2.66
	-0.70	0.00	2.85	2.85	2.85	2.85	2.85	2.69
	2.20	3.00	3.01	3.01	3.01	3.01	2.94	2.69
	4.10	5.00	3.10	3.10	3.10	3.10	2.94	2.69
	6.00	7.00	3.20	3.20	3.20	3.10	2.94	2.69
	7.90	9.00	3.30	3.30	3.20	3.10	2.94	2.69
	9.80	11.00	3.39	3.39	3.20	3.10	2.94	2.69
	11.80	13.00	3.52	3.46	3.20	3.10	2.94	2.69
	13.70	15.00	3.62	3.46	3.20	3.10	2.94	2.69
3.60	-15.00	-14.70	2.52	2.52	2.52	2.52	2.52	2.52
	-13.00	-12.60	2.68	2.68	2.68	2.68	2.68	2.68
	-11.00	-10.50	2.80	2.80	2.80	2.80	2.80	2.80
	-10.00	-9.50	2.92	2.92	2.92	2.92	2.92	2.92
	-9.10	-8.50	3.00	3.00	3.00	3.00	3.00	3.00
	-7.60	-7.00	3.04	3.04	3.04	3.04	3.04	3.04
	-5.60	-5.00	3.16	3.16	3.16	3.16	3.16	3.16
	-3.70	-3.00	3.32	3.32	3.32	3.32	3.32	3.32
	-0.70	0.00	3.56	3.56	3.56	3.56	3.56	3.36
	2.20	3.00	3.76	3.76	3.76	3.76	3.68	3.36
	4.10	5.00	3.88	3.88	3.88	3.88	3.68	3.36
	6.00	7.00	4.00	4.00	4.00	3.88	3.68	3.36
	7.90	9.00	4.12	4.12	4.00	3.88	3.68	3.36
	9.80	11.00	4.24	4.24	4.00	3.88	3.68	3.36
	11.80	13.00	4.40	4.32	4.00	3.88	3.68	3.36
	13.70	15.00	4.52	4.32	4.00	3.88	3.68	3.36
4.50	-15.00	-14.70	3.15	3.15	3.15	3.15	3.15	3.15
	-13.00	-12.60	3.35	3.35	3.35	3.35	3.35	3.35
	-11.00	-10.50	3.50	3.50	3.50	3.50	3.50	3.50
	-10.00	-9.50	3.65	3.65	3.65	3.65	3.65	3.65
	-9.10	-8.50	3.75	3.75	3.75	3.75	3.75	3.75
	-7.60	-7.00	3.80	3.80	3.80	3.80	3.80	3.80
	-5.60	-5.00	3.95	3.95	3.95	3.95	3.95	3.95
	-3.70	-3.00	4.15	4.15	4.15	4.15	4.15	4.15
	-0.70	0.00	4.45	4.45	4.45	4.45	4.45	4.20

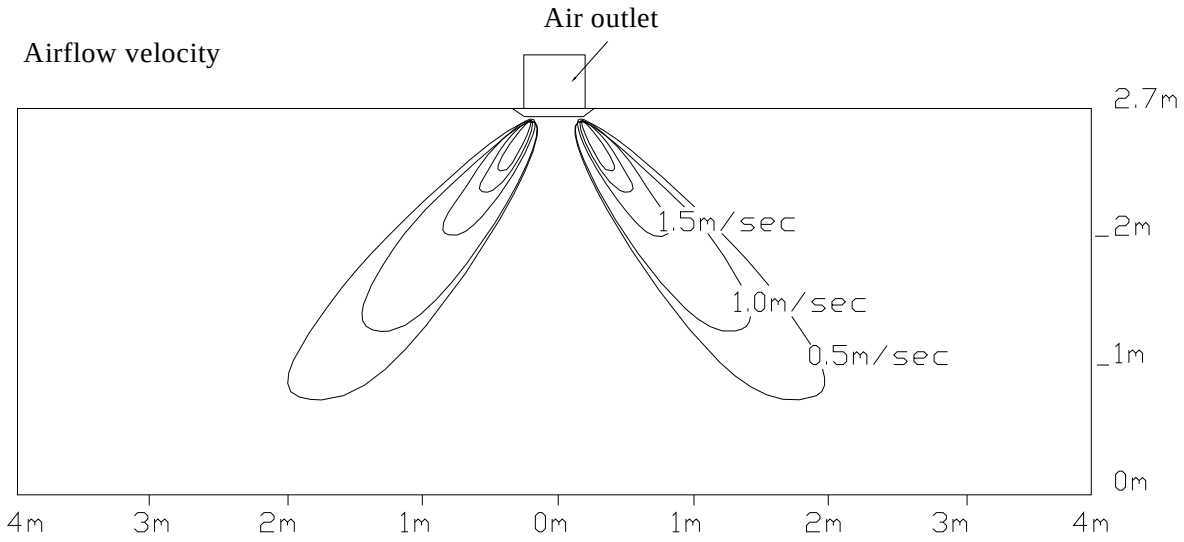
	2.20	3.00	4.70	4.70	4.70	4.70	4.60	4.20
	4.10	5.00	4.85	4.85	4.85	4.85	4.60	4.20
	6.00	7.00	5.00	5.00	5.00	4.85	4.60	4.20
	7.90	9.00	5.15	5.15	5.00	4.85	4.60	4.20
	9.80	11.00	5.30	5.30	5.00	4.85	4.60	4.20
	11.80	13.00	5.50	5.40	5.00	4.85	4.60	4.20
	13.70	15.00	5.65	5.40	5.00	4.85	4.60	4.20
5.60	-15.00	-14.70	3.97	3.97	3.97	3.97	3.97	3.97
	-13.00	-12.60	4.22	4.22	4.22	4.22	4.22	4.22
	-11.00	-10.50	4.41	4.41	4.41	4.41	4.41	4.41
	-10.00	-9.50	4.60	4.60	4.60	4.60	4.60	4.60
	-9.10	-8.50	4.73	4.73	4.73	4.73	4.73	4.73
	-7.60	-7.00	4.79	4.79	4.79	4.79	4.79	4.79
	-5.60	-5.00	4.98	4.98	4.98	4.98	4.98	4.98
	-3.70	-3.00	5.23	5.23	5.23	5.23	5.23	5.23
	-0.70	0.00	5.61	5.61	5.61	5.61	5.61	5.29
	2.20	3.00	5.92	5.92	5.92	5.92	5.80	5.29
	4.10	5.00	6.11	6.11	6.11	6.11	5.80	5.29
	6.00	7.00	6.30	6.30	6.30	6.11	5.80	5.29
	7.90	9.00	6.49	6.49	6.30	6.11	5.80	5.29
	9.80	11.00	6.68	6.68	6.30	6.11	5.80	5.29
	11.80	13.00	6.93	6.80	6.30	6.11	5.80	5.29
	13.70	15.00	7.12	6.80	6.30	6.11	5.80	5.29
7.10	-15.00	-14.70	5.04	5.04	5.04	5.04	5.04	5.04
	-13.00	-12.60	5.36	5.36	5.36	5.36	5.36	5.36
	-11.00	-10.50	5.60	5.60	5.60	5.60	5.60	5.60
	-10.00	-9.50	5.84	5.84	5.84	5.84	5.84	5.84
	-9.10	-8.50	6.00	6.00	6.00	6.00	6.00	6.00
	-7.60	-7.00	6.08	6.08	6.08	6.08	6.08	6.08
	-5.60	-5.00	6.32	6.32	6.32	6.32	6.32	6.32
	-3.70	-3.00	6.64	6.64	6.64	6.64	6.64	6.64
	-0.70	0.00	7.12	7.12	7.12	7.12	7.12	6.72
	2.20	3.00	7.52	7.52	7.52	7.52	7.36	6.72
	4.10	5.00	7.76	7.76	7.76	7.76	7.36	6.72
	6.00	7.00	8.00	8.00	8.00	7.76	7.36	6.72
	7.90	9.00	8.24	8.24	8.00	7.76	7.36	6.72
	9.80	11.00	8.48	8.48	8.00	7.76	7.36	6.72
	11.80	13.00	8.80	8.64	8.00	7.76	7.36	6.72
	13.70	15.00	9.04	8.64	8.00	7.76	7.36	6.72
8.00	-15.00	-14.70	5.67	5.67	5.67	5.67	5.67	5.67
	-13.00	-12.60	6.03	6.03	6.03	6.03	6.03	6.03
	-11.00	-10.50	6.30	6.30	6.30	6.30	6.30	6.30
	-10.00	-9.50	6.57	6.57	6.57	6.57	6.57	6.57
	-9.10	-8.50	6.75	6.75	6.75	6.75	6.75	6.75
	-7.60	-7.00	6.84	6.84	6.84	6.84	6.84	6.84
	-5.60	-5.00	7.11	7.11	7.11	7.11	7.11	7.11
	-3.70	-3.00	7.47	7.47	7.47	7.47	7.47	7.47

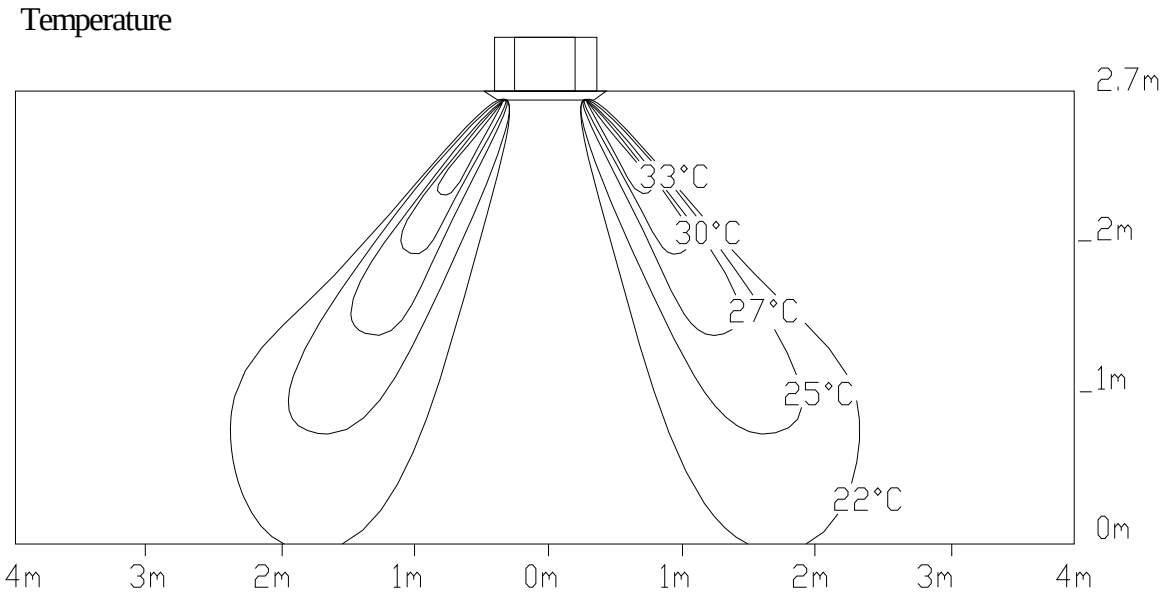
	-0.70	0.00	8.01	8.01	8.01	8.01	8.01	7.56
	2.20	3.00	8.46	8.46	8.46	8.46	8.28	7.56
	4.10	5.00	8.73	8.73	8.73	8.73	8.28	7.56
	6.00	7.00	9.00	9.00	9.00	8.73	8.28	7.56
	7.90	9.00	9.27	9.27	9.00	8.73	8.28	7.56
	9.80	11.00	9.54	9.54	9.00	8.73	8.28	7.56
	11.80	13.00	9.90	9.72	9.00	8.73	8.28	7.56
	13.70	15.00	10.17	9.72	9.00	8.73	8.28	7.56
9.00	-15.00	-14.70	6.30	6.30	6.30	6.30	6.30	6.30
	-13.00	-12.60	6.70	6.70	6.70	6.70	6.70	6.70
	-11.00	-10.50	7.00	7.00	7.00	7.00	7.00	7.00
	-10.00	-9.50	7.30	7.30	7.30	7.30	7.30	7.30
	-9.10	-8.50	7.50	7.50	7.50	7.50	7.50	7.50
	-7.60	-7.00	7.60	7.60	7.60	7.60	7.60	7.60
	-5.60	-5.00	7.90	7.90	7.90	7.90	7.90	7.90
	-3.70	-3.00	8.30	8.30	8.30	8.30	8.30	8.30
	-0.70	0.00	8.90	8.90	8.90	8.90	8.90	8.40
	2.20	3.00	9.40	9.40	9.40	9.40	9.20	8.40
	4.10	5.00	9.70	9.70	9.70	9.70	9.20	8.40
	6.00	7.00	10.00	10.00	10.00	9.70	9.20	8.40
	7.90	9.00	10.30	10.30	10.00	9.70	9.20	8.40
	9.80	11.00	10.60	10.60	10.00	9.70	9.20	8.40
	11.80	13.00	11.00	10.80	10.00	9.70	9.20	8.40
	13.70	15.00	11.30	10.80	10.00	9.70	9.20	8.40
10.00	-15.00	-14.70	6.93	6.93	6.93	6.93	6.93	6.93
	-13.00	-12.60	7.37	7.37	7.37	7.37	7.37	7.37
	-11.00	-10.50	7.70	7.70	7.70	7.70	7.70	7.70
	-10.00	-9.50	8.03	8.03	8.03	8.03	8.03	8.03
	-9.10	-8.50	8.25	8.25	8.25	8.25	8.25	8.25
	-7.60	-7.00	8.36	8.36	8.36	8.36	8.36	8.36
	-5.60	-5.00	8.69	8.69	8.69	8.69	8.69	8.69
	-3.70	-3.00	9.13	9.13	9.13	9.13	9.13	9.13
	-0.70	0.00	9.79	9.79	9.79	9.79	9.79	9.24
	2.20	3.00	10.34	10.34	10.34	10.34	10.12	9.24
	4.10	5.00	10.67	10.67	10.67	10.67	10.12	9.24
	6.00	7.00	11.00	11.00	11.00	10.67	10.12	9.24
	7.90	9.00	11.33	11.33	11.00	10.67	10.12	9.24
	9.80	11.00	11.66	11.66	11.00	10.67	10.12	9.24
	11.80	13.00	12.10	11.88	11.00	10.67	10.12	9.24
	13.70	15.00	12.43	11.88	11.00	10.67	10.12	9.24
11.20	-15.00	-14.70	7.88	7.88	7.88	7.88	7.88	7.88
	-13.00	-12.60	8.38	8.38	8.38	8.38	8.38	8.38
	-11.00	-10.50	8.75	8.75	8.75	8.75	8.75	8.75
	-10.00	-9.50	9.13	9.13	9.13	9.13	9.13	9.13
	-9.10	-8.50	9.38	9.38	9.38	9.38	9.38	9.38
	-7.60	-7.00	9.50	9.50	9.50	9.50	9.50	9.50
	-5.60	-5.00	9.88	9.88	9.88	9.88	9.88	9.88

	-3.70	-3.00	10.38	10.38	10.38	10.38	10.38	10.38
	-0.70	0.00	11.13	11.13	11.13	11.13	11.13	10.50
	2.20	3.00	11.75	11.75	11.75	11.75	11.50	10.50
	4.10	5.00	12.13	12.13	12.13	12.13	11.50	10.50
	6.00	7.00	12.50	12.50	12.50	12.13	11.50	10.50
	7.90	9.00	12.88	12.88	12.50	12.13	11.50	10.50
	9.80	11.00	13.25	13.25	12.50	12.13	11.50	10.50
	11.80	13.00	13.75	13.50	12.50	12.13	11.50	10.50
	13.70	15.00	14.13	13.50	12.50	12.13	11.50	10.50
14.0	-15.0	-14.7	9.8	9.8	9.8	9.8	9.8	9.8
	-13.0	-12.6	10.4	10.4	10.4	10.4	10.4	10.4
	-11.0	-10.5	10.9	10.9	10.9	10.9	10.9	10.9
	-10.0	-9.5	11.3	11.3	11.3	11.3	11.3	11.3
	-9.1	-8.5	11.6	11.6	11.6	11.6	11.6	11.6
	-7.6	-7.0	11.8	11.8	11.8	11.8	11.8	11.8
	-5.6	-5.0	12.3	12.3	12.3	12.3	12.3	12.3
	-3.7	-3.0	12.9	12.9	12.9	12.9	12.9	12.9
	-0.7	0.0	13.8	13.8	13.8	13.8	13.8	13.0
	2.2	3.0	14.6	14.6	14.6	14.6	14.3	13.0
	4.1	5.0	15.0	15.0	15.0	15.0	14.3	13.0
	6.0	7.0	15.5	15.5	15.5	15.0	14.3	13.0
	7.9	9.0	16.0	16.0	15.5	15.0	14.3	13.0
	9.8	11.0	16.4	16.4	15.5	15.0	14.3	13.0
	11.8	13.0	17.1	16.7	15.5	15.0	14.3	13.0
	13.7	15.0	17.5	16.7	15.5	15.0	14.3	13.0

8. Air Velocity and Temperature Distribution (Reference Data)

Discharge angle 60º





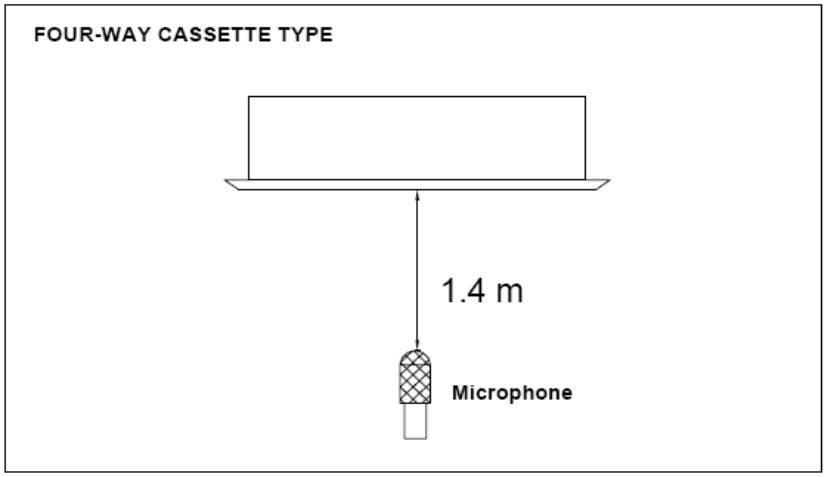
9. Electric Characteristics

Model	Indoor Unit				Power Supply		IFM	
	Hz	Voltage	Min.	Max.	MCA	MFA	kW	FLA
MDVi-D28Q4/N1-C	50Hz	220-240V	198V	254V	0.5	15A	0.06	0.38
MDVi-D36Q4/N1-C	50Hz	220-240V	198V	254V	0.5	15A	0.06	0.38
MDVi-D45Q4/N1-C	50Hz	220-240V	198V	254V	0.5	15A	0.06	0.38
MDVi-D56Q4/N1-C	50Hz	220-240V	198V	254V	0.5	15A	0.06	0.38
MDVi-D71Q4/N1-C	50Hz	220-240V	198V	254V	0.65	15A	0.080	0.5
MDVi-D80Q4/N1-C	50Hz	220-240V	198V	254V	0.65	15A	0.080	0.5
MDVi-D90Q4/N1-C	50Hz	220-240V	198V	254V	0.85	15A	0.09	0.67
MDVi-D100Q4/N1-C	50Hz	220-240V	198V	254V	0.85	15A	0.09	0.67
MDVi-D112Q4/N1-C	50Hz	220-240V	198V	254V	0.85	15A	0.09	0.67
MDVi-D140Q4/N1-C	50Hz	220-240V	198V	254V	0.85	15A	0.09	0.67

Remark:
MCA: Min. Current Amps. (A)
MFA: Max. Fuse Amps. (A)
kW: Fan Motor Rated Output (kW)
FLA: Full Load Amps. (A)
IFM: Indoor Fan Motor

10. Sound Levels

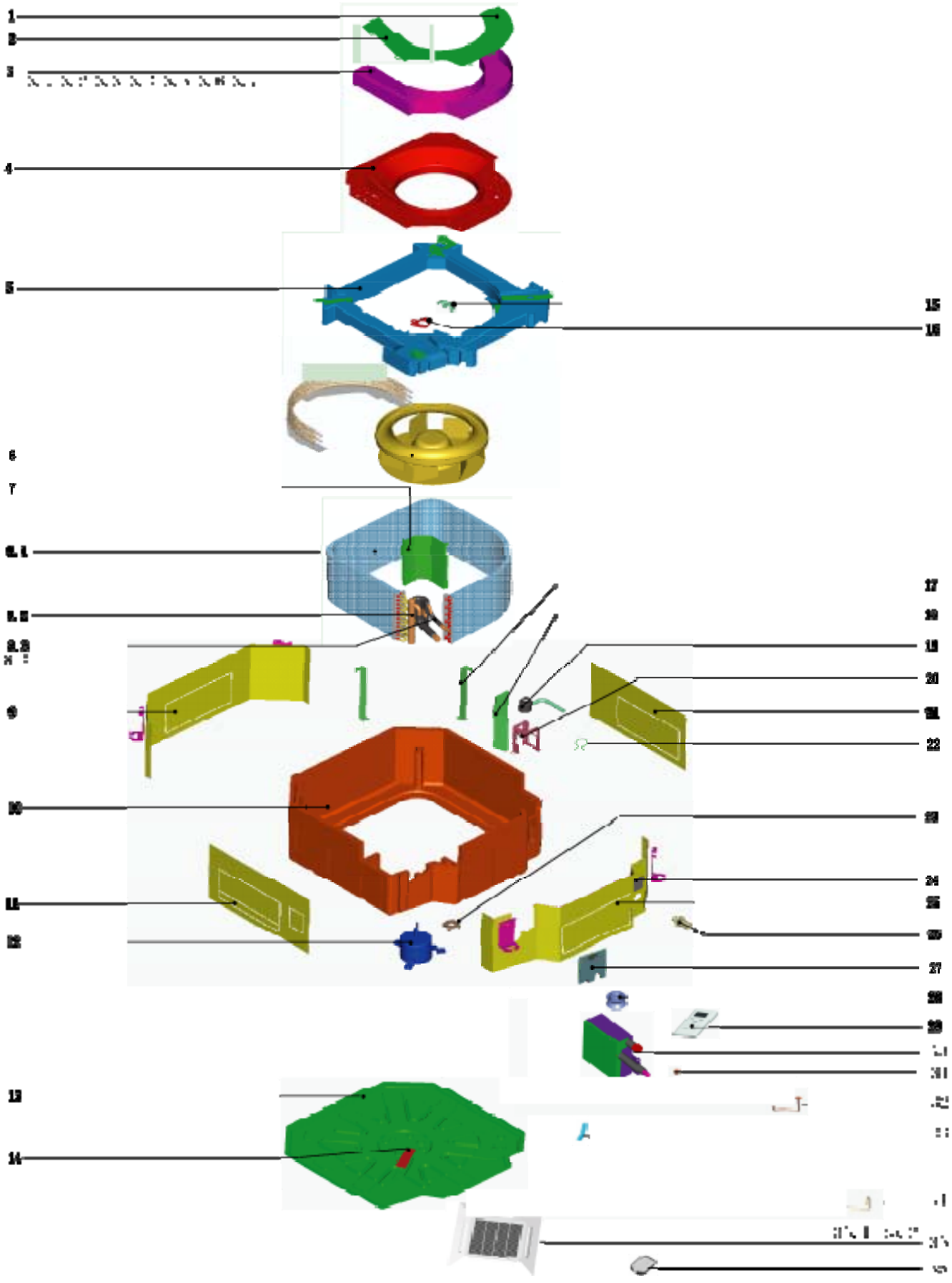
Test condition



Model	Noise level under three speeds of fan (dB(A))		
	H	M	L
MDVi-D28Q4/N1-C	42	38	35
MDVi-D36Q4/N1-C	42	38	35
MDVi-D45Q4/N1-C	42	38	35
MDVi-D56Q4/N1-C	42	38	35
MDVi-D71Q4/N1-C	45	42	39
MDVi-D80Q4/N1-C	45	42	39
MDVi-D90Q4/N1-C	48	45	43
MDVi-D100Q4/N1-C	48	45	43
MDVi-D112Q4/N1-C	48	45	43
MDVi-D140Q4/N1-C	50	47	44

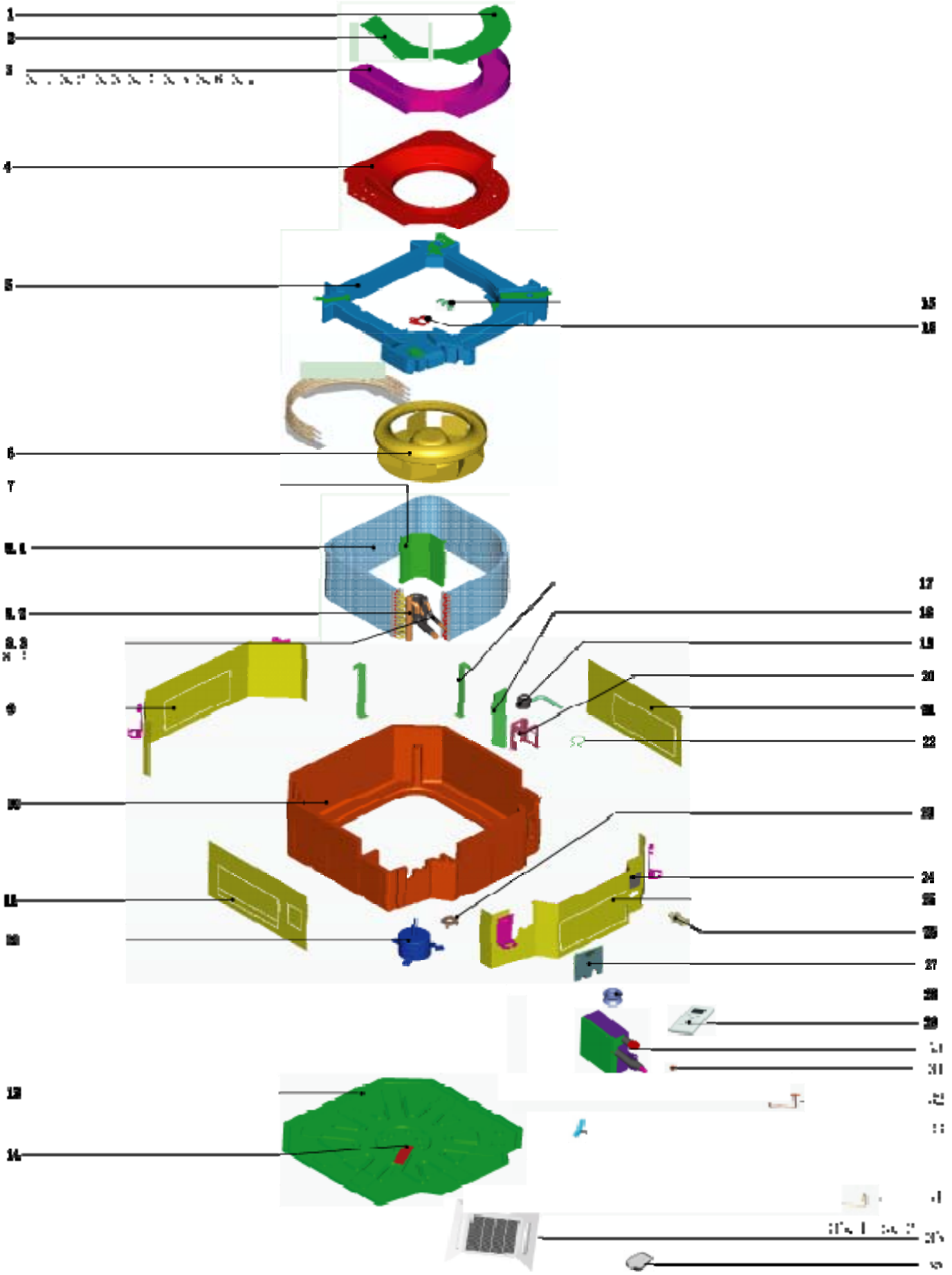
11. Exploded View

11.1 MDVi-D28Q4/N1-C MDVi-D36Q4/N1-C MDVi-D45Q4/N1-C MDVi-D56Q4/N1-C MDVi-D71Q4/N1-C MDVi-D80Q4/N1-C



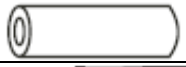
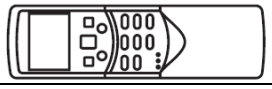
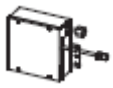
No.	Part Name	Quantity		No.	Part Name	Quantity
1	Electricity control box coping I	1		15	Wire clamp	1
2	Electricity control box coping II	1		16	Wire clip	1
3	E-part box ass'y	1		17	Evaporator fixing hanger	3
3.1	E-part box	1		18	Water pump board	1
3.2	Transformer	1		19	Drain pump	1
3.3	Room temp sensor ass'y	1		20	Installation bracket ass'y	1
3.4	Motor capacitor	1		21	Board ass'y	1
3.5	Main controller ass'y	1		22	Water pipe clamp	1
3.6	Wire joint, 3p	1		23	Fan clip	1
3.7	Wire joint,4p	1		24	Water cover ass'y	1
4	Ring ass'y	1		25	Board ass'y	1
5	Foam ass'y	1		26	Water pipe	1
6	Fan ass'y	1		27	Sealed board ass'y	1
7	Evaporator fixing board	1		28	Pump rubber washer	1
8	Evaporator ass'y	1		29	Remote controller	1
8.1	Evaporator	1		30	Electric throttle ass'y	1
8.2	Evaporator output pipe ass'y	1		31	Water level sensor ass'y	1
8.3	Evaporator input pipe ass'y	1		32	Connecting pipe ass'y	1
8.4	Sleeve	1		33	Temp. sensor ass'y	1
9	Board ass'y	1		34	Temperature sensor	1
10	Foam ass'y	1		35	Panel	1
11	Board ass'y	1		35.1	Swing motor	1
12	Motor	1		35.2	Main controller ass'y	1
13	Base	1		36	Installation bracket	1
14	Wire clamp	1				

11.2 MDVi-D90Q4/N1-C MDVi-D100Q4/N1-C MDVi-D112Q4/N1-C MDVi-D140Q4/N1-C



No.	Part Name	Quantity		No.	Part Name	Quantity
1	Electricity control box coping I	1		15	Wire clamp	1
2	Electricity control box coping II	1		16	Wire clip	1
3	E-part box ass'y	1		17	Evaporator fixing hanger	3
3.1	E-part box	1		18	Water pump board	1
3.2	Transformer	1		19	Drain pump	1
3.3	Room temp sensor ass'y	1		20	Water Pump installation bracket ass'y	1
3.4	Motor capacitor	1		21	Board ass'y	1
3.5	Main controller ass'y	1		22	Water pipe clamp	1
3.6	Wire joint, 3p	1		23	Fan clip	1
3.7	Wire joint,4p	1		24	Water cover ass'y	1
4	Ring ass'y	1		25	Board ass'y	1
5	Foam ass'y	1		26	Water pipe	1
6	Fan ass'y	1		27	Sealed board ass'y	1
7	Evaporator fixing board	1		28	Pump rubber washer	1
8	Evaporator ass'y	1		29	Remote controller	1
8.1	Evaporator	1		30	Electric throttle ass'y	1
8.2	Evaporator output pipe ass'y	1		31	Water level sensor ass'y	1
8.3	Evaporator input pipe ass'y	1		32	Connecting pipe ass'y	1
8.4	Sleeve	1		33	Temp. sensor ass'y	1
9	Board ass'y	1		34	Temperature sensor	1
10	Foam ass'y	1		35	Panel	1
11	Board ass'y	1		35.1	Swing motor	1
12	Motor	1		35.2	Main controller ass'y	1
13	Base	1		36	Installation bracket	1
14	Wire clamp	1				

12. Accessories

Name	Quantity	Shape	Purpose
Installation manual for indoor unit	1		Must deliver to customer
Insulation sheath	2		Thermal insulation for the jointing part of piping
Installation paper board	1		For confirming the ceiling site and unit location
Installation gauge	1		For confirming the ceiling site (Integrated on installation paper board)
Installation screw for paper board	4		For installing paper board
Thermal insulated material	1		Thermal insulation for the jointing part of drain pipe
Bushing	8		Hanger assembly
Flexible hose tube	1		For drain pipe
Thermal insulation material	1		For sealing the jointing part of piping
Remote controller	1		For remove controlling the air conditioner
Mounting screw	4		For installing defrosting tray
Drain pipe clasp	1		For installing drain pipe
Connective pipe for restriction assembly	1		/
Tightening band	5		/
Electric throttle (That have been installed at the unit)	1		/

Low Static Pressure Duct Type

1. Features


1.1 Lower noise level

Utilize the cross flow fun, the lowest noise is 21dba.

1.2 Smoother airflow with less turbulence

Owing to the multiple-blade fan rotor and the air guide design, the airflow is getting smoother and more comfortable

1.3 More light weight and super thin

The whole body adopt fireproof plastic material

1.4 Smaller volume

Compared with the original duct, the new design volume is 15% smaller

1.5 Wider capacity range

The capacity range from 1.8KW to 5.6KW, six model.

1.6 Convenient installation

1.6.1 The EXV is fixed beside of the indoor unit

1.6.2 The connection pipe is flexible pipe, so it can change the connection direction conveniently.

1.7 Easier to do cleaning and maintenance

Flat type suction grille of easy cleaning

1.8 Four level fan speed meet different requirements. Obligate super high speed in order to satisfy long air pipe

2. Specifications

Model			MDVi-D18T3/N1-A	MDVi-D22T3/N1-A	MDVi-D28T3/N1-A
Power supply		V-Ph-Hz	220-240V~, 1Ph, 50Hz		
Cooling	Capacity	kW	1.8	2.2	2.8
	Input	W	40	40	40
	Rated current	A	0.17	0.17	0.17
Heating	Capacity	kW	2.2	2.6	3.2
	Input	W	40	40	40
	Rated current	A	0.17	0.17	0.17
Indoor fan motor	Model		RPS15D	RPS15D	RPS15D
	Type		Asynchronism motor		
	Brand		Welling		
	Input	W	30.6/29.2/25.8/22.3	30.6/29.2/25.8/22.3	32.8/30.8/26/23
	Capacitor	μF	0.8μF/450V	0.8μF/450V	1.0μF/450V
	Speed (hi/mid/lo)	r/min	899/832/679/571	899/832/679/571	958/89/743/628
Indoor coil	Number of rows		2	2	2
	Tube pitch(a)x row pitch(b)	mm	21*13.37	21*13.37	21*13.37
	Fin spacing	mm	1.5	1.5	1.5
	Fin type		Hydrophilic aluminum		
	Tube outside diameter and type	mm	Φ7 Inner groove tube		
	Coil length x height x width	mm	635X283.5 X26.74	635X283.5 X26.74	635X283.5 X26.74
	Number of circuits		2	2	4
Indoor air flow (H/M/L)		m^3/h	446/323/250	446/323/250	527/359/267
Indoor external static pressure (Hi)		Pa	5	5	5
Indoor noise level (Hi/Mid/Lo)		dB(A)	33/27/21	34/29/21	36/34/30
Indoor unit	Dimension (W×H×D)	mm	850×190×405	850×190×405	850×190×405
	Packing (W×H×D)	mm	903*277*445	903*277*445	903*277*445
	Net/Gross weight	kg	11.5/14.5	11.5/14.5	11.5/14.5
Refrigerant type			R410A		
Throttle		Type	Electrical expand valve		
		Model	CE-J20AB1/N1-C		
Design pressure		MPa	4.4/2.6		
Refrigerant piping	Liquid side/ Gas side	mm	Φ6.4/ Φ12.7	Φ6.4/ Φ12.7	Φ6.4/ Φ12.7
Connecting wiring	Power wiring	mm^2	3*2		
	Signal wiring	mm^2	4*0.8		
Drainage water pipe diameter			Φ16		
Controller			Wireless remote controller R51/E(standard)		
Operation temp		˚C	17-30	17-30	17-30

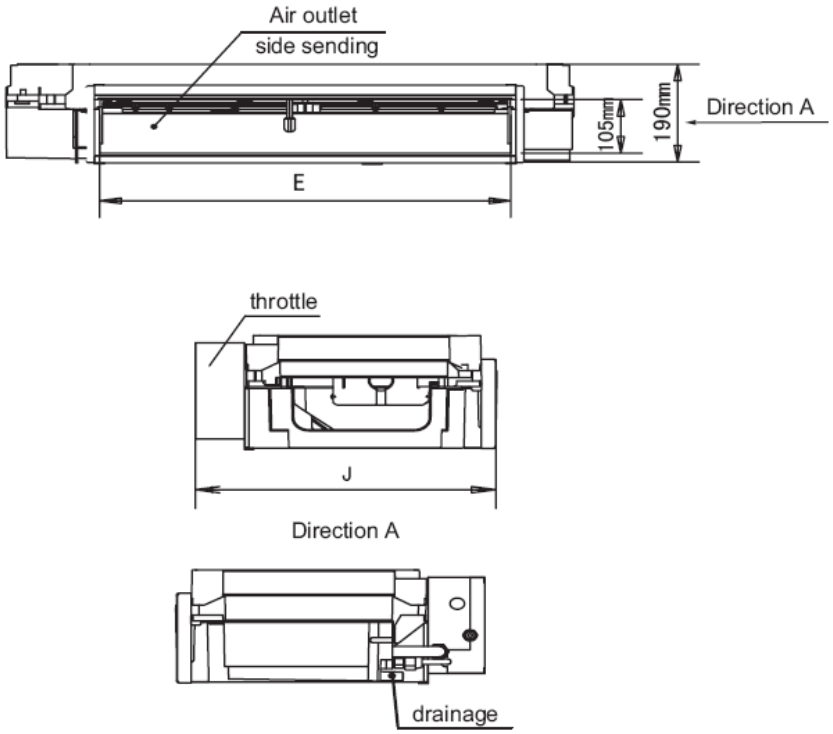
Model			MDVi-D36T3/N1-A	MDVi-D45T3/N1-A	MDVi-D56T3/N1-A
Power supply		V-Ph-Hz	220-240V~, 1Ph, 50Hz		
Cooling	Capacity	kW	3.6	4.5	5.6
	Input	W	40	40	56
	Rated current	A	0.17	0.17	0.24
Heating	Capacity	kW	4.0	5.0	6.3
	Input	W	40	40	56
	Rated current	A	0.17	0.24	0.24
Indoor fan motor	Model		RPS15D	YDK22-4	YDK22-4
	Type		Asynchronism motor		
	Brand		Welling		
	Input	W	32.8/30.8/26/23	50.8/46.7/41.8/36.8	50.8/46.7/41.8/36.8
	Capacitor	μF	1.0μF/450V	1.5μF/450V	1.5μF/450V
	Speed (hi/mid/lo)	r/min	958/89/743/628	1055/930/790/650	1055/930/790/650
Indoor coil	Number of rows		2	2	2
	Tube pitch(a)x row pitch(b)	mm	21*13.37	21*13.37	21*13.37
	Fin spacing	mm	1.5	1.5	1.5
	Fin type		Hydrophilic aluminum		
	Tube outside diameter and type	mm	Φ7 inner groove tube		
	Coil length x height x width	mm	635X283.5 X26.74	635X283.5 X26.74	635X283.5 X26.74
	Number of circuits		4	4	4
Indoor air flow (H/M/L)		m^3/h	527/359/267	767/634/512	767/634/512
Indoor external static pressure (Hi)		Pa	5	5	5
Indoor noise level (Hi/Mid/Lo)		dB(A)	36/34/30	37/35/31	37/35/31
Indoor unit	Dimension (W×H×D)	mm	850×190×405	1030×190×430	1030×190×430
	Packing (W×H×D)	mm	903*277*445	1084*277*472	1084*277*472
	Net/Gross weight	kg	11.5/14.5	14 /17.5	14/17.5
Refrigerant type			R410A		
Throttle		Type	Electrical expand valve		
		Model	CE-J20BB1/N1-C		
Design pressure		MPa	4.4/2.6		
Refrigerant piping	Liquid side/ Gas side	mm	Φ6.4/ Φ12.7	Φ6.4/ Φ12.7	Φ9.53/ Φ15.9
Connecting wiring	Power wiring	mm^2	3x2		
	Signal wiring	mm^2	4x0.8		
Drainage water pipe diameter			Φ16		
Controller			Wireless remote controller R51/E(standard)		
Operation temp		˚C	17-30	17-30	17-30

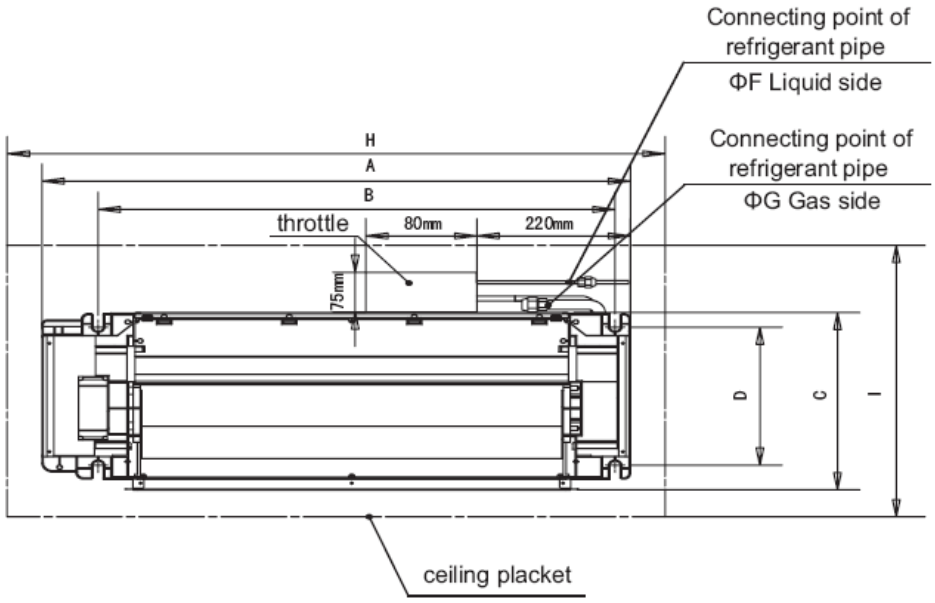
Notes:

1. Nominal cooling capacities are based on the following conditions: return air temp. : 27°CDB, 19°CWB, outdoor temp.:35°CDB, equivalent ref. Piping: 8m(horizontal)
2. Nominal heating capacities are based on the following conditions: return air temp.: 20°CDB, outdoor temp.: 7°CDB, 6°CWB, equivalent ref. Piping: 8m(horizontal)

3. Dimensions

MDVi-D18T3/N1-A MDVi-D22T3/N1-A MDVi-D28T3/N1-A
MDVi-D36T3/N1-A MDVi-D45T3/N1-A MDVi-D56T3/N1-A

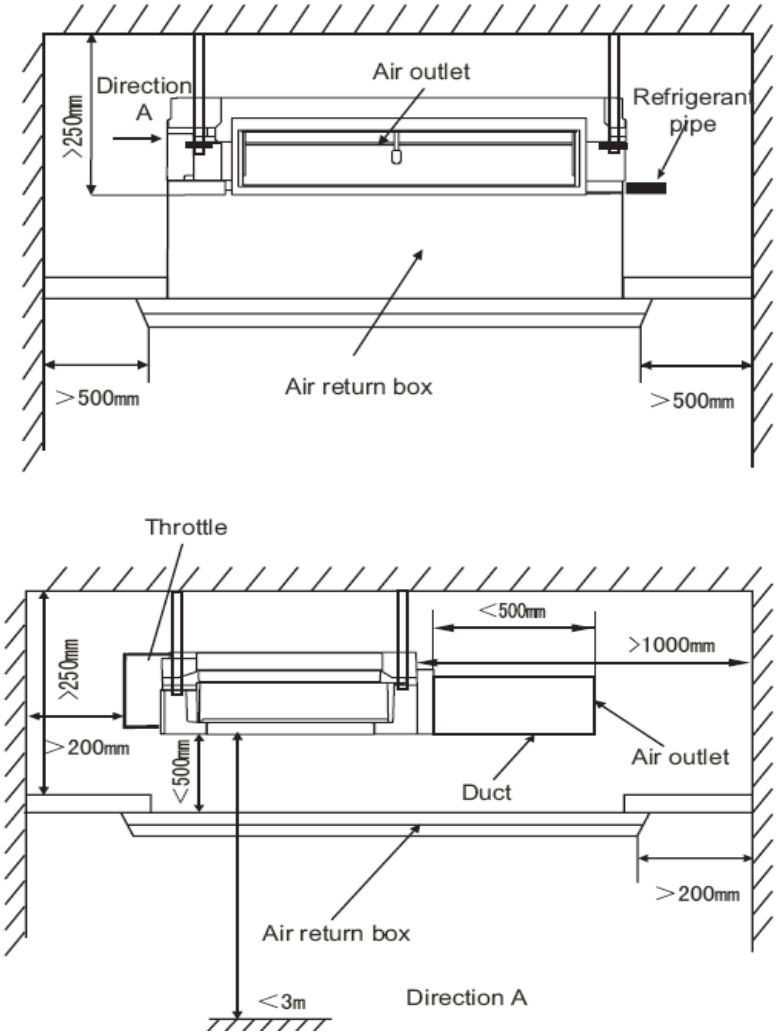




MODEL	A	B	C	D	E	F	G	H	I	J
18	850	744	330	260	630	6.4	12.7	950	505	405
22	850	744	330	260	630	6.4	12.7	950	505	405
28	850	744	330	260	630	6.4	12.7	950	505	405
36	850	744	330	260	630	6.4	12.7	950	505	405
45	1030	894	355	285	780	9.5	15.9	1150	530	430
56	1030	894	355	285	780	9.5	15.9	1150	530	430

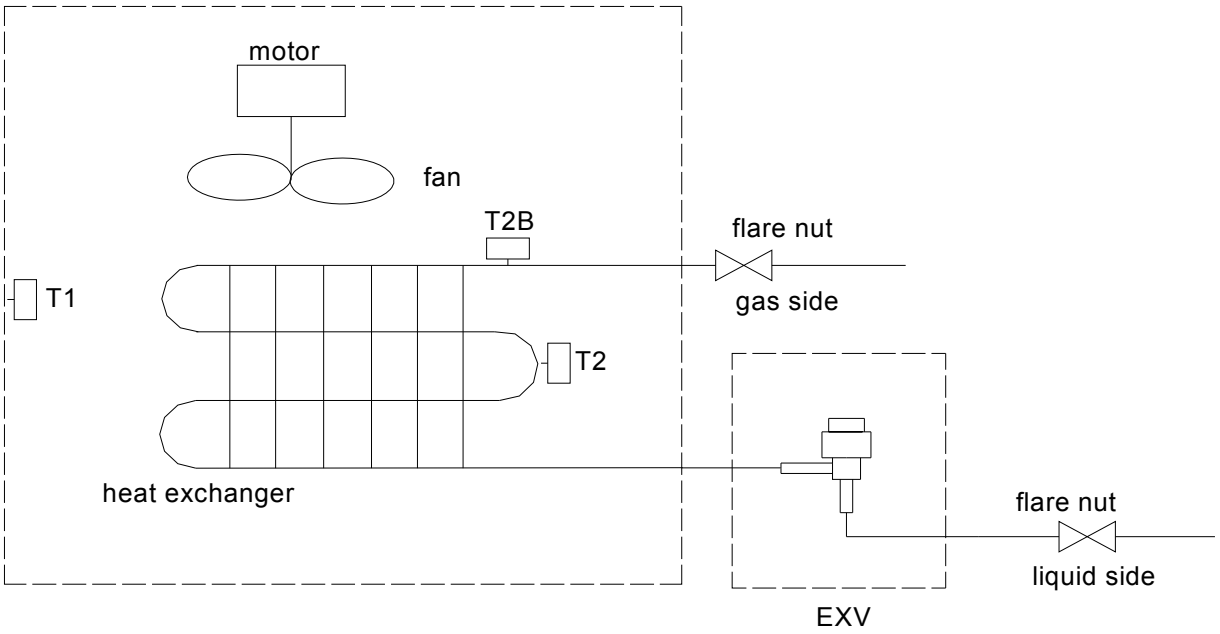
4. Service Space

Ensure the needed spaces for installation and maintenance.

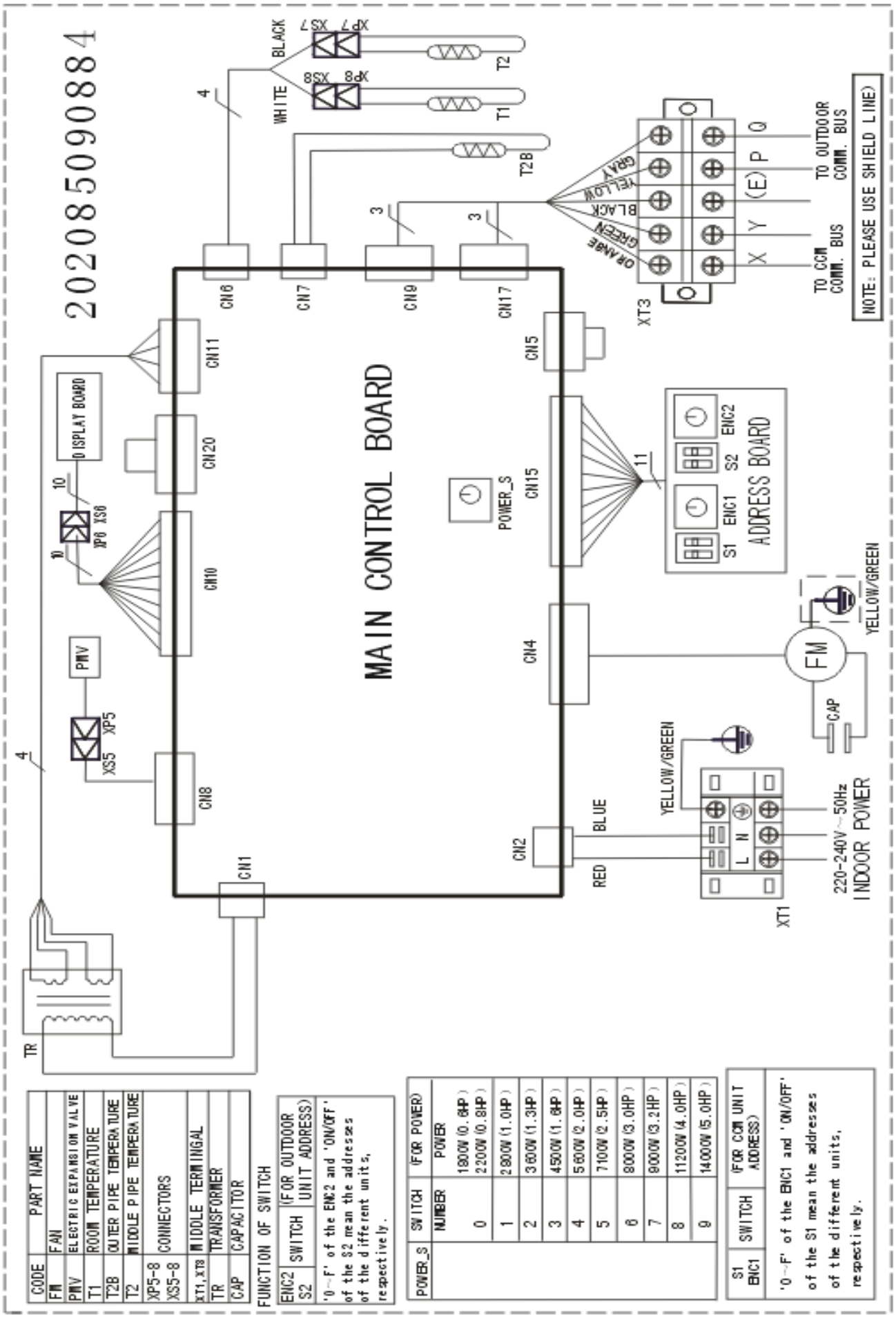


5. Piping Diagrams

MDVi-D18T3/N1-A MDVi-D22T3/N1-A MDVi-D28T3/N1-A
MDVi-D36T3/N1-A MDVi-D45T3/N1-A MDVi-D56T3/N1-A



6. Wiring Diagrams



7. Capacity Tables

7.1 Cooling

TC: total capacity **SC**: sensible capacity **WB**: wet-bulb temperature **DB**: dry-bulb temperature

Indoor Unit size (kW)	Outdoor temperature (℃ DB)	Indoor temperature (℃ WB/DB)													
		14/20		16/23		18/26		19/27		20/28		22/30		24/32	
		TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
1.8	10.0	1.2	1.1	1.5	1.2	1.7	1.3	1.8	1.3	1.9	1.4	2.1	1.4	2.4	1.4
	12.0	1.2	1.1	1.5	1.2	1.7	1.3	1.8	1.3	1.9	1.4	2.1	1.4	2.3	1.3
	14.0	1.2	1.1	1.5	1.2	1.7	1.3	1.8	1.3	1.9	1.4	2.1	1.4	2.3	1.3
	16.0	1.2	1.1	1.5	1.2	1.7	1.3	1.8	1.3	1.9	1.4	2.1	1.4	2.3	1.3
	18.0	1.2	1.1	1.5	1.2	1.7	1.3	1.8	1.3	1.9	1.4	2.1	1.4	2.3	1.3
	20.0	1.2	1.1	1.5	1.2	1.7	1.3	1.8	1.3	1.9	1.4	2.1	1.4	2.2	1.2
	21.0	1.2	1.1	1.5	1.2	1.7	1.3	1.8	1.3	1.9	1.4	2.1	1.4	2.2	1.2
	23.0	1.2	1.1	1.5	1.2	1.7	1.3	1.8	1.3	1.9	1.4	2.1	1.3	2.2	1.2
	25.0	1.2	1.1	1.5	1.2	1.7	1.3	1.8	1.3	1.9	1.4	2.1	1.3	2.1	1.2
	27.0	1.2	1.1	1.5	1.2	1.7	1.3	1.8	1.3	1.9	1.4	2.1	1.3	2.1	1.2
	29.0	1.2	1.1	1.5	1.2	1.7	1.3	1.8	1.3	1.9	1.4	2.0	1.3	2.1	1.2
	31.0	1.2	1.1	1.5	1.2	1.7	1.3	1.8	1.3	1.9	1.4	2.0	1.3	2.1	1.2
	33.0	1.2	1.1	1.5	1.2	1.7	1.3	1.8	1.3	1.9	1.4	2.0	1.3	2.0	1.3
	35.0	1.2	1.1	1.5	1.2	1.7	1.3	1.8	1.6	1.9	1.4	1.9	1.2	2.0	1.3
	37.0	1.2	1.1	1.5	1.2	1.7	1.3	1.8	1.3	1.9	1.4	1.9	1.2	1.9	1.2
	39.0	1.2	1.1	1.5	1.2	1.7	1.3	1.8	1.3	1.8	1.3	1.9	1.2	1.9	1.2
2.2	10.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.9	1.7
	12.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.8	1.6
	14.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.8	1.6
	16.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.8	1.6
	18.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.8	1.6
	20.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.7	1.5
	21.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.7	1.5
	23.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.5	1.6	2.7	1.5
	25.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.5	1.6	2.6	1.5
	27.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.5	1.6	2.6	1.5
	29.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.4	1.5	2.5	1.5
	31.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.4	1.5	2.5	1.5
	33.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.4	1.5	2.4	1.5
	35.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.3	1.5	2.4	1.5
	37.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.3	1.5	2.3	1.5
	39.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.2	1.6	2.3	1.5	2.3	1.5
2.8	10.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.7	2.1
	12.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.6	2.1
	14.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.6	2.1
	16.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.6	2.0
	18.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.5	2.0
	20.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.4	1.9
	21.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.4	1.9
	23.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.2	2.1	3.4	1.9
	25.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.2	2.0	3.3	1.9
	27.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.2	2.0	3.3	1.9
	29.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.1	2.0	3.2	1.9
	31.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.1	2.0	3.2	1.9

	33.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.1	2.0	3.1	2.0
	35.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.1	2.9	1.9	3.1	2.0
	37.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.1	2.9	1.9	2.9	1.9
	39.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.8	2.0	2.9	1.9	2.9	1.9
3.6	10.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.8	2.8
	12.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.6	2.7
	14.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.6	2.7
	16.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.5	2.7
	18.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.5	2.7
	20.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.4	2.7
	21.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.4	2.7
	23.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.4	2.7
	25.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.1	2.7	4.2	2.6
	27.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.1	2.7	4.2	2.6
	29.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.0	2.6	4.1	2.5
	31.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.0	2.6	4.1	2.4
	33.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.0	2.6	4.0	2.4
	35.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.7	2.6	3.9	2.6	4.0	2.4
	37.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.7	2.6	3.9	2.6	3.9	2.3
	39.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.7	2.6	3.9	2.7	3.9	2.4
4.5	10.0	3.0	2.6	3.6	2.8	4.1	3.1	4.4	3.2	4.7	3.3	5.2	3.1	5.8	3.3
	12.0	3.0	2.6	3.6	2.8	4.1	3.1	4.4	3.2	4.7	3.3	5.2	3.1	5.8	3.3
	14.0	3.0	2.6	3.6	2.8	4.1	3.1	4.4	3.2	4.7	3.3	5.2	3.1	5.7	3.2
	16.0	3.0	2.6	3.6	2.8	4.1	3.1	4.4	3.2	4.7	3.3	5.2	3.1	5.5	3.1
	18.0	3.0	2.6	3.6	2.8	4.1	3.1	4.4	3.2	4.7	3.3	5.2	3.1	5.5	3.1
	20.0	3.0	2.6	3.6	2.8	4.1	3.1	4.4	3.2	4.7	3.3	5.2	3.1	5.4	3.1
	21.0	3.0	2.6	3.6	2.8	4.1	3.1	4.4	3.2	4.7	3.3	5.2	3.1	5.3	3.0
	23.0	3.0	2.6	3.6	2.8	4.1	3.1	4.4	3.2	4.7	3.3	5.1	3.1	5.2	3.0
	25.0	3.0	2.6	3.6	2.8	4.1	3.1	4.4	3.2	4.7	3.3	5.1	3.1	5.1	2.9
	27.0	3.0	2.6	3.6	2.8	4.1	3.1	4.4	3.2	4.7	3.3	4.9	3.0	5.1	2.9
	29.0	3.0	2.6	3.6	2.8	4.1	3.1	4.4	3.2	4.7	3.3	4.9	3.0	5.0	2.9
	31.0	3.0	2.6	3.6	2.8	4.1	3.1	4.4	3.2	4.7	3.3	5.2	3.4	5.0	2.9
	33.0	3.0	2.6	3.6	2.8	4.1	3.1	4.4	3.2	4.7	3.3	5.2	3.4	4.8	2.8
	35.0	3.0	2.6	3.6	2.8	4.1	3.1	4.4	3.2	4.7	3.3	5.1	3.4	4.7	2.8
	37.0	3.0	2.6	3.6	2.8	4.1	3.1	4.4	3.2	4.5	3.2	4.7	3.1	4.7	2.8
	39.0	3.0	2.6	3.6	2.8	4.1	3.1	4.4	3.2	4.5	3.2	4.7	3.1	4.7	2.8
5.6	10.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.3	4.1
	12.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.3	4.1
	14.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.2	4.1
	16.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	6.9	4.0
	18.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.1	4.1
	20.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.1	4.1
	21.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.0	4.1
	23.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	6.9	4.0
	25.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.5	4.1	6.8	3.9
	27.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.4	4.0	6.5	3.8
	29.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.3	4.0	6.4	3.7
	31.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.2	3.9	6.3	3.7
	33.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.0	3.8	6.3	3.7
	35.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	5.9	3.7	6.2	3.6
	37.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	5.9	3.9	6.1	3.5
	39.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	5.7	3.8	5.8	3.8	6.0	3.5

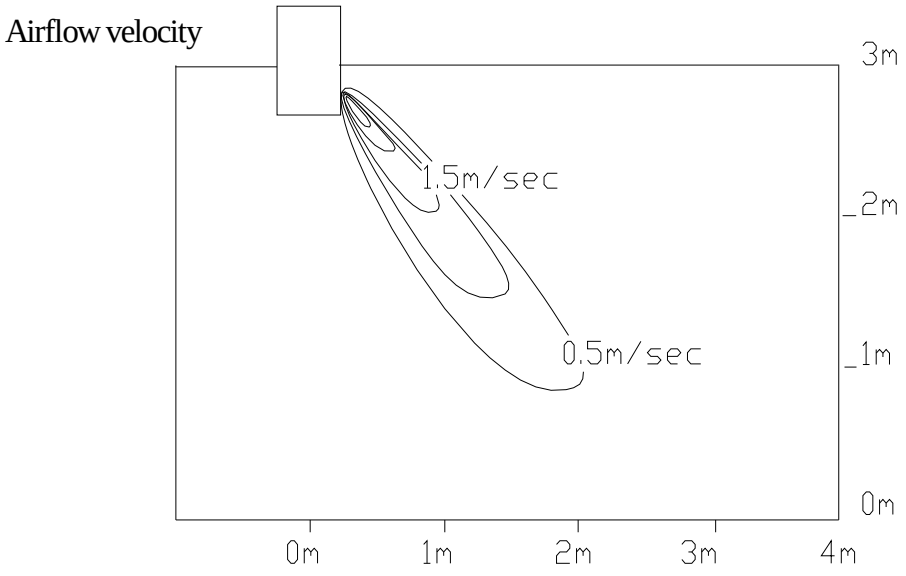
7.2 Heating

TC: total capacity **WB**: wet-bulb temperature **DB**: dry-bulb temperature

Indoor Unit size (kW)	Outdoor temperature (℃)		Indoor temperature (℃ DB)					
			16.00	18.00	20.00	21.00	22.00	24.00
			TC	TC	TC	TC	TC	TC
	WB	DB	kW	kW	kW	kW	kW	kW
1.8	-15.0	-14.7	1.39	1.39	1.39	1.39	1.39	1.39
	-13.0	-12.6	1.47	1.47	1.47	1.47	1.47	1.47
	-11.0	-10.5	1.54	1.54	1.54	1.54	1.54	1.54
	-10.0	-9.5	1.61	1.61	1.61	1.61	1.61	1.61
	-9.1	-8.5	1.65	1.65	1.65	1.65	1.65	1.65
	-7.6	-7.0	1.67	1.67	1.67	1.67	1.67	1.67
	-5.6	-5.0	1.74	1.74	1.74	1.74	1.74	1.74
	-3.7	-3.0	1.83	1.83	1.83	1.83	1.83	1.83
	-0.7	0.0	1.96	1.96	1.96	1.96	1.96	1.85
	2.2	3.0	2.07	2.07	2.07	2.07	2.02	1.85
	4.1	5.0	2.13	2.13	2.13	2.13	2.02	1.85
	6.0	7.0	2.20	2.20	2.20	2.13	2.02	1.85
	7.9	9.0	2.27	2.27	2.20	2.13	2.02	1.85
	9.8	11.0	2.33	2.33	2.20	2.13	2.02	1.85
	11.8	13.0	2.42	2.38	2.20	2.13	2.02	1.85
	13.7	15.0	2.49	2.38	2.20	2.13	2.02	1.85
2.20	-15.00	-14.70	1.64	1.64	1.64	1.64	1.64	1.64
	-13.00	-12.60	1.74	1.74	1.74	1.74	1.74	1.74
	-11.00	-10.50	1.82	1.82	1.82	1.82	1.82	1.82
	-10.00	-9.50	1.90	1.90	1.90	1.90	1.90	1.90
	-9.10	-8.50	1.95	1.95	1.95	1.95	1.95	1.95
	-7.60	-7.00	1.98	1.98	1.98	1.98	1.98	1.98
	-5.60	-5.00	2.05	2.05	2.05	2.05	2.05	2.05
	-3.70	-3.00	2.16	2.16	2.16	2.16	2.16	2.16
	-0.70	0.00	2.31	2.31	2.31	2.31	2.31	2.18
	2.20	3.00	2.44	2.44	2.44	2.44	2.39	2.18
	4.10	5.00	2.52	2.52	2.52	2.52	2.39	2.18
	6.00	7.00	2.60	2.60	2.60	2.52	2.39	2.18
	7.90	9.00	2.68	2.68	2.93	2.52	2.39	2.18
	9.80	11.00	2.76	2.76	2.60	2.52	2.39	2.18
	11.80	13.00	2.86	2.81	2.60	2.52	2.39	2.18
	13.70	15.00	2.94	2.81	2.60	2.52	2.39	2.18
2.80	-15.00	-14.70	2.02	2.02	2.02	2.02	2.02	2.02
	-13.00	-12.60	2.14	2.14	2.14	2.14	2.14	2.14
	-11.00	-10.50	2.24	2.24	2.24	2.24	2.24	2.24
	-10.00	-9.50	2.34	2.34	2.34	2.34	2.34	2.34
	-9.10	-8.50	2.40	2.40	2.40	2.40	2.40	2.40
	-7.60	-7.00	2.43	2.43	2.43	2.43	2.43	2.43
	-5.60	-5.00	2.53	2.53	2.53	2.53	2.53	2.53
	-3.70	-3.00	2.66	2.66	2.66	2.66	2.66	2.66
	-0.70	0.00	2.85	2.85	2.85	2.85	2.85	2.69
	2.20	3.00	3.01	3.01	3.01	3.01	2.94	2.69
	4.10	5.00	3.10	3.10	3.10	3.10	2.94	2.69
	6.00	7.00	3.20	3.20	3.20	3.10	2.94	2.69
	7.90	9.00	3.30	3.30	2.93	3.10	2.94	2.69

	9.80	11.00	3.39	3.39	3.20	3.10	2.94	2.69
	11.80	13.00	3.52	3.46	3.20	3.10	2.94	2.69
	13.70	15.00	3.62	3.46	3.20	3.10	2.94	2.69
3.60	-15.00	-14.70	2.52	2.52	2.52	2.52	2.52	2.52
	-13.00	-12.60	2.68	2.68	2.68	2.68	2.68	2.68
	-11.00	-10.50	2.80	2.80	2.80	2.80	2.80	2.80
	-10.00	-9.50	2.92	2.92	2.92	2.92	2.92	2.92
	-9.10	-8.50	3.00	3.00	3.00	3.00	3.00	3.00
	-7.60	-7.00	3.04	3.04	3.04	3.04	3.04	3.04
	-5.60	-5.00	3.16	3.16	3.16	3.16	3.16	3.16
	-3.70	-3.00	3.32	3.32	3.32	3.32	3.32	3.32
	-0.70	0.00	3.56	3.56	3.56	3.56	3.56	3.36
	2.20	3.00	3.76	3.76	3.76	3.76	3.68	3.36
	4.10	5.00	3.88	3.88	3.88	3.88	3.68	3.36
	6.00	7.00	4.00	4.00	4.00	3.88	3.68	3.36
	7.90	9.00	4.12	4.12	2.93	3.88	3.68	3.36
	9.80	11.00	4.24	4.24	4.00	3.88	3.68	3.36
	11.80	13.00	4.40	4.32	4.00	3.88	3.68	3.36
	13.70	15.00	4.52	4.32	4.00	3.88	3.68	3.36
4.50	-15.00	-14.70	3.15	3.15	3.15	3.15	3.15	3.15
	-13.00	-12.60	3.35	3.35	3.35	3.35	3.35	3.35
	-11.00	-10.50	3.50	3.50	3.50	3.50	3.50	3.50
	-10.00	-9.50	3.65	3.65	3.65	3.65	3.65	3.65
	-9.10	-8.50	3.75	3.75	3.75	3.75	3.75	3.75
	-7.60	-7.00	3.80	3.80	3.80	3.80	3.80	3.80
	-5.60	-5.00	3.95	3.95	3.95	3.95	3.95	3.95
	-3.70	-3.00	4.15	4.15	4.15	4.15	4.15	4.15
	-0.70	0.00	4.45	4.45	4.45	4.45	4.45	4.20
	2.20	3.00	4.70	4.70	4.70	4.70	4.60	4.20
	4.10	5.00	4.85	4.85	4.85	4.85	4.60	4.20
	6.00	7.00	5.00	5.00	5.00	4.85	4.60	4.20
	7.90	9.00	5.15	5.15	2.93	4.85	4.60	4.20
	9.80	11.00	5.30	5.30	5.00	4.85	4.60	4.20
	11.80	13.00	5.50	5.40	5.00	4.85	4.60	4.20
	13.70	15.00	5.65	5.40	5.00	4.85	4.60	4.20
5.60	-15.00	-14.70	3.97	3.97	3.97	3.97	3.97	3.97
	-13.00	-12.60	4.22	4.22	4.22	4.22	4.22	4.22
	-11.00	-10.50	4.41	4.41	4.41	4.41	4.41	4.41
	-10.00	-9.50	4.60	4.60	4.60	4.60	4.60	4.60
	-9.10	-8.50	4.73	4.73	4.73	4.73	4.73	4.73
	-7.60	-7.00	4.79	4.79	4.79	4.79	4.79	4.79
	-5.60	-5.00	4.98	4.98	4.98	4.98	4.98	4.98
	-3.70	-3.00	5.23	5.23	5.23	5.23	5.23	5.23
	-0.70	0.00	5.61	5.61	5.61	5.61	5.61	5.29
	2.20	3.00	5.92	5.92	5.92	5.92	5.80	5.29
5.6	4.10	5.00	6.11	6.11	6.11	6.11	5.80	5.29
	6.00	7.00	6.30	6.30	6.30	6.11	5.80	5.29
	7.90	9.00	6.49	6.49	2.93	6.11	5.80	5.29
	9.80	11.00	6.68	6.68	6.30	6.11	5.80	5.29
	11.80	13.00	6.93	6.80	6.30	6.11	5.80	5.29
	13.70	15.00	7.12	6.80	6.30	6.11	5.80	5.29

8. Air Velocity Distribution



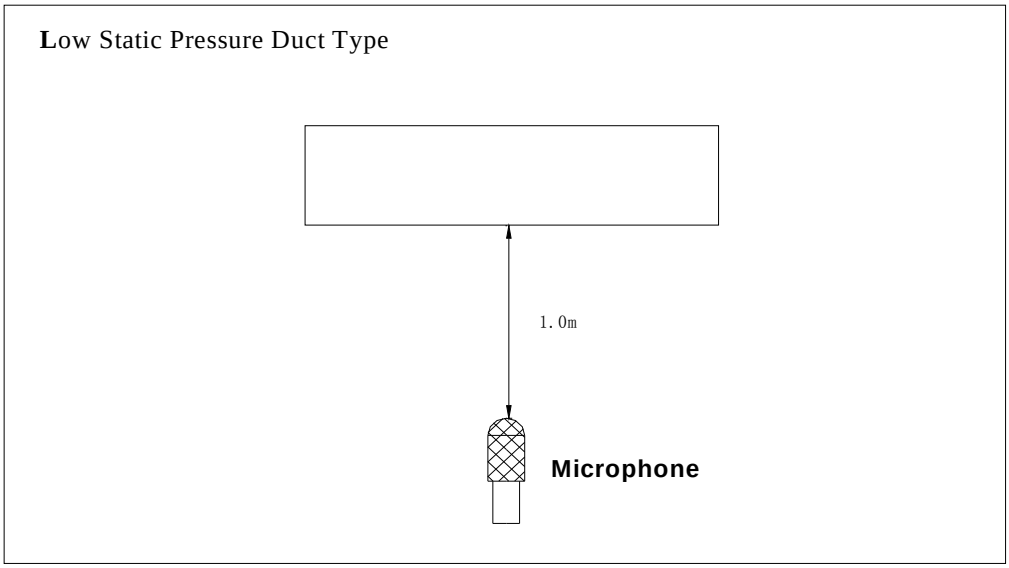
9. Electric Characteristics

Model	Factory model	Indoor Unit				Power Supply		IFM	
		Hz	Voltage	Min.	Max.	MCA	MFA	KW	FLA
MDVi-D18T3/N1-A	CE-MDVD18T3/N1-A	50	230	207	253	0.175	15	0.03	0.14
MDVi-D22T3/N1-A	CE-MDVD22T3/N1-A	50	230	207	253	0.175	15	0.03	0.14
MDVi-D28T3/N1-A	CE-MDVD28T3/N1-A	50	230	207	253	0.187	15	0.032	0.15
MDVi-D36T3/N1-A	CE-MDVD36T3/N1-A	50	230	207	253	0.175	15	0.032	0.15
MDVi-D45T3/N1-A	CE-MDVD45T3/N1-A	50	230	207	253	0.35	15	0.053	0.28
MDVi-D56T3/N1-A	CE-MDVD56T3/N1-A	50	230	207	253	0.35	15	0.053	0.28

Remark:
MCA: Min. Current Amps. (A)
MFA: Max. Fuse Amps. (A)
KW: Fan Motor Rated Output (kW)
FLA: Full Load Amps. (A)
IFM: Indoor Fan Motor

10. Noise Levels

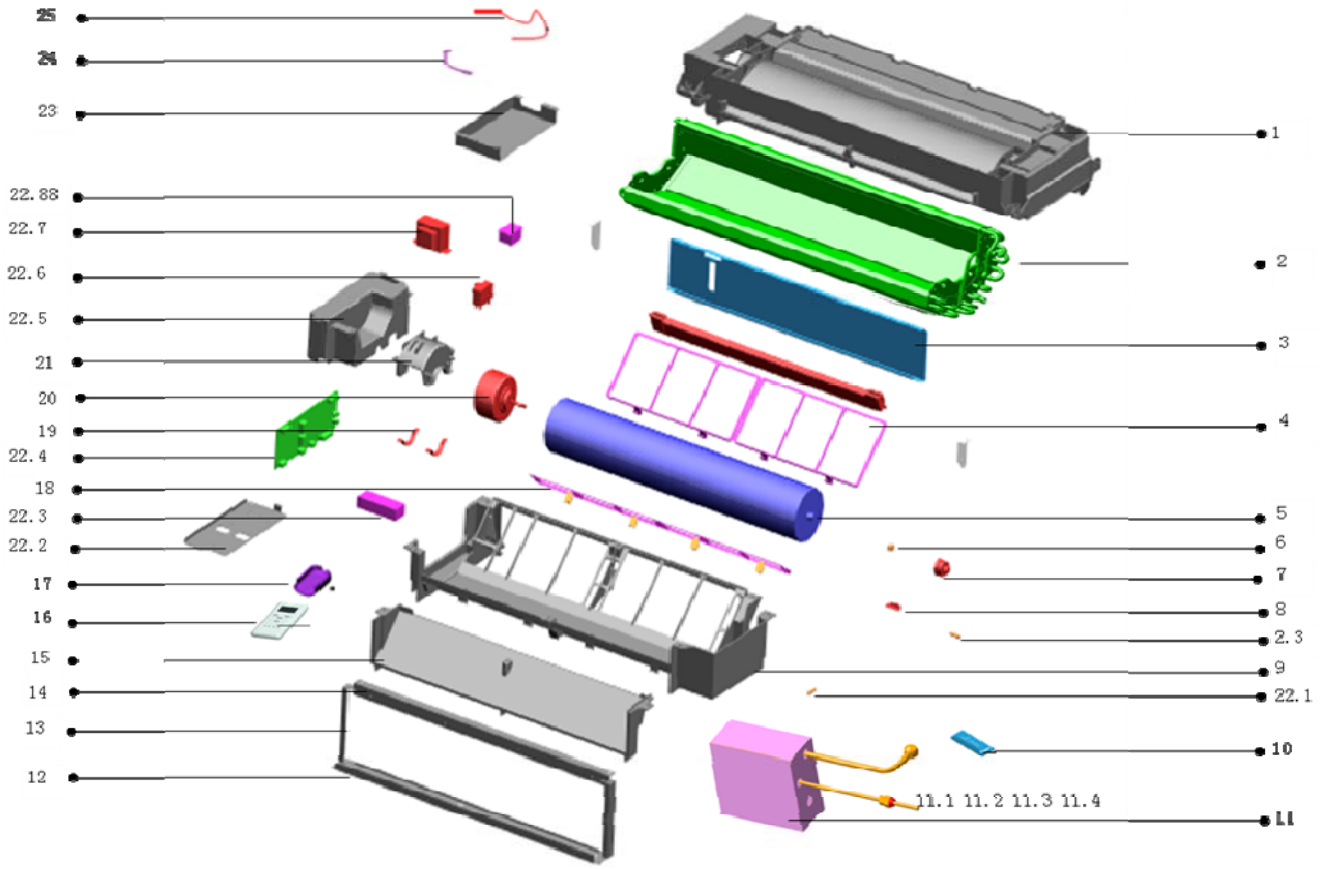
10.1 Test condition

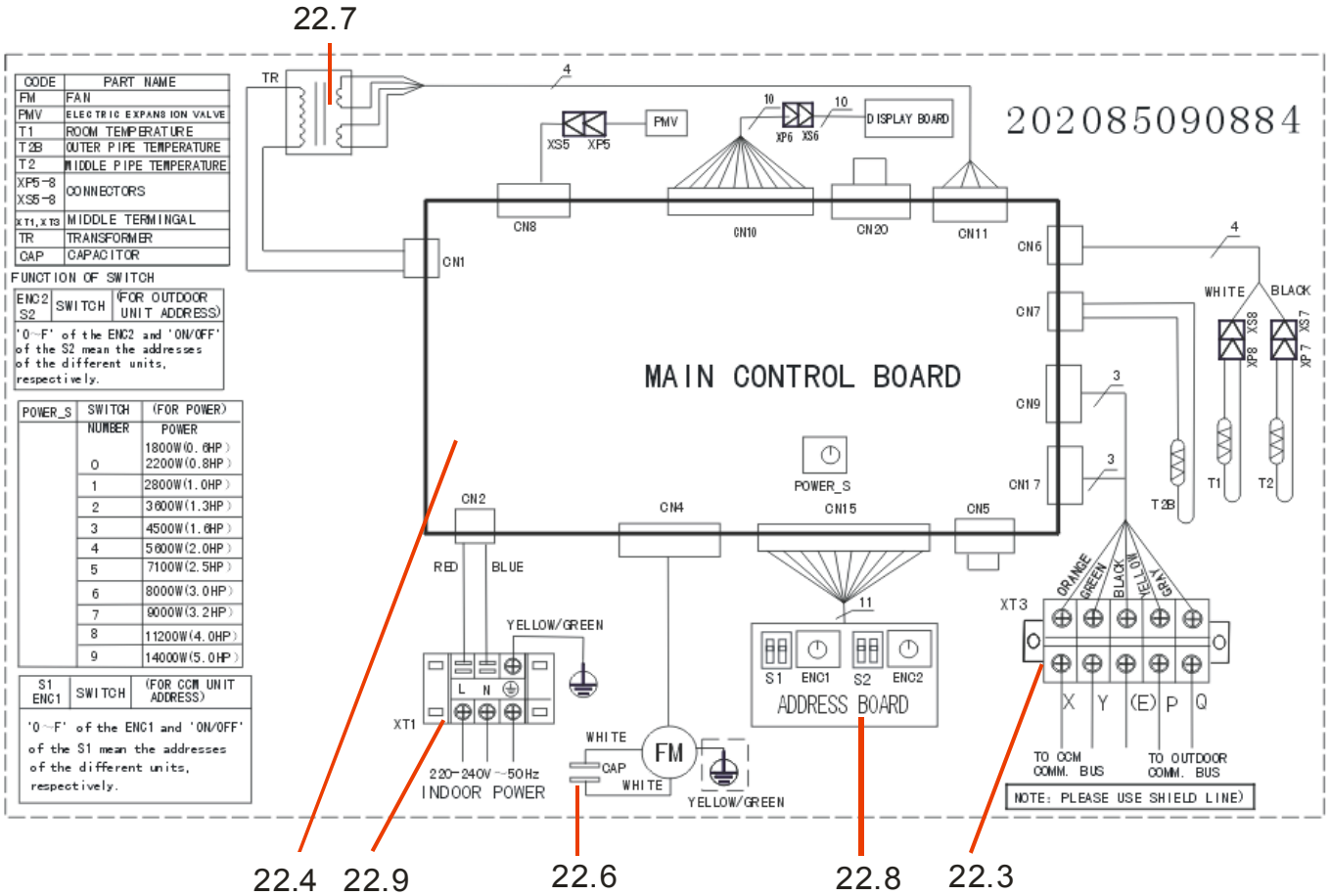


Model	Noise test value dB(A)		
	Hi	Mid	Low
MDVi-D18T3/N1-A	33	37	21
MDVi-D22T3/N1-A	34	29	21
MDVi-D28T3/N1-A	36	34	30
MDVi-D36T3/N1-A	36	34	30
MDVi-D45T3/N1-A	37	35	31
MDVi-D56T3/N1-A	37	35	31

11. Explode View

MDVi-D18T3/N1-A MDVi-D22T3/N1-A MDVi-D28T3/N1-A
MDVi-D36T3/N1-A MDVi-D45T3/N1-A MDV-D56T3/N1-A



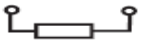


No.	Part name	Quantity
1	Base ass'y	1
2	Evaporator ass'y	1
2.1	Evaporator intput pipe ass'y	1
2.1.1	Copper nut	1
2.1.1	Pipe joint	1
2.2	Evaporator output pipe ass'y	1
2.2.1	Pipe joint	1
2.2.2	Copper nut	1
2.2.3	Sphere pad	1
3	Rear clapboard	1
4	Back Filter	2
5	Cross fan	1
6	Bearing	1
7	Bearing base	1
8	Block	1
9	drainage pan ass'y	1
10	Display board ass'y	1
11	Electric throttle ass'y	1
11.1	Electronic expansion valve ass'y	1
11.2	EEV solenoid	1
11.3	Cover plate ass'y	1
11.4	EXV Box ass'y	1
12	Lower installation board ass'y of air passage	1
13	Air outlet passage installation board ass'y	2
14	Upper installation board ass'y of air passage	1
15	Air outlet ass'y	1

No.	Part name	Quantity
16	Remote controller	1
17	Installation bracket	1
18	Front filter	2
19	Motor spud	2
20	Fan motor	1
21	motor base	1
22	E-part box ass'y	1
22.1	Power connection wire	1
22.2	Network address board ass'y	1
22.3	Wire joint, 5p	1
22.4	Main controller ass'y	1
22.5	E-part box ass'y	1
22.6	Motor capacitor	1
22.7	Transformer	1
22.8	Network address board ass'y	1
22.9	Wire joint	1
23	E-Part box cover	1
24	Temp.sensor ass'y	1
25	Room temp sensor ass'y	1

12. Accessories

Standard accessories

Name	Quantity	Shape	Usage
Installation manual	1	/	/
Pipe insulation material	2		Heat insulation
washer	8		Overhang indoor units
Remote controller	1		/
7# alkaline battery	2		/
Holder for remote controller	1		Hold the remote controller
Constriction bandage	10		—
Network matching wire	1		The indoor unit witch at the terminal of communication system should connect a impedance between port p and port Q
Remoter controller manual	1		—
Controlling discreteness installation plot	1	—	—
Installation spring	2		Fix water outlet
Water outlet joint	1		For drainage
Signal receiver display board	1		Receive signal

Medium Static Pressure Duct Type

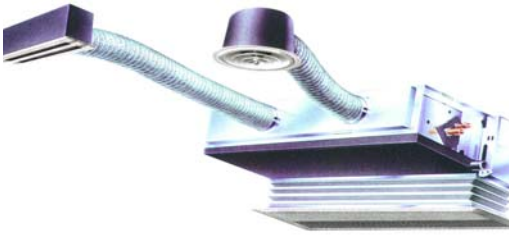
1.Features

Normal body

①. Economic and convenient installation

Several diffusers branch off from an indoor unit, adjusting the room temperature, which makes many rooms to be air-conditioned with only one indoor unit.

All models feature thin design making them applicable to ceiling pocket that tends to be shallow



②. A wild variety of optional accessories

Including front clapboard, panel, canvas air passage, filter, etc.

Canvas air passage

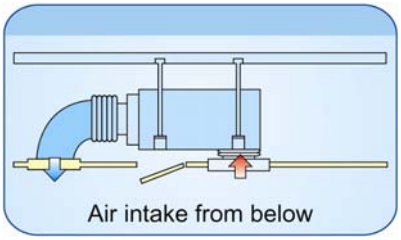
Clapboard

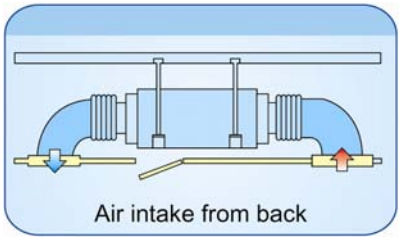
Panel

③. A long-life and high-efficiency filter

④. Way of air intake and inserting air filter

Air intake can be positioned either at the back or below the unit. Similarly, the air filter also can be inserted either from the back or from the bottom of the unit.





2.Specifications

Sale Model				MDVi-D45T2/CN1	MDVi-D56T2/CN1
Power supply			V-ph-Hz	220~240-1-50	220~240-1-50
Cooling	Capacity		kW	4.5	5.6
	Input		W	110	110
	Rated current		A	0.5	0.5
Heating	Capacity		kW	5.0	6.3
	Input		W	110	110
	Rated current		A	0.5	0.5
Indoor fan motor	Model			YSK55-4D	YSK55-4D
	Type			AC MOTOR	AC MOTOR
	Brand			Welling	Welling
	Input		W	117/110/101	117/110/101
	Capacitor		uF	3	3
	Speed(hi/mi/lo)		r/min	900/800/690	900/800/690
Indoor coil	Number of rows			3	3
	Tube pitch(a)x row pitch(b)		mm	25.4×22	25.4×22
	Fin spacing		mm	1.7	1.7
	Fin type (code)			Hydrophilic aluminum	
	Tube outside dia. and type		mm	Φ9.53	Φ9.53
				Inner groove tube	Inner groove tube
	Coil length x height x width		mm	800x66 x254	800x66 x254
	Number of circuits			2	2
Indoor air flow (Hi/Mi/Lo)			m^3/h	1160/1100/950	1160/1100/950
Indoor external static pressure (Hi)			Pa	40	40
Sound level (sound pressure)			dB(A)	45/41/38	45/41/38
Indoor unit	Dimension (W x H x D)		mm	1000×298×800	1000×298×800
	Packing (W x H x D)		mm	1205x370x940	1205x370x940
	Net/Gross weight		kg	38/45	38/45
Refrigerant	Type			R410A	R410A
Design pressure			MPa	4.2/2.0	4.2/2.0
Refrigerant piping		Liquid side/ Gas side	mm	Φ6.4/Φ12.7	Φ9.5/Φ15.9
Connection wiring		Power wiring	$Nb×mm^2$	3×2.5(L≤20m); 3×3.5(L≤50m)	
		Signal wiring	$Nb×mm^2$	3×1.0	
Drainage water pipe dia.			mm	Φ32	Φ32
Controller				Wireless remote controller R51(standard)	
Operation temp			℃	17～30	

Notes:

1. Nominal cooling capacities are based on the following conditions: return air temp.: 27°CDB, 19°CWB, and outdoor temp.:35°CDB, equivalent ref. piping: 8m (horizontal)
2. Nominal heating capacities are based on the following conditions: return air temp.: 20°CDB, outdoor temp.: 7°CDB, 6°CWB, and equivalent ref. Piping: 8m (horizontal)

Sale Model				MDiV-D71T2/CN1	MDVi-D80T2/CN1
Power supply			V-ph-Hz	220~240-1-50	220~240-1-50
Cooling	Capacity		kW	7.1	8.0
	Input		W	150	150
	Rated current		A	0.72	0.72
Heating	Capacity		kW	8.0	9.0
	Input		W	150	150
	Rated current		A	0.72	0.72
Indoor fan motor	Model			YSK74-4C	YSK74-4C
	Type			AC MOTOR	AC MOTOR
	Brand			Welling	Welling
	Input		w	170/150/133	170/150/133
	Capacitor		uF	6.5	6.5
	Speed(hi/mi/lo)		r/min	1100/1020/900	1100/1020/900
Indoor coil	Number of rows			3	3
	Tube pitch(a)x row pitch(b)		mm	25.4×22	25.4×22
	Fin spacing		mm	1.7	1.7
	Fin type (code)			Hydrophilic aluminum	
	Tube outside dia. and type		mm	Φ9.53	Φ9.53
				Inner groove tube	
	Coil length x height x width		mm	800x66 x254	800x66 x254
	Number of circuits			3	3
Indoor air flow (Hi/Mi/Lo)			m^3/h	1400/1100/900	1400/1100/900
Indoor external static pressure (Hi)			Pa	40	40
Sound level (sound pressure)			dB(A)	46/44/42	46/44/42
Indoor unit	Dimension (W x H x D)		mm	1000×298×800	1000×298×800
	Packing (W x H x D)		mm	1205x370x940	1205x370x940
	Net/Gross weight		kg	38/45	38/45
Refrigerant	Type			R410A	R410A
Design pressure			MPa	4.2/2.0	4.2/2.0
Refrigerant piping		Liquid side/ Gas side	mm	Φ9.5/Φ15.9	Φ9.5/Φ15.9
Connection wiring		Power wiring	$Nb×mm^2$	3×2.5(L≤20m); 3×3.5(L≤50m)	
		Signal wiring	$Nb×mm^2$	3×1.0	
Drainage water pipe dia.			mm	Φ32	Φ32
Controller				Wireless remote controller R51(standard)	
Operation temp			℃	17～30	

Notes:

1. Nominal cooling capacities are based on the following conditions: return air temp.: 27°CDB, 19°CWB, and outdoor temp.:35°CDB, equivalent ref. piping: 8m (horizontal)
2. Nominal heating capacities are based on the following conditions: return air temp.: 20°CDB, outdoor temp.: 7°CDB, 6°CWB, and equivalent ref. Piping: 8m (horizontal)

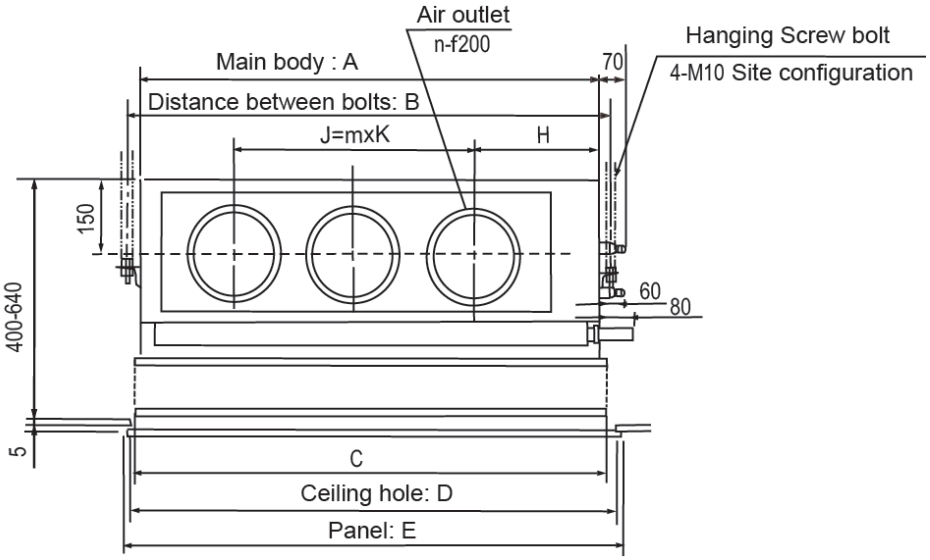
Sale Model			MDVi-D90T2/CN1	MDVi-D112T2/CN1	MDVi-D140T2/CN1
Power supply		V-ph-Hz	220~240-1-50	220~240-1-50	220~240-1-50
Cooling	Capacity	kW	9.0	11.2	14.0
	Input	W	215	215	215
	Rated current	A	0.98	0.98	0.98
Heating	Capacity	kW	10.0	12.5	15.5
	Input	W	215	215	215
	Rated current	A	0.98	0.98	0.98
Indoor fan motor	Model		YSK59-4A x2	YSK59-4A x2	YSK59-4A x2
	Type		AC MOTOR	AC MOTOR	AC MOTOR
	Brand		Welling	Welling	Welling
	Input	W	104/87/78	104/87/78	104/87/78
	Capacitor	uF	4(x2)	4(x2)	4(x2)
	Speed(hi/mi/lo)	r/min	840//695/610	840//695/610	840//695/610
Indoor coil	Number of rows		3	3	3
	Tube pitch(a)x row pitch(b)	mm	25.4×22	25.4×22	25.4×22
	Fin spacing	mm	1.7	1.7	1.7
	Fin type (code)		Hydrophilic aluminum		
	Tube outside dia. and type	mm	Φ9.53	Φ9.53	Φ9.53
			Inner groove tube		
	Coil length x height x width	mm	1150x66 x254	1150x66 x254	1150x66 x254
	Number of circuits		5	5	5
Indoor air flow (Hi/Mi/Lo)		m^3/h	1800/1500/1200	1800/1500/1200	1800/1500/1200
Indoor external static pressure (Hi)		Pa	70	70	70
Sound level (sound pressure)		dB(A)	47/45/43	47/45/43	47/45/43
Indoor unit	Dimension (W x H x D)	mm	1350×298×800	1350×298×800	1350×298×800
	Packing (W x H x D)	mm	1555X370 X940	1555X370 X940	1555X370 X940
	Net/Gross weight	kg	48/57	51/58	51/58
Refrigerant	Type		R410A	R410A	R410A
Design pressure		MPa	4.2/2.0	4.2/2.0	4.2/2.0
Refrigerant piping	Liquid side/ Gas side	mm	Φ9.5/Φ15.9	Φ9.5/Φ15.9	Φ9.5/Φ15.9
Connection wiring	Power wiring	$Nb×mm^2$	3×2.5(L≤20m); 3×3.5(L≤50m)		
	Signal wiring	$Nb×mm^2$	3×1.0		
Drainage water pipe dia.		mm	Φ32	Φ32	Φ32
Controller			Wireless remote controller R51(standard)		
Operation temp		℃	17～30		

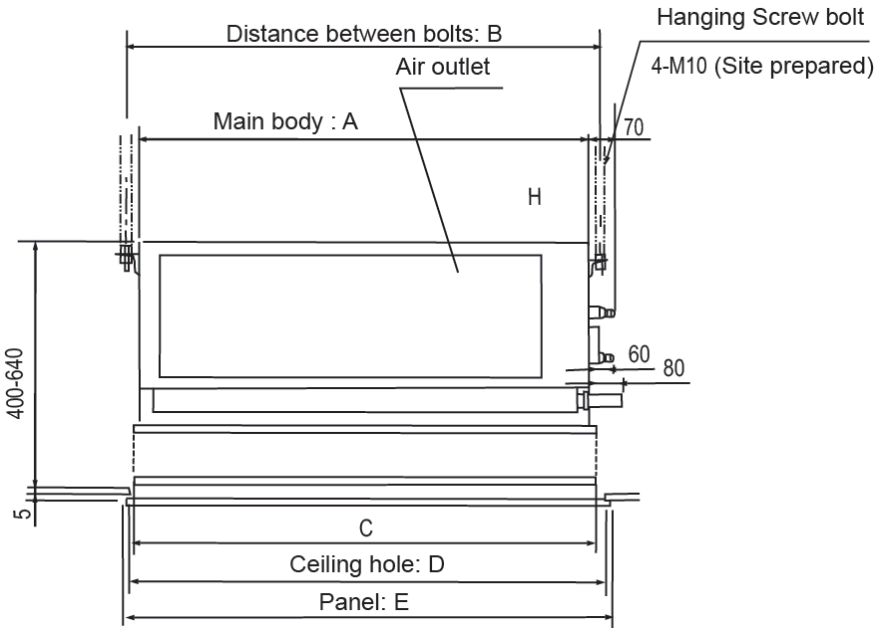
Notes:

1. Nominal cooling capacities are based on the following conditions: return air temp.: 27°CDB, 19°CWB, and outdoor temp.:35°CDB, equivalent ref. piping: 8m (horizontal)
2. Nominal heating capacities are based on the following conditions: return air temp.: 20°CDB, outdoor temp.: 7°CDB, 6°CWB, and equivalent ref. Piping: 8m (horizontal)

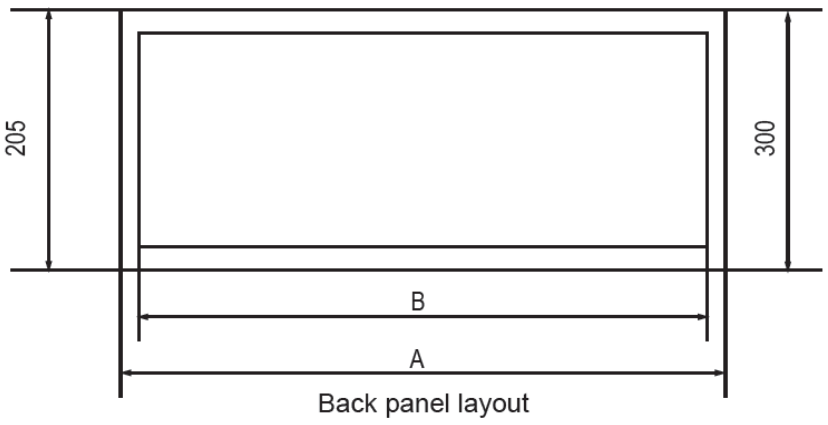
3.Dimensions

In case of air return from below, please refer to the following:

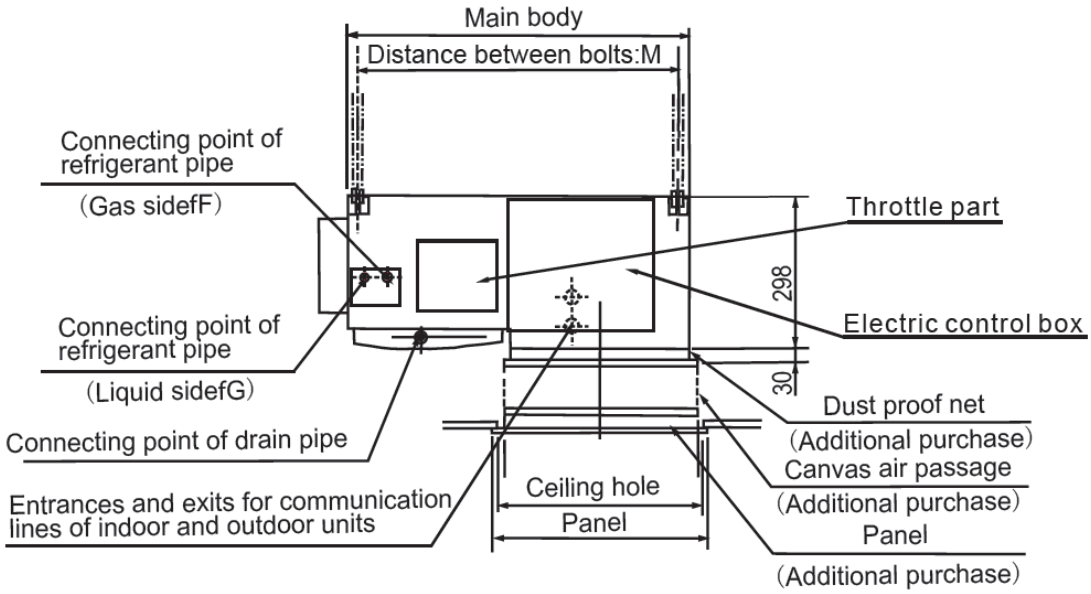




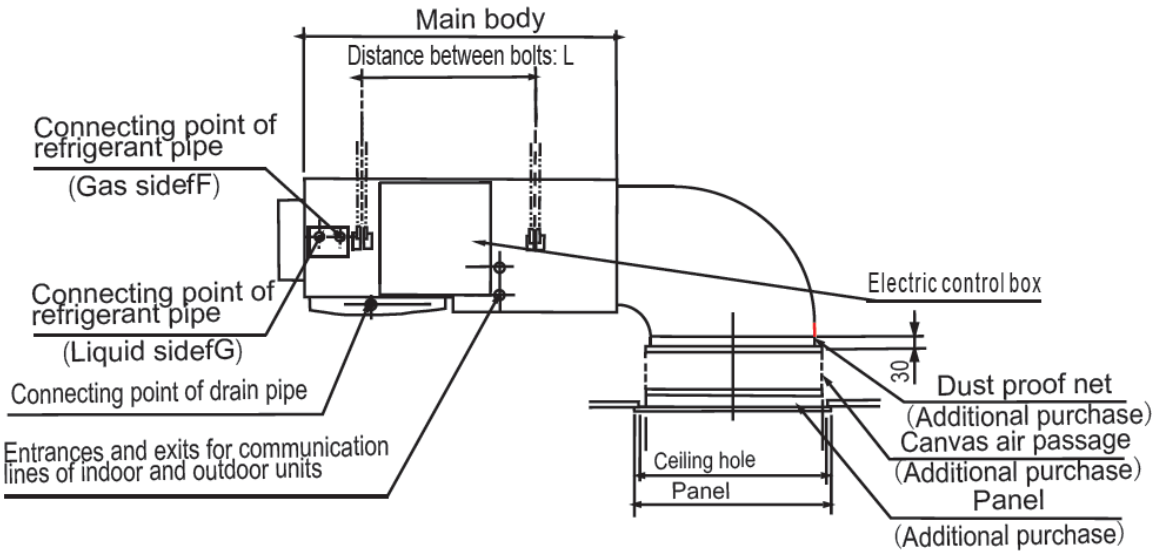
In case of air return from back, please refer to the following:



Air return from below:



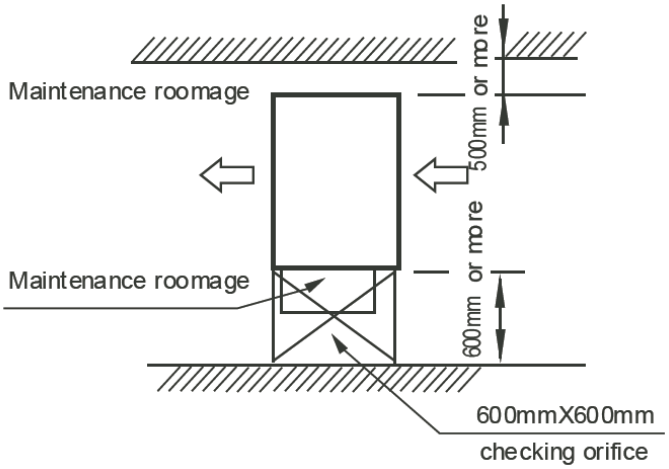
Air return from back:

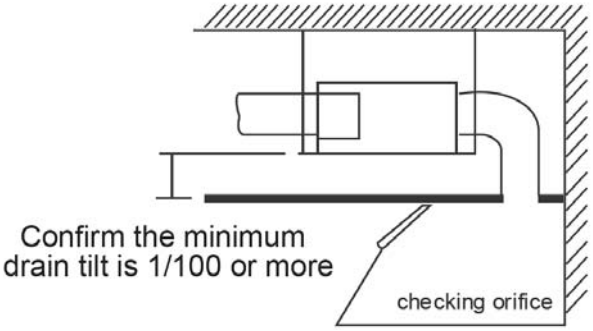


Cooling capacity(W)	A	B	C	D	E	F	G	H	J	K	m	n
4500	1000	1050	1112	1085	1470	Φ12.7	Φ6.4	252	580	290	2	3
5600~8000	1000	1050	1112	1085	1470	Φ15.9	Φ9.5	252	580	290	2	3
9000~14000	1350	1400	1380	1400	1430	Φ15.9	Φ9.5	252	930	310	3	4

4.Service Space

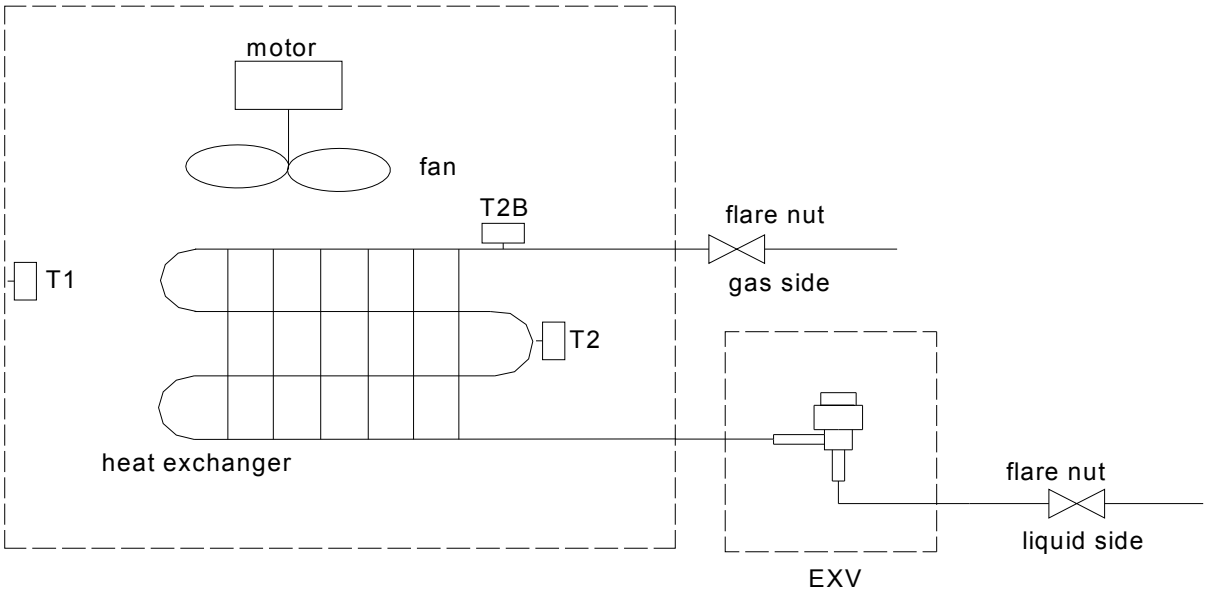
Confirm that there is enough room for installation and maintenance.





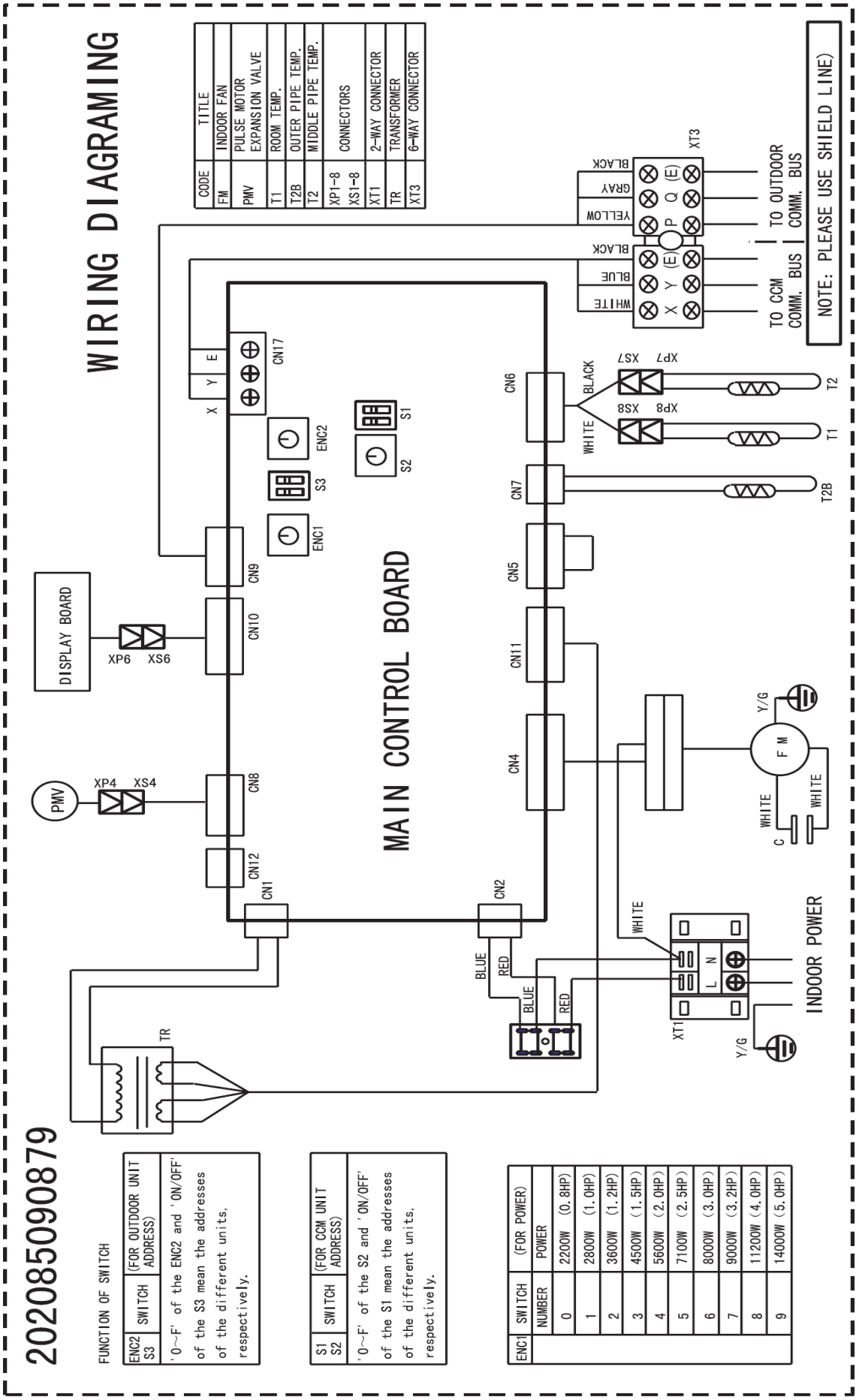
5.Piping Diagrams

MDVi-D45T2/CN1 MDVi-D56T2/CN1 MDVi-D71T2/CN1 MDVi-D80T2/CN1
MDVi-D90T2/CN1 MDVi-D112T2/CN1 MDVi-D140T2/CN1

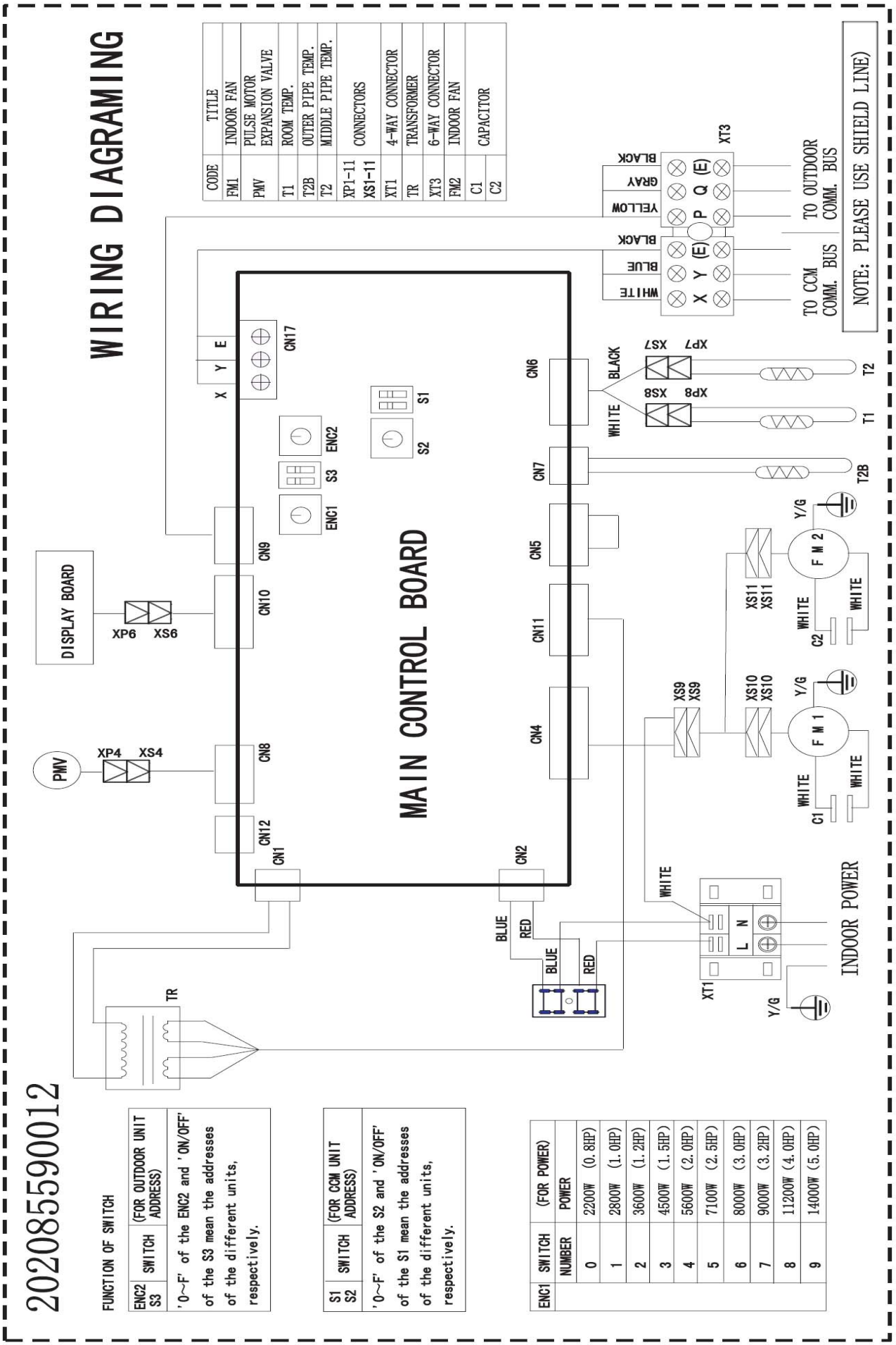


6.Wiring Diagrams

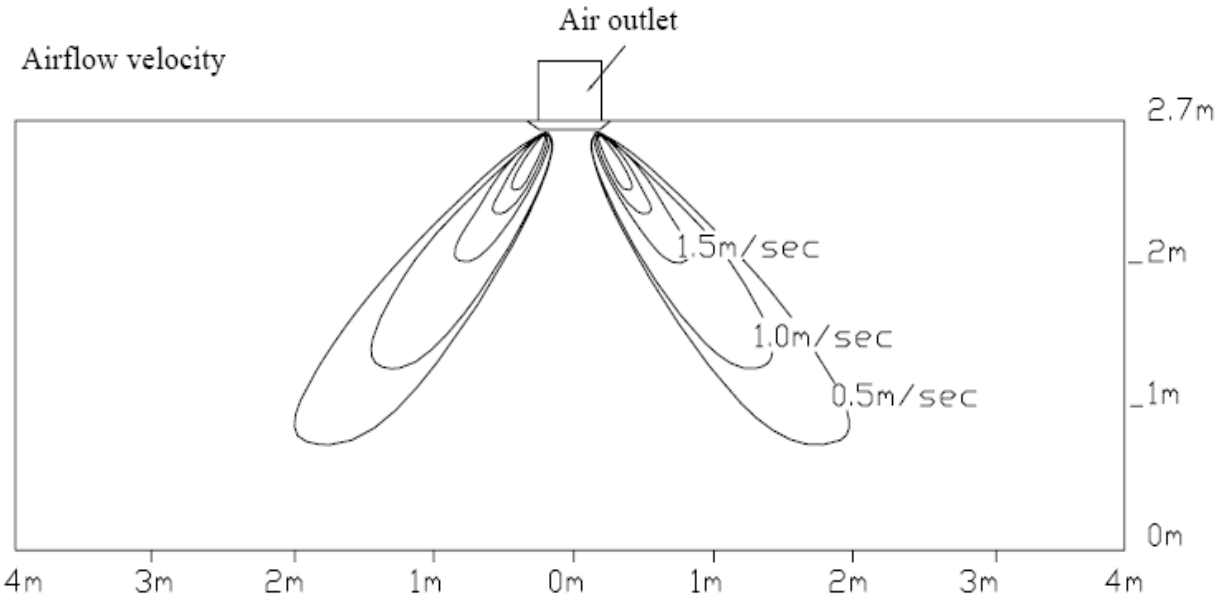
MDVi-D45T2/CN1 MDVi-D56T2/CN1 MDVi-D71T2/CN1 MDVi-D80T2/CN1

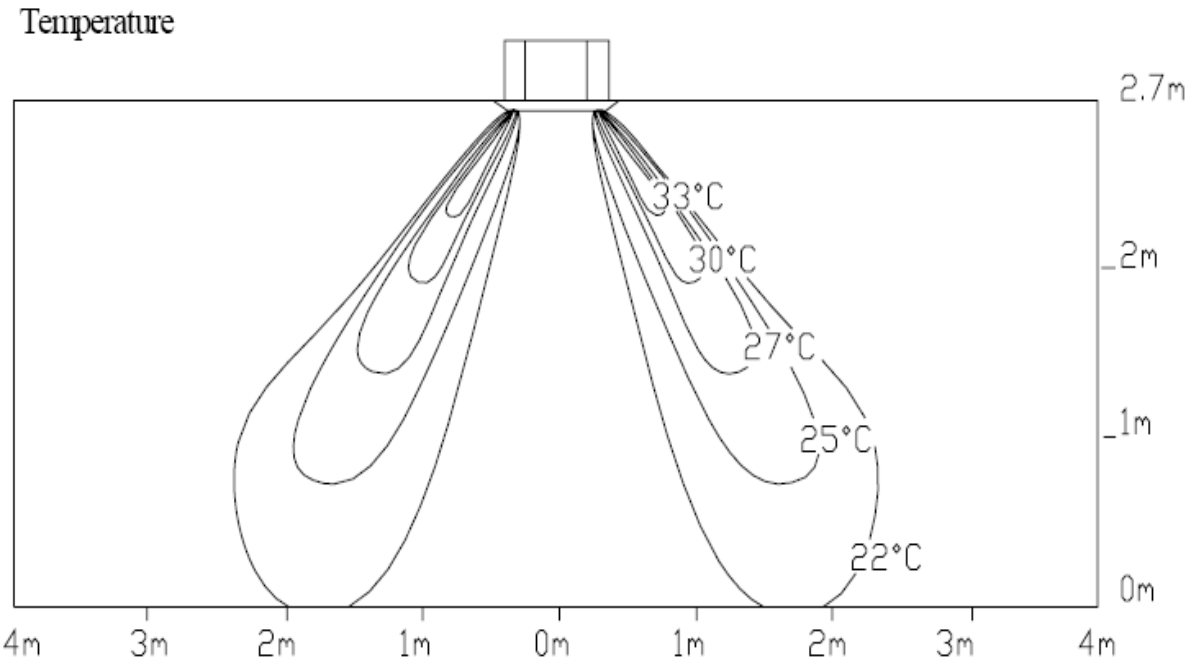


MDVi-D90T2/CN1 MDVi-D112T2/CN1 MDVi-D140T2/CN1



7.Air Velocity and Temperature Distributions





8.Capacity Tables

8.1 Cooling

TC: total capacity **SC**: sensible capacity **WB**: wet-bulb temperature **DB**: dry-bulb temperature

Indoor Unit size (kW)	Outdoor temperature (℃ DB)	Indoor temperature (℃ WB/DB)													
		14/20		16/23		18/26		19/27		20/28		22/30		24/32	
		TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
4.5	10.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.9	3.4
	12.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.9	3.4
	14.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.8	3.3
	16.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.6	3.2
	18.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.6	3.2
	20.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.5	3.2
	21.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.4	3.1
	23.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.2	3.2	5.4	3.1
	25.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.2	3.2	5.3	3.0
	27.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.0	3.0	5.3	3.0
	29.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.0	3.0	5.1	2.9
	31.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.3	3.5	5.1	3.0
	33.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.3	3.5	4.9	2.9
	35.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.3	3.5	4.8	2.8
	37.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.6	3.2	4.8	3.1	4.8	2.9
	39.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.6	3.2	4.8	3.1	4.8	2.9
5.6	10.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.3	4.1
	12.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.3	4.1
	14.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.2	4.1
	16.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	6.9	4.0
	18.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.1	4.1
	20.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.1	4.1
	21.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.0	4.1
	23.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	6.9	4.0
	25.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.5	4.1	6.8	3.9
	27.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.4	4.0	6.5	3.8
	29.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.3	4.0	6.4	3.7
	31.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.2	3.9	6.3	3.7
	33.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.0	3.8	6.3	3.7
	35.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	5.9	3.7	6.2	3.6
	37.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	5.9	3.9	6.1	3.5
	39.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	5.7	3.8	5.8	3.8	6.0	3.5
7.1	10.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	9.2	4.9
	12.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	9.1	4.8
	14.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	9.0	4.8
	16.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	8.9	4.7
	18.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	8.7	4.7
	20.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	8.5	4.6
	21.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	8.4	4.5

	23.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	8.3	4.5
	25.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	8.2	4.4
	27.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.1	4.9	8.2	4.4
	29.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.0	4.8	8.1	4.5
	31.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	7.9	4.7	7.8	4.4
	33.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	7.8	4.7	7.8	4.4
	35.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	7.6	4.6	7.7	4.3
	37.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	7.5	4.5	7.6	4.3
	39.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.2	4.6	7.4	4.4	7.6	4.3
8.0	10.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	10.4	5.6
	12.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	10.2	5.5
	14.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	10.2	5.5
	16.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	10.0	5.4
	18.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	9.8	5.3
	20.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	9.6	5.2
	21.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	9.4	5.1
	23.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	9.4	5.1
	25.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	9.3	5.0
	27.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.1	5.3	9.2	5.1
	29.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.5	9.0	5.3	9.1	5.0
	31.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.5	8.9	5.2	8.8	4.8
	33.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.5	8.8	5.2	8.8	4.8
	35.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.5	8.6	5.1	8.6	4.8
	37.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.3	5.4	8.4	5.0	8.6	4.9
	39.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.1	5.3	8.3	5.0	8.6	4.9
9.0	10.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.6	6.6	11.7	6.6
	12.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.6	6.6	11.5	6.5
	14.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.6	6.6	11.4	6.4
	16.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.6	6.6	11.3	6.3
	18.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.6	6.6	11.0	6.3
	20.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.6	6.6	10.8	6.2
	21.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.6	6.6	10.6	6.1
	23.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.6	6.6	10.5	6.0
	25.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.6	6.6	10.4	6.0
	27.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.3	6.4	10.4	5.9
	29.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.1	6.2	10.3	5.8
	31.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.0	6.2	9.9	5.7
	33.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	9.9	6.1	9.9	5.7
	35.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.5	6.5	9.6	6.0	9.7	5.7
	37.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.3	6.3	9.5	5.9	9.6	5.8
	39.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.2	6.2	9.4	5.8	9.6	5.8
11.2	10.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	13.3	8.3	15.5	9.0
	12.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	13.3	8.3	14.4	8.4
	14.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	13.3	8.3	14.2	8.2
	16.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	13.3	8.3	14.1	8.2
	18.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	13.3	8.3	14.0	8.1
	20.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	13.3	8.3	13.9	8.1

	21.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	13.3	8.3	13.8	8.0
	23.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	13.1	8.1	13.7	7.9
	25.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	13.0	8.1	13.6	7.9
	27.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	12.9	8.0	13.4	7.8
	29.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	12.8	7.9	13.3	7.9
	31.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	12.7	7.8	12.8	7.5
	33.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	12.5	7.8	12.5	7.4
	35.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.8	8.0	12.4	7.7	12.3	7.3
	37.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.6	7.9	12.3	7.6	12.1	7.1
	39.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.4	7.8	12.2	7.6	11.9	7.1
14.0	10.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.7	10.2	18.2	10.2
	12.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.7	10.2	17.9	10.0
	14.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.7	10.2	17.8	10.0
	16.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.7	10.2	17.5	9.8
	18.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.7	10.2	17.1	9.6
	20.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.7	10.2	16.8	9.4
	21.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.7	10.2	16.5	9.3
	23.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.4	10.2	16.4	9.2
	25.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.2	10.1	16.2	9.1
	27.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.1	10.0	16.1	9.2
	29.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.0	9.9	16.0	9.1
	31.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	15.8	9.8	15.4	8.8
	33.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	15.7	9.7	15.4	8.8
	35.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.7	9.7	15.1	9.4	15.1	8.8
	37.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.6	9.6	15.1	9.4	15.0	8.7
	39.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.3	9.4	14.6	9.2	15.0	8.8

8.2 Heating

TC: total capacity **WB**: wet-bulb temperature **DB**: dry-bulb temperature

Indoor Unit size (kW)	Outdoor temperature (℃)		Indoor temperature (℃ DB)					
			16	18	20	21	22	24
			TC	TC	TC	TC	TC	TC
	WB	DB	kW	kW	kW	kW	kW	kW
4.50	-15.00	-14.70	3.15	3.15	3.15	3.15	3.15	3.15
	-13.00	-12.60	3.35	3.35	3.35	3.35	3.35	3.35
	-11.00	-10.50	3.50	3.50	3.50	3.50	3.50	3.50
	-10.00	-9.50	3.65	3.65	3.65	3.65	3.65	3.65
	-9.10	-8.50	3.75	3.75	3.75	3.75	3.75	3.75
	-7.60	-7.00	3.80	3.80	3.80	3.80	3.80	3.80
	-5.60	-5.00	3.95	3.95	3.95	3.95	3.95	3.95
	-3.70	-3.00	4.15	4.15	4.15	4.15	4.15	4.15
	-0.70	0.00	4.45	4.45	4.45	4.45	4.45	4.20
	2.20	3.00	4.70	4.70	4.70	4.70	4.60	4.20
	4.10	5.00	4.85	4.85	4.85	4.85	4.60	4.20
	6.00	7.00	5.00	5.00	5.00	4.85	4.60	4.20
	7.90	9.00	5.15	5.15	5.00	4.85	4.60	4.20
	9.80	11.00	5.30	5.30	5.00	4.85	4.60	4.20
	11.80	13.00	5.50	5.40	5.00	4.85	4.60	4.20
	13.70	15.00	5.65	5.40	5.00	4.85	4.60	4.20
5.6	-15.00	-14.70	3.97	3.97	3.97	3.97	3.97	3.97
	-13.00	-12.60	4.22	4.22	4.22	4.22	4.22	4.22
	-11.00	-10.50	4.41	4.41	4.41	4.41	4.41	4.41
	-10.00	-9.50	4.60	4.60	4.60	4.60	4.60	4.60
	-9.10	-8.50	4.73	4.73	4.73	4.73	4.73	4.73
	-7.60	-7.00	4.79	4.79	4.79	4.79	4.79	4.79
	-5.60	-5.00	4.98	4.98	4.98	4.98	4.98	4.98
	-3.70	-3.00	5.23	5.23	5.23	5.23	5.23	5.23
	-0.70	0.00	5.61	5.61	5.61	5.61	5.61	5.29
	2.20	3.00	5.92	5.92	5.92	5.92	5.80	5.29
	4.10	5.00	6.11	6.11	6.11	6.11	5.80	5.29
	6.00	7.00	6.30	6.30	6.30	6.11	5.80	5.29
	7.90	9.00	6.49	6.49	6.30	6.11	5.80	5.29
	9.80	11.00	6.68	6.68	6.30	6.11	5.80	5.29
	11.80	13.00	6.93	6.80	6.30	6.11	5.80	5.29
	13.70	15.00	7.12	6.80	6.30	6.11	5.80	5.29
7.1	-15.00	-14.70	5.04	5.04	5.04	5.04	5.04	5.04
	-13.00	-12.60	5.36	5.36	5.36	5.36	5.36	5.36
	-11.00	-10.50	5.60	5.60	5.60	5.60	5.60	5.60
	-10.00	-9.50	5.84	5.84	5.84	5.84	5.84	5.84
	-9.10	-8.50	6.00	6.00	6.00	6.00	6.00	6.00
	-7.60	-7.00	6.08	6.08	6.08	6.08	6.08	6.08
	-5.60	-5.00	6.32	6.32	6.32	6.32	6.32	6.32
	-3.70	-3.00	6.64	6.64	6.64	6.64	6.64	6.64
	-0.70	0.00	7.12	7.12	7.12	7.12	7.12	6.72

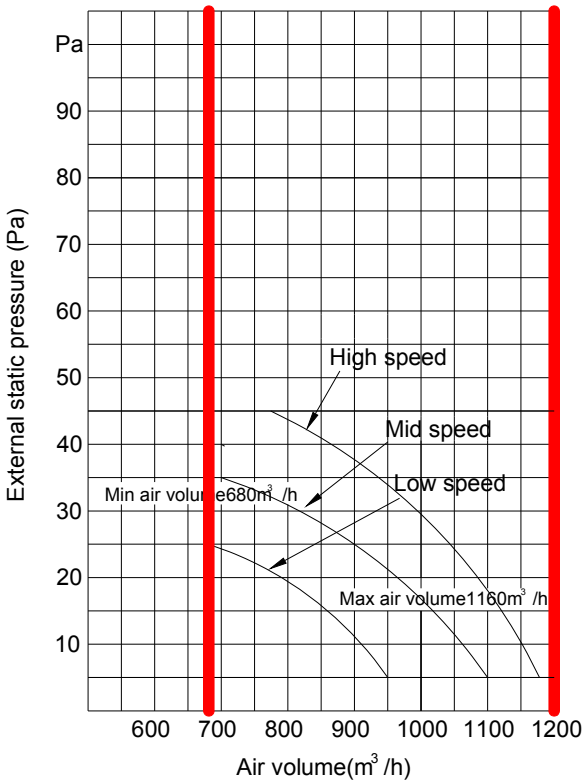
	2.20	3.00	7.52	7.52	7.52	7.52	7.36	6.72
	4.10	5.00	7.76	7.76	7.76	7.76	7.36	6.72
	6.00	7.00	8.00	8.00	8.00	7.76	7.36	6.72
	7.90	9.00	8.24	8.24	8.00	7.76	7.36	6.72
	9.80	11.00	8.48	8.48	8.00	7.76	7.36	6.72
	11.80	13.00	8.80	8.64	8.00	7.76	7.36	6.72
	13.70	15.00	9.04	8.64	8.00	7.76	7.36	6.72
8.0	-15	-14.7	5.67	5.67	5.67	5.67	5.67	5.67
	-13	-12.6	6.03	6.03	6.03	6.03	6.03	6.03
	-11	-10.5	6.30	6.30	6.30	6.30	6.30	6.30
	-10	-9.5	6.57	6.57	6.57	6.57	6.57	6.57
	-9.1	-8.5	6.75	6.75	6.75	6.75	6.75	6.75
	-7.6	-7	6.84	6.84	6.84	6.84	6.84	6.84
	-5.6	-5	7.11	7.11	7.11	7.11	7.11	7.11
	-3.7	-3	7.47	7.47	7.47	7.47	7.47	7.47
	-0.7	0	8.01	8.01	8.01	8.01	8.01	7.56
	2.2	3	8.46	8.46	8.46	8.46	8.28	7.56
	4.1	5	8.73	8.73	8.73	8.73	8.28	7.56
	6	7	9.00	9.00	9.00	8.73	8.28	7.56
	7.9	9	9.27	9.27	9.00	8.73	8.28	7.56
	9.8	11	9.54	9.54	9.00	8.73	8.28	7.56
	11.8	13	9.90	9.72	9.00	8.73	8.28	7.56
	13.7	15	10.17	9.72	9.00	8.73	8.28	7.56
9.0	-15	-14.7	6.30	6.30	6.30	6.30	6.30	6.30
	-13	-12.6	6.70	6.70	6.70	6.70	6.70	6.70
	-11	-10.5	7.00	7.00	7.00	7.00	7.00	7.00
	-10	-9.5	7.30	7.30	7.30	7.30	7.30	7.30
	-9.1	-8.5	7.50	7.50	7.50	7.50	7.50	7.50
	-7.6	-7	7.60	7.60	7.60	7.60	7.60	7.60
	-5.6	-5	7.90	7.90	7.90	7.90	7.90	7.90
	-3.7	-3	8.30	8.30	8.30	8.30	8.30	8.30
	-0.7	0	8.90	8.90	8.90	8.90	8.90	8.40
	2.2	3	9.40	9.40	9.40	9.40	9.20	8.40
	4.1	5	9.70	9.70	9.70	9.70	9.20	8.40
	6	7	10.00	10.00	10.00	9.70	9.20	8.40
	7.9	9	10.30	10.30	10.00	9.70	9.20	8.40
	9.8	11	10.60	10.60	10.00	9.70	9.20	8.40
	11.8	13	11.00	10.80	10.00	9.70	9.20	8.40
	13.7	15	11.30	10.80	10.00	9.70	9.20	8.40
11.2	-15	-14.7	7.88	7.88	7.88	7.88	7.88	7.88
	-13	-12.6	8.38	8.38	8.38	8.38	8.38	8.38
	-11	-10.5	8.75	8.75	8.75	8.75	8.75	8.75
	-10	-9.5	9.13	9.13	9.13	9.13	9.13	9.13
	-9.1	-8.5	9.38	9.38	9.38	9.38	9.38	9.38
	-7.6	-7	9.50	9.50	9.50	9.50	9.50	9.50
	-5.6	-5	9.88	9.88	9.88	9.88	9.88	9.88
	-3.7	-3	10.38	10.38	10.38	10.38	10.38	10.38

	-0.7	0	11.13	11.13	11.13	11.13	11.13	10.50
	2.2	3	11.75	11.75	11.75	11.75	11.50	10.50
	4.1	5	12.13	12.13	12.13	12.13	11.50	10.50
	6	7	12.50	12.50	12.50	12.13	11.50	10.50
	7.9	9	12.88	12.88	12.50	12.13	11.50	10.50
	9.8	11	13.25	13.25	12.50	12.13	11.50	10.50
	11.8	13	13.75	13.50	12.50	12.13	11.50	10.50
	13.7	15	14.13	13.50	12.50	12.13	11.50	10.50
14.0	-15	-14.7	9.77	9.77	9.77	9.77	9.77	9.77
	-13	-12.6	10.39	10.39	10.39	10.39	10.39	10.39
	-11	-10.5	10.85	10.85	10.85	10.85	10.85	10.85
	-10	-9.5	11.32	11.32	11.32	11.32	11.32	11.32
	-9.1	-8.5	11.63	11.63	11.63	11.63	11.63	11.63
	-7.6	-7	11.78	11.78	11.78	11.78	11.78	11.78
	-5.6	-5	12.25	12.25	12.25	12.25	12.25	12.25
	-3.7	-3	12.87	12.87	12.87	12.87	12.87	12.87
	-0.7	0	13.80	13.80	13.80	13.80	13.80	13.02
	2.2	3	14.57	14.57	14.57	14.57	14.26	13.02
	4.1	5	15.04	15.04	15.04	15.04	14.26	13.02
	6	7	15.50	15.50	15.50	15.04	14.26	13.02
	7.9	9	15.97	15.97	15.50	15.04	14.26	13.02
	9.8	11	16.43	16.43	15.50	15.04	14.26	13.02
	11.8	13	17.05	16.74	15.50	15.04	14.26	13.02
	13.7	15	17.52	16.74	15.50	15.04	14.26	13.02

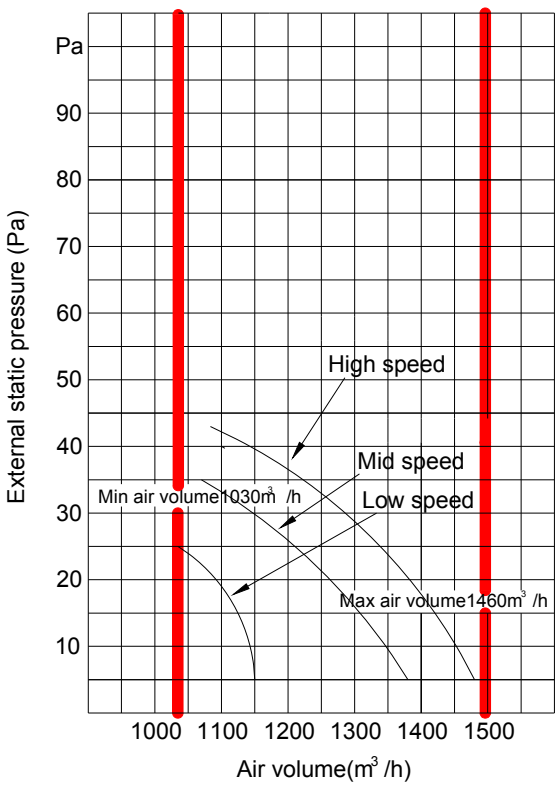
9.Fan Performances

Static pressure curve

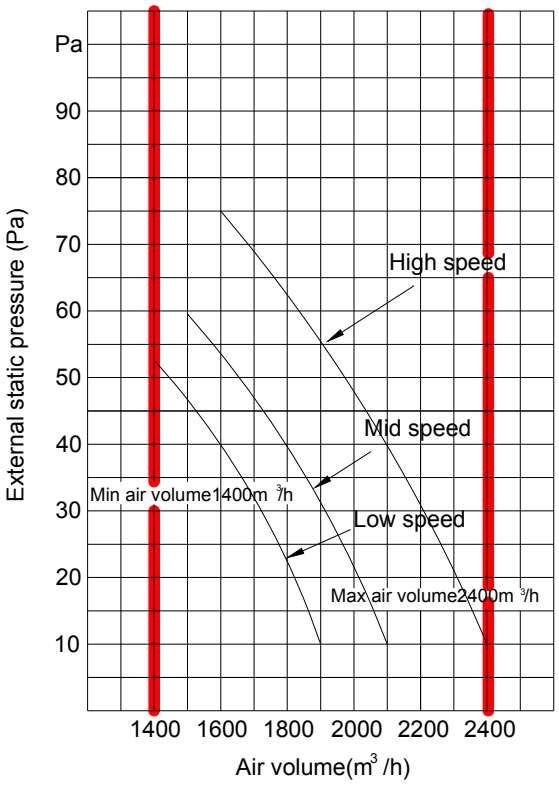
MDVi-D45,56T2/CN1



MDVi-D71,80T2/CN1



MDVi-D90, 112,140T2/CN1

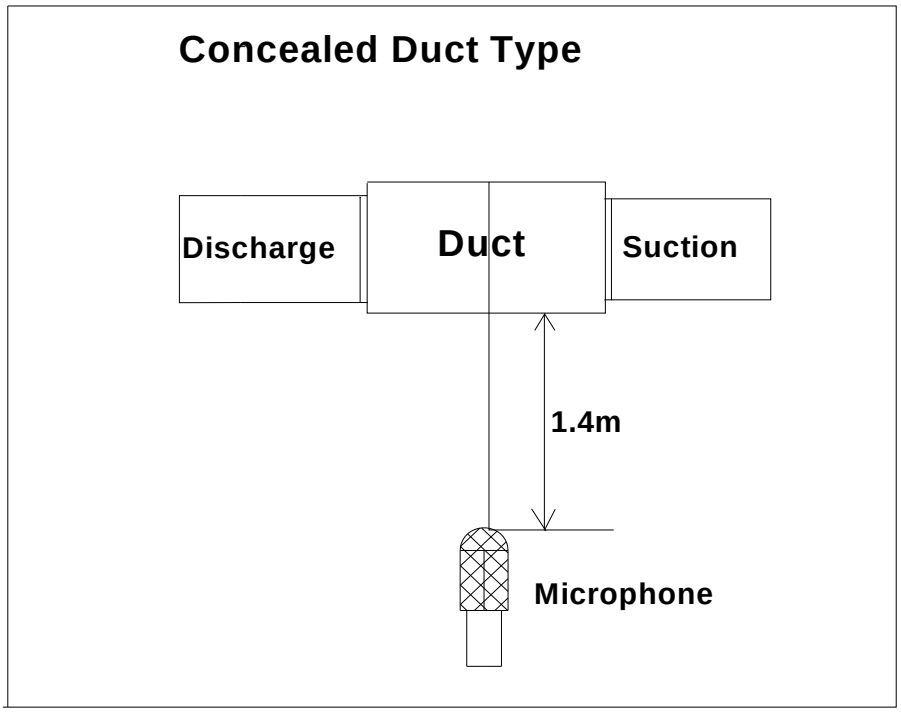


10.Electric Characteristics

Model	Indoor Unit				Power Supply	IFM	
	Hz	Voltage	Min.	Max.	MFA	kW	FLA
MDVi-D45T2/CN1	50	220-240V	198V	254V	15A	0.055	0.54
MDVi-D56T2/CN1	50	220-240V	198V	254V	15A	0.055	0.54
MDVi-D71T2/CN1	50	220-240V	198V	254V	15A	0.074	0.785
MDVi-D80T2/CN1	50	220-240V	198V	254V	15A	0.074	0.785
MDVi-D90T2/CN1	50	220-240V	198V	254V	15A	0.059	0.475
MDVi-D112T2/CN1	50	220-240V	198V	254V	15A	0.059	0.475
MDVi-D140T2/CN1	50	220-240V	198V	254V	15A	0.059	0.475

Remark:
MFA: Max. Fuse Amps. (A)
KW: Fan Motor Rated Output (KW)
FLA: Full Load Amps. (A)
IFM: Indoor Fan Motor

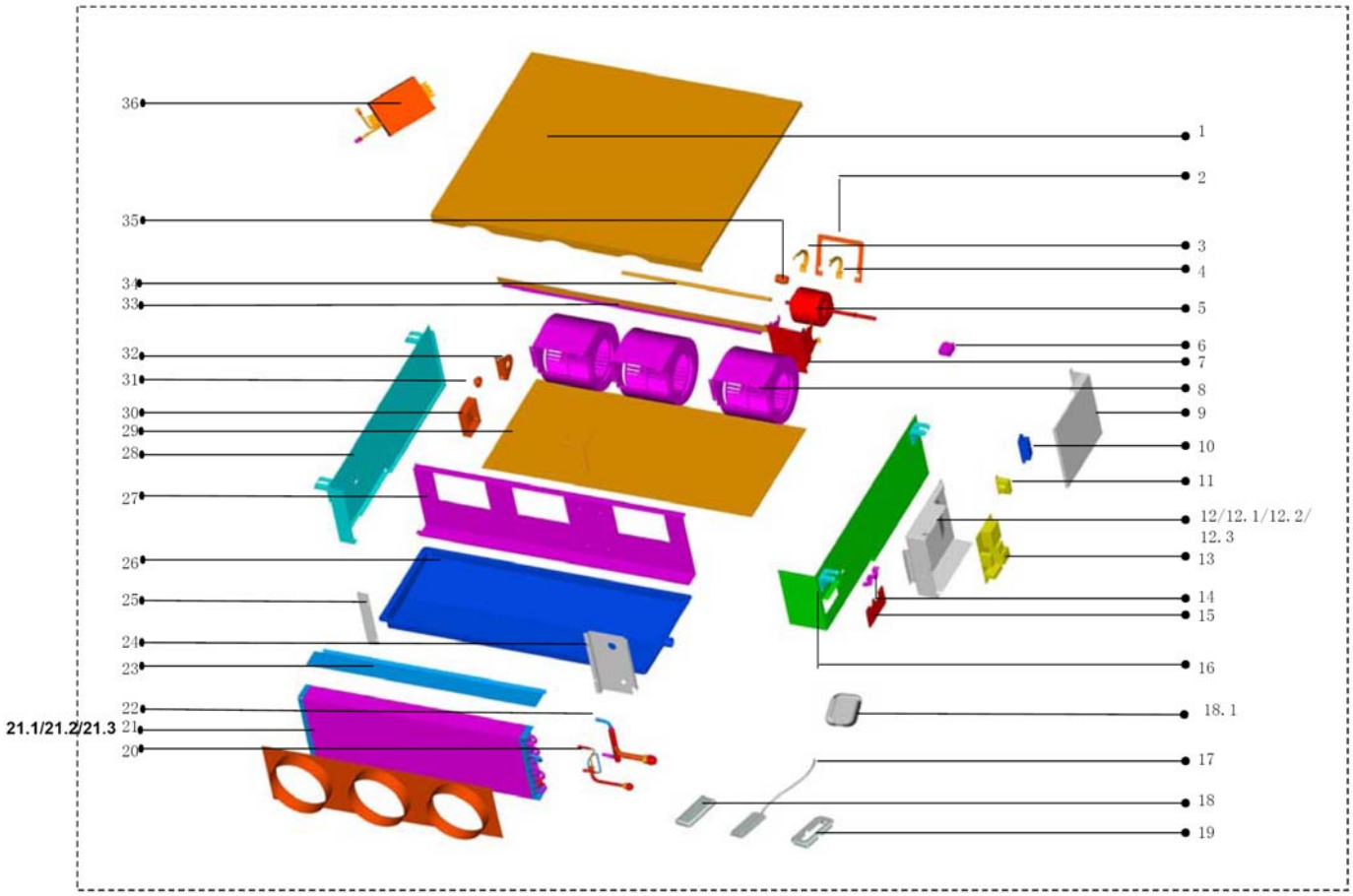
11.Sound Levels



Model	Noise level dB(A)		
	H	M	L
MDVi-D45T2/CN1	45	41	38
MDVi-D56T2/CN1	45	41	38
MDVi-D71T2/CN1	46	44	42
MDVi-D80T2/CN1	46	44	42
MDVi-D90T2/CN1	47	45	43
MDVi-D112T2/CN1	47	45	43
MDVi-D140T2/CN1	47	45	43

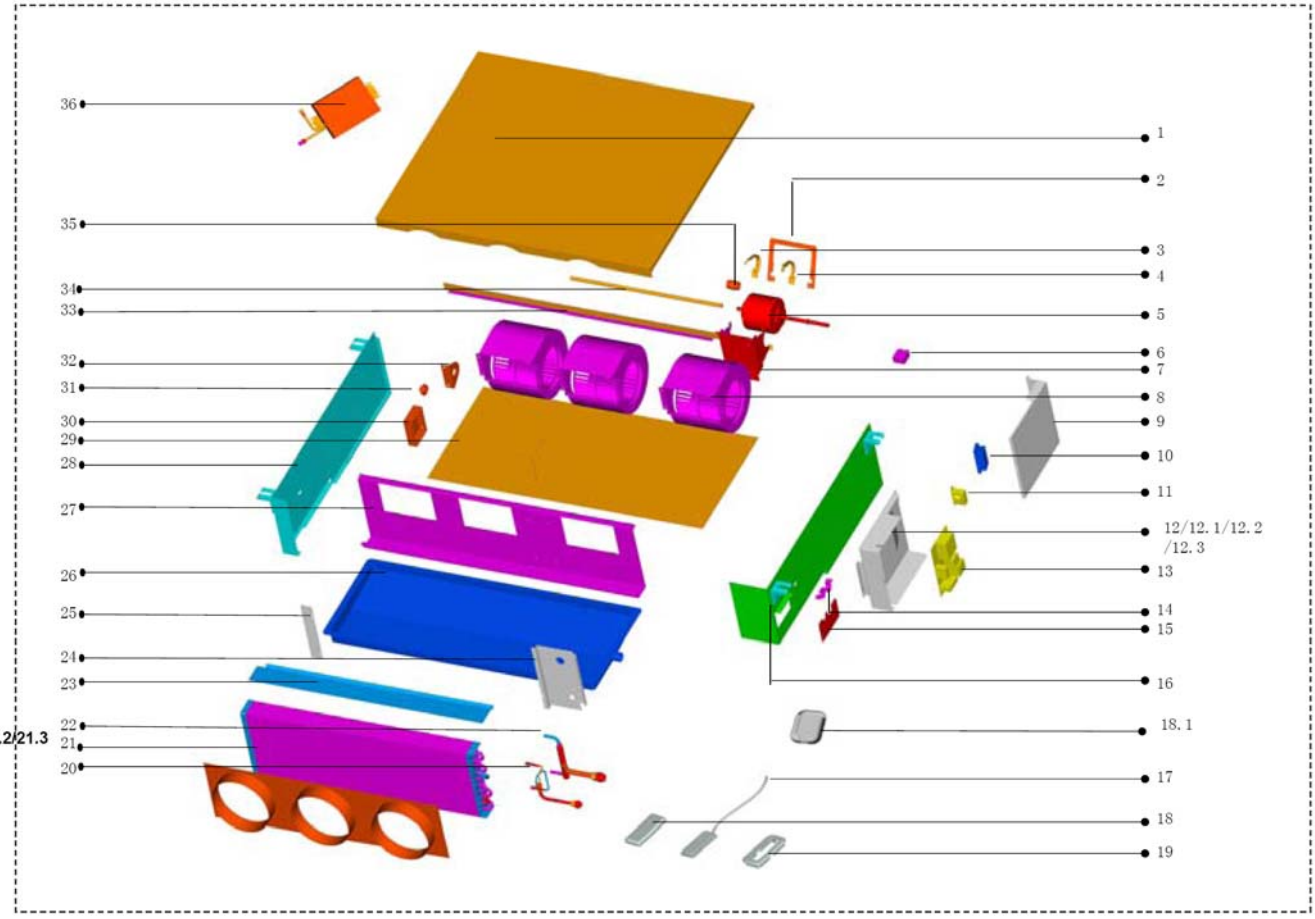
12.Exploded View

MDVi-D45T2/CN1 MDVi-D56T2/CN1



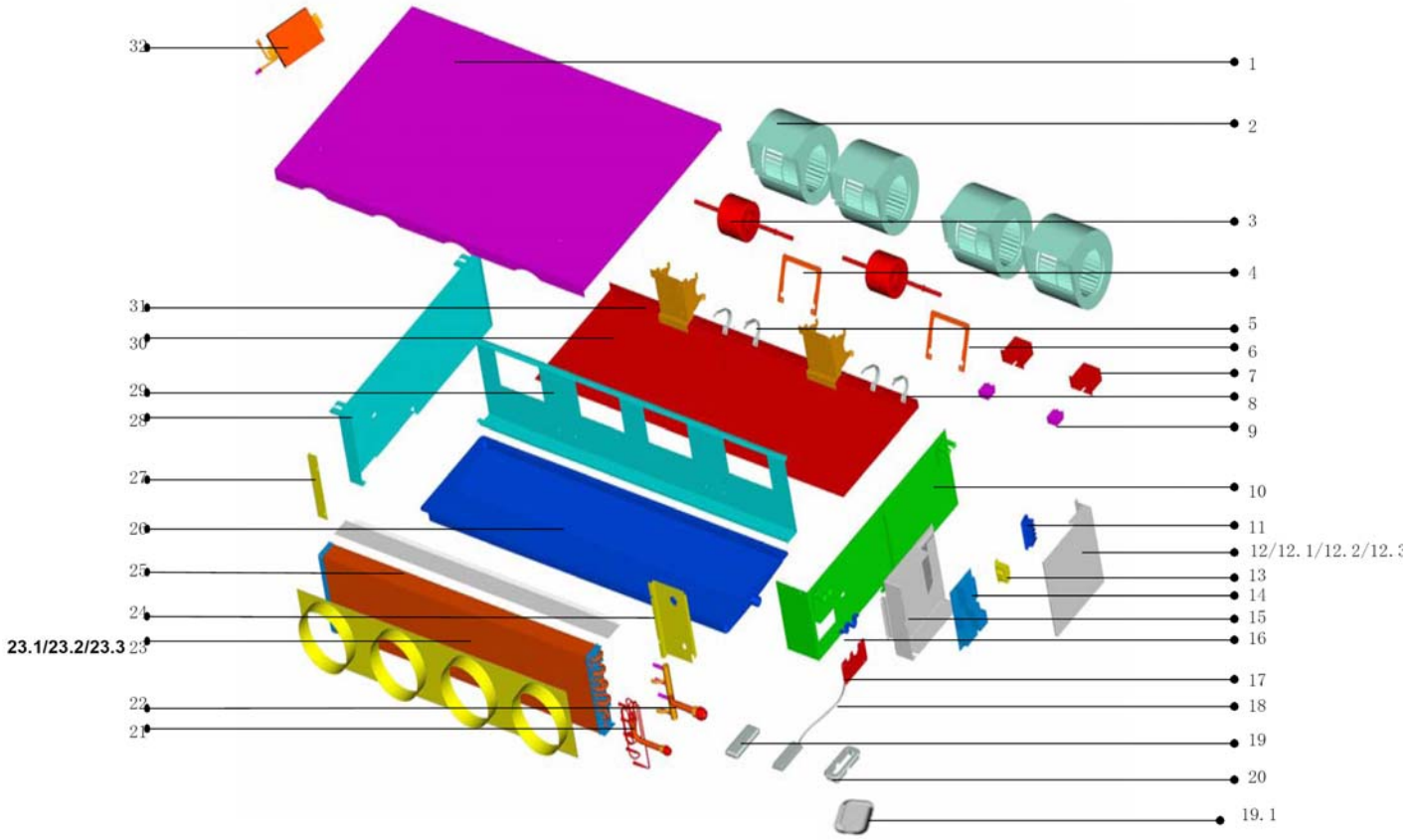
No.	Part Name	Quantity		No.	Part Name	Quantity
1	Base ass'y	1		19	Display box	1
2	Board	1		20	Evaporator input pipe ass'y	1
3	Motor clamp	1		21	Evaporator ass'y	1
4	Motor clamp	1		21.1	Room temp sensor ass'y	1
5	Fan motor	1		21.2	Temp. sensor ass'y	1
6	Motor capacitor	1		21.3	Temperature sensor	1
7	Motor bracket	1		22	Evaporator output pipe ass'y	1
8	Fan ass'y	3		23	Evaporator lining board	1
9	E-Part box cover	1		24	Evaporator left clapboard ass'y	1
10	Wire joint	1		25	Evaporator right clapboard ass'y	1
11	Transformer	1		26	Drainage pan ass'y	1
12	E-part box ass'y	1		27	Middle beam	1
12.1	E-part box	1		28	Right cover ass'y	1
12.2	Wire joint, 2p	1		29	Rear cover ass'y	1
12.3	Wire joint	1		30	Bearing base	1
13	Main controller ass'y	1		31	Bearing	1
14	Pipe clamp board	1		32	Bearing supporting board	1
15	Sealed board ass'y	1		33	Rear beam	1
16	Left clapboard ass'y	1		34	Connecting shaft	1
17	Display board ass'y	1		35	Coupling	1
18	Remote controller	1		36	Electric throttle ass'y	1
18.1	Remote controller holder ass'y	1				

MDVi-D71T2/CN1 MDVi-D80T2/CN1



No.	Part Name	Quantity		No.	Part Name	Quantity
1	Base ass'y	1		19	Display box	1
2	Board	1		20	Input pipe ass'y	1
3	Motor clamp	1		21	Evaporator ass'y	1
4	Motor clamp	1		21.1	Room temp sensor ass'y	1
5	Fan motor	1		21.2	Temp. sensor ass'y	1
6	Capacitor	1		21.3	Temperature sensor	1
7	Motor bracket	1		22	Output pipe ass'y	1
8	Fan ass'y	3		23	Evaporator lining board	1
9	E-Part box cover	1		24	Evaporator left clapboard ass'y	1
10	Wire joint	1		25	Evaporator right clapboard ass'y	1
11	Transformer	1		26	Drainage pan ass'y	1
12	E-part box ass'y	1		27	Middle beam	1
12.1	E-part box	1		28	Right cover ass'y	1
12.2	Wire joint, 2p	1		29	Rear cover ass'y	1
12.3	Wire joint	1		30	Bearing base	1
13	Main controller ass'y	1		31	Bearing	1
14	Pipe clamp board	1		32	Bearing supporting board	1
15	Sealed board ass'y	1		33	Rear beam	1
16	Left clapboard ass'y	1		34	Connecting shaft	1
17	Display board ass'y	1		35	Coupling	1
18	Remote controller	1		36	Electric throttle ass'y	1
18.1	Remote controller holder ass'y	1				

MDVi-D90T2/CN1 MDVi-D112T2/CN1 MDVi-D140T2/CN1



No.	Part Name	Quantity		No.	Part Name	Quantity
1	Base ass'y	1		18	Display board ass'y	1
2	Fan ass'y	4		19	Remote controller	1
3	Motor	2		19.1	Remote controller holder ass'y	1
4	Board	2		20	Display box	1
5	Motor clamp	2		21	Input pipe ass'y	1
6	Motor bracket	2		22	Output pipe ass'y	1
7	Capacitor box	2		23	Evaporator ass'y	1
8	Motor clamp	2		23.1	Room temp sensor ass'y	1
9	Motor capacitor	1		23.2	Temp. sensor ass'y	1
10	Left clapboard ass'y	1		23.3	Temperature sensor	1
11	Wire joint	1		24	Evaporator left clapboard ass'y	1
12	E-part box ass'y	1		25	Evaporator lining board ass'y	1
12.1	E-part box	1		26	Drainage pan ass'y	1
12.2	Wire joint, 2p	1		27	Evaporator right clapboard ass'y	1
12.3	Wire joint	1		28	Right cover ass'y	1
13	Transformer	1		29	Middle beam	1
14	Main controller ass'y	1		30	Rear cover ass'y	1
15	E-Part box cover	1		31	Rear beam	1
16	Pipe clamp board	1		32	Electric throttle ass'y	1
17	Sealed board ass'y	1		18	Display board ass'y	1

13. Accessories

Name of Accessories	Q'ty	Outline	Usage
Installation manual	1	/	———————————————
Remote controller subassembly	1		Remote control the air-conditioner.
Pipe insulation material	2		Heat insulation
Accessory drain pipe	1		To connect drain pipe
Adhesive tape for seal	1		To connect drain pipe
Remote controller	1		For remove controlling the air conditioner
Frame	1		/
Mounting screw(ST2.9x10-C-H)	2		/
Alkaline dry batteries(AM4)	2		/
Remote controller manual	1	/	/

New Middle Static Pressure Duct Type -A5

1. Features

1. A5 ducted unit is the new generation draw through type ducted instead of A3。

2. Compact unit body

- This type is new designed thin and compact.
- The EXV is fixed inside of the indoor unit, Compact unit body.

3. It is very easy to maintains and installed

- Standard aluminum alloy filter, which is more convenient to replace

- Easy maintenance for Fan motor

Simple remove the plastic cover and unload two bolt and then the fan motor can be replaced.

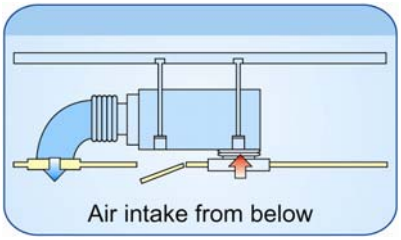
- E-box can be installed within a maximum distance of 1 meter away from the main body. (This feature should be required by clients and done by Midea CAC in factory.)

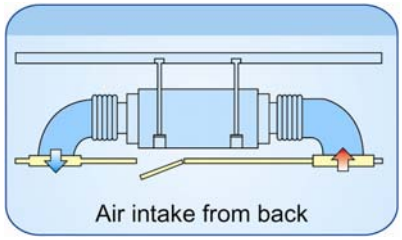
4. Comfortable air flow

- Four speed fan motor(Hi speed as a optional)
- Four speed: Super Hi, Hi(Optional), Med, Lo.

5. Air inlet from back standard and from bottom optional.

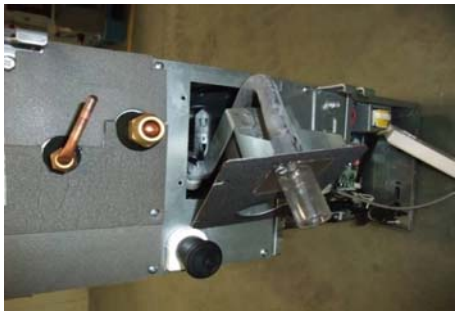
Because the size of the plate from bottom and flange from back is same, its easy to change the air inlet from back to bottom by installer.





6.Build-in Drain water pump

The pump is easy for maintenance.



2.Specifications

Sale Model			MDVi-D22T2/N1-A5	MDVi-D28T2/N1-A5	MDVi-D36T2/N1-A5
Power supply		V-ph-Hz	220~240-1-50	220~240-1-50	220~240-1-50
Cooling	Capacity	kW	2.2	2.8	3.6
	Input	W	62	62	67
	Rated current	A	0.31	0.31	0.34
Heating	Capacity	kW	2.6	3.2	4.0
	Input	W	62	62	67
	Rated current	A	0.31	0.31	0.34
Indoor fan motor	Model		YSK27-4C	YSK27-4C	YSK27-4C
	Type		Ac Motor	Ac Motor	Ac Motor
	Brand		Welling	Welling	Welling
	Input	w	62	62	67
	Capacitor	uF	1.5uF/450V	1.5UF/450V	2UF/450V
	Speed(hi/mi/lo)	r/min	1100/850/690/600	1100/850/690/600	1150/930/800/700
Indoor coil	Number of rows		2	2	3
	Tube pitch(a)x row pitch(b)	mm	21X13.5	21X13.5	21X13.5
	Fin spacing	mm	1.5	1.5	1.5
	Fin type (code)		Hydrophilic aluminum		
	Tube outside dia. and type	mm	Φ7	Φ7	Φ7
			Inner groove tube		
	Coil length x height x width	mm	515x41x254	515x41x254	515x41x254
	Number of circuits		3	3	3
Indoor air flow (/Hi/Mi/Lo)		m^3/h	570/530/410/320	570/530/410/320	570/530/410/320
Static pressure		Pa	10/30(optional)	10/30(optional)	10/30(optional)
Sound level (sound pressure)		dB(A)	38/35/32	38/35/32	40/38/36
Indoor unit	Dimension (W x H x D)	mm	700x210x635	700x210x635	700x210x635
	Packing (W x H x D)	mm	915x290x655	915x290x655	915x290x655
	Net/Gross weight	kg	21.5/26	21.5/26	22/26.5
Refrigerant	Type		R410A	R410A	R410A
Design pressure		MPa	4.4/2.6	4.4/2.6	4.4/2.6
Refrigerant piping	Liquid side/ Gas side	mm	Φ6.4/Φ12.7	Φ6.4/Φ12.7	Φ6.4/Φ12.7
Connection wiring	Power wiring	mm^2	3×2.5(L≤20m); 3×3.5(L≤50m)		
	Signal wiring	mm^2	3×0.75		
Drainage water pipe diameter		mm	Φ25		
Controller			Wired controller KJR-10B/DP(T)-E(6 meters connection wire)		
Operation temp		℃	17～30		
Application area		m^2	7～11	9～14	12～18

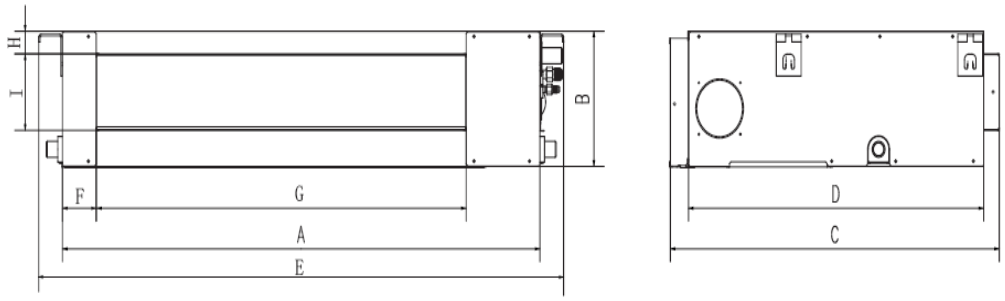
Sale Model			MDVi-D45T2/N1-A5	MDVi-D56T2/N1-A5	MDVi-D71T2/N1-A5	MDVi-D80T2/N1-A5
Power supply		V-ph-Hz	220~240-1-50	220~240-1-50	220~240-1-50	220~240-1-50
Cooling	Capacity	kW	4.5	5.6	7.1	8
	Input	W	115	115	163	231
	Rated current	A	0.58	0.58	0.82	1.16
Heating	Capacity	kW	5.0	6.3	8.0	9.0
	Input	W	115	115	163	231
	Rated current	A	0.58	0.58	0.82	1.16
Indoor fan motor	Model		YSK68-4P	YSK68-4P	YSK74-4P	YSK100-4P
	Type		AC MOTOR	AC MOTOR	AC MOTOR	AC MOTOR
	Brand		Welling	Welling	Welling	Welling
	Input	w	107	107	163	227
	Capacitor	uF	3.5UF/450V	3.5UF/450V	3.5UF/450V	10UF/450V
	Speed(hi/mi/lo)	r/min	1150/1020/800/700	1150/1020/800/700	1000/870/750/680	935/810/700/620
Indoor coil	Number of rows		3	3	4	4
	Tube pitch(a)x row pitch(b)	mm	21X13.5	21X13.5	21X13.5	21X13.5
	Fin spacing	mm	1.5	1.5	1.5	1.5
	Fin type (code)		Hydrophilic aluminum			
	Tube outside dia. and type	mm	Φ7	Φ7	Φ7	Φ7
			Inner groove tube			
	Coil length x height x width	mm	735X41X254	735X41X254	735X41X254	955X54X336
	Number of circuits		4	4	6	5
Indoor air flow (/Hi/Mi/Lo)		m^3/h	958/850/667/583	958/850/667/583	1207/1050/905/821	1558/1350/1167/1033
Static pressure		Pa	10/30(optional)	10/30(optional)	10/30(optional)	20/50(optional)
Sound level (sound pressure)		dB(A)	41/38.9/36	41/38.9/36	43.4/40/36	45.4/39.8/37
Indoor unit	Dimension (W x H x D)	mm	920X210X570	920X210X570	920X270X570	1140X270X710
	Packing (W x H x D)	mm	1135X290X655	1135X290X655	1135X350X655	1355X350X795
	Net/Gross weight	kg	27/32	27/32	31/36	40/48.5
Refrigerant	Type		R410A	R410A	R410A	R410A
Design pressure		MPa	4.4/2.6	4.4/2.6	4.4/2.6	4.4/2.6
Refrigerant piping	Liquid side/ Gas side	mm	Φ6.35/Φ12.7	Φ9.52/Φ16	Φ9.52/Φ16	Φ9.52/Φ16
Connection wiring	Power wiring	mm^2	3×2.5(L≤20m); 3×3.5(L≤50m)			
	Signal wiring	mm^2	3×0.75			
Drainage water pipe diameter		mm	Φ25	Φ25	Φ25	Φ25
Controller			Wired controller KJR-10B/DP(T)-E(6 meters connection wire)			
Operation temp		℃	17～30			
Application area		m^2	14～22	18～28	23～35	26～40

Sale Model			MDVi-D90T2/N1-A5	MDVi-D112T2/N1-A5	MDVi-D140T2/N1-A5
Power supply		V-ph-Hz	220~240-1-50	220~240-1-50	220~240-1-50
Cooling	Capacity	kW	9	11.2	14
	Input	W	231	327	357
	Rated current	A	1.16	1.65	1.8
Heating	Capacity	kW	10.0	12.5	15.5
	Input	W	231	327	357
	Rated current	A	1.16	1.65	1.8
Indoor fan motor	Model		YSK100-4P	YSK200-4P	YSK180-4P
	Type		AC MOTOR	AC MOTOR	AC MOTOR
	Brand		Welling	Welling	Welling
	Input	w	227	393	355
	Capacitor	uF	10UF/450V	10UF/450V	10UF/450V
	Speed(hi/mi/lo)	r/min	935/810/700/620	1120/990/860/770	1080/960/830/710
Indoor coil	Number of rows		4	4	4
	Tube pitch(a)x row pitch(b)	mm	21X13.5	21X13.5	21X13.5
	Fin spacing	mm	1.5	1.5	1.5
	Fin type (code)		Hydrophilic aluminum		
	Tube outside dia. and type	mm	Φ7	Φ7	Φ7
			Inner groove tube		
	Coil length x height x width	mm	955X54X336	955X54X336	1030X54X378
	Number of circuits		8	8	8
Indoor air flow (/Hi/Mi/Lo)		m^3/h	1558/1350/1167/1033	2036/1800/1564/1400	2138/1900/1643/1405
Static pressure		Pa	20/50(optional)	40/80(optional)	40/100(optional)
Sound level (sound pressure)		dB(A)	45.4/39.8/37	48.0 /41.9/38	47.7/43.2/39.0
Indoor unit	Dimension (W x H x D)	mm	1140X270X710	1140X270X710	1200X300X800
	Packing (W x H x D)	mm	1355X350X795	1355X350X795	1385X375X920
	Net/Gross weight	kg	42/50	42/50	50/59.5
Refrigerant	Type		R410A	R410A	R410A
Design pressure		MPa	4.4/2.6	4.4/2.6	4.4/2.6
Refrigerant piping	Liquid side/ Gas side	mm	Φ9.52/Φ16	Φ9.52/Φ16	Φ9.52/Φ16
Connection wiring	Power wiring	mm^2	3×2.5(L≤20m); 3×3.5(L≤50m)		
	Signal wiring	mm^2	3×0.75		
Drainage water pipe diameter		mm	Φ25	Φ25	Φ25
Controller			Wired controller KJR-10B/DP(T)-E(6 meters connection wire)		
Operation temp		℃	17～30		
Application area		m^2	29～45	36～56	45～70

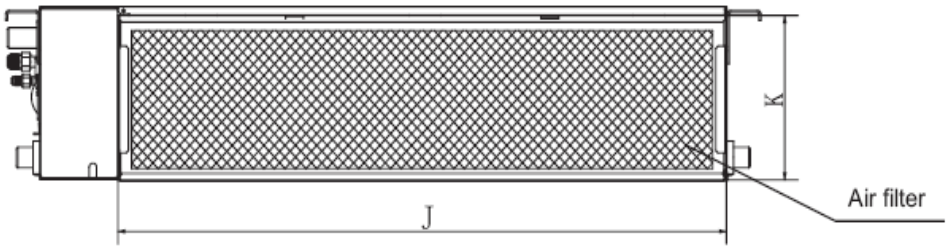
3. Dimensions

MDVi-D22T2/N1-A5 MDVi-D28T2/N1-A5 MDVi-D36T2/N1-A5 MDVi-D45T2/N1-A5 MDVi-D56T2/N1-A5 MDVi-D7T2/N1-A5 MDVi-D80T2/N1-A5 MDVi-D90T2/N1-A5 MDVi-D112T2/N1-A5 MDVi-D140T2/N1-A5

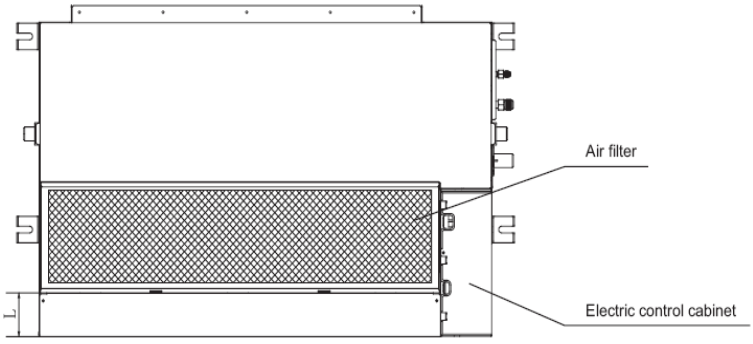
Outline dimension and air outlet opening size



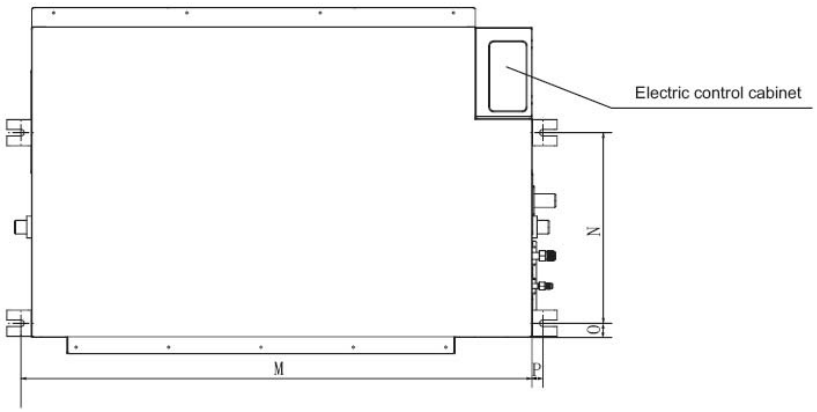
Air return opening size



Position size of descensional ventilation opening



Size of mounted lug

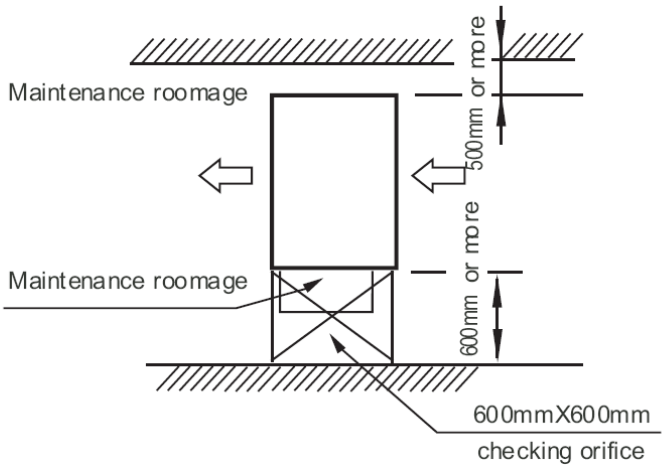


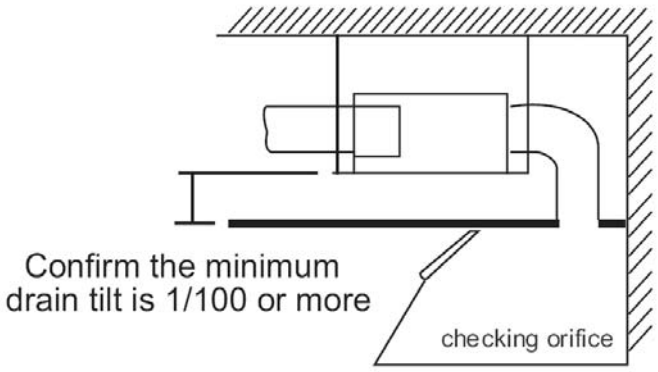
Model	Outline dimension					Air outlet opening size			
	A	B	C	D	E	F	G	H	I
22-36	700	210	635	570	790	65	493	35	119
45-56	920	210	635	570	1010	65	713	35	119
71	920	270	635	570	1010	65	713	35	179
80-112	1140	270	775	710	1230	65	933	35	179
140	1200	300	865	800	1290	80	933	40	204

Model	Air return opening size			Size of mounted lug			
	J	K	L	M	N	O	P
22-36	595	200	80	740	350	26	20
45-56	815	200	80	960	350	26	20
71	815	260	20	960	350	26	20
80-112	1035	260	20	1180	490	26	20
140	1094	288	45	1240	500	226	20

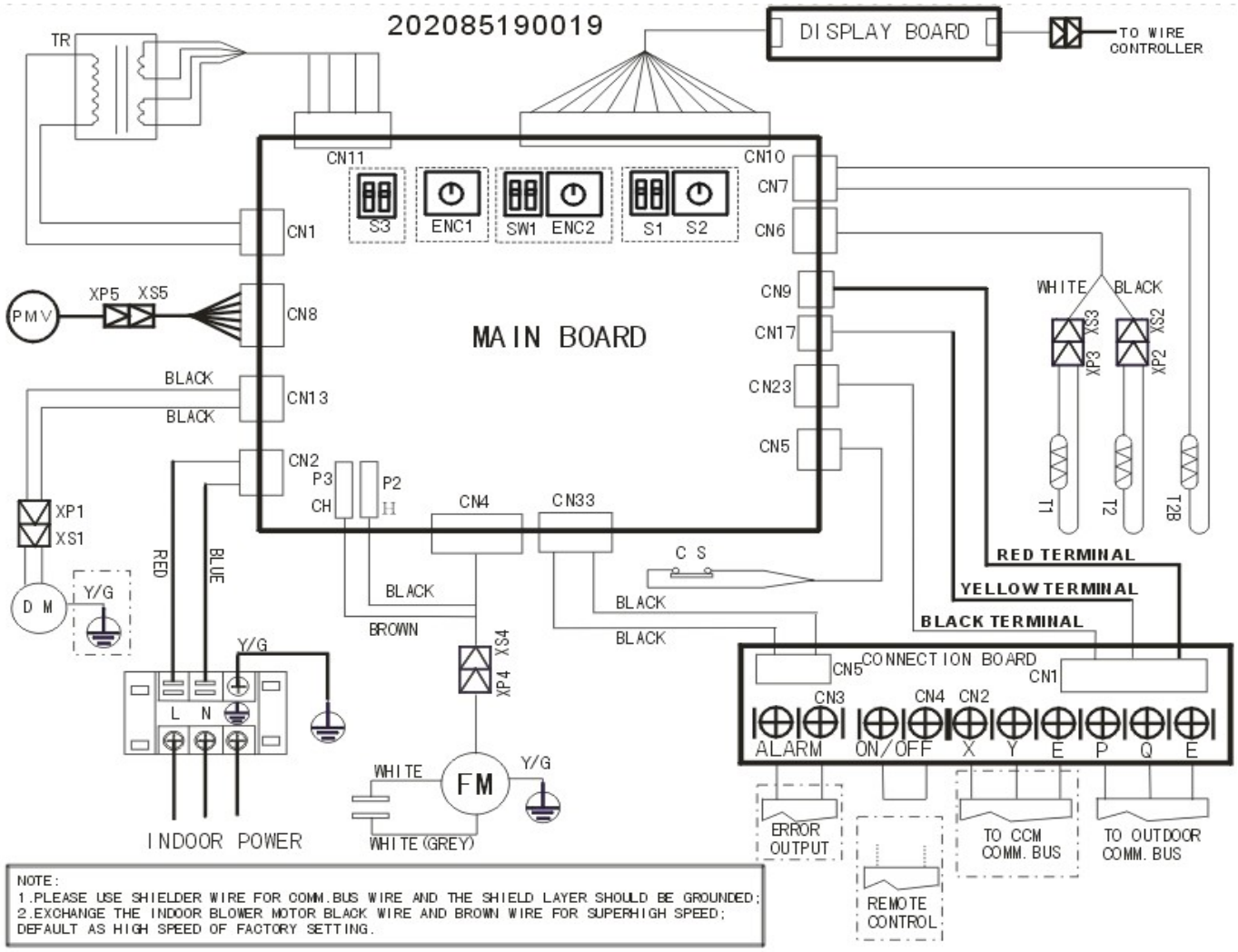
4. Service Space

Confirm that there is enough room for installation and maintenance.





5. Wiring Diagrams



CODE	TITLE
FM	FAN MOTOR
DM	PUMP MOTOR
CS	WATER LEVEL SWITCH
H/P2	HIGH FAN
CH/P3	SUPER HIGH FAN
T1	ROOM TEMP.
T2B	OUTER PIPE TEMP.
T2	MIDDLE PIPE TEMP.
XP1-5 XS1-5	CONNECTORS
TR	TRANSFORMER
PMV	PULSE MOTOR EXPANSION VALVE

FUNCTION OF SWITCH

SW1 ENC2	SWITCH	(FOR INDOOR UNIT ADDRESS)
'0~F' of the S2 and 'ON/OFF' of the S1 mean the addresses of the different units, respectively.		

S1 S2	SWITCH	(FOR COM UNIT ADDRESS)
'0~F' of the S2 and 'ON/OFF' of the S1 mean the addresses of the different units, respectively.		

SS	SWITCH	FOR TEMP. COMPENSATION			
STATE	ON	ON	ON	ON	
VALUE (℃)	3 (Default)	4	6	8	

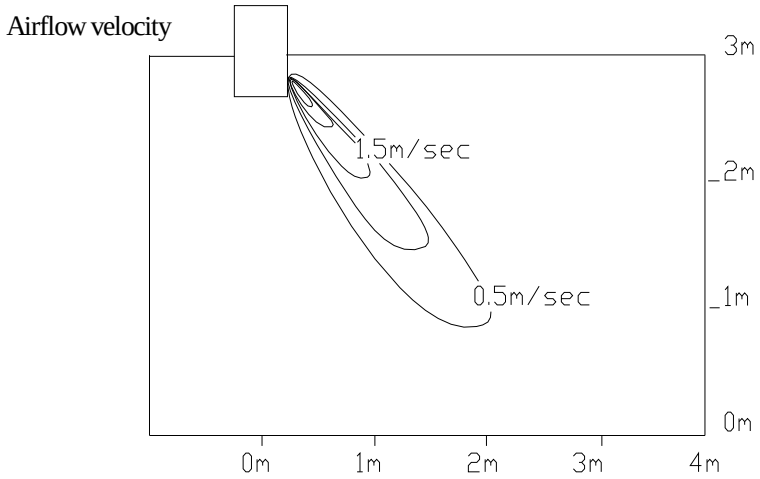
ENC1	SWITCH NUMBER	(FOR POWER) POWER
	0	2200W
	1	2800W
	2	3600W
	3	4500W
	4	5600W
	5	7100W
	6	8000W
	7	9000W
	8	11200W
	9	14000W

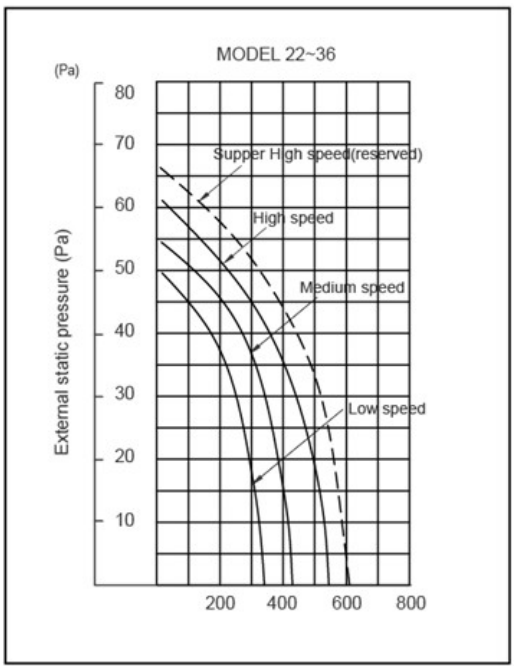
MALFUNCTION & PROTECTION REDIRECT

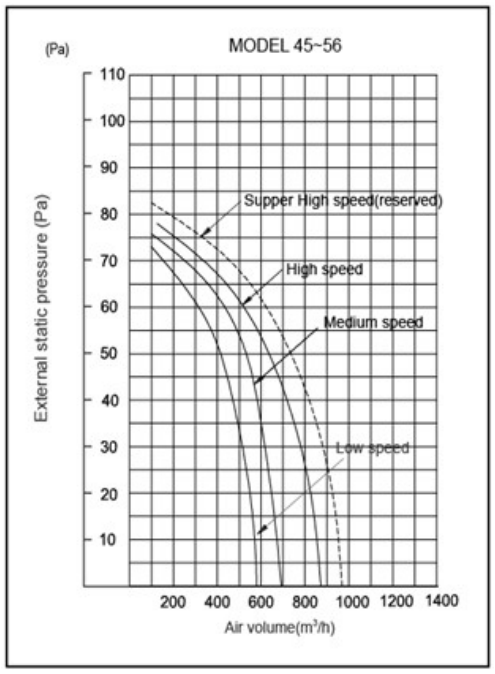
MALFUNCTION & PROTECTION DEFINE	LED1 OPERATION	LED2 TIMER	LED3 DEF.FAN	LED4 ALARM	DISPLAY DIGITAL TUBE
Collision mode malfunction			◎		E0
In-Outdoor unit COMM. Checking channel is abnormal		◎			E1
Room TEMP. sensor checking channel is abnormal	◎				E2
Pipe TEMP. Sensor checking channel is abnormal(T2)	◎				E3
Pipe TEMP. Sensor checking channel is abnormal(T2B)	◎				E4
EPPROM malfunction			◎	◎	E7
Water-level alarm malfunction				◎	EE
Outdoor malfunction				○	Ed
Be closed by the remote control function	○				CP
Avoid cold fan & Defrost	●		●		

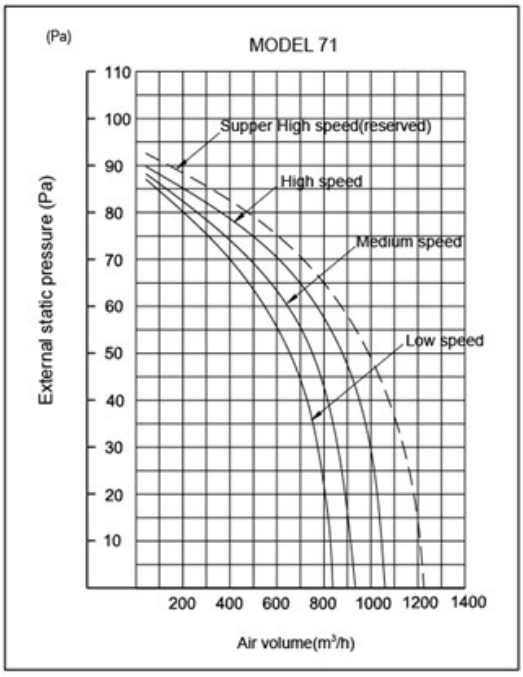
● Extinguish ◎ Flashing at 5HZ ○ Flashing at 1HZ

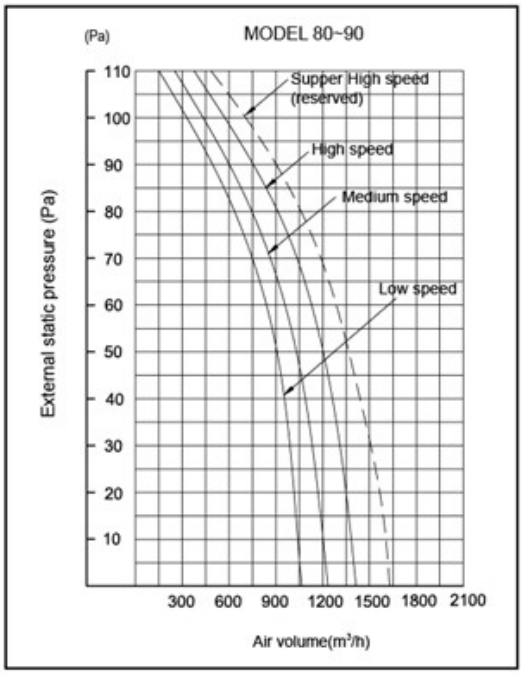
6. Air Velocity

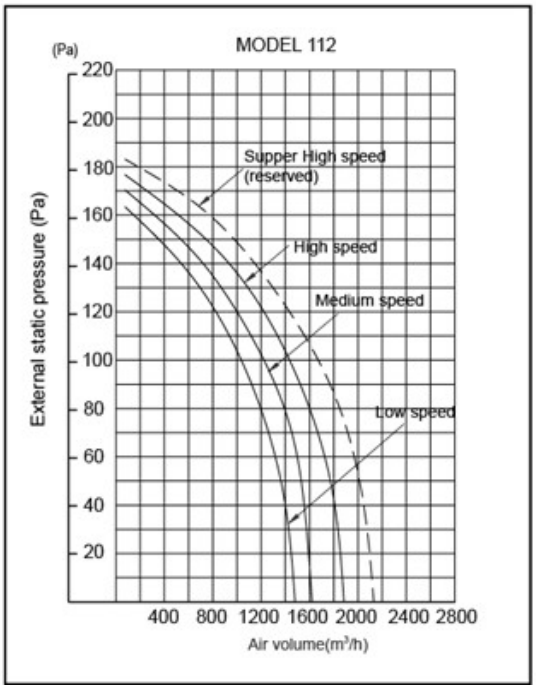


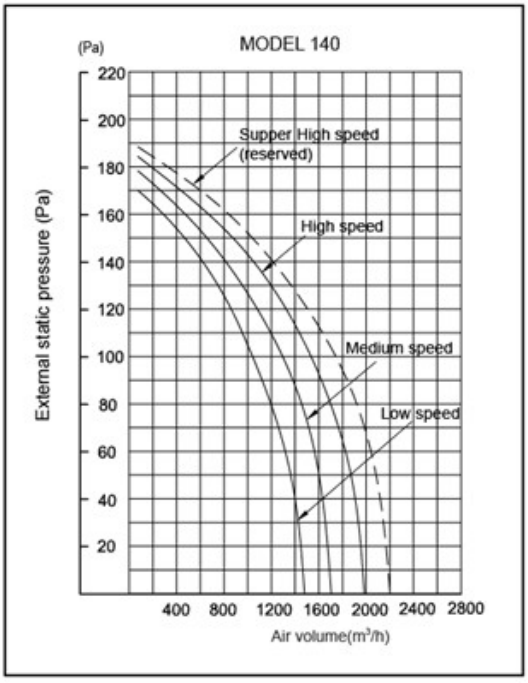









MODEL 112
(Pa)
220
200
180
160
140
120
100
80
60
40
20
External static pressure (Pa)
Supper High speed
(reserved)
High speed
Medium speed
Low speed
400 800 1200 1600 2000 2400 2800
Air volume(m³/h)


MODEL 140
(Pa)
220
200
180
160
140
120
100
80
60
40
20
External static pressure (Pa)
Supper High speed
(reserved)
High speed
Medium speed
Low speed
400 800 1200 1600 2000 2400 2800
Air volume(m³/h)

7. Capacity Tables

7.1 Cooling

TC: total capacity **SC**: sensible capacity **WB**: wet-bulb temperature **DB**: dry-bulb temperature

Indoor Unit size (kW)	Outdoor temperature (℃ DB)	Indoor temperature (℃ WB/DB)													
		14/20		16/23		18/26		19/27		20/28		22/30		24/32	
		TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
2.2	10.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.9	1.7
	12.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.8	1.6
	14.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.8	1.6
	16.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.8	1.6
	18.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.8	1.6
	20.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.7	1.5
	21.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.7	1.5
	23.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.5	1.6	2.7	1.5
	25.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.5	1.6	2.6	1.5
	27.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.5	1.6	2.6	1.5
	29.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.4	1.5	2.5	1.5
	31.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.4	1.5	2.5	1.5
	33.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.4	1.5	2.4	1.5
	35.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.3	1.5	2.4	1.5
	37.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.3	1.5	2.3	1.5
	39.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.2	1.6	2.3	1.5	2.3	1.5
2.8	10.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.7	2.1
	12.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.6	2.1
	14.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.6	2.1
	16.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.6	2.0
	18.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.5	2.0
	20.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.4	1.9
	21.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.4	1.9
	23.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.2	2.1	3.4	1.9
	25.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.2	2.0	3.3	1.9
	27.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.2	2.0	3.3	1.9
	29.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.1	2.0	3.2	1.9
	31.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.1	2.0	3.2	1.9
	33.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.1	2.0	3.1	2.0
	35.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.1	2.9	1.9	3.1	2.0
	37.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.1	2.9	1.9	2.9	1.9
	39.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.8	2.0	2.9	1.9	2.9	1.9
3.6	10.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.8	2.8
	12.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.6	2.7
	14.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.6	2.7
	16.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.5	2.7
	18.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.5	2.7
	20.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.4	2.7
	21.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.4	2.7

	23.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.4	2.7
	25.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.1	2.7	4.2	2.6
	27.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.1	2.7	4.2	2.6
	29.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.0	2.6	4.1	2.5
	31.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.0	2.6	4.1	2.4
	33.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.0	2.6	4.0	2.4
	35.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.7	2.6	3.9	2.6	4.0	2.4
	37.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.7	2.6	3.9	2.6	3.9	2.3
	39.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.7	2.6	3.9	2.7	3.9	2.4
4.5	10.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.9	3.4
	12.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.9	3.4
	14.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.8	3.3
	16.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.6	3.2
	18.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.6	3.2
	20.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.5	3.2
	21.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.4	3.1
	23.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.2	3.2	5.4	3.1
	25.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.2	3.2	5.3	3.0
	27.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.0	3.0	5.3	3.0
	29.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.0	3.0	5.1	2.9
	31.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.3	3.5	5.1	3.0
	33.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.3	3.5	4.9	2.9
	35.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.3	3.5	4.8	2.8
	37.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.6	3.2	4.8	3.1	4.8	2.9
	39.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.6	3.2	4.8	3.1	4.8	2.9
5.6	10.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.3	4.1
	12.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.3	4.1
	14.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.2	4.1
	16.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	6.9	4.0
	18.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.1	4.1
	20.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.1	4.1
	21.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.0	4.1
	23.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	6.9	4.0
	25.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.5	4.1	6.8	3.9
	27.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.4	4.0	6.5	3.8
	29.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.3	4.0	6.4	3.7
	31.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.2	3.9	6.3	3.7
	33.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.0	3.8	6.3	3.7
	35.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	5.9	3.7	6.2	3.6
	37.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	5.9	3.9	6.1	3.5
	39.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	5.7	3.8	5.8	3.8	6.0	3.5
7.1	10.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	9.2	4.9
	12.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	9.1	4.8
	14.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	9.0	4.8
	16.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	8.9	4.7
	18.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	8.7	4.7
	20.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	8.5	4.6

	21.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	8.4	4.5
	23.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	8.3	4.5
	25.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	8.2	4.4
	27.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.1	4.9	8.2	4.4
	29.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.0	4.8	8.1	4.5
	31.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	7.9	4.7	7.8	4.4
	33.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	7.8	4.7	7.8	4.4
	35.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	7.6	4.6	7.7	4.3
	37.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	7.5	4.5	7.6	4.3
	39.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.2	4.6	7.4	4.4	7.6	4.3
8.0	10.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	10.4	5.6
	12.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	10.2	5.5
	14.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	10.2	5.5
	16.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	10.0	5.4
	18.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	9.8	5.3
	20.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	9.6	5.2
	21.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	9.4	5.1
	23.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	9.4	5.1
	25.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	9.3	5.0
	27.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.1	5.3	9.2	5.1
	29.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.5	9.0	5.3	9.1	5.0
	31.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.5	8.9	5.2	8.8	4.8
	33.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.5	8.8	5.2	8.8	4.8
	35.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.5	8.6	5.1	8.6	4.8
	37.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.3	5.4	8.4	5.0	8.6	4.9
	39.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.1	5.3	8.3	5.0	8.6	4.9
9.0	10.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.6	6.6	11.7	6.6
	12.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.6	6.6	11.5	6.5
	14.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.6	6.6	11.4	6.4
	16.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.6	6.6	11.3	6.3
	18.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.6	6.6	11.0	6.3
	20.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.6	6.6	10.8	6.2
	21.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.6	6.6	10.6	6.1
	23.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.6	6.6	10.5	6.0
	25.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.6	6.6	10.4	6.0
	27.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.3	6.4	10.4	5.9
	29.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.1	6.2	10.3	5.8
	31.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.0	6.2	9.9	5.7
	33.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	9.9	6.1	9.9	5.7
	35.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.5	6.5	9.6	6.0	9.7	5.7
	37.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.3	6.3	9.5	5.9	9.6	5.8
	39.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.2	6.2	9.4	5.8	9.6	5.8
11.2	10.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	13.3	8.3	15.5	9.0
	12.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	13.3	8.3	14.4	8.4
	14.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	13.3	8.3	14.2	8.2
	16.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	13.3	8.3	14.1	8.2
	18.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	13.3	8.3	14.0	8.1

	20.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	13.3	8.3	13.9	8.1
	21.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	13.3	8.3	13.8	8.0
	23.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	13.1	8.1	13.7	7.9
	25.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	13.0	8.1	13.6	7.9
	27.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	12.9	8.0	13.4	7.8
	29.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	12.8	7.9	13.3	7.9
	31.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	12.7	7.8	12.8	7.5
	33.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	12.5	7.8	12.5	7.4
	35.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.8	8.0	12.4	7.7	12.3	7.3
	37.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.6	7.9	12.3	7.6	12.1	7.1
	39.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.4	7.8	12.2	7.6	11.9	7.1
14.0	10.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.7	10.2	18.2	10.2
	12.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.7	10.2	17.9	10.0
	14.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.7	10.2	17.8	10.0
	16.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.7	10.2	17.5	9.8
	18.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.7	10.2	17.1	9.6
	20.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.7	10.2	16.8	9.4
	21.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.7	10.2	16.5	9.3
	23.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.4	10.2	16.4	9.2
	25.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.2	10.1	16.2	9.1
	27.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.1	10.0	16.1	9.2
	29.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.0	9.9	16.0	9.1
	31.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	15.8	9.8	15.4	8.8
	33.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	15.7	9.7	15.4	8.8
	35.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.7	9.7	15.1	9.4	15.1	8.8
	37.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.6	9.6	15.1	9.4	15.0	8.7
	39.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.3	9.4	14.6	9.2	15.0	8.8

7.2 Heating

TC: total capacity **SC**: sensible capacity **WB**: wet-bulb temperature **DB**: dry-bulb temperature

Indoor Unit size (kW)	Outdoor temperature (℃)		Indoor temperature (℃ DB)					
			16	18	20	21	22	24
			TC	TC	TC	TC	TC	TC
	WB	DB	kW	kW	kW	kW	kW	kW
2.20	-15.00	-14.70	1.64	1.64	1.64	1.64	1.64	1.64
	-13.00	-12.60	1.74	1.74	1.74	1.74	1.74	1.74
	-11.00	-10.50	1.82	1.82	1.82	1.82	1.82	1.82
	-10.00	-9.50	1.90	1.90	1.90	1.90	1.90	1.90
	-9.10	-8.50	1.95	1.95	1.95	1.95	1.95	1.95
	-7.60	-7.00	1.98	1.98	1.98	1.98	1.98	1.98
	-5.60	-5.00	2.05	2.05	2.05	2.05	2.05	2.05
	-3.70	-3.00	2.16	2.16	2.16	2.16	2.16	2.16
	-0.70	0.00	2.31	2.31	2.31	2.31	2.31	2.18
	2.20	3.00	2.44	2.44	2.44	2.44	2.39	2.18
	4.10	5.00	2.52	2.52	2.52	2.52	2.39	2.18
	6.00	7.00	2.60	2.60	2.60	2.52	2.39	2.18
	7.90	9.00	2.68	2.68	2.60	2.52	2.39	2.18
	9.80	11.00	2.76	2.76	2.60	2.52	2.39	2.18
	11.80	13.00	2.86	2.81	2.60	2.52	2.39	2.18
	13.70	15.00	2.94	2.81	2.60	2.52	2.39	2.18
2.80	-15.00	-14.70	2.02	2.02	2.02	2.02	2.02	2.02
	-13.00	-12.60	2.14	2.14	2.14	2.14	2.14	2.14
	-11.00	-10.50	2.24	2.24	2.24	2.24	2.24	2.24
	-10.00	-9.50	2.34	2.34	2.34	2.34	2.34	2.34
	-9.10	-8.50	2.40	2.40	2.40	2.40	2.40	2.40
	-7.60	-7.00	2.43	2.43	2.43	2.43	2.43	2.43
	-5.60	-5.00	2.53	2.53	2.53	2.53	2.53	2.53
	-3.70	-3.00	2.66	2.66	2.66	2.66	2.66	2.66
	-0.70	0.00	2.85	2.85	2.85	2.85	2.85	2.69
	2.20	3.00	3.01	3.01	3.01	3.01	2.94	2.69
	4.10	5.00	3.10	3.10	3.10	3.10	2.94	2.69
	6.00	7.00	3.20	3.20	3.20	3.10	2.94	2.69
	7.90	9.00	3.30	3.30	3.20	3.10	2.94	2.69
	9.80	11.00	3.39	3.39	3.20	3.10	2.94	2.69
	11.80	13.00	3.52	3.46	3.20	3.10	2.94	2.69
	13.70	15.00	3.62	3.46	3.20	3.10	2.94	2.69
3.60	-15.00	-14.70	2.52	2.52	2.52	2.52	2.52	2.52
	-13.00	-12.60	2.68	2.68	2.68	2.68	2.68	2.68
	-11.00	-10.50	2.80	2.80	2.80	2.80	2.80	2.80
	-10.00	-9.50	2.92	2.92	2.92	2.92	2.92	2.92
	-9.10	-8.50	3.00	3.00	3.00	3.00	3.00	3.00
	-7.60	-7.00	3.04	3.04	3.04	3.04	3.04	3.04
	-5.60	-5.00	3.16	3.16	3.16	3.16	3.16	3.16
	-3.70	-3.00	3.32	3.32	3.32	3.32	3.32	3.32
	-0.70	0.00	3.56	3.56	3.56	3.56	3.56	3.36

	2.20	3.00	3.76	3.76	3.76	3.76	3.68	3.36
	4.10	5.00	3.88	3.88	3.88	3.88	3.68	3.36
	6.00	7.00	4.00	4.00	4.00	3.88	3.68	3.36
	7.90	9.00	4.12	4.12	4.00	3.88	3.68	3.36
	9.80	11.00	4.24	4.24	4.00	3.88	3.68	3.36
	11.80	13.00	4.40	4.32	4.00	3.88	3.68	3.36
	13.70	15.00	4.52	4.32	4.00	3.88	3.68	3.36
4.50	-15.00	-14.70	3.15	3.15	3.15	3.15	3.15	3.15
	-13.00	-12.60	3.35	3.35	3.35	3.35	3.35	3.35
	-11.00	-10.50	3.50	3.50	3.50	3.50	3.50	3.50
	-10.00	-9.50	3.65	3.65	3.65	3.65	3.65	3.65
	-9.10	-8.50	3.75	3.75	3.75	3.75	3.75	3.75
	-7.60	-7.00	3.80	3.80	3.80	3.80	3.80	3.80
	-5.60	-5.00	3.95	3.95	3.95	3.95	3.95	3.95
	-3.70	-3.00	4.15	4.15	4.15	4.15	4.15	4.15
	-0.70	0.00	4.45	4.45	4.45	4.45	4.45	4.20
	2.20	3.00	4.70	4.70	4.70	4.70	4.60	4.20
	4.10	5.00	4.85	4.85	4.85	4.85	4.60	4.20
	6.00	7.00	5.00	5.00	5.00	4.85	4.60	4.20
	7.90	9.00	5.15	5.15	5.00	4.85	4.60	4.20
	9.80	11.00	5.30	5.30	5.00	4.85	4.60	4.20
	11.80	13.00	5.50	5.40	5.00	4.85	4.60	4.20
	13.70	15.00	5.65	5.40	5.00	4.85	4.60	4.20
5.6	-15.00	-14.70	3.97	3.97	3.97	3.97	3.97	3.97
	-13.00	-12.60	4.22	4.22	4.22	4.22	4.22	4.22
	-11.00	-10.50	4.41	4.41	4.41	4.41	4.41	4.41
	-10.00	-9.50	4.60	4.60	4.60	4.60	4.60	4.60
	-9.10	-8.50	4.73	4.73	4.73	4.73	4.73	4.73
	-7.60	-7.00	4.79	4.79	4.79	4.79	4.79	4.79
	-5.60	-5.00	4.98	4.98	4.98	4.98	4.98	4.98
	-3.70	-3.00	5.23	5.23	5.23	5.23	5.23	5.23
	-0.70	0.00	5.61	5.61	5.61	5.61	5.61	5.29
	2.20	3.00	5.92	5.92	5.92	5.92	5.80	5.29
	4.10	5.00	6.11	6.11	6.11	6.11	5.80	5.29
	6.00	7.00	6.30	6.30	6.30	6.11	5.80	5.29
	7.90	9.00	6.49	6.49	6.30	6.11	5.80	5.29
	9.80	11.00	6.68	6.68	6.30	6.11	5.80	5.29
	11.80	13.00	6.93	6.80	6.30	6.11	5.80	5.29
	13.70	15.00	7.12	6.80	6.30	6.11	5.80	5.29
7.1	-15.00	-14.70	5.04	5.04	5.04	5.04	5.04	5.04
	-13.00	-12.60	5.36	5.36	5.36	5.36	5.36	5.36
	-11.00	-10.50	5.60	5.60	5.60	5.60	5.60	5.60
	-10.00	-9.50	5.84	5.84	5.84	5.84	5.84	5.84
	-9.10	-8.50	6.00	6.00	6.00	6.00	6.00	6.00
	-7.60	-7.00	6.08	6.08	6.08	6.08	6.08	6.08
	-5.60	-5.00	6.32	6.32	6.32	6.32	6.32	6.32
	-3.70	-3.00	6.64	6.64	6.64	6.64	6.64	6.64

	-0.70	0.00	7.12	7.12	7.12	7.12	7.12	6.72
	2.20	3.00	7.52	7.52	7.52	7.52	7.36	6.72
	4.10	5.00	7.76	7.76	7.76	7.76	7.36	6.72
	6.00	7.00	8.00	8.00	8.00	7.76	7.36	6.72
	7.90	9.00	8.24	8.24	8.00	7.76	7.36	6.72
	9.80	11.00	8.48	8.48	8.00	7.76	7.36	6.72
	11.80	13.00	8.80	8.64	8.00	7.76	7.36	6.72
	13.70	15.00	9.04	8.64	8.00	7.76	7.36	6.72
8.0	-15	-14.7	5.67	5.67	5.67	5.67	5.67	5.67
	-13	-12.6	6.03	6.03	6.03	6.03	6.03	6.03
	-11	-10.5	6.30	6.30	6.30	6.30	6.30	6.30
	-10	-9.5	6.57	6.57	6.57	6.57	6.57	6.57
	-9.1	-8.5	6.75	6.75	6.75	6.75	6.75	6.75
	-7.6	-7	6.84	6.84	6.84	6.84	6.84	6.84
	-5.6	-5	7.11	7.11	7.11	7.11	7.11	7.11
	-3.7	-3	7.47	7.47	7.47	7.47	7.47	7.47
	-0.7	0	8.01	8.01	8.01	8.01	8.01	7.56
	2.2	3	8.46	8.46	8.46	8.46	8.28	7.56
	4.1	5	8.73	8.73	8.73	8.73	8.28	7.56
	6	7	9.00	9.00	9.00	8.73	8.28	7.56
	7.9	9	9.27	9.27	9.00	8.73	8.28	7.56
	9.8	11	9.54	9.54	9.00	8.73	8.28	7.56
	11.8	13	9.90	9.72	9.00	8.73	8.28	7.56
	13.7	15	10.17	9.72	9.00	8.73	8.28	7.56
9.0	-15	-14.7	6.30	6.30	6.30	6.30	6.30	6.30
	-13	-12.6	6.70	6.70	6.70	6.70	6.70	6.70
	-11	-10.5	7.00	7.00	7.00	7.00	7.00	7.00
	-10	-9.5	7.30	7.30	7.30	7.30	7.30	7.30
	-9.1	-8.5	7.50	7.50	7.50	7.50	7.50	7.50
	-7.6	-7	7.60	7.60	7.60	7.60	7.60	7.60
	-5.6	-5	7.90	7.90	7.90	7.90	7.90	7.90
	-3.7	-3	8.30	8.30	8.30	8.30	8.30	8.30
	-0.7	0	8.90	8.90	8.90	8.90	8.90	8.40
	2.2	3	9.40	9.40	9.40	9.40	9.20	8.40
	4.1	5	9.70	9.70	9.70	9.70	9.20	8.40
	6	7	10.00	10.00	10.00	9.70	9.20	8.40
	7.9	9	10.30	10.30	10.00	9.70	9.20	8.40
	9.8	11	10.60	10.60	10.00	9.70	9.20	8.40
	11.8	13	11.00	10.80	10.00	9.70	9.20	8.40
	13.7	15	11.30	10.80	10.00	9.70	9.20	8.40
11.2	-15	-14.7	7.88	7.88	7.88	7.88	7.88	7.88
	-13	-12.6	8.38	8.38	8.38	8.38	8.38	8.38
	-11	-10.5	8.75	8.75	8.75	8.75	8.75	8.75
	-10	-9.5	9.13	9.13	9.13	9.13	9.13	9.13
	-9.1	-8.5	9.38	9.38	9.38	9.38	9.38	9.38
	-7.6	-7	9.50	9.50	9.50	9.50	9.50	9.50
	-5.6	-5	9.88	9.88	9.88	9.88	9.88	9.88

	-3.7	-3	10.38	10.38	10.38	10.38	10.38	10.38
	-0.7	0	11.13	11.13	11.13	11.13	11.13	10.50
	2.2	3	11.75	11.75	11.75	11.75	11.50	10.50
	4.1	5	12.13	12.13	12.13	12.13	11.50	10.50
	6	7	12.50	12.50	12.50	12.13	11.50	10.50
	7.9	9	12.88	12.88	12.50	12.13	11.50	10.50
	9.8	11	13.25	13.25	12.50	12.13	11.50	10.50
	11.8	13	13.75	13.50	12.50	12.13	11.50	10.50
	13.7	15	14.13	13.50	12.50	12.13	11.50	10.50
14.0	-15	-14.7	9.77	9.77	9.77	9.77	9.77	9.77
	-13	-12.6	10.39	10.39	10.39	10.39	10.39	10.39
	-11	-10.5	10.85	10.85	10.85	10.85	10.85	10.85
	-10	-9.5	11.32	11.32	11.32	11.32	11.32	11.32
	-9.1	-8.5	11.63	11.63	11.63	11.63	11.63	11.63
	-7.6	-7	11.78	11.78	11.78	11.78	11.78	11.78
	-5.6	-5	12.25	12.25	12.25	12.25	12.25	12.25
	-3.7	-3	12.87	12.87	12.87	12.87	12.87	12.87
	-0.7	0	13.80	13.80	13.80	13.80	13.80	13.02
	2.2	3	14.57	14.57	14.57	14.57	14.26	13.02
	4.1	5	15.04	15.04	15.04	15.04	14.26	13.02
	6	7	15.50	15.50	15.50	15.04	14.26	13.02
	7.9	9	15.97	15.97	15.50	15.04	14.26	13.02
	9.8	11	16.43	16.43	15.50	15.04	14.26	13.02
	11.8	13	17.05	16.74	15.50	15.04	14.26	13.02
	13.7	15	17.52	16.74	15.50	15.04	14.26	13.02

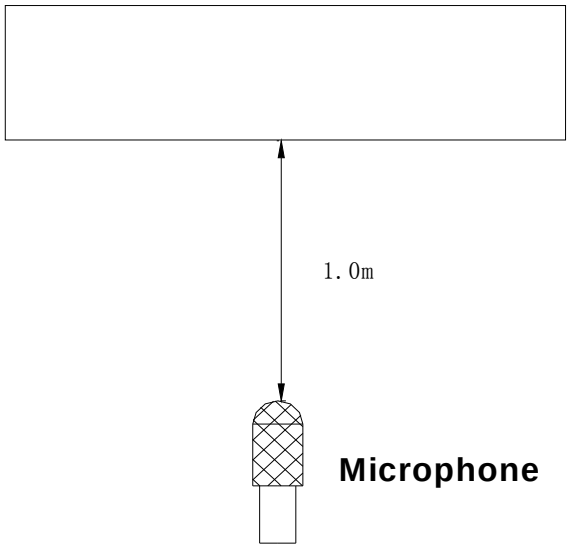
8. Electric Characteristics

Model	Factory model	Indoor Unit				Power Supply		IFM	
		Hz	Voltage	Min.	Max.	MCA	MFA	KW	FLA
MDVi-D22T2/N1-A5	**CE-MDVD22T2/N1X-A5**	**50**	**220-240**	**198**	**264**	**0.28**	**15**	**0.027**	**0.28**
MDVi-D28T2/N1-A5	CE-MDVD28T2/N1X-A5	50	220-240	198	264	0.28	15	0.027	0.28
MDVi-D36T2/N1-A5	CE-MDVD36T2/N1X-A5	50	220-240	198	264	0.28	15	0.027	0.28
MDVi-D45T2/N1-A5	CE-MDVD45T2/N1X-A5	50	220-240	198	264	0.6	15	0.107	0.48
MDVi-D56T2/N1-A5	CE-MDVD56T2/N1X-A5	50	220-240	198	264	0.6	15	0.107	0.48
MDVi-D71T2/N1-A5	CE-MDVD71T3/N1X-A5	50	220-240	198	264	0.92	15	0.163	0.73
MDVi-D80T2/N1-A5	CE-MDVD80T3/N1X-A5	50	220-240	198	264	1.25	15	0.227	1
MDVi-D90T2/N1-A5	CE-MDVD90T3/N1X-A5	50	220-240	198	264	1.25	15	0.227	1
MDVi-D112T2/N1-A5	CE-MDVD112T3/N1X-A5	50	220-240	198	264	1.9	15	0.393	1.51
MDVi-D140T2/N1-A5	CE-MDVD140T2/N1X-A5	50	220-240	198	264	2	15	0.355	1.55

Remark:
MCA: Min. Current Amps. (A)
MFA: Max. Fuse Amps. (A)
KW: Fan Motor Rated Output (kW)
FLA: Full Load Amps. (A)
IFM: Indoor Fan Motor

9. Sound Levels

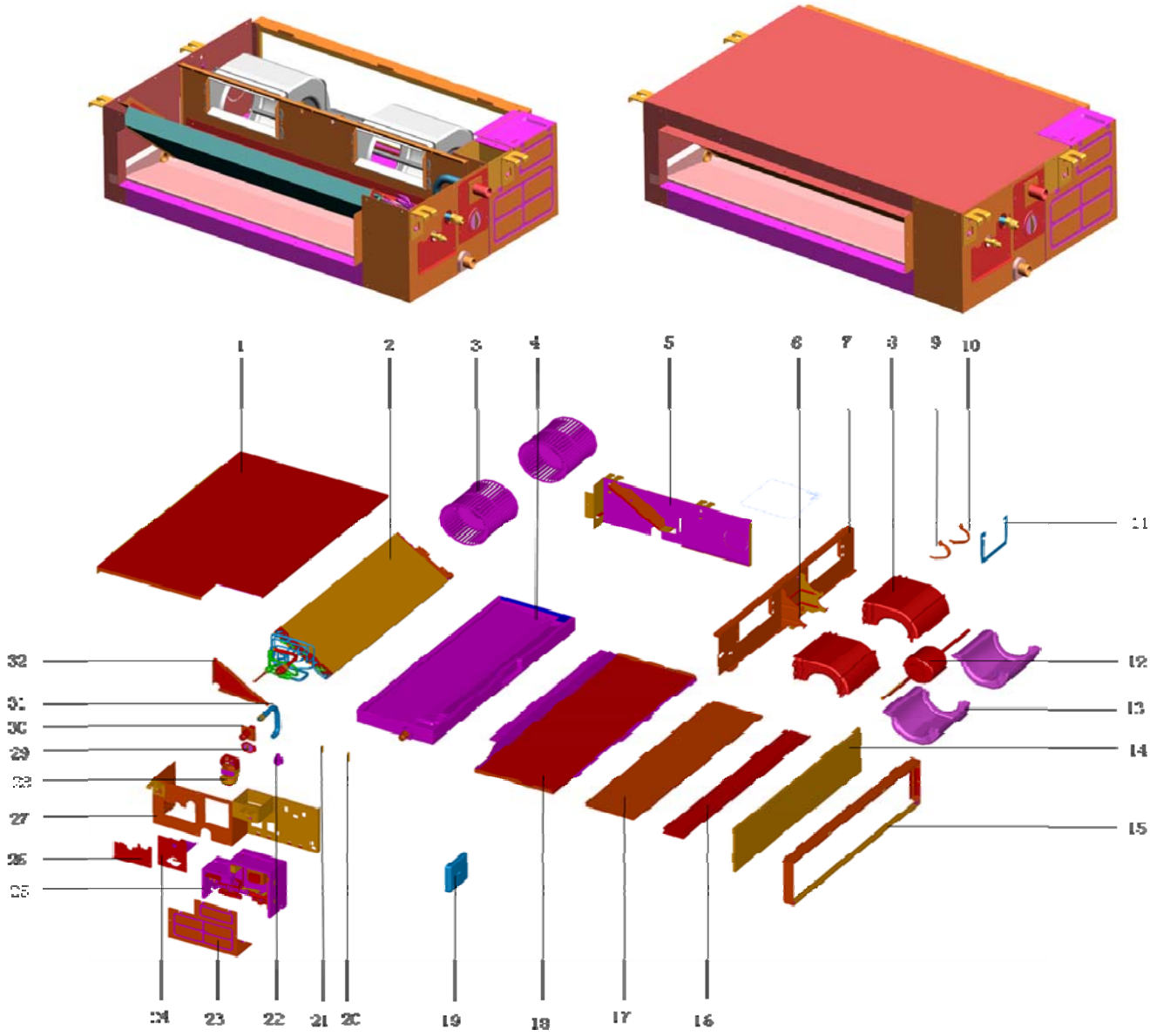
Low Static Pressure Duct Type

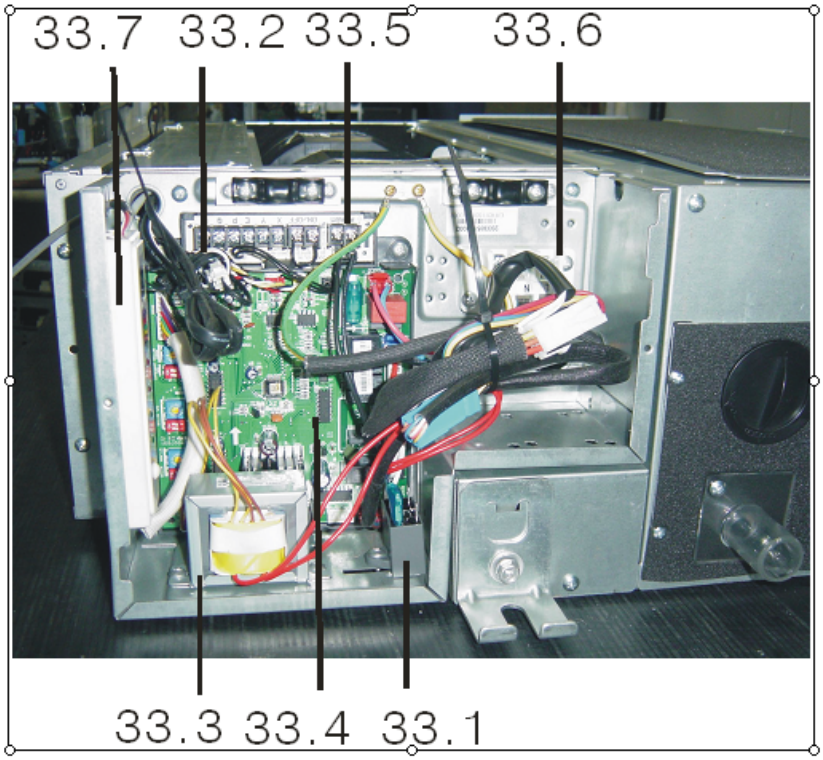


Model	Noise test value dB(A)		
	Hi	Mid	Low
MDVi-D22T2/N1-A5	38	35	32
MDVi-D28T2/N1-A5	38	35	32
MDVi-D36T2/N1-A5	40	38	36
MDVi-D45T2/N1-A5	41	38.9	36
MDVi-D56T2/N1-A5	41	38.9	36
MDVi-D71T2/N1-A5	43.4	40	36
MDVi-D80T2/N1-A5	45.4	39.8	37
MDVi-D90T2/N1-A5	45.4	39.8	37
MDVi-D112T2/N1-A5	48.0	41.9	38
MDVi-D140T2/N1-A5	47.7	43.2	39.0

10. Exploded View

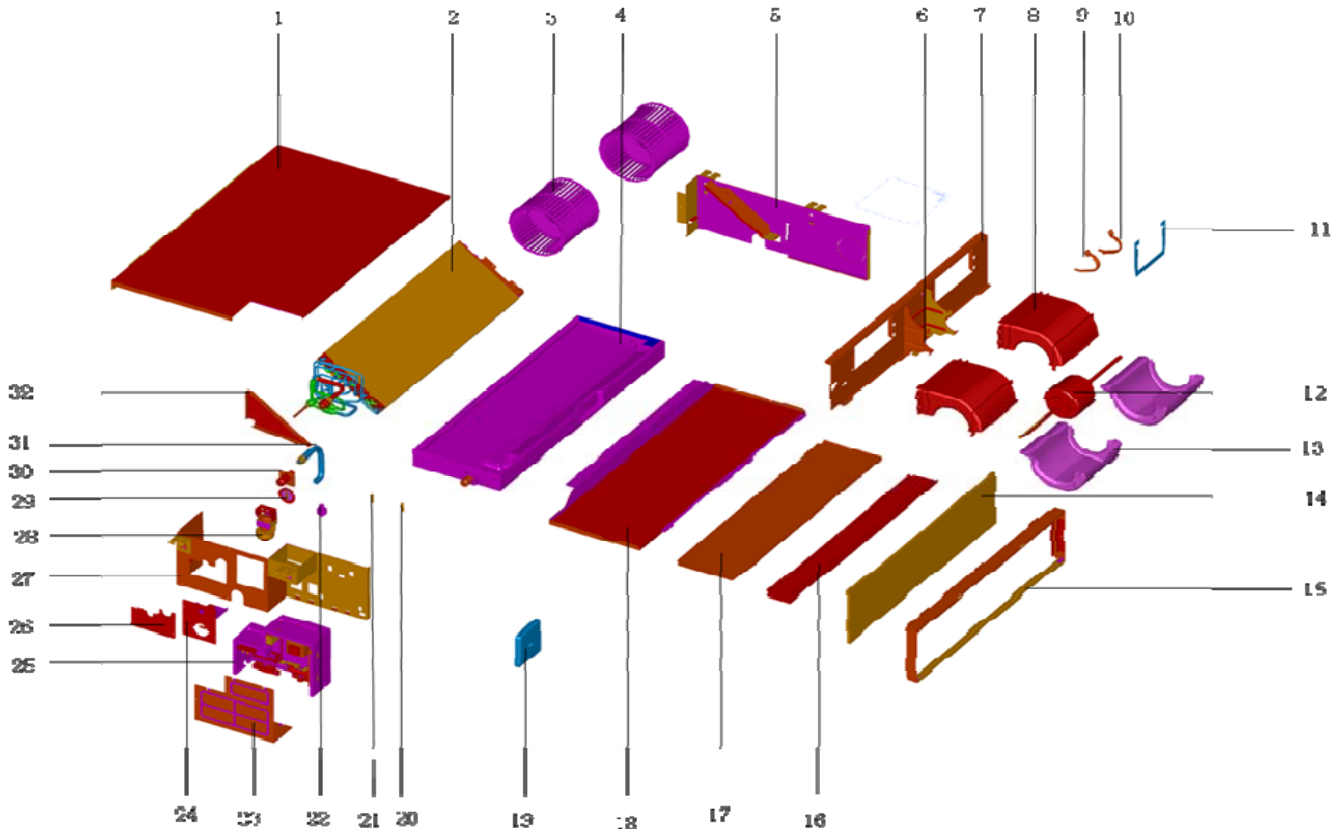
10.1MDVi-D22T2/N1-A5 MDVi-D28T 2/N1-A5 MDVi-D36T2/N1-A5





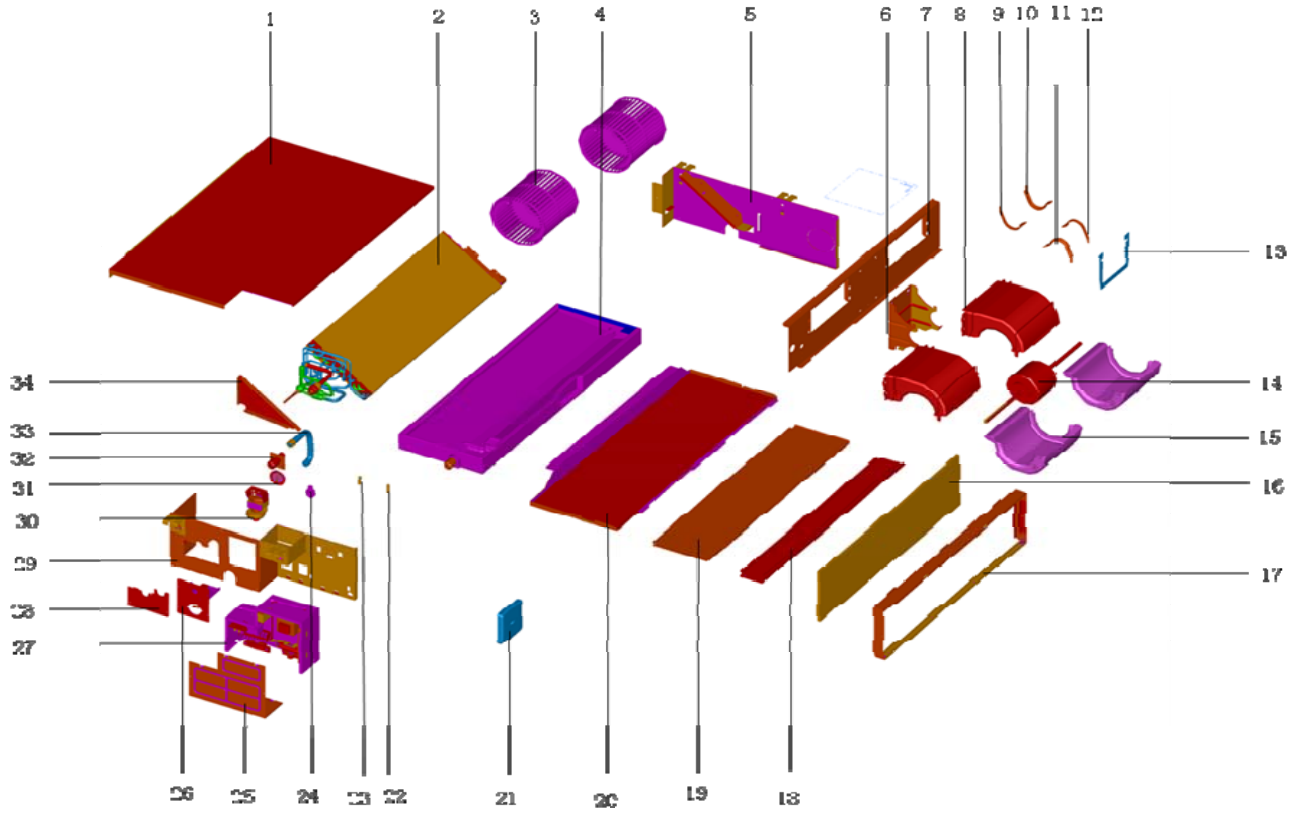
No.	Part Name	Qty	BOM Code	N0.	Part Name	Qty	Bom Code
1	base pan assembly	1	201285190001	21	Temp.sensor ass'y	1	202301300442
2	evaporator assembly	1	201585090033	22	Water level sensor ass'y	1	202301310051
3	centrifugal fan	2	201100100809	23	electric box cover	1	201270290015
4	drip tray assembly	1	202285090001	24	water remove pump supporter	1	201270290039
5	leftside plate subassembly	1	201270290032	26	Pipe fix board	1	201270290014
6	motor mounting bracket	1	201270290028	27	right panel assembly	1	201270290031
7	middle transom subassembly	1	201285190002	28	Drain pump	1	202400600005
8	above scroll	2	201185190001	29	Water cover ass'y	1	201170290006
9	Motor clamp	1	201280200005	30	Connecting pipe	1	201101030002
10	Motor clamp	1	201280200006	31	Connecting pipe	1	202770290001
11	Motor barrier	1	201285090016	32	evaporator right supporter assembly	1	201270290034
12	fan motor	1	202400400237	33	electronic control box assembly	1	203385090506
13	bottom scroll	2	201185190002	33.1	Motor capacitor	1	202401190047
14	filter	1	201185190003	33.2	Room temp sensor ass'y	1	202301310083
15	flange subassembly	1	201285190005	33.3	Transformer	1	202300900204
16	rear transom subassembly	1	201285190003	33.4	main control board	1	201385190002
17	rear cover subassembly	1	201285190004	33.5	Wire Connection Board	1	201370390017
18	top cover subassembly	1	201285190006	33.6	Wire joint	1	202301450116
19	Wire controller	1	203355190000	33.7	display box subassembly	1	203385190001
20	Temperature sensor	1	202301300303				

10.2MDVi-D45T2/N1-A5 MDVi-D56T2/N1-A5 MDVi-D71T2/N1-A5



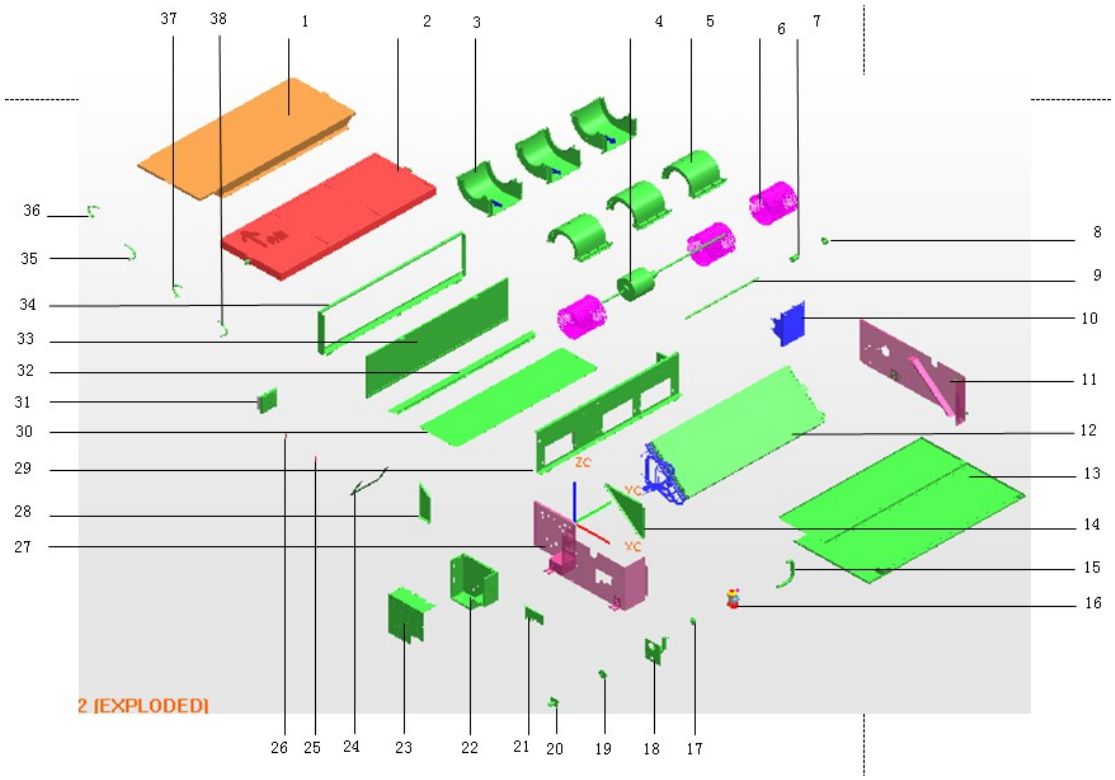
No.	Part Name	Qty	BOM Code	N0.	Part Name	Qty	Bom Code
1	base pan assembly	1	201270290030	21	Temp.sensor ass'y	1	202301300442
2	evaporator assembly	1	201585290003	22	Water level sensor ass'y	1	202301310051
3	centrifugal fan	2	20118C000000	23	electric box cover	1	201270290015
4	drip tray assembly	1	202270290001	24	water remove pump supporter	1	201270290039
5	leftside plate subassembly	1	201270290032	25	electric box subassembly	1	203385290005
6	motor mounting bracket	1	201270290028	25.1	Wire joint	1	202301450116
7	middle transom subassembly	1	201270290033	25.2	Transformer	1	202300900204
8	above scroll	2	201170290008	25.3	main control board	1	201385190002
9	Motor clamp	1	201280200005	25.4	electric box weld component	1	201270290011
10	Motor clamp	1	201280200006	25.5	Installation Board of PCB	1	201170290001
11	Motor barrier	1	201280200007	25.6	display box subassembly	1	203385190001
12	fan motor	1	202400400288	25.7	Wire Connection Board	1	201370390017
13	bottom scroll	2	201170290007	25.8	Motor capacitor	1	202401100354
14	filter	1	201170290012	26	Pipe fix board	1	201270290014
15	flange subassembly	1	201270290038	27	right panel assembly	1	201270290031
16	rear transom subassembly	1	201270290036	28	Drain pump	1	202400600005
17	rear cover subassembly	1	201270290037	29	Water cover ass'y	1	201170290006
18	top cover subassembly	1	201270290035	30	Connecting pipe	1	201101030002
19	Wire controller	1	203355190000	31	drainage pipe	1	202770290001
20	Temperature sensor	1	202301300303	32	evaporator right supporter assembly	1	201270290034

10.3MDVi-D80T2/N1-A5 MDVi-D90T2/N1-A5 MDVi-D112T2/N1-A5



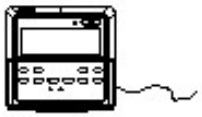
No.	Part Name	Qty	BOM Code	N0.	Part Name	Qty	Bom Code
1	base pan assembly	1	201270590177	21	Wire controller	1	203355190000
2	evaporator assembly	1	201585590004	22	Temperature sensor	1	202301300303
3	centrifugal fan	2	201100100807	23	Temp.sensor ass'y	1	202301300442
4	drip tray assembly	1	202270590001	24	Water level sensor ass'y	1	202301310051
5	leftside plate subassembly	1	201270590179	25	electric box cover	1	201270590100
6	motor mounting bracket	1	201285700005	26	water remove pump supporter	1	201270290039
7	middle transom subassembly	1	201270590180	27	electric box subassembly	1	203385590002
8	above scroll	2	201170590004	27.1	Wire joint	1	201385190002
9	Motor clamp	1	201286000052	27.2	Transformer	1	201370390017
10	Motor clamp	1	201286000053	27.3	main control board	1	202300320025
11	Motor clamp	1	201286000007	27.4	electric box weld component	1	201270590113
12	Motor clamp	1	201286000008	27.5	Installation Board of PCB	1	201170290001
13	Motor barrier	1	201286000009	27.6	display box subassembly	1	202301450116
14	fan motor	1	202400400922	27.7	Wire Connection Board	1	202300900204
15	bottom scroll	2	201170590003	27.8	Motor capacitor	1	203385190001
16	filter	1	201170590006	28	Pipe fix board	1	201270290014
17	flange subassembly	1	201270590185	29	right panel assembly	1	201270590176
18	rear transom subassembly	1	201270590183	30	Drain pump	1	202400600005
19	rear cover subassembly	1	201270590184	31	Water cover ass'y	1	201170290006
20	top cover subassembly	1	201270590182	32	Connecting pipe	1	201101030002
				33	Drainage pipe	1	202770290001
				34	evaporator right supporter assembly	1	201270590181

10.4MDVi-D140T2/N1-A5



No.	Part Name	Qty	Bom code	No.	Part Name	Qty	Bom code
1	Top cover ass`y	1	201270790135	22.2	Wire Connection Board	1	201370390017
2	Drainage pan ass'y	1	202270790001	22.3	Capacitor	1	202300320025
3	Volute shell	3	201170590004	22.4	E-part box	1	201270590113
4	Fan motor	1	202400400193	22.5	Installation Board of PCB	1	201170290001
5	Volute shell	3	201170590003	22.6	Wire joint	1	202301450116
6	Centrifugal fun	3	201100100807	22.7	Transformer	1	202300900204
7	Coupling	1	202984400001	22.8	Display board	1	203385190001
8	axletree	1	202732400001	23	E-Part box cover	1	201270590100
9	Connecting shaft	1	202501180006	24	Board	1	201286000009
10	Motor clamp	1	201285700005	25	Temperature sensor	1	202301300303
11	Left-board ass`y	1	201270790131	26	Temp.sensor ass'y	1	202301300442
12	Evaporator ass`y	1	201585790003	27	Right board	1	201270790130
13	Bottom board ass`y	1	201270790129	28	Filter	1	201270790042
14	Evaporator right clamp	1	201270790134	29	Middle crossbar	1	201270790133
15	Connecting pipe	1	202770290001	30	Back board	1	201270790136
16	Drain pump	1	202400600005	31	Wire controller	1	203355190000
17	Water level sensor ass'y	1	202301310051	32	Back crossbar	1	201270790139
18	Drain pump support	1	201270290039	33	Filter	1	201170790007
19	Water cover ass'y	1	201170290006	34	Flange ass`y	1	201270790137
20	Connecting pipe	1	201101030002	35	Motor up cover	1	201286000007
21	Pipe fix board	1	201270290014	36	Motor up cover	1	201286000008
22	electric control box	1	203385590002	37	Motor below cover	1	201286000052
22.1	main control board	1	201385190002	38	Motor below cover	1	201286000053

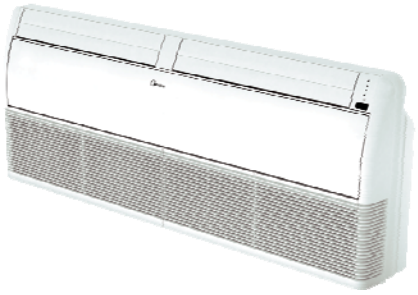
11. Accessories

Name of Accessories	Q'ty	Outline	Usage
Installation manual	1	(This manual)	———
KJR-10B Wire controller	1		Remote control the air-conditioner
Pipe insulation material	2		Heat insulation
Adhesive tape for seal	1		To connect drain pipe

Ceiling & Floor Type

1.Features

1.1. New design, more modern and elegant appearance.



1.2. Convenient installation

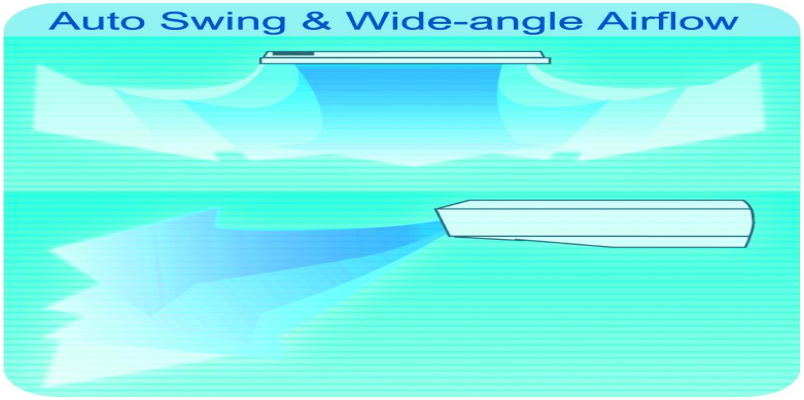
The ceiling type can be easily installed into a corner of the ceiling even if the ceiling is very narrow

It is especially useful when installation of an air conditioner in the center of the ceiling is impossible due to a structure such as one lighting

1.3. Two direction auto swing (vertical & horizontal) and wide angle air flow

Air flow directional control minimizes the air resistance and produces wilder air flow to vertical direction.

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



1.4. Three level fan speed, more humanism design, meets different air-supply requirement.

1.5. Water proof by utilizing the absorbing plastic film on water collector

1.6. Easy operation. Auto-restart function, remote control and optional wire control method.

1.7. Low noise level plus compact size

--Shape of the blades has been improved to prevent noise caused by turbulence.

2.Specifications

Sale Model			MDVi-D36DL/N1-B	MDVi-D45DL/N1-B	MDVi-D56DL/N1-B
Power supply		V-ph-Hz	220~240-1-50	220~240-1-50	220~240-1-50
Cooling	Capacity	kW	3.6	4.5	5.6
	Input	W	120	120	122
	Rated current	A	0.55	0.55	0.55
Heating	Capacity	kW	4.0	5.0	6.3
	Input	W	120	120	122
	Rated current	A	0.55	0.55	0.55
Indoor fan motor	Model		YSK25-6L	YSK55-4L	YSK55-4L
	Type		Ac Motor	Ac Motor	Ac Motor
	Brand		Welling	Welling	Welling
	Input	w	33.4/31.1/29.5	125/105/85	125/105/85
	Capacitor	uF	1.2	2	2.5
	Speed(hi/mi/lo)	r/min	756/666/592	1310/1190/1040	1310/1190/1040
Indoor coil	Number of rows		2	3	3
	Tube pitch(a)x row pitch(b)	mm	25.4x22	25.4x22	25.4x22
	Fin spacing	mm	1.8	1.8	1.8
	Fin type (code)		Hydrophilic aluminum		
	Tube outside dia. and type	mm	Φ9.5	Φ9.5	Φ9.5
			Inner groove tube		
	Coil length x height x width	mm	804x44 x254	804x66 x254	804x66 x254
	Number of circuits		3	3	3
Indoor air flow (Hi/Mi/Lo)		m^3/h	650/570/500	800/600/500	800/600/500
Sound level (sound pressure)		dB(A)	40/38/36	43/41/38	43/41/38
Indoor unit	Dimension (W x H x D)	mm	990x660x206	990x660x206	990x660x206
	Packing (W x H x D)	mm	1089x744x296	1089x744x296	1089x744x296
	Net/Gross weight	kg	29/35	29/35	29/35
Refrigerant	Type		R410A	R410A	R410A
Design pressure		MPa	4.2/2.0	4.2/2.0	4.2/2.0
Refrigerant piping	Liquid side/ Gas side	mm	Φ6.4/Φ12.7	Φ6.4/Φ12.7	Φ9.5/Φ15.9
Connection wiring	Power wiring	$Nb\times mm^2$	3×2.5(L≤20m); 3×3.5(L≤50m)		
	Signal wiring	$Nb\times mm^2$	3×1.0		
Drainage water pipe diameter		mm	Φ25	Φ25	Φ25
Controller			Wireless remote controller R05 (standard)		
Operation temp		℃	17～30		

Notes:

1. Nominal cooling capacities are based on the following conditions: return air temp.: 27°CDB, 19°CWB, and outdoor temp.:35°CDB, equivalent ref. piping: 8m (horizontal)
2. Nominal heating capacities are based on the following conditions: return air temp.: 20°CDB, outdoor temp.: 7°CDB, 6°CWB, and equivalent ref. Piping: 8m (horizontal)

Sale Model			MDVi-D71DL/N1-B	MDVi-D80DL/N1-B	MDVi-D90DL/N1-B
Power supply		V-ph-Hz	220~240-1-50	220~240-1-50	220~240-1-50
Cooling	Capacity	kW	7.1	8.0	9.0
	Input	W	125	130	130
	Rated current	A	0.57	0.6	0.6
Heating	Capacity	kW	8.0	9.0	10.0
	Input	W	125	130	130
	Rated current	A	0.57	0.6	0.6
Indoor fan motor	Model		YSK55-4L	YSK80-4A	YSK80-4A
	Type		Ac Motor	Ac Motor	Ac Motor
	Brand		Welling	Welling	Welling
	Input	w	125/105/85	143/122/110	143/122/110
	Capacitor	uF	2.5	3.5	3.5
	Speed(hi/mi/lo)	r/min	1310/1190/1040	1310/1210/1115	1310/1210/1115
Indoor coil	Number of rows		3	3	3
	Tube pitch(a)x row pitch(b)	mm	25.4x22	25.4x22	25.4x22
	Fin spacing	mm	1.8	1.8	1.8
	Fin type (code)		Hydrophilic aluminum		
	Tube outside dia. and type	mm	Φ9.5	Φ9.5	Φ9.5
			Inner groove tube		
	Coil length x height x width	mm	804x66 x254	1094x66 x254	1094x66 x254
	Number of circuits		3	5	5
Indoor air flow (Hi/Mi/Lo)		m^3/h	800/600/500	1200/900/700	1200/900/700
Sound level (sound pressure)		dB(A)	43/41/38	45/43/40	45/43/40
Indoor unit	Dimension (W x H x D)	mm	990x660x206	1280 x 660x206	1280 x 660x206
	Packing (W x H x D)	mm	1089x744x296	1379x744x296	1379x744x296
	Net/Gross weight	kg	29/35	37/42	37/42
Refrigerant	Type		R410A	R410A	R410A
Design pressure		MPa	4.2/2.0	4.2/2.0	4.2/2.0
Refrigerant piping	Liquid side/ Gas side	mm	Φ9.5/Φ15.9	Φ9.5/Φ15.9	Φ9.5/Φ15.9
Connection wiring	Power wiring	$Nb\times mm^2$	3×2.5(L≤20m); 3×3.5(L≤50m)		
	Signal wiring	$Nb\times mm^2$	3×1.0		
Drainage water pipe dia.		mm	Φ25	Φ25	Φ25
Controller			Wireless remote controller R05 (standard)		
Operation temp		℃	17～30		

Notes:

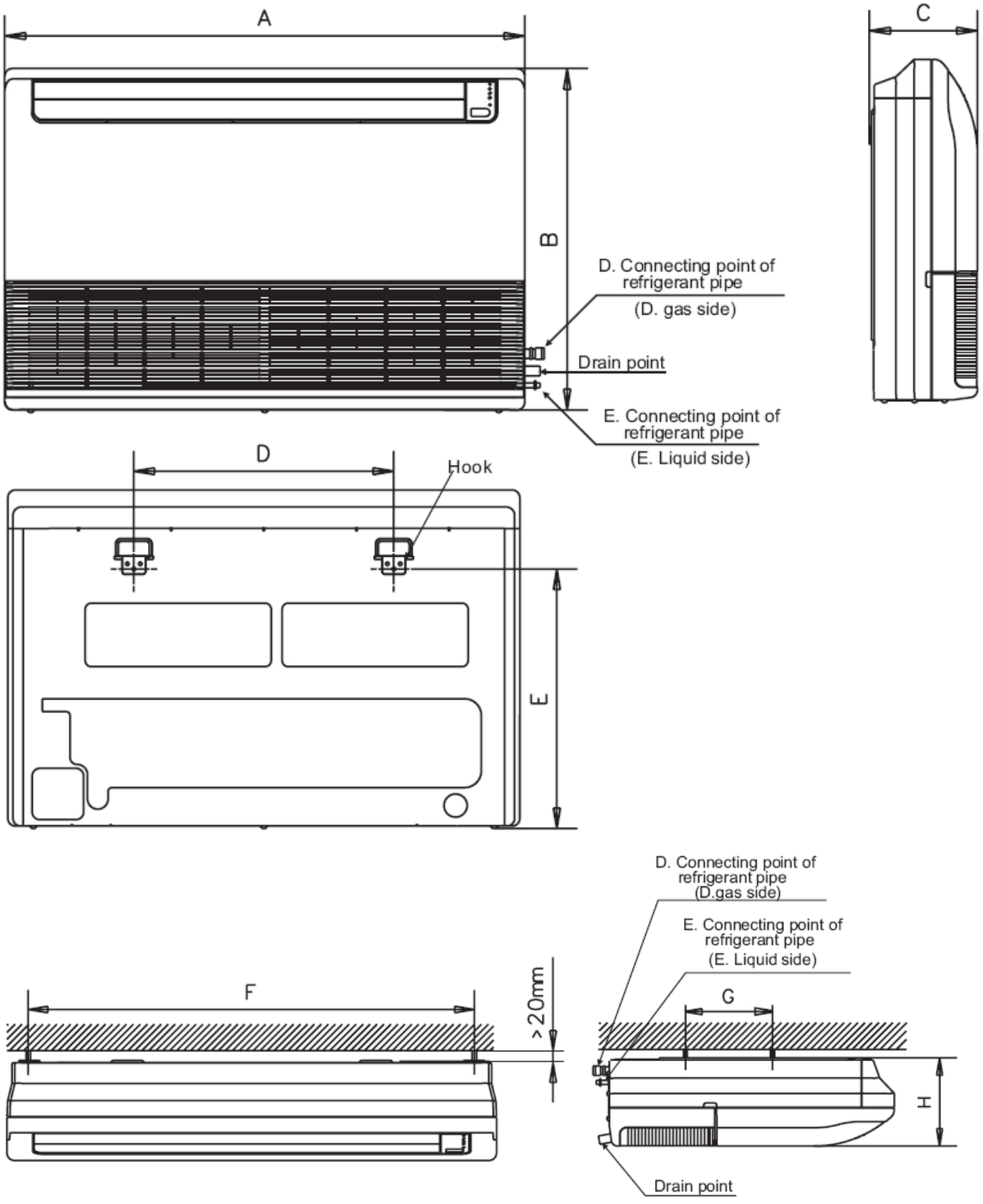
1. Nominal cooling capacities are based on the following conditions: return air temp.: 27°CDB, 19°CWB, and outdoor temp.:35°CDB, equivalent ref. piping: 8m (horizontal)
2. Nominal heating capacities are based on the following conditions: return air temp.: 20°CDB, outdoor temp.: 7°CDB, 6°CWB, and equivalent ref. Piping: 8m (horizontal)

Sale Model			MDVi-D112DL /N1-B	MDVi-D140DL/N1-B
Power supply		V-ph-Hz	220~240-1-50	220~240-1-50
Cooling	Capacity	kW	11.2	14.0
	Input	W	182	182
	Rated current	A	0.83	0.83
Heating	Capacity	kW	12.5	15.5
	Input	W	182	182
	Rated current	A	0.83	0.83
Indoor fan motor	Model		YSK59-4D (x2)	YSK59-4D(x2)
	Type		Ac Motor	Ac Motor
	Brand		Welling	Welling
	Input	w	89.5/81.5/77.5	89.5/81.5/77.5
	Capacitor	uF	2.5(x2)	2.5 (x2)
	Speed(hi/mi/lo)	r/min	1170/1070/995	1170/1070/995
Indoor coil	Number of rows		3	3
	Tube pitch(a)x row pitch(b)	mm	25.4x22	25.4x22
	Fin spacing	mm	1.8	1.8
	Fin type (code)		Hydrophilic aluminum	
	Tube outside dia. and type	mm	Φ9.5	Φ9.5
			Inner groove tube	
	Coil length x height x width	mm	1360x66 x254	1360x66 x254
	Number of circuits		5	5
Indoor air flow (Hi/Mi/Lo)		m^3/h	1980/1860/1730	1980/1860/1730
Sound level (sound pressure)		dB(A)	47/45/42	47/45/42
Indoor unit	Dimension (W x H x D)	mm	1670x680x244	1670x680x244
	Packing (W x H x D)	mm	1764x760x329	1764x760x329
	Net/Gross weight	kg	54/61	54/61
Refrigerant	Type		R410A	R410A
Design pressure		MPa	4.2/2.0	4.2/2.0
Refrigerant piping	Liquid side/ Gas side	mm	Φ9.5/Φ15.9	Φ9.5/Φ15.9
Connection wiring	Power wiring	$Nb\times mm^2$	3×2.5(L≤20m); 3×3.5(L≤50m)	
	Signal wiring	$Nb\times mm^2$	3×1.0	
Drainage water pipe dia.		mm	Φ25	Φ25
Controller			Wireless remote controller R05 (standard)	
Operation temp		℃	17～30	

Notes:

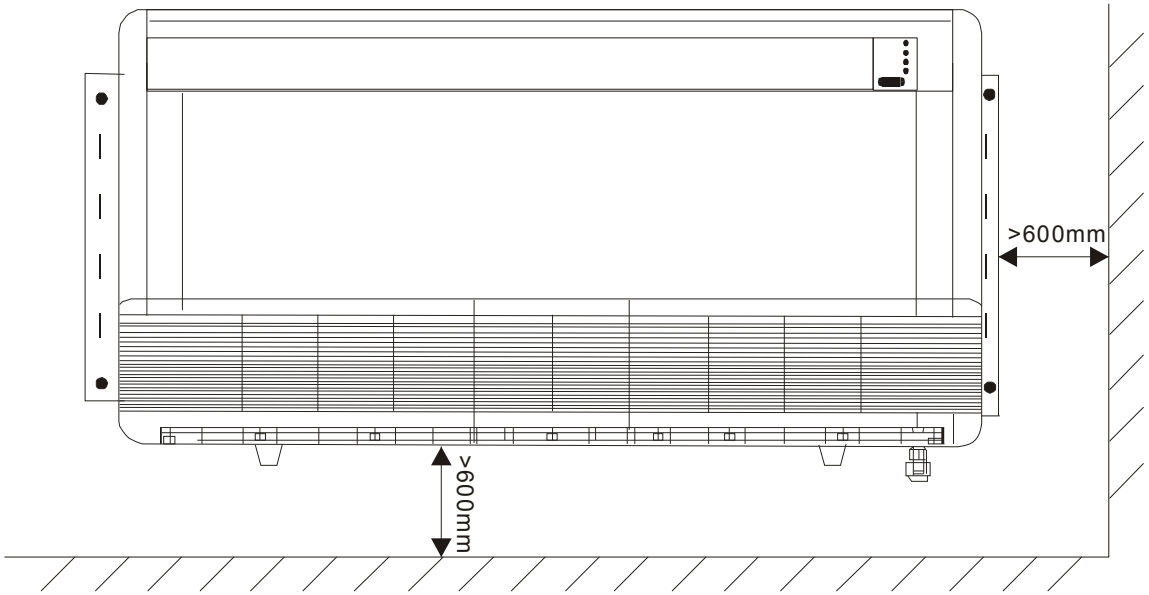
1. Nominal cooling capacities are based on the following conditions: return air temp.: 27°CDB, 19°CWB, and outdoor temp.:35°CDB, equivalent ref. piping: 8m (horizontal)
2. Nominal heating capacities are based on the following conditions: return air temp.: 20°CDB, outdoor temp.: 7°CDB, 6°CWB, and equivalent ref. Piping: 8m (horizontal)

3.Dimensions



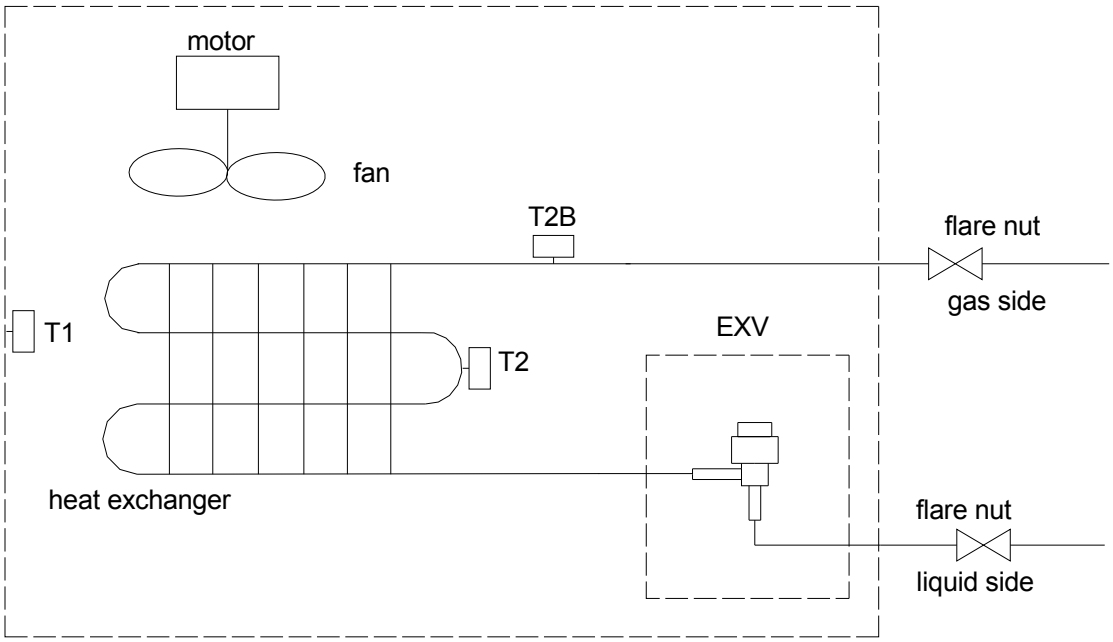
Capacity(W)	A	B	C	D	E	F	G	H
3600-7100	990	660	206	505	506	907	200	203
8000-9000	1280	660	206	795	506	1195	200	203
11200-14000	1670	680	244	1070	450	1542	200	240

4.Service Space



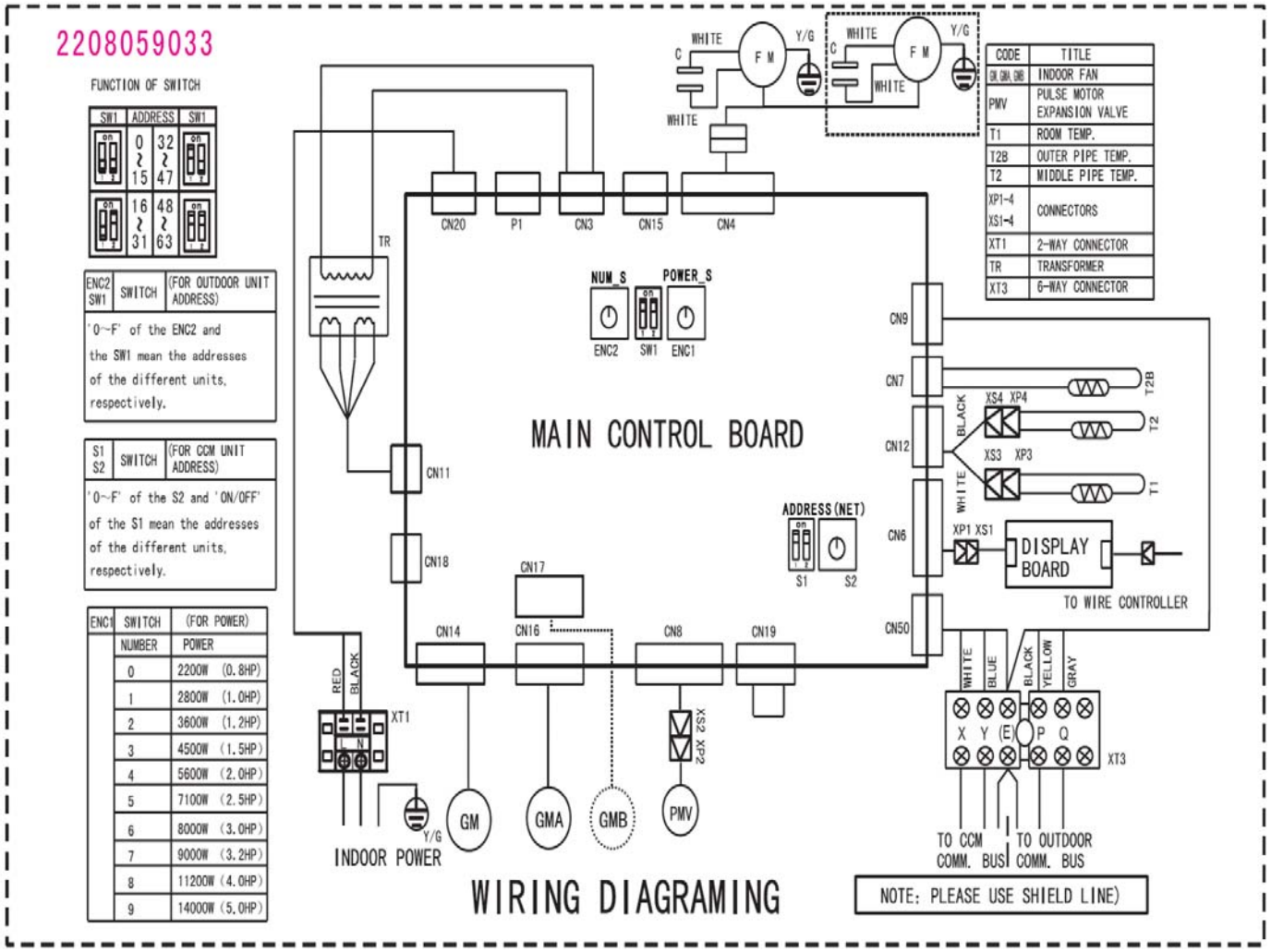
5.Piping Diagrams

MDVi-D36DL/N1-B MDVi-D45DL/N1-B MDVi-D56DL/N1-B MDVi-D71DL/N1-B
MDVi-D80DL/N1-B MDVi-D90DL/N1-B MDVi-D112DL/N1-B MDVi-D140DL/N1-B



6.Wiring Diagrams

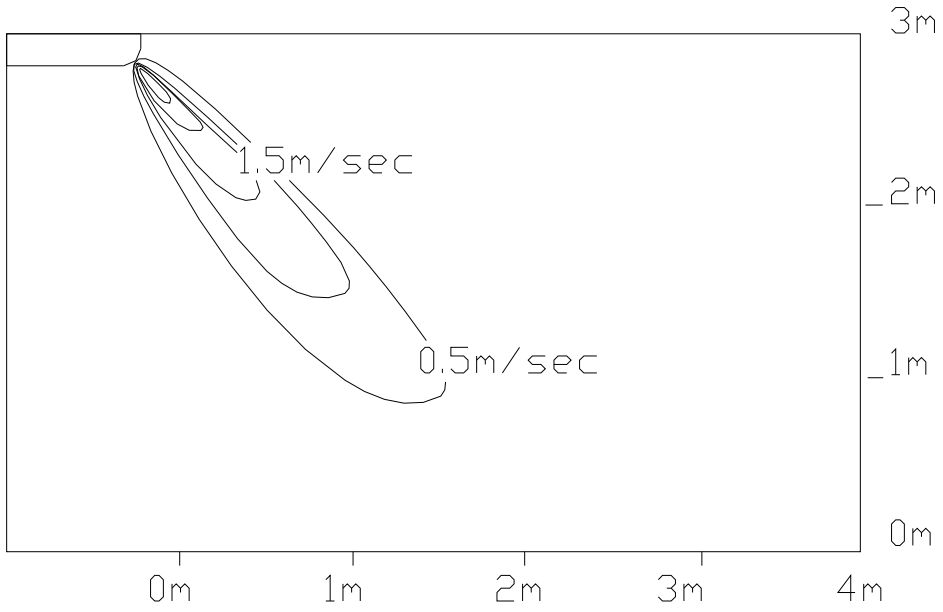
MDVi-D36DL/N1-B MDVi-D45DL/N1-B MDVi-D56DL/N1-B MDVi-D71DL/N1-B
MDVi-D80DL/N1-B MDVi-D90DL/N1-B MDVi-D112DL/N1-B MDVi-D140DL/N1-B



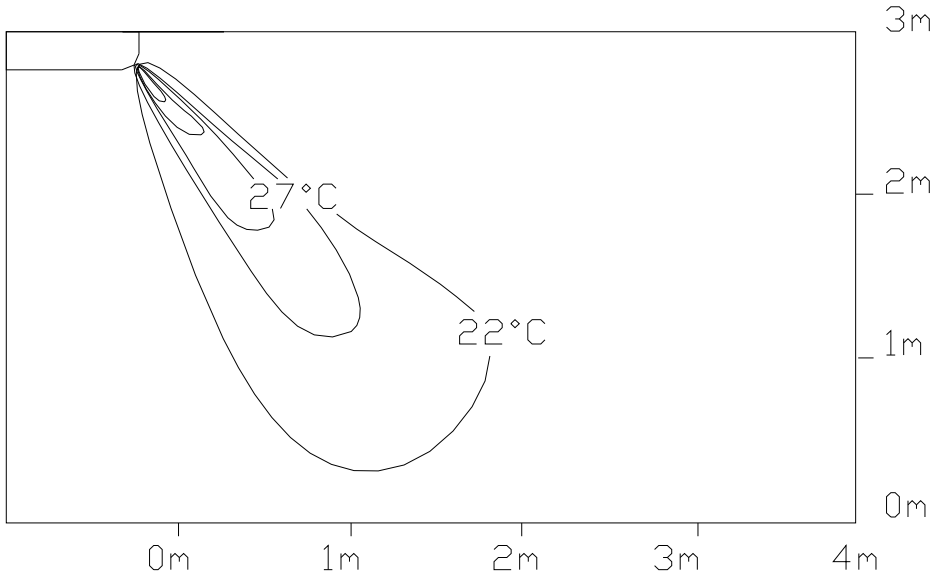
7.Air Velocity and Temperature Distributions

Discharge angle 60° (CEILING)

Airflow velocity

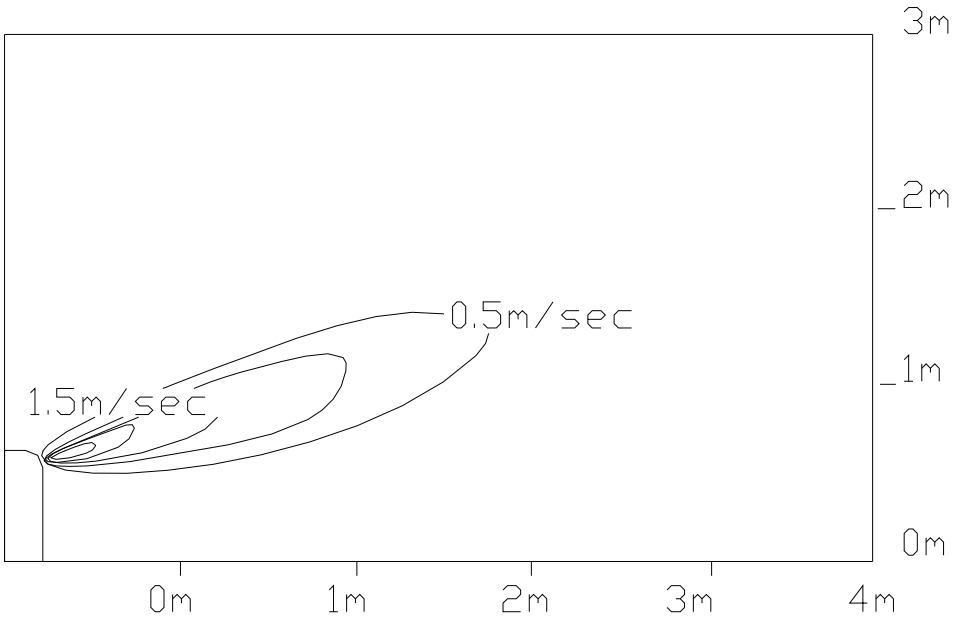


Temperature

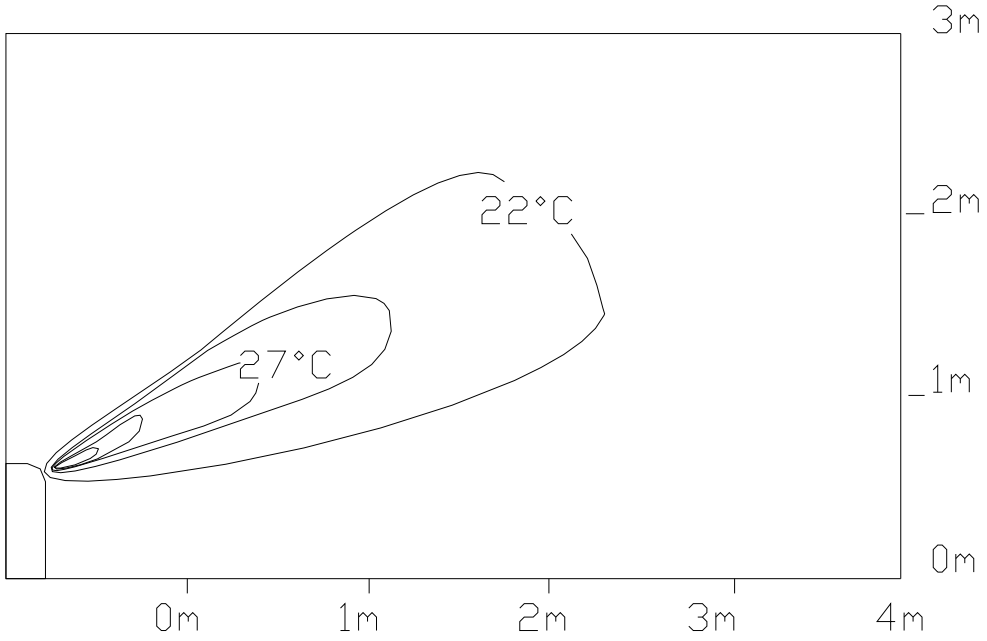


Discharge angle 60°(FLOOR)

Airflow velocity



Temperature



8.Capacity Tables

8.1 Cooling

TC: total capacity **SC**: sensible capacity **WB**: wet-bulb temperature **DB**: dry-bulb temperature

Indoor Unit size (kW)	Outdoor temperature (℃ DB)	Indoor temperature (℃ WB/DB)													
		14/20		16/23		18/26		19/27		20/28		22/30		24/32	
		TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
3.6	10.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.8	2.8
	12.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.6	2.7
	14.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.6	2.7
	16.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.5	2.7
	18.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.5	2.7
	20.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.4	2.7
	21.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.4	2.7
	23.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.4	2.7
	25.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.1	2.7	4.2	2.6
	27.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.1	2.7	4.2	2.6
	29.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.0	2.6	4.1	2.5
	31.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.0	2.6	4.1	2.4
	33.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.0	2.6	4.0	2.4
	35.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.7	2.6	3.9	2.6	4.0	2.4
	37.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.7	2.6	3.9	2.6	3.9	2.3
	39.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.7	2.6	3.9	2.7	3.9	2.4
4.5	10.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.9	3.4
	12.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.9	3.4
	14.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.8	3.3
	16.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.6	3.2
	18.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.6	3.2
	20.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.5	3.2
	21.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.4	3.1
	23.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.2	3.2	5.4	3.1
	25.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.2	3.2	5.3	3.0
	27.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.0	3.0	5.3	3.0
	29.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.0	3.0	5.1	2.9
	31.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.3	3.5	5.1	3.0
	33.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.3	3.5	4.9	2.9
	35.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.3	3.5	4.8	2.8
	37.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.6	3.2	4.8	3.1	4.8	2.9
	39.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.6	3.2	4.8	3.1	4.8	2.9
5.6	10.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.3	4.1
	12.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.3	4.1
	14.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.2	4.1
	16.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	6.9	4.0
	18.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.1	4.1
	20.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.1	4.1
	21.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.0	4.1
	23.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	6.9	4.0
	25.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.5	4.1	6.8	3.9
	27.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.4	4.0	6.5	3.8
	29.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.3	4.0	6.4	3.7

	31.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.2	3.9	6.3	3.7
	33.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.0	3.8	6.3	3.7
	35.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	5.9	3.7	6.2	3.6
	37.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	5.9	3.9	6.1	3.5
	39.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	5.7	3.8	5.8	3.8	6.0	3.5
7.1	10.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	9.2	4.9
	12.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	9.1	4.8
	14.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	9.0	4.8
	16.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	8.9	4.7
	18.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	8.7	4.7
	20.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	8.5	4.6
	21.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	8.4	4.5
	23.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	8.3	4.5
	25.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	8.2	4.4
	27.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.1	4.9	8.2	4.4
	29.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.0	4.8	8.1	4.5
	31.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	7.9	4.7	7.8	4.4
	33.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	7.8	4.7	7.8	4.4
	35.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	7.6	4.6	7.7	4.3
	37.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	7.5	4.5	7.6	4.3
	39.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.2	4.6	7.4	4.4	7.6	4.3
8.0	10.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	10.4	5.6
	12.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	10.2	5.5
	14.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	10.2	5.5
	16.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	10.0	5.4
	18.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	9.8	5.3
	20.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	9.6	5.2
	21.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	9.4	5.1
	23.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	9.4	5.1
	25.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	9.3	5.0
	27.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.1	5.3	9.2	5.1
	29.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.5	9.0	5.3	9.1	5.0
	31.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.5	8.9	5.2	8.8	4.8
	33.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.5	8.8	5.2	8.8	4.8
	35.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.5	8.6	5.1	8.6	4.8
	37.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.3	5.4	8.4	5.0	8.6	4.9
	39.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.1	5.3	8.3	5.0	8.6	4.9
9.0	10.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.6	6.6	11.7	6.6
	12.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.6	6.6	11.5	6.5
	14.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.6	6.6	11.4	6.4
	16.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.6	6.6	11.3	6.3
	18.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.6	6.6	11.0	6.3
	20.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.6	6.6	10.8	6.2
	21.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.6	6.6	10.6	6.1
	23.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.6	6.6	10.5	6.0
	25.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.6	6.6	10.4	6.0
	27.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.3	6.4	10.4	5.9
	29.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.1	6.2	10.3	5.8
	31.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	10.0	6.2	9.9	5.7
	33.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.6	6.5	9.9	6.1	9.9	5.7
	35.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.5	6.5	9.6	6.0	9.7	5.7
	37.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.3	6.3	9.5	5.9	9.6	5.8

	39.0	6.2	5.3	7.3	5.8	8.4	6.3	9.0	6.4	9.2	6.2	9.4	5.8	9.6	5.8
11.2	10.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	13.3	8.3	15.5	9.0
	12.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	13.3	8.3	14.4	8.4
	14.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	13.3	8.3	14.2	8.2
	16.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	13.3	8.3	14.1	8.2
	18.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	13.3	8.3	14.0	8.1
	20.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	13.3	8.3	13.9	8.1
	21.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	13.3	8.3	13.8	8.0
	23.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	13.1	8.1	13.7	7.9
	25.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	13.0	8.1	13.6	7.9
	27.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	12.9	8.0	13.4	7.8
	29.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	12.8	7.9	13.3	7.9
	31.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	12.7	7.8	12.8	7.5
	33.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.9	8.1	12.5	7.8	12.5	7.4
	35.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.8	8.0	12.4	7.7	12.3	7.3
	37.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.6	7.9	12.3	7.6	12.1	7.1
	39.0	7.7	6.4	9.1	7.1	10.5	7.7	11.2	7.8	11.4	7.8	12.2	7.6	11.9	7.1
14.0	10.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.7	10.2	18.2	10.2
	12.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.7	10.2	17.9	10.0
	14.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.7	10.2	17.8	10.0
	16.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.7	10.2	17.5	9.8
	18.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.7	10.2	17.1	9.6
	20.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.7	10.2	16.8	9.4
	21.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.7	10.2	16.5	9.3
	23.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.4	10.2	16.4	9.2
	25.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.2	10.1	16.2	9.1
	27.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.1	10.0	16.1	9.2
	29.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	16.0	9.9	16.0	9.1
	31.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	15.8	9.8	15.4	8.8
	33.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.8	9.8	15.7	9.7	15.4	8.8
	35.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.7	9.7	15.1	9.4	15.1	8.8
	37.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.6	9.6	15.1	9.4	15.0	8.7
	39.0	9.7	7.8	11.3	8.6	13.2	9.6	14.0	9.8	14.3	9.4	14.6	9.2	15.0	8.8

8.2 Heating

TC: total capacity **WB**: wet-bulb temperature **DB**: dry-bulb temperature

Indoor Unit size (kW)	Outdoor temperature (℃)		Indoor temperature (℃ DB)					
			16	18	20	21	22	24
			TC	TC	TC	TC	TC	TC
	WB	DB	kW	kW	kW	kW	kW	kW
3.6	-15.00	-14.70	2.52	2.52	2.52	2.52	2.52	2.52
	-13.00	-12.60	2.68	2.68	2.68	2.68	2.68	2.68
	-11.00	-10.50	2.80	2.80	2.80	2.80	2.80	2.80
	-10.00	-9.50	2.92	2.92	2.92	2.92	2.92	2.92
	-9.10	-8.50	3.00	3.00	3.00	3.00	3.00	3.00
	-7.60	-7.00	3.04	3.04	3.04	3.04	3.04	3.04
	-5.60	-5.00	3.16	3.16	3.16	3.16	3.16	3.16
	-3.70	-3.00	3.32	3.32	3.32	3.32	3.32	3.32
	-0.70	0.00	3.56	3.56	3.56	3.56	3.56	3.36
	2.20	3.00	3.76	3.76	3.76	3.76	3.68	3.36
	4.10	5.00	3.88	3.88	3.88	3.88	3.68	3.36
	6.00	7.00	4.00	4.00	4.00	3.88	3.68	3.36
	7.90	9.00	4.12	4.12	4.00	3.88	3.68	3.36
	9.80	11.00	4.24	4.24	4.00	3.88	3.68	3.36
	11.80	13.00	4.40	4.32	4.00	3.88	3.68	3.36
	13.70	15.00	4.52	4.32	4.00	3.88	3.68	3.36
4.5	-15.00	-14.70	3.15	3.15	3.15	3.15	3.15	3.15
	-13.00	-12.60	3.35	3.35	3.35	3.35	3.35	3.35
	-11.00	-10.50	3.50	3.50	3.50	3.50	3.50	3.50
	-10.00	-9.50	3.65	3.65	3.65	3.65	3.65	3.65
	-9.10	-8.50	3.75	3.75	3.75	3.75	3.75	3.75
	-7.60	-7.00	3.80	3.80	3.80	3.80	3.80	3.80
	-5.60	-5.00	3.95	3.95	3.95	3.95	3.95	3.95
	-3.70	-3.00	4.15	4.15	4.15	4.15	4.15	4.15
	-0.70	0.00	4.45	4.45	4.45	4.45	4.45	4.20
	2.20	3.00	4.70	4.70	4.70	4.70	4.60	4.20
	4.10	5.00	4.85	4.85	4.85	4.85	4.60	4.20
	6.00	7.00	5.00	5.00	5.00	4.85	4.60	4.20
	7.90	9.00	5.15	5.15	5.00	4.85	4.60	4.20
	9.80	11.00	5.30	5.30	5.00	4.85	4.60	4.20
	11.80	13.00	5.50	5.40	5.00	4.85	4.60	4.20
	13.70	15.00	5.65	5.40	5.00	4.85	4.60	4.20
5.6	-15.00	-14.70	3.97	3.97	3.97	3.97	3.97	3.97
	-13.00	-12.60	4.22	4.22	4.22	4.22	4.22	4.22
	-11.00	-10.50	4.41	4.41	4.41	4.41	4.41	4.41
	-10.00	-9.50	4.60	4.60	4.60	4.60	4.60	4.60
	-9.10	-8.50	4.73	4.73	4.73	4.73	4.73	4.73
	-7.60	-7.00	4.79	4.79	4.79	4.79	4.79	4.79
	-5.60	-5.00	4.98	4.98	4.98	4.98	4.98	4.98
	-3.70	-3.00	5.23	5.23	5.23	5.23	5.23	5.23
	-0.70	0.00	5.61	5.61	5.61	5.61	5.61	5.29

	2.20	3.00	5.92	5.92	5.92	5.92	5.80	5.29
	4.10	5.00	6.11	6.11	6.11	6.11	5.80	5.29
	6.00	7.00	6.30	6.30	6.30	6.11	5.80	5.29
	7.90	9.00	6.49	6.49	6.30	6.11	5.80	5.29
	9.80	11.00	6.68	6.68	6.30	6.11	5.80	5.29
	11.80	13.00	6.93	6.80	6.30	6.11	5.80	5.29
	13.70	15.00	7.12	6.80	6.30	6.11	5.80	5.29
7.1	-15.00	-14.70	5.04	5.04	5.04	5.04	5.04	5.04
	-13.00	-12.60	5.36	5.36	5.36	5.36	5.36	5.36
	-11.00	-10.50	5.60	5.60	5.60	5.60	5.60	5.60
	-10.00	-9.50	5.84	5.84	5.84	5.84	5.84	5.84
	-9.10	-8.50	6.00	6.00	6.00	6.00	6.00	6.00
	-7.60	-7.00	6.08	6.08	6.08	6.08	6.08	6.08
	-5.60	-5.00	6.32	6.32	6.32	6.32	6.32	6.32
	-3.70	-3.00	6.64	6.64	6.64	6.64	6.64	6.64
	-0.70	0.00	7.12	7.12	7.12	7.12	7.12	6.72
	2.20	3.00	7.52	7.52	7.52	7.52	7.36	6.72
	4.10	5.00	7.76	7.76	7.76	7.76	7.36	6.72
	6.00	7.00	8.00	8.00	8.00	7.76	7.36	6.72
	7.90	9.00	8.24	8.24	8.00	7.76	7.36	6.72
	9.80	11.00	8.48	8.48	8.00	7.76	7.36	6.72
	11.80	13.00	8.80	8.64	8.00	7.76	7.36	6.72
	13.70	15.00	9.04	8.64	8.00	7.76	7.36	6.72
8.0	-15	-14.7	5.67	5.67	5.67	5.67	5.67	5.67
	-13	-12.6	6.03	6.03	6.03	6.03	6.03	6.03
	-11	-10.5	6.30	6.30	6.30	6.30	6.30	6.30
	-10	-9.5	6.57	6.57	6.57	6.57	6.57	6.57
	-9.1	-8.5	6.75	6.75	6.75	6.75	6.75	6.75
	-7.6	-7	6.84	6.84	6.84	6.84	6.84	6.84
	-5.6	-5	7.11	7.11	7.11	7.11	7.11	7.11
	-3.7	-3	7.47	7.47	7.47	7.47	7.47	7.47
	-0.7	0	8.01	8.01	8.01	8.01	8.01	7.56
	2.2	3	8.46	8.46	8.46	8.46	8.28	7.56
	4.1	5	8.73	8.73	8.73	8.73	8.28	7.56
	6	7	9.00	9.00	9.00	8.73	8.28	7.56
	7.9	9	9.27	9.27	9.00	8.73	8.28	7.56
	9.8	11	9.54	9.54	9.00	8.73	8.28	7.56
	11.8	13	9.90	9.72	9.00	8.73	8.28	7.56
	13.7	15	10.17	9.72	9.00	8.73	8.28	7.56
9.0	-15	-14.7	6.30	6.30	6.30	6.30	6.30	6.30
	-13	-12.6	6.70	6.70	6.70	6.70	6.70	6.70
	-11	-10.5	7.00	7.00	7.00	7.00	7.00	7.00
	-10	-9.5	7.30	7.30	7.30	7.30	7.30	7.30
	-9.1	-8.5	7.50	7.50	7.50	7.50	7.50	7.50
	-7.6	-7	7.60	7.60	7.60	7.60	7.60	7.60
	-5.6	-5	7.90	7.90	7.90	7.90	7.90	7.90
	-3.7	-3	8.30	8.30	8.30	8.30	8.30	8.30

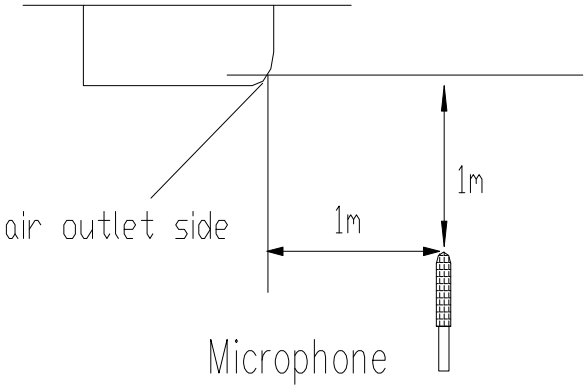
	-0.7	0	8.90	8.90	8.90	8.90	8.90	8.40
	2.2	3	9.40	9.40	9.40	9.40	9.20	8.40
	4.1	5	9.70	9.70	9.70	9.70	9.20	8.40
	6	7	10.00	10.00	10.00	9.70	9.20	8.40
	7.9	9	10.30	10.30	10.00	9.70	9.20	8.40
	9.8	11	10.60	10.60	10.00	9.70	9.20	8.40
	11.8	13	11.00	10.80	10.00	9.70	9.20	8.40
	13.7	15	11.30	10.80	10.00	9.70	9.20	8.40
11.2	-15	-14.7	7.88	7.88	7.88	7.88	7.88	7.88
	-13	-12.6	8.38	8.38	8.38	8.38	8.38	8.38
	-11	-10.5	8.75	8.75	8.75	8.75	8.75	8.75
	-10	-9.5	9.13	9.13	9.13	9.13	9.13	9.13
	-9.1	-8.5	9.38	9.38	9.38	9.38	9.38	9.38
	-7.6	-7	9.50	9.50	9.50	9.50	9.50	9.50
	-5.6	-5	9.88	9.88	9.88	9.88	9.88	9.88
	-3.7	-3	10.38	10.38	10.38	10.38	10.38	10.38
	-0.7	0	11.13	11.13	11.13	11.13	11.13	10.50
	2.2	3	11.75	11.75	11.75	11.75	11.50	10.50
	4.1	5	12.13	12.13	12.13	12.13	11.50	10.50
	6	7	12.50	12.50	12.50	12.13	11.50	10.50
	7.9	9	12.88	12.88	12.50	12.13	11.50	10.50
	9.8	11	13.25	13.25	12.50	12.13	11.50	10.50
	11.8	13	13.75	13.50	12.50	12.13	11.50	10.50
	13.7	15	14.13	13.50	12.50	12.13	11.50	10.50
14.0	-15	-14.7	9.77	9.77	9.77	9.77	9.77	9.77
	-13	-12.6	10.39	10.39	10.39	10.39	10.39	10.39
	-11	-10.5	10.85	10.85	10.85	10.85	10.85	10.85
	-10	-9.5	11.32	11.32	11.32	11.32	11.32	11.32
	-9.1	-8.5	11.63	11.63	11.63	11.63	11.63	11.63
	-7.6	-7	11.78	11.78	11.78	11.78	11.78	11.78
	-5.6	-5	12.25	12.25	12.25	12.25	12.25	12.25
	-3.7	-3	12.87	12.87	12.87	12.87	12.87	12.87
	-0.7	0	13.80	13.80	13.80	13.80	13.80	13.02
	2.2	3	14.57	14.57	14.57	14.57	14.26	13.02
	4.1	5	15.04	15.04	15.04	15.04	14.26	13.02
	6	7	15.50	15.50	15.50	15.04	14.26	13.02
	7.9	9	15.97	15.97	15.50	15.04	14.26	13.02
	9.8	11	16.43	16.43	15.50	15.04	14.26	13.02
	11.8	13	17.05	16.74	15.50	15.04	14.26	13.02
	13.7	15	17.52	16.74	15.50	15.04	14.26	13.02

9.Electric Characteristics

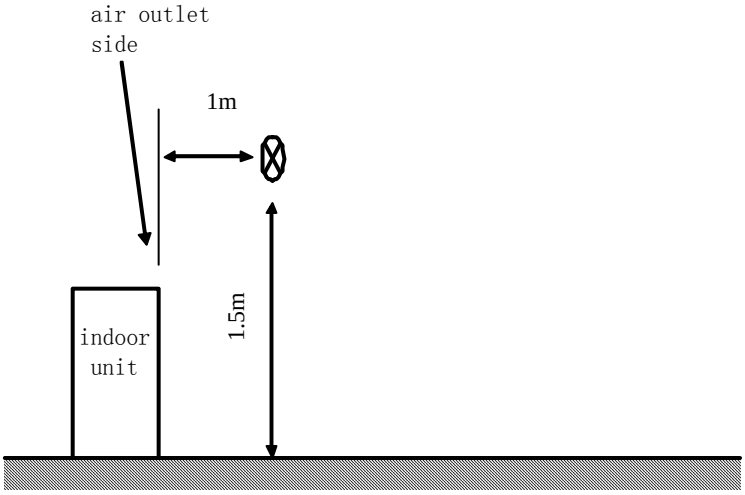
Model	Indoor Unit				Power Supply	IFM	
	Hz	Voltage	Min	Max	MFA	kW	FLA
MDVi-D36DL/N1-B	50	220-240V	198	254	15	0.025	0.15
MDVi-D45DL/N1-B	50	220-240V	198	254	15	0.055	0.57
MDVi-D56DL/N1-B	50	220-240V	198	254	15	0.055	0.57
MDVi-D71DL/N1-B	50	220-240V	198	254	15	0.055	0.57
MDVi-D80DL/N1-B	50	220-240V	198	254	15	0.08	0.63
MDVi-D90DL/N1-B	50	220-240V	198	254	15	0.08	0.63
MDVi-D112DL/N1-B	50	220-240V	198	254	15	0.059	0.39
MDVi-D140DL/N1-B	50	220-240V	198	254	15	0.059	0.39

Remark:
MFA: Max. Fuse Amps. (A)
KW: Fan Motor Rated Output (KW)
FLA: Full Load Amps. (A)
IFM: Indoor Fan Motor

10.Sound Levels



Ceiling

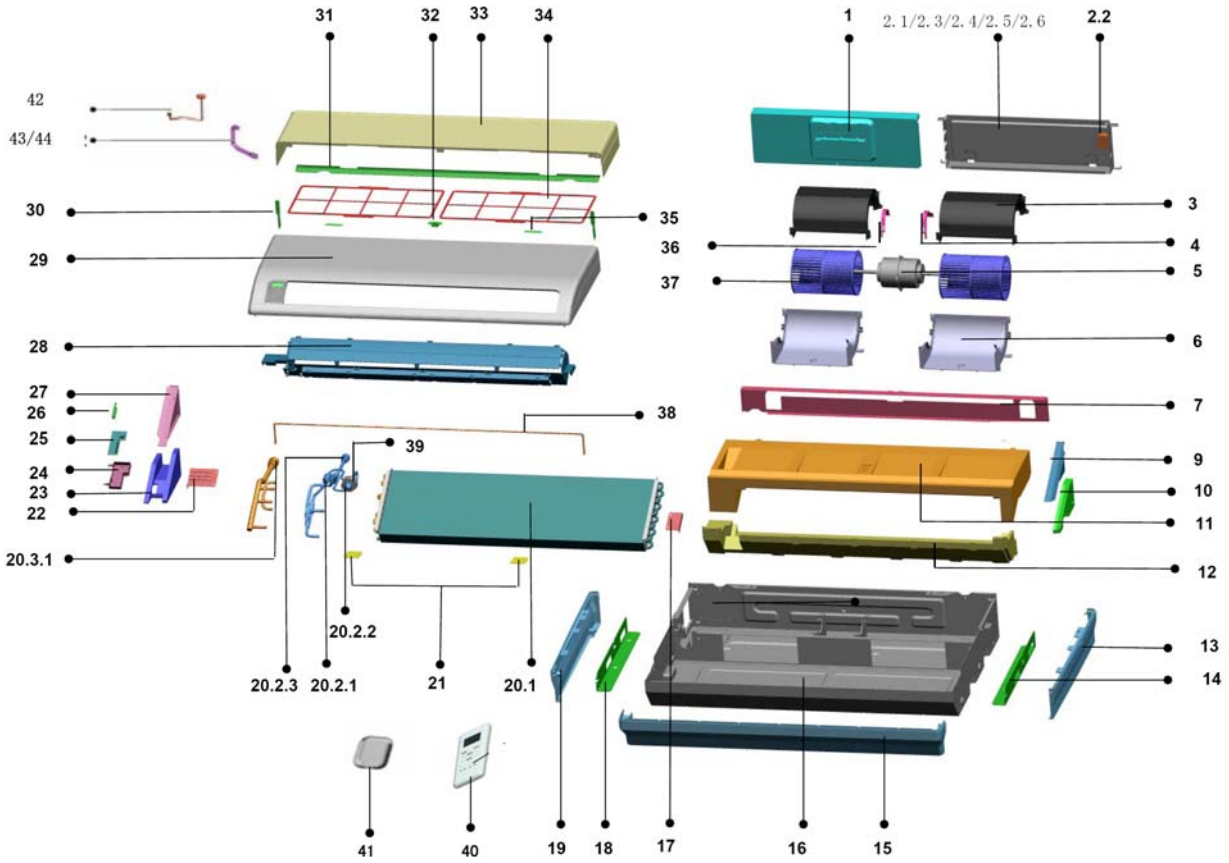


Floor

Model	Noise level dB(A)		
	H	M	L
MDVi-D36DL/N1-B	40	38	36
MDVi-D45DL/N1-B	43	41	38
MDVi-D56DL/N1-B	43	41	38
MDVi-D71DL/N1-B	43	41	38
MDVi-D80DL/N1-B	45	43	40
MDVi-D90DL/N1-B	45	43	40
MDVi-D112DL/N1-B	47	45	42
MDVi-D140DL/N1-B	47	45	42

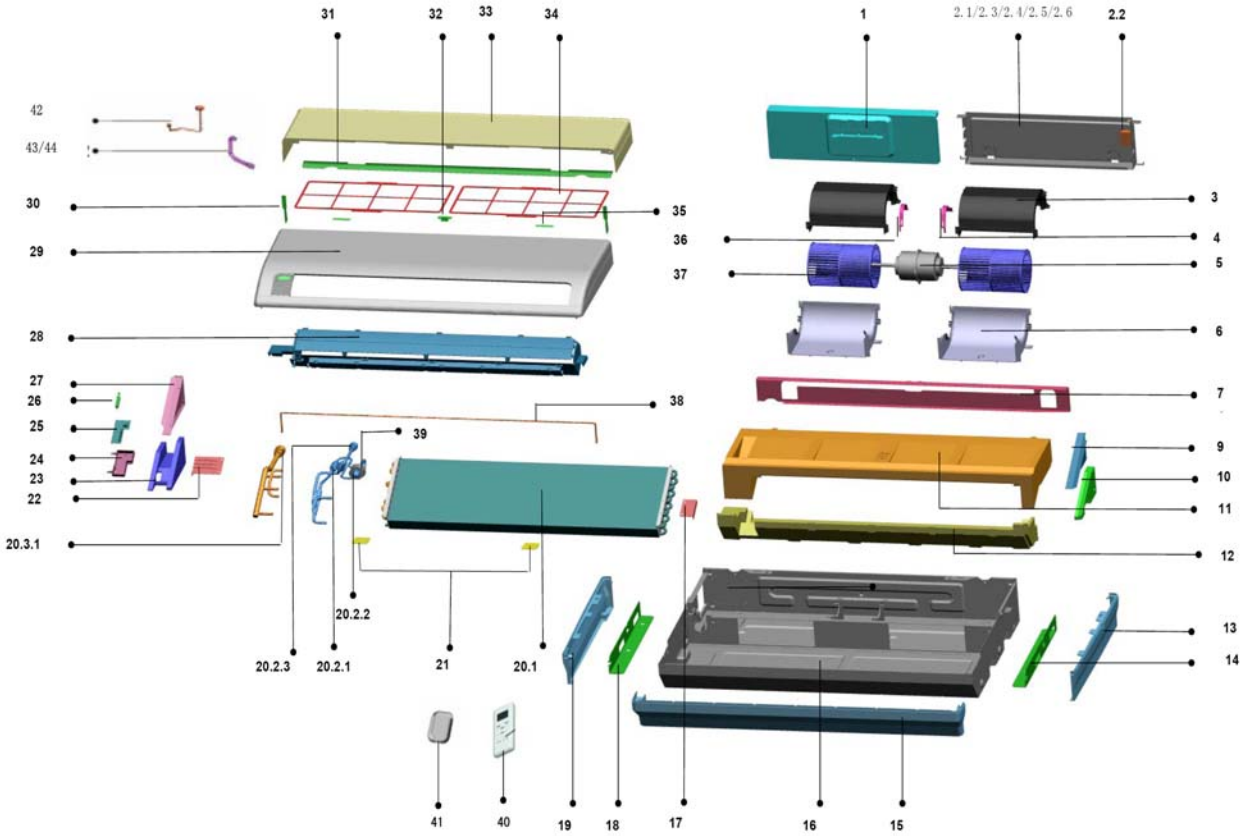
11.Exploded View

11.1MDVi-D36DL/N1-B



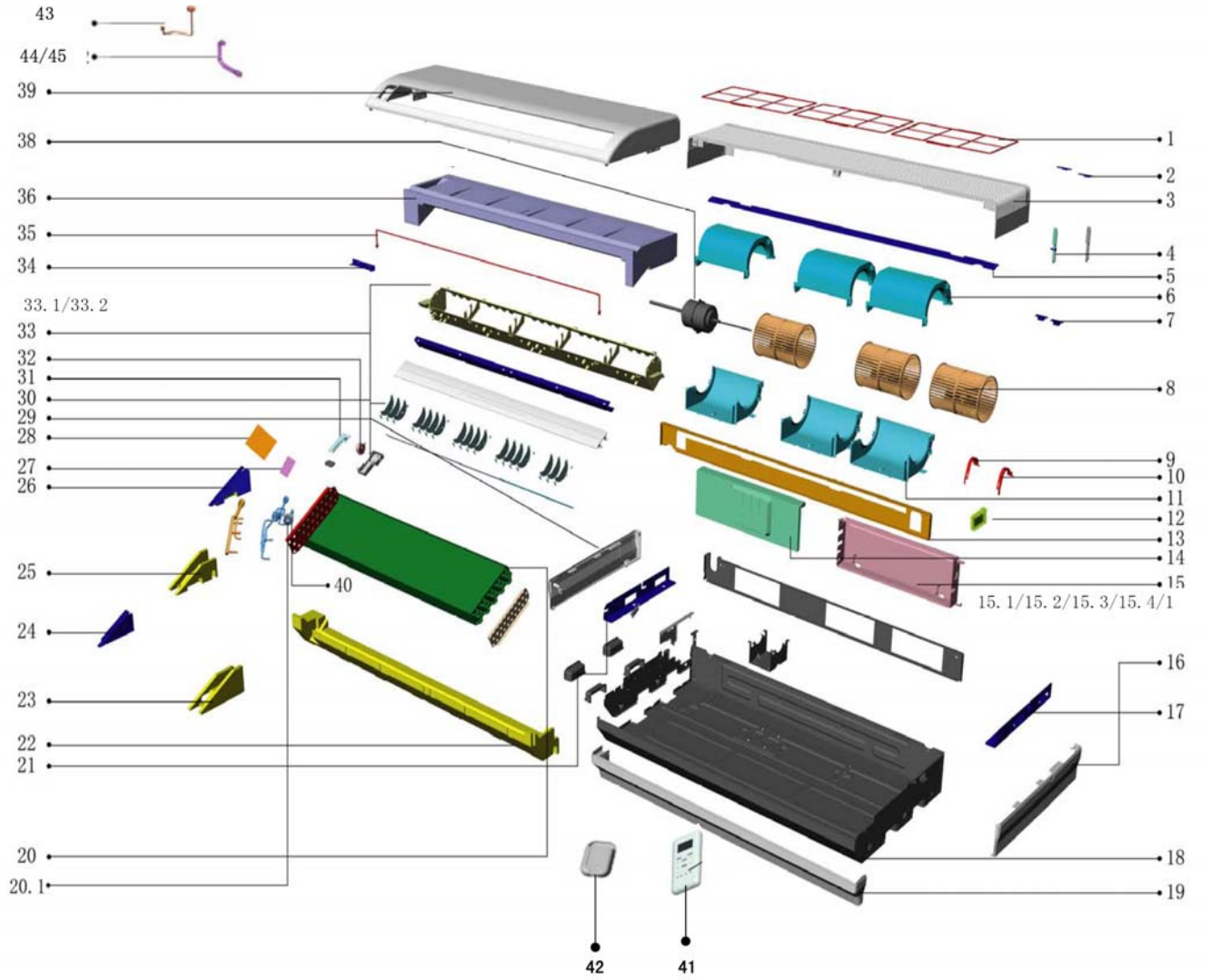
No.	Part Name	Quantity		No.	Part Name	Quantity
1	E-part box cover	1		20.2.3	Copper nut	1
2	E-part box ass'y	1		20.3	Evaporator output pipe ass'y	1
2.1	E-Part box	1		20.3.1	Copper nut	1
2.2	Motor capacitor	1		21	Installation clamp	2
2.3	Main controller ass'y	1		22	Evaporator left clapboard	1
2.4	Transformer	1		23	Foam ass'y	1
2.5	Wire joint, 2p	1		24	Display panel box	1
2.6	Wire joint	1		25	Display board ass'y	1
3	Volute shell	2		26	Manual button	1
4	Motor clamp	1		27	Evaporator Left support	1
5	Motor	1		28	Air outlet frame ass'y	1
6	Volute shell	2		28.1	Stepper motor	1
7	Middle beam	1		28.2	Stepper motor(vertical)	1
9	Support board	1		29	Panel ass'y	1
10	Foam ass'y	1		30	Grille clamp	2
11	Drainage pan ass'y	1		31	Grille strengthening rib	1
12	Foam ass'y	1		32	Grille lock	1
13	Cover	1		33	Grille	1
14	Installation board	1		34	Filter	2
15	Base ass'y	1		35	Grille clamp	2
16	Rear cover	1		36	Motor clamp	1
17	Evaporator right clapboard	1		37	Plastic fan	2
18	Installation board	1		38	Drainage pan holder	1
19	Left cover	1		39	EEV solenoid	1
20	Evaporator ass'y	1		40	Remote controller	1
20.1	Evaporator	1		41	Installation bracket	1
20.2	Evaporator input pipe ass'y	1		42	Room temp sensor ass'y	1
20.2.1	Strainer	2		43	Temp. sensor ass'y	1
20.2.2	Electronic expansion valve	1		44	Temp. sensor ass'y	1

11.2MDVi-D45DL/N1-B MDVi-D56DL/N1-B MDVi-D71DL/N1-B



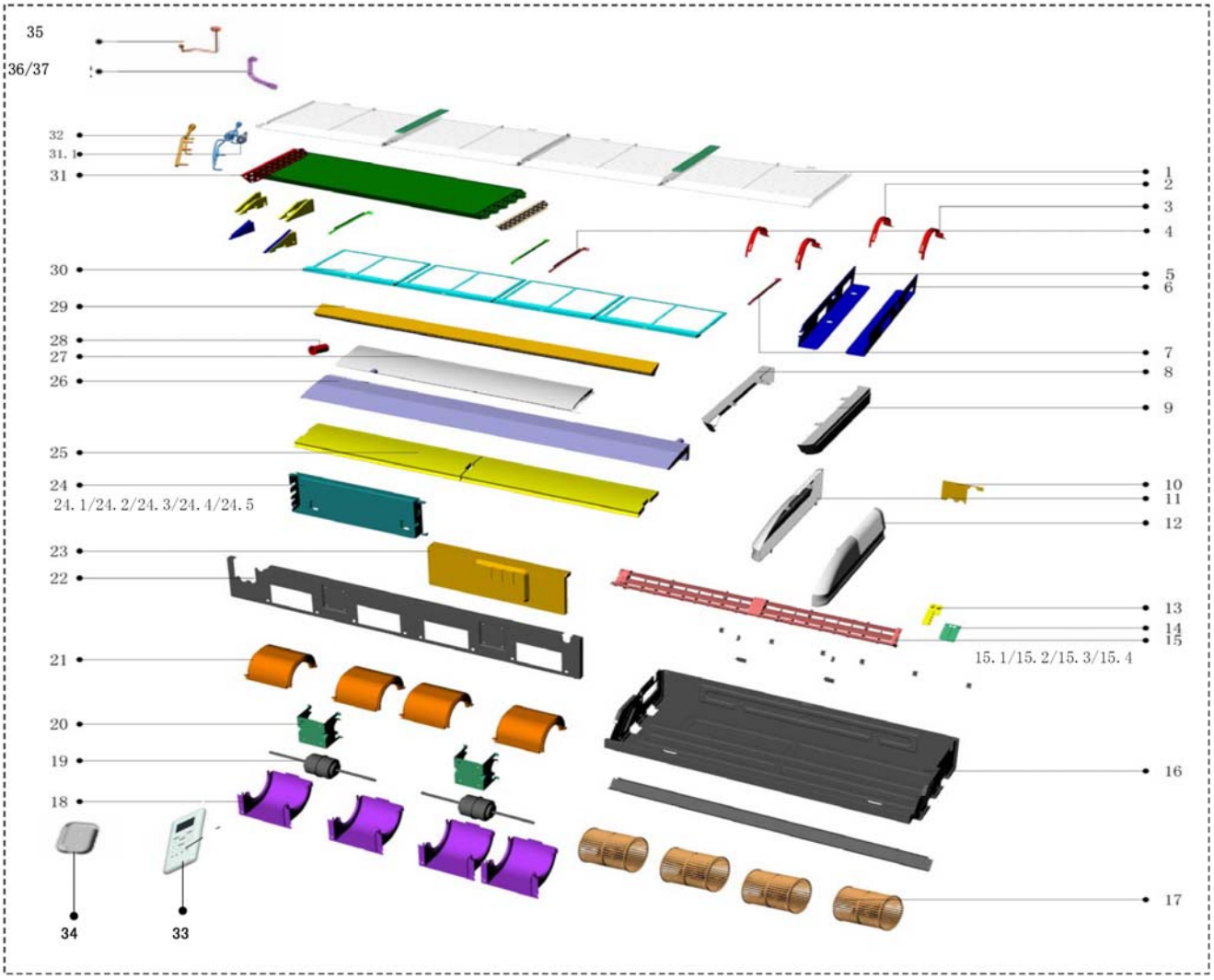
No.	Part Name	Quantity		No.	Part Name	Quantity
1	E-part box cover	1		20.2.3	Copper nut	1
2	E-part box ass'y	1		20.3	Evaporator output pipe ass'y	1
2.1	E-Part box	1		20.3.1	Copper nut	1
2.2	Capacitor	1		21	Installation clamp	2
2.3	Main controller ass'y	1		22	Evaporator left clapboard	1
2.4	Transformer	1		23	Foam ass'y	1
2.5	Wire joint, 2p	1		24	Display panel box	1
2.6	Wire joint	1		25	Display board ass'y	1
3	Volute shell	2		26	Manual button	1
4	Motor clamp	1		27	Evaporator Left support	1
5	Motor	1		28	Air outlet frame ass'y	1
6	Volute shell	2		28.1	Stepper motor	1
7	Middle beam	1		28.2	Stepper motor(vertical)	1
9	Support board	1		29	Panel ass'y	1
10	Foam ass'y	1		30	Grille clamp	2
11	Drainage pan ass'y	1		31	Grille strengthening rib	1
12	Foam ass'y	1		32	Grille lock	1
13	Cover	1		33	Grille	1
14	Installation board	1		34	Filter	2
15	Base ass'y	1		35	Grille clamp	2
16	Rear cover	1		36	Motor clamp	1
17	Evaporator right clapboard	1		37	Plastic fan	2
18	Installation board	1		38	Drainage pan holder	1
19	Left cover	1		39	EEV solenoid	1
20	Evaporator ass'y	1		40	Remote controller	1
20.1	Evaporator	1		41	Installation bracket	1
20.2	Evaporator input pipe ass'y	1		42	Room temp sensor ass'y	1
20.2.1	Strainer	2		43	Temp.sensor ass'y	1
20.2.2	Electronic expansion valve	1		44	Temp.sensor ass'y	1

11.3MDVi-D80DL/N1-B MDVi-D90DL/N1-B



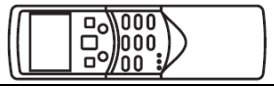
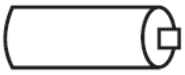
No.	Part Name	Quantity	No.	Part Name	Quantity
1	Filter	3	21	Installation board	1
2	Grille clamp	2	22	Foam ass'y	1
3	Grille	1	23	Foam ass'y	1
4	Grille clamp	2	24	Evaporator Left support	1
5	Grille strengthening rib	1	25	Foam ass'y	1
6	Volute shell	3	26	Support board	1
7	Grille lock	2	27	Evaporator right clapboard	1
8	Plastic fan	3	28	Evaporator left clapboard	1
9	Motor clamp	1	29	Cover	1
10	Motor clamp	1	30	Display panel box	1
11	Volute shell	3	31	Display board ass'y	1
12	Board	1	32	Manual button	1
13	Middle beam	1	33	Air outlet frame ass'y	1
14	E-part box cover	1	33.1	Stepper motor(vertical)	1
15	E-part box ass'y	1	33.2	Stepper motor	1
15.1	Main controller ass'y	1	34	Foam	1
15.2	Transformer	1	35	Drainage pan holder	1
15.3	Wire joint, 2p	1	36	Drainage pan ass'y	1
15.4	Wire joint	1	38	Motor	1
15.5	Motor capacitor	1	39	Panel ass'y	1
16	Left cover	1	40	EEV solenoid	1
17	Installation board	1	41	Remote controller	1
18	Base ass'y	1	42	Installation bracket	1
19	Rear cover	1	43	Room temp sensor ass'y	1
20	Evaporator ass'y	1	44	Temp. sensor ass'y	1
20.1	Electronic expansion valve	1	45	Temp. sensor ass'y	1

11.4MDVi-D112DL/N1-B MDVi-D140DL/N1-B



No.	Part Name	Quantity		No.	Part Name	Quantity
1	Grille ass'y	2		21	Volute shell	4
2	Motor clamp	2		22	Middle beam	1
3	Motor clamp	2		23	E-part box cover	1
4	Filter bracket	2		24	E-part box ass'y	1
5	Installation board	1		24.1	Main control board ass'y	1
6	Installation board	1		24.2	Transformer	1
7	Filter bracket	2		24.3	Wire joint, 2p	1
8	Sealed board	1		24.4	Wire joint	1
9	Sealed board	1		24.5	Motor capacitor	1
10	Pipe clamp board	1		25	Foam	2
11	Cover	1		26	Top cover ass'y	1
12	Left cover	1		27	Drainage pan ass'y	1
13	Display board ass'y	1		28	Plastic cover	1
14	Display installation box	1		29	Foam	2
15	Air outlet frame ass'y	1		30	Filter	4
15.1	Stepper motor	1		31	Evaporator ass'y	1
15.2	Stepper motor(vertical)	1		31.1	Electronic expansion valve	1
15.3	Stepper motor(horizontal)	1		32	EEV solenoid	1
15.4	Display board ass'y	1		33	Remote controller	1
16	Base ass'y	1		34	Installation bracket	1
17	Plastic fan	4		35	Room temp sensor ass'y	1
18	Volute shell	4		36	Temp.sensor ass'y	1
19	Motor	2		37	Temp.sensor ass'y	1
20	Motor bracket	2		21	Volute shell	4

12.Accessories

Name of Accessories	Q'ty	Outline	Usage
Owner's manual	1		Must deliver to customer
Installation manual	1		Must deliver to customer
Hook	2		For wall mounting installation
Hanging arm	2		For ceiling installation
Remote controller	1		For remove controlling the air conditioner
Frame	1		/
Mounting screw(ST2.9x10-C-H)	2		/
Alkaline dry batteries(AM4)	2		/

Wall-mounted Type (E1/E7 Type)

1.Features

1. Easy and flexible installation, which can satisfy the different space demands
2. Air cleaning equipment and the high efficiency filter, keep the air fresh
3. Low noise, creates quite and comfortable environment
4. The optimization system designed and evaporator employs a multi-bend structure which enlarges the heat exchange surface, more efficient.
5. Trapezium inner groove copper pipe and hydrophilic aluminum foil make the heat exchange more sufficient.
6. Supply air freely: cool air flow up, warm air flow down, fast and symmetrical adjust temperature, don't blow people.
7. The direction of up and down air flow can be controlled by remote controller, the direction of left and right air flow can adjust, achieve solid circle supply air.
8. Adopt cross fan and optimization wind path design, supply air is strong and quiet.

2.Specifications

Model			MDVi-D22G/N1-E1	MDVi-D28G/N1-E1	MDVi-D36G/N1-E1	MDVi-D45G/N1-E1	MDVi-D56G/N1-E1
Power supply		V- Ph-Hz	220-240V, 1Ph, 50Hz				
Cooling	Capacity	kW	2.2	2.8	3.6	4.5	5.6
	Input	W	40	40	40	50	50
	Rated current	A	0.19	0.19	0.19	0.23	0.23
Heating	Capacity	kW	2.6	3.2	4.0	5.0	6.3
	Input	W	40	40	40	50	50
	Rated current	A	0.19	0.19	0.19	0.23	0.23
Indoor fan motor	Model		RPS13D	RPS13D	RPS13D	RPS28D	RPS28D
	Type		AC motor	AC motor	AC motor	AC motor	AC motor
	Brand		Weilling	Weilling	Weilling	Weilling	Weilling
	Input	W	49/38/30	49/38/30	49/38/30	50.5/44.5/40.5	50.5/44.5/40.5
	Capacitor	uF	1.5	1.5	1.5	1.5	1.5
	Speed (hi/mid/lo)	r/min	1180/1000/850	1180/1000/850	1180/1000/850	1180/1080/800	1180/1080/800
Indoor coil	Number of rows		2	2	2	2	2
	Tube pitch(a)x row pitch(b)	mm	21 x13.37	21 x13.37	21 x13.37	21 x13.37	21 x13.37
	Fin spacing	mm	1.3	1.3	1.3	1.3	1.3
	Fin type		Hydrophilic Aluminium				
	Tube outside dia. and type	mm	Φ7, Inner groove Tube	Φ7, Inner groove Tube	Φ7, Inner groove Tube	Φ7, Inner groove Tube	Φ7, Inner groove Tube
	Coil length x height x width	mm	637×26.7×263.5	637×26.7×263.5	637×26.7×263.5	637×26.7×263.5	637×26.7×263.5
	Number of circuits		2	2	2	4	4
Indoor air flow (H/M/L)		m^3/h	580/520/480	580/520/480	580/520/480	860/755/630	925/860/755
Indoor noise level (Hi/Mid/Lo)		dB(A)	40/37/34	40/37/34	40/37/34	43/40/37	43/40/37
Indoor unit	Dimension (WxHxD)	mm	786X198X264	786X198X264	786X198X264	914X220X289	914X220X289
	Packing (WxHxD)	mm	875X290X447	875X290X447	875X290X447	1015X295X465	1015X295X465
	Net/Gross weight	kg	11/14	11/14	11/14	15/17	15/17
Refrigerant type			R410A	R410A	R410A	R410A	R410A
Throttle			Electric expansive valve				
Design pressure		MPa	4.2/2.0	4.2/2.0	4.2/2.0	4.2/2.0	4.2/2.0
Refrigerant piping	Liquid side/ Gas side	mm	Φ6.4/Φ12.7	Φ6.4/Φ12.7	Φ6.4/Φ12.7	Φ6.4/Φ12.7	Φ9.5/Φ15.9
Connecting wiring	Power wiring	$Nb×mm^2$	3×2.5(L≤20m); 3×3.5(L≤50m)				
	Signal wiring	$Nb×mm^2$	3×1.0	3×1.0	3×1.0	3×1.0	3×1.0
Drainage water pipe dia.		mm	Φ15	Φ15	Φ15	Φ15	Φ15
Controller			Wireless remote controller (R51/E) (Standard)				
Operation temp		℃	Cooling: ≥17℃; Heating: ≤30℃				

Notes:

1. Nominal cooling capacities are based on the following conditions:
   indoor temperature : 27°CDB,19°CWB,outdoor temperature:35°CDB,equivalent ref. Piping: 8m(horizontal).
2. Nominal heating capacities are based on the following conditions:
   indoor temperature: 20°CDB,outdoor temperature: 7°CDB,6°CWB,equivalent ref. Piping: 8m(horizontal).

Model			-D22G/N1-E7	-D28G/N1-E7	-D36G/N1-E7	V-D45G/N1-E7	-D56G/N1-E7
Power supply		V-Ph-Hz	220-240V, 1Ph, 50Hz				
Cooling	Capacity	kW	2.2	2.8	3.6	4.5	5.6
	Input	W	40	40	40	50	50
	Rated current	A	0.19	0.19	0.19	0.23	0.23
Heating	Capacity	kW	2.6	3.2	4.0	5.0	6.3
	Input	W	40	40	40	50	50
	Rated current	A	0.19	0.19	0.19	0.23	0.23
Indoor fan motor	Model		RPS13D	RPS13D	RPS13D	RPS28D	RPS28D
	Type		AC motor	AC motor	AC motor	AC motor	AC motor
	Brand		Weilling	Weilling	Weilling	Weilling	Weilling
	Input	W	49/38/30	49/38/30	49/38/30	50.5/44.5/40.5	50.5/44.5/40.5
	Capacitor	uF	1.5	1.5	1.5	1.5	1.5
	Speed (hi/mid/lo)	r/min	1180/1000/850	1180/1000/850	1180/1000/850	1180/1080/800	1180/1080/800
Indoor coil	Number of rows		2	2	2	2	2
	Tube pitch(a)x row pitch(b)	mm	21 x13.37	21 x13.37	21 x13.37	21 x13.37	21 x13.37
	Fin spacing	mm	1.3	1.3	1.3	1.3	1.3
	Fin type		Hydrophilic Aluminium				
	Tube outside dia. and type	mm	Φ7, Inner groove Tube	Φ7, Inner groove Tube	Φ7, Inner groove Tube	Φ7, Inner groove Tube	Φ7, Inner groove Tube
	Coil length x height x width	mm	637×26.7×263.5	637×26.7×263.5	637×26.7×263.5	637×26.7×263.5	637×26.7×263.5
	Number of circuits		2	2	2	4	4
Indoor air flow (H/M/L)		m^3/h	580/520/480	580/520/480	580/520/480	860/755/630	925/860/755
Indoor noise level (Hi/Mid/Lo)		dB(A)	40/37/34	40/37/34	40/37/34	43/40/37	43/40/37
Indoor unit	Dimension (WxHxD)	mm	786X198X264	786X198X264	786X198X264	914X220X289	914X220X289
	Packing (WxHxD)	mm	885X365X400	885X365X400	885X365X400	1015X365X420	1015X365X420
	Net/Gross weight	kg	11/14.5	11/14.5	11/14.5	15/19	15/19
Refrigerant type			R410A	R410A	R410A	R410A	R410A
Throttle			Electric expansive valve				
Design pressure		MPa	4.2/2.0	4.2/2.0	4.2/2.0	4.2/2.0	4.2/2.0
Refrigerant piping	Liquid side/ Gas side	mm	Φ6.4/Φ12.7	Φ6.4/Φ12.7	Φ6.4/Φ12.7	Φ6.4/Φ12.7	Φ9.5/Φ15.9
Connecting wiring	Power wiring	$Nb\times mm_2$	3×2.5(L≤20m); 3×3.5(L≤50m)				
	Signal wiring	$Nb\times mm_2$	3×1.0	3×1.0	3×1.0	3×1.0	3×1.0
Drainage water pipe dia.		mm	Φ15	Φ15	Φ15	Φ15	Φ15
Controller			Wireless remote controller (R51/E) (Standard)				
Operation temp		℃	Cooling: ≥17℃; Heating: ≤30℃				

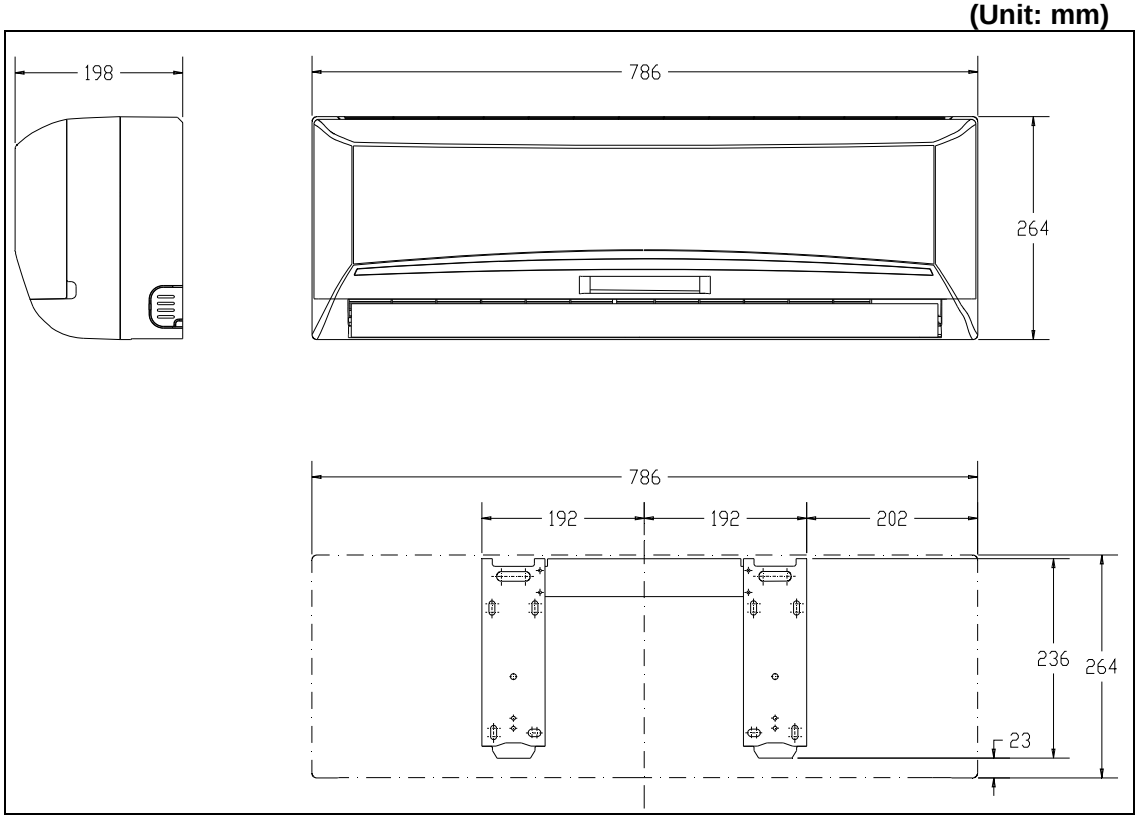
Notes:

1. Nominal cooling capacities are based on the following conditions:
   indoor temperature : 27°CDB,19°CWB,outdoor temperature:35°CDB,equivalent ref. Piping: 8m(horizontal).
2. Nominal heating capacities are based on the following conditions:
   indoor temperature: 20°CDB,outdoor temperature: 7°CDB,6°CWB,equivalent ref. Piping: 8m(horizontal).

3.Dimensions

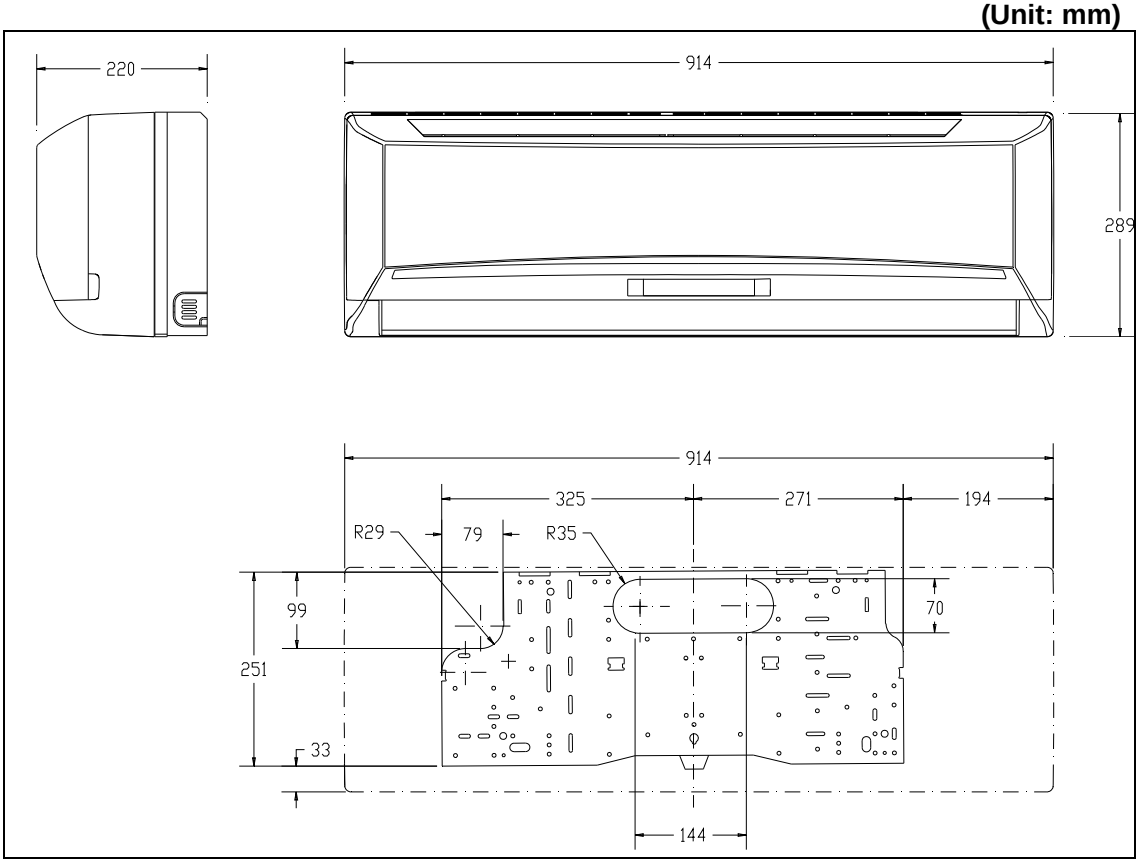
MDVi-D22G/N1-E1 MDVi-D28G/N1-E1 MDVi-D36G/N1-E1
MDVi-D22G/N1-E7 MDVi-D28G/N1-E7 MDVi-D36G/N1-E7

(Unit: mm)



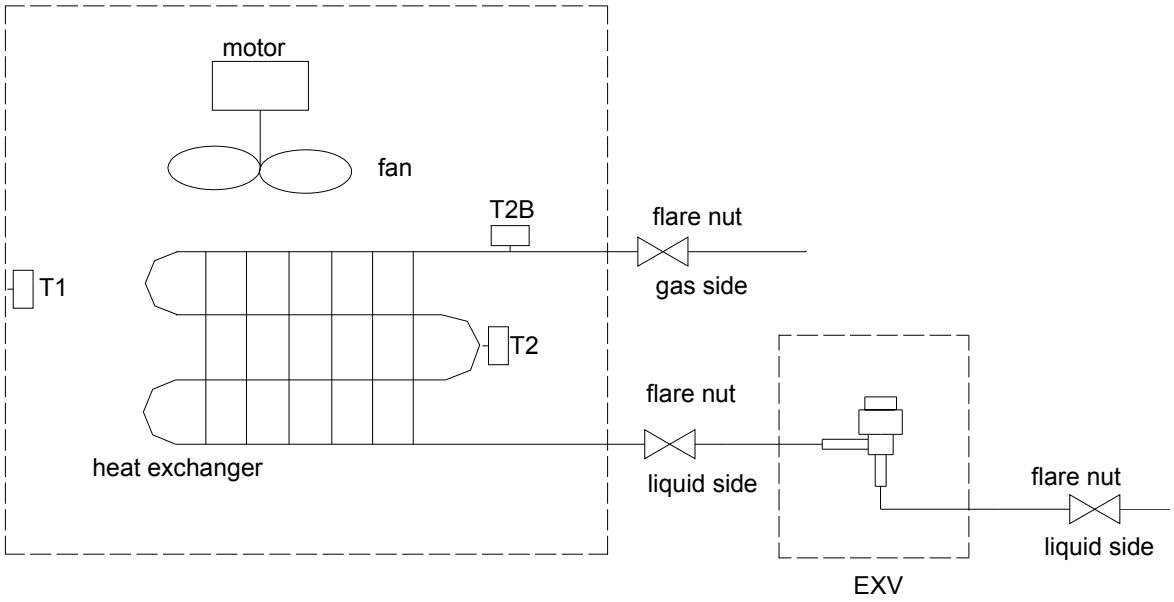
MDVi-D45G/N1-E1 MDVi-D56G/N1-E1 MDVi-D45G/N1-E7 MDVi-D56G/N1-E7

(Unit: mm)



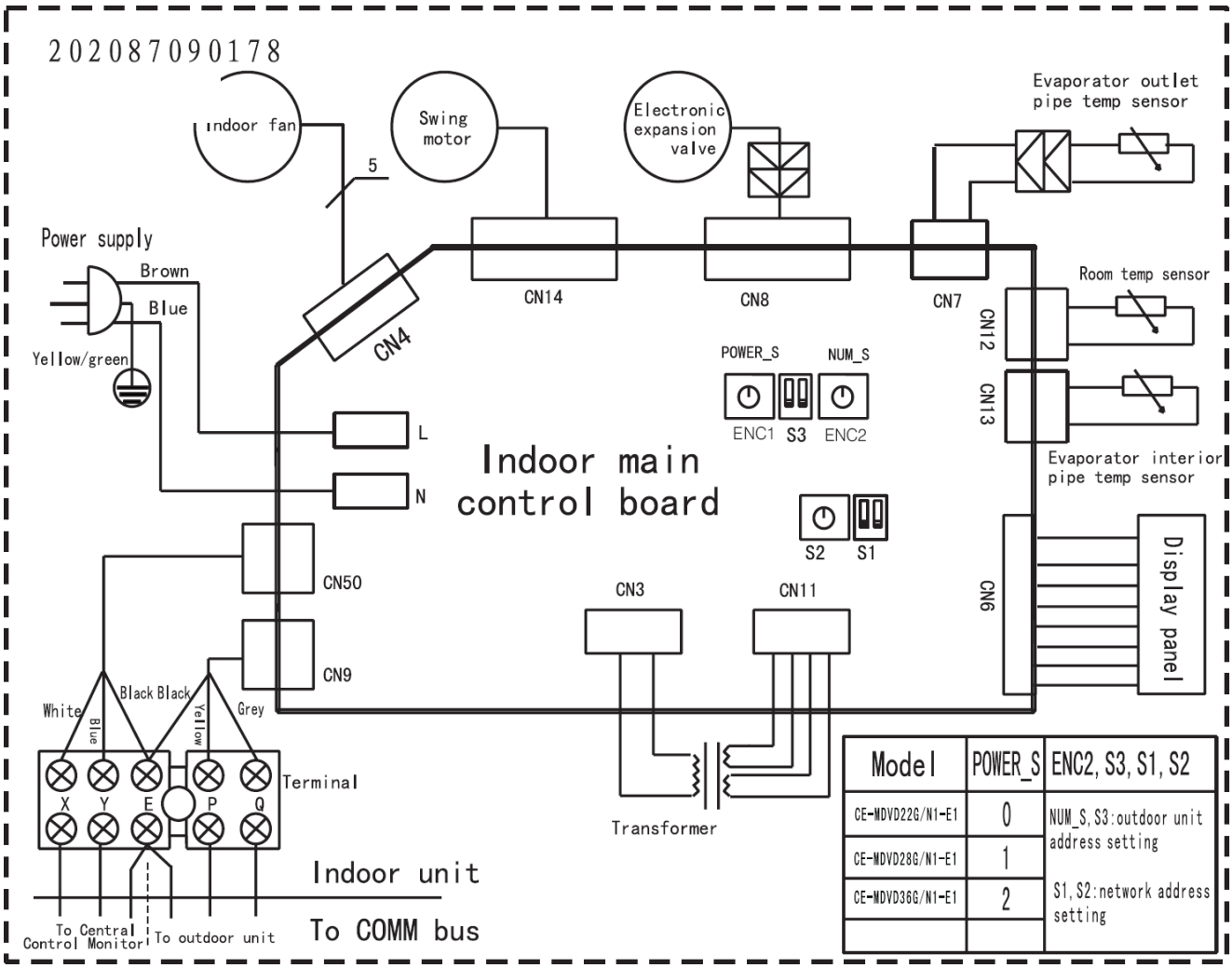
4.Piping Diagrams

MDVi-D22G/N1-E1 MDVi-D28G/N1-E1 MDVi-D36G/N1-E1 MDVi-D45G/N1-E1 MDVi-D56G/N1-E1
MDVi-D22G/N1-E7 MDVi-D28G/N1-E7 MDVi-D36G/N1-E7 MDVi-D45G/N1-E7 MDVi-D56G/N1-E7

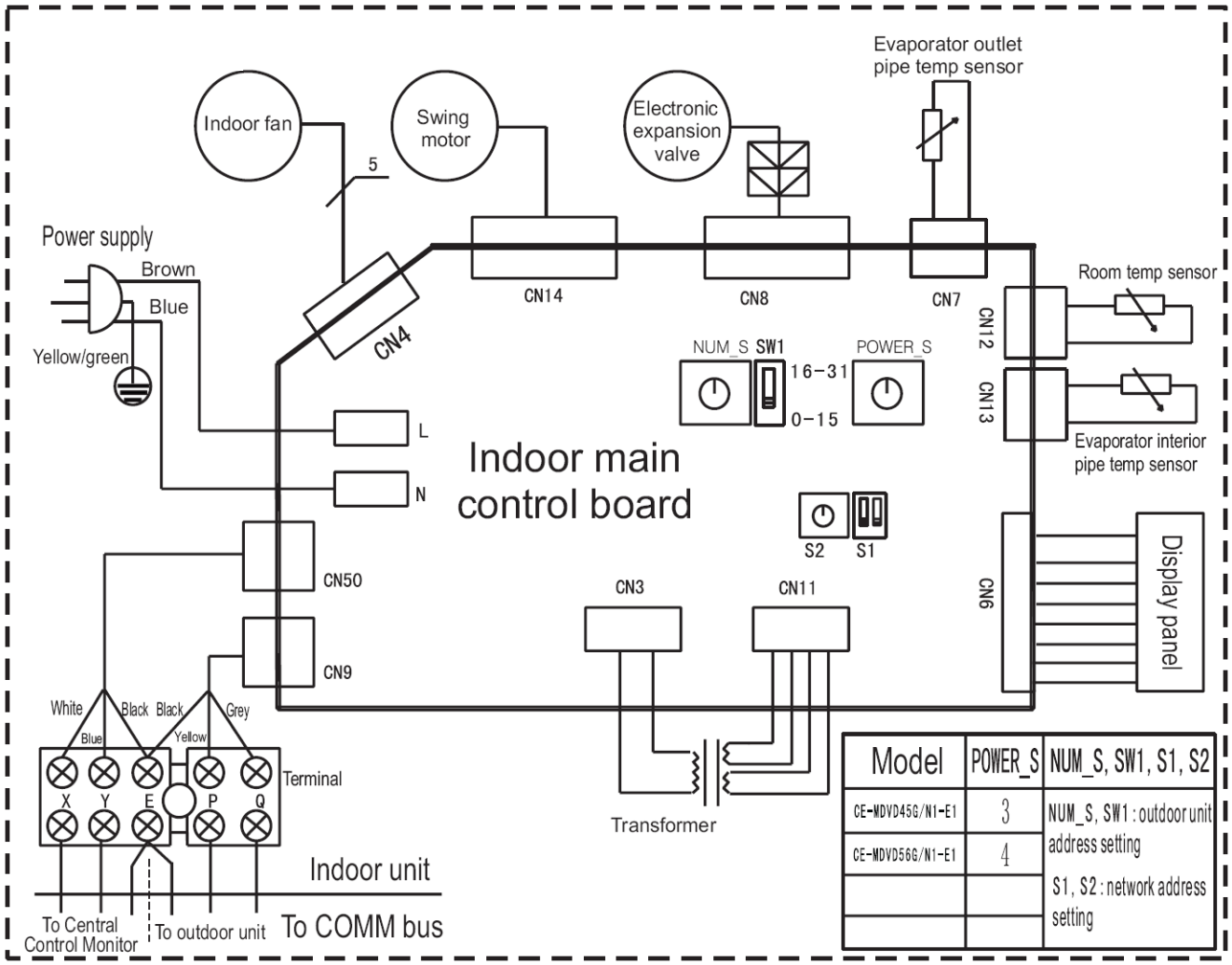


5.Wiring Diagrams

MDVi-D22G/N1-E1 MDVi-D28G/N1-E1 MDVi-D36G/N1-E1
MDVi-D22G/N1-E7 MDVi-D28G/N1-E7 MDVi-D36G/N1-E7



MDVi-D45G/N1-E1 MDVi-D56G/N1-E1 MDVi-D45G/N1-E7 MDVi-D56G/N1-E7



6.Capacity Tables

6.1 Cooling

TC: total capacity **SC**: sensible capacity **WB**: wet-bulb temperature **DB**: dry-bulb temperature

Indoor Unit size (kW)	Outdoor temperature (℃ DB)	Indoor temperature (℃ WB/DB)													
		14/20		16/23		18/26		19/27		20/28		22/30		24/32	
		TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
2.2	10.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.9	1.7
	12.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.8	1.6
	14.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.8	1.6
	16.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.8	1.6
	18.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.8	1.6
	20.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.7	1.5
	21.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.7	1.5
	23.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.5	1.6	2.7	1.5
	25.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.5	1.6	2.6	1.5
	27.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.5	1.6	2.6	1.5
	29.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.4	1.5	2.5	1.5
	31.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.4	1.5	2.5	1.5
	33.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.4	1.5	2.4	1.5
	35.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.3	1.5	2.4	1.5
	37.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.3	1.5	2.3	1.5
	39.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.2	1.6	2.3	1.5	2.3	1.5
2.8	10.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.7	2.1
	12.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.6	2.1
	14.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.6	2.1
	16.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.6	2.0
	18.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.5	2.0
	20.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.4	1.9
	21.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.4	1.9
	23.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.2	2.1	3.4	1.9
	25.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.2	2.0	3.3	1.9
	27.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.2	2.0	3.3	1.9
	29.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.1	2.0	3.2	1.9
	31.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.1	2.0	3.2	1.9
	33.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.1	2.0	3.1	2.0
	35.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.1	2.9	1.9	3.1	2.0
	37.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.1	2.9	1.9	2.9	1.9
	39.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.8	2.0	2.9	1.9	2.9	1.9
3.6	10.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.8	2.8
	12.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.6	2.7
	14.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.6	2.7
	16.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.5	2.7
	18.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.5	2.7
	20.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.4	2.7
	21.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.4	2.7

	23.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.4	2.7
	25.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.1	2.7	4.2	2.6
	27.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.1	2.7	4.2	2.6
	29.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.0	2.6	4.1	2.5
	31.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.0	2.6	4.1	2.4
	33.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.0	2.6	4.0	2.4
	35.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.7	2.6	3.9	2.6	4.0	2.4
	37.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.7	2.6	3.9	2.6	3.9	2.3
	39.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.7	2.6	3.9	2.7	3.9	2.4
4.5	10.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.9	3.4
	12.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.9	3.4
	14.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.8	3.3
	16.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.6	3.2
	18.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.6	3.2
	20.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.5	3.2
	21.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.4	3.1
	23.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.2	3.2	5.4	3.1
	25.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.2	3.2	5.3	3.0
	27.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.0	3.0	5.3	3.0
	29.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.0	3.0	5.1	2.9
	31.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.3	3.5	5.1	3.0
	33.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.3	3.5	4.9	2.9
	35.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.3	3.5	4.8	2.8
	37.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.6	3.2	4.8	3.1	4.8	2.9
	39.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.6	3.2	4.8	3.1	4.8	2.9
5.6	10.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.3	4.1
	12.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.3	4.1
	14.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.2	4.1
	16.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	6.9	4.0
	18.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.1	4.1
	20.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.1	4.1
	21.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.0	4.1
	23.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	6.9	4.0
	25.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.5	4.1	6.8	3.9
	27.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.4	4.0	6.5	3.8
	29.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.3	4.0	6.4	3.7
	31.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.2	3.9	6.3	3.7
	33.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.0	3.8	6.3	3.7
	35.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	5.9	3.7	6.2	3.6
	37.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	5.9	3.9	6.1	3.5
	39.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	5.7	3.8	5.8	3.8	6.0	3.5

6.2 Heating

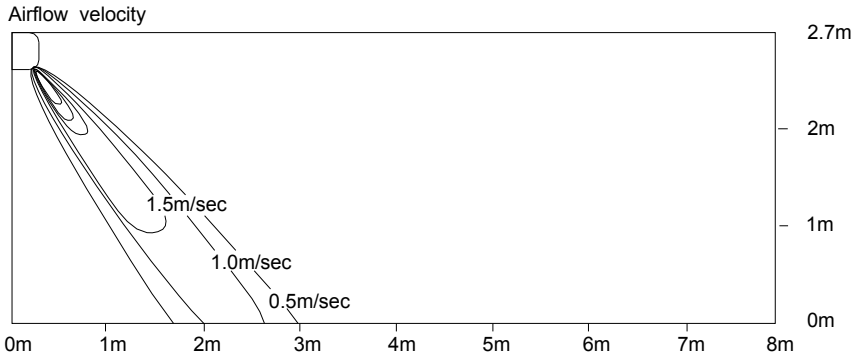
TC: total capacity **WB**: wet-bulb temperature **DB**: dry-bulb temperature

Indoor Unit size (kW)	Outdoor temperature (℃)		Indoor temperature (℃ DB)					
			16.00	18.00	20.00	21.00	22.00	24.00
			TC	TC	TC	TC	TC	TC
	WB	DB	kW	kW	kW	kW	kW	kW
2.20	-15.00	-14.70	1.64	1.64	1.64	1.64	1.64	1.64
	-13.00	-12.60	1.74	1.74	1.74	1.74	1.74	1.74
	-11.00	-10.50	1.82	1.82	1.82	1.82	1.82	1.82
	-10.00	-9.50	1.90	1.90	1.90	1.90	1.90	1.90
	-9.10	-8.50	1.95	1.95	1.95	1.95	1.95	1.95
	-7.60	-7.00	1.98	1.98	1.98	1.98	1.98	1.98
	-5.60	-5.00	2.05	2.05	2.05	2.05	2.05	2.05
	-3.70	-3.00	2.16	2.16	2.16	2.16	2.16	2.16
	-0.70	0.00	2.31	2.31	2.31	2.31	2.31	2.18
	2.20	3.00	2.44	2.44	2.44	2.44	2.39	2.18
	4.10	5.00	2.52	2.52	2.52	2.52	2.39	2.18
	6.00	7.00	2.60	2.60	2.60	2.52	2.39	2.18
	7.90	9.00	2.68	2.68	2.93	2.52	2.39	2.18
	9.80	11.00	2.76	2.76	2.60	2.52	2.39	2.18
	11.80	13.00	2.86	2.81	2.60	2.52	2.39	2.18
	13.70	15.00	2.94	2.81	2.60	2.52	2.39	2.18
2.80	-15.00	-14.70	2.02	2.02	2.02	2.02	2.02	2.02
	-13.00	-12.60	2.14	2.14	2.14	2.14	2.14	2.14
	-11.00	-10.50	2.24	2.24	2.24	2.24	2.24	2.24
	-10.00	-9.50	2.34	2.34	2.34	2.34	2.34	2.34
	-9.10	-8.50	2.40	2.40	2.40	2.40	2.40	2.40
	-7.60	-7.00	2.43	2.43	2.43	2.43	2.43	2.43
	-5.60	-5.00	2.53	2.53	2.53	2.53	2.53	2.53
	-3.70	-3.00	2.66	2.66	2.66	2.66	2.66	2.66
	-0.70	0.00	2.85	2.85	2.85	2.85	2.85	2.69
	2.20	3.00	3.01	3.01	3.01	3.01	2.94	2.69
	4.10	5.00	3.10	3.10	3.10	3.10	2.94	2.69
	6.00	7.00	3.20	3.20	3.20	3.10	2.94	2.69
	7.90	9.00	3.30	3.30	2.93	3.10	2.94	2.69
	9.80	11.00	3.39	3.39	3.20	3.10	2.94	2.69
	11.80	13.00	3.52	3.46	3.20	3.10	2.94	2.69
	13.70	15.00	3.62	3.46	3.20	3.10	2.94	2.69
3.60	-15.00	-14.70	2.52	2.52	2.52	2.52	2.52	2.52
	-13.00	-12.60	2.68	2.68	2.68	2.68	2.68	2.68
	-11.00	-10.50	2.80	2.80	2.80	2.80	2.80	2.80
	-10.00	-9.50	2.92	2.92	2.92	2.92	2.92	2.92
	-9.10	-8.50	3.00	3.00	3.00	3.00	3.00	3.00
	-7.60	-7.00	3.04	3.04	3.04	3.04	3.04	3.04
	-5.60	-5.00	3.16	3.16	3.16	3.16	3.16	3.16
	-3.70	-3.00	3.32	3.32	3.32	3.32	3.32	3.32
	-0.70	0.00	3.56	3.56	3.56	3.56	3.56	3.36

	2.20	3.00	3.76	3.76	3.76	3.76	3.68	3.36
	4.10	5.00	3.88	3.88	3.88	3.88	3.68	3.36
	6.00	7.00	4.00	4.00	4.00	3.88	3.68	3.36
	7.90	9.00	4.12	4.12	2.93	3.88	3.68	3.36
	9.80	11.00	4.24	4.24	4.00	3.88	3.68	3.36
	11.80	13.00	4.40	4.32	4.00	3.88	3.68	3.36
	13.70	15.00	4.52	4.32	4.00	3.88	3.68	3.36
4.50	-15.00	-14.70	3.15	3.15	3.15	3.15	3.15	3.15
	-13.00	-12.60	3.35	3.35	3.35	3.35	3.35	3.35
	-11.00	-10.50	3.50	3.50	3.50	3.50	3.50	3.50
	-10.00	-9.50	3.65	3.65	3.65	3.65	3.65	3.65
	-9.10	-8.50	3.75	3.75	3.75	3.75	3.75	3.75
	-7.60	-7.00	3.80	3.80	3.80	3.80	3.80	3.80
	-5.60	-5.00	3.95	3.95	3.95	3.95	3.95	3.95
	-3.70	-3.00	4.15	4.15	4.15	4.15	4.15	4.15
	-0.70	0.00	4.45	4.45	4.45	4.45	4.45	4.20
	2.20	3.00	4.70	4.70	4.70	4.70	4.60	4.20
	4.10	5.00	4.85	4.85	4.85	4.85	4.60	4.20
	6.00	7.00	5.00	5.00	5.00	4.85	4.60	4.20
	7.90	9.00	5.15	5.15	2.93	4.85	4.60	4.20
	9.80	11.00	5.30	5.30	5.00	4.85	4.60	4.20
	11.80	13.00	5.50	5.40	5.00	4.85	4.60	4.20
	13.70	15.00	5.65	5.40	5.00	4.85	4.60	4.20
5.60	-15.00	-14.70	3.97	3.97	3.97	3.97	3.97	3.97
	-13.00	-12.60	4.22	4.22	4.22	4.22	4.22	4.22
	-11.00	-10.50	4.41	4.41	4.41	4.41	4.41	4.41
	-10.00	-9.50	4.60	4.60	4.60	4.60	4.60	4.60
	-9.10	-8.50	4.73	4.73	4.73	4.73	4.73	4.73
	-7.60	-7.00	4.79	4.79	4.79	4.79	4.79	4.79
	-5.60	-5.00	4.98	4.98	4.98	4.98	4.98	4.98
	-3.70	-3.00	5.23	5.23	5.23	5.23	5.23	5.23
	-0.70	0.00	5.61	5.61	5.61	5.61	5.61	5.29
	2.20	3.00	5.92	5.92	5.92	5.92	5.80	5.29
	4.10	5.00	6.11	6.11	6.11	6.11	5.80	5.29
	6.00	7.00	6.30	6.30	6.30	6.11	5.80	5.29
	7.90	9.00	6.49	6.49	2.93	6.11	5.80	5.29
	9.80	11.00	6.68	6.68	6.30	6.11	5.80	5.29
	11.80	13.00	6.93	6.80	6.30	6.11	5.80	5.29
	13.70	15.00	7.12	6.80	6.30	6.11	5.80	5.29

7.Velocity Distribution

Discharge angle 70º



8.Electric Characteristics

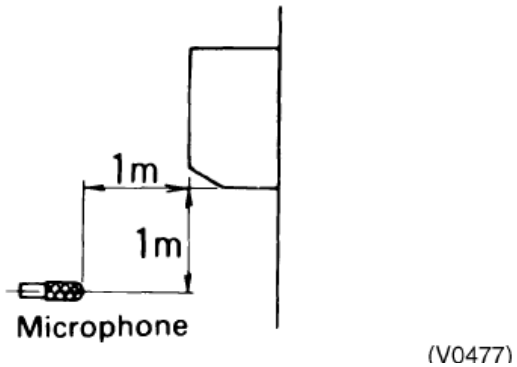
Model	Indoor Unit				Power Supply		IFM	
	Hz	Voltage	Min.	Max.	MCA	MFA	KW	FLA
MDVi-D22G/N1-E1(E7)	50	220-240V	198	254	0.3	15	0.013	0.225
MDVi-D28G/N1-E1(E7)	50	220-240V	198	254	0.3	15	0.013	0.225
MDVi-D36G/N1-E1(E7)	50	220-240V	198	254	0.3	15	0.013	0.225
MDVi-D45G/N1-E1(E7)	50	220-240V	198	254	0.3	15	0.028	0.24
MDVi-D56G/N1-E1(E7)	50	220-240V	198	254	0.3	15	0.028	0.24

Remark:
MCA: Min. Current Amps. (A)
MFA: Max. Fuse Amps. (A)
KW: Fan Motor Rated Output (kW)
FLA: Full Load Amps. (A)
IFM: Indoor Fan Motor

9.Sound Level

Test condition

■ Wall Mounted Type

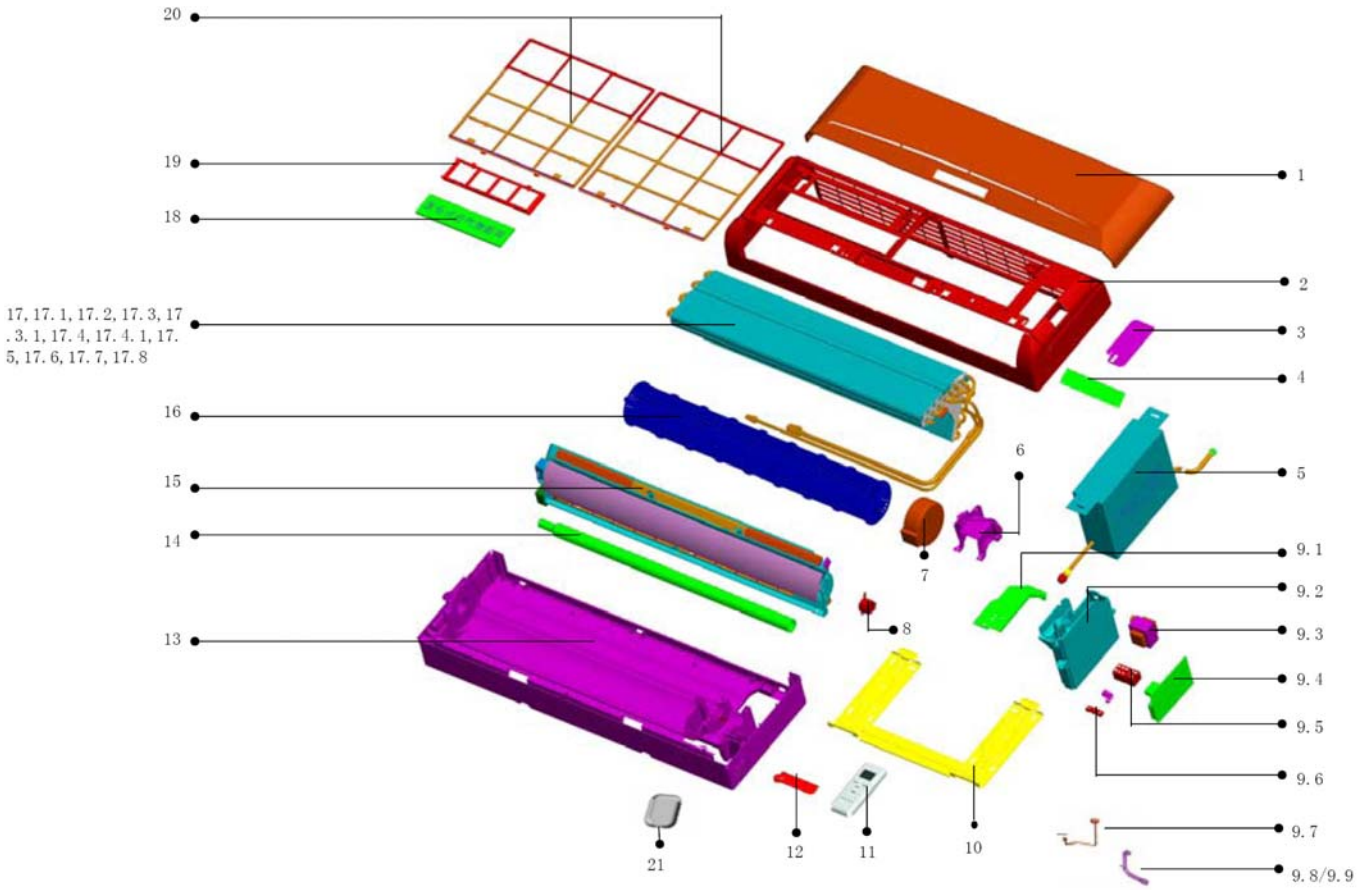


(V0477)

Model	Noise level under three speeds of fan (dB(A))		
	H	M	L
MDVi-D22G/N1-E1(E7)	40	37	34
MDVi-D28G/N1-E1(E7)	40	37	34
MDVi-D36G/N1-E1(E7)	40	37	34
MDVi-D45G/N1-E1(E7)	43	40	37
MDVi-D56G/N1-E1(E7)	43	40	37

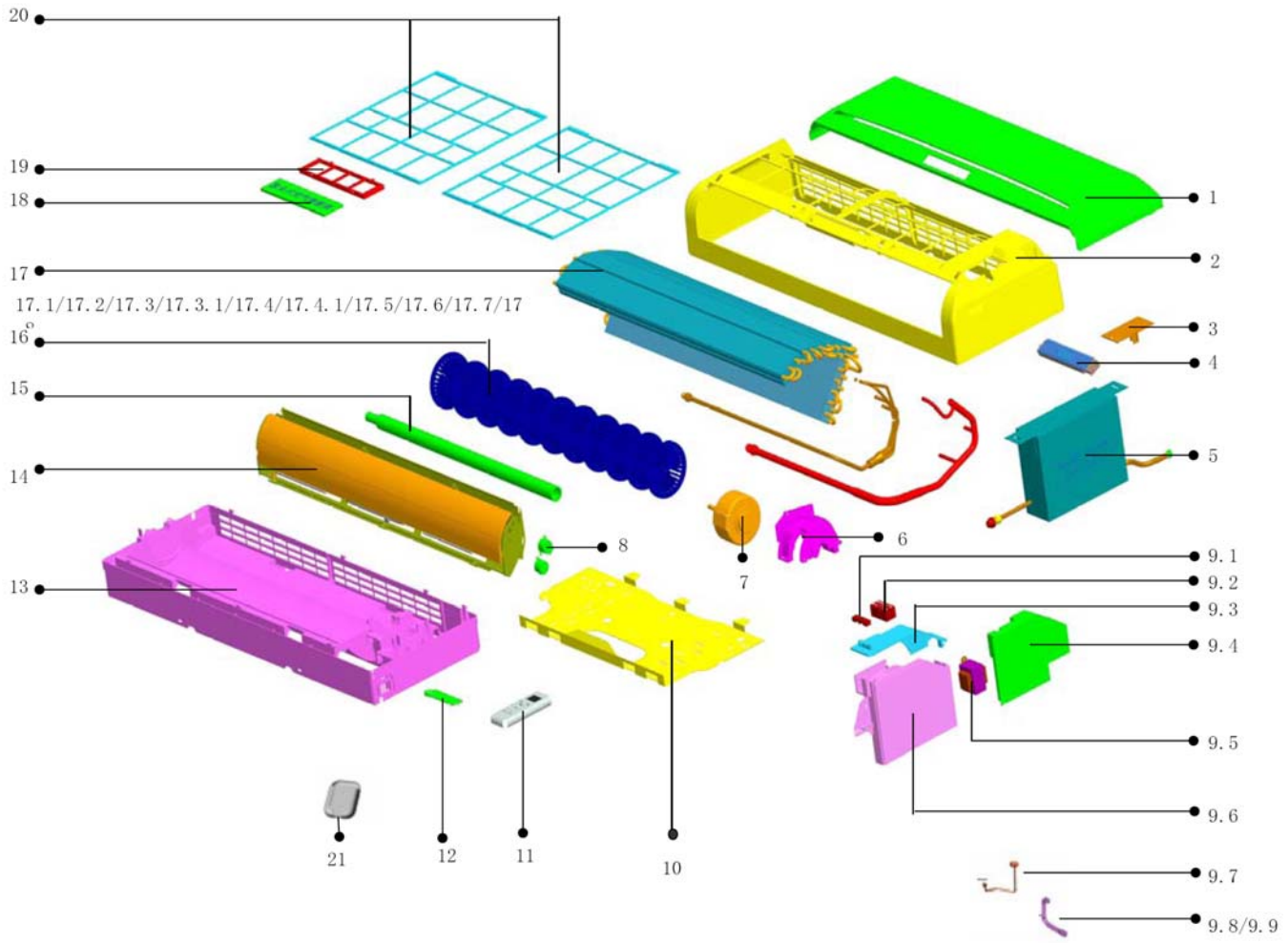
10.Exploded View

10.1 MDVi-D22G/N1-E1 MDVi-D28G/N1-E1 MDVi-D36G/N1-E1



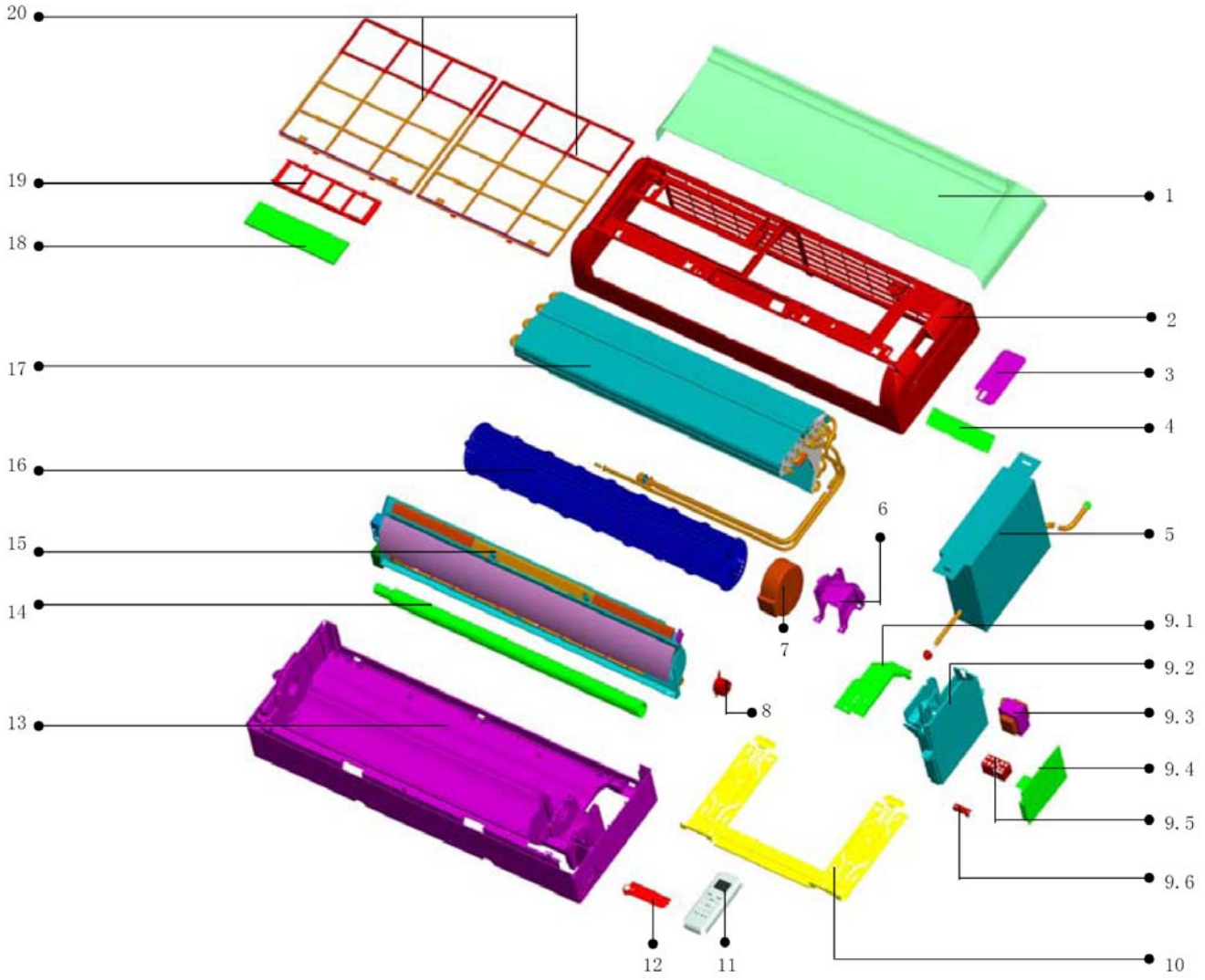
No.	Part Name	Quantity		No.	Part Name	Quantity
1	Panel ass'y	1		12	Pipe clamp board	1
2	Panel frame ass'y	1		13	Base ass'y	1
3	E-Part box cover	1		14	Drain hose	1
4	Display control box ass'y	1		15	Air outlet frame ass'y	1
5	Electric throttle ass'y	1		16	Cross fan	1
6	Motor cover	1		17	Evaporator ass'y	1
7	Motor	1		17.1	Front Evaporator	1
8	Stepper motor	1		17.2	Rear Evaporator	1
9	E-part box ass'y	1		17.3	Evaporator input pipe ass'y	1
9.1	E-Part box cover	1		17.3.1	Pipe joint	1
9.2	E-Part box	1		17.4	Evaporator output pipe ass'y	1
9.3	Transformer	1		17.4.1	Pipe joint	1
9.4	Main controller ass'y	1		17.5	Sphere pad	1
9.5	Wire joint, 5p	1		17.6	Sphere pad	1
9.6	Wire clamp	2		17.7	Copper nut	1
9.7	Temp. sensor ass'y	1		17.8	Copper nut	1
9.8	Room temp sensor ass'y	1		18	Net	1
9.9	Temp. sensor ass'y	1		19	Net	1
10	Installation board	1		20	Filter	2
11	Remote controller	1		21	Remote controller holder ass'y	1

10.2 MDVi-D45G/N1-E1 MDVi-D56G/N1-E1



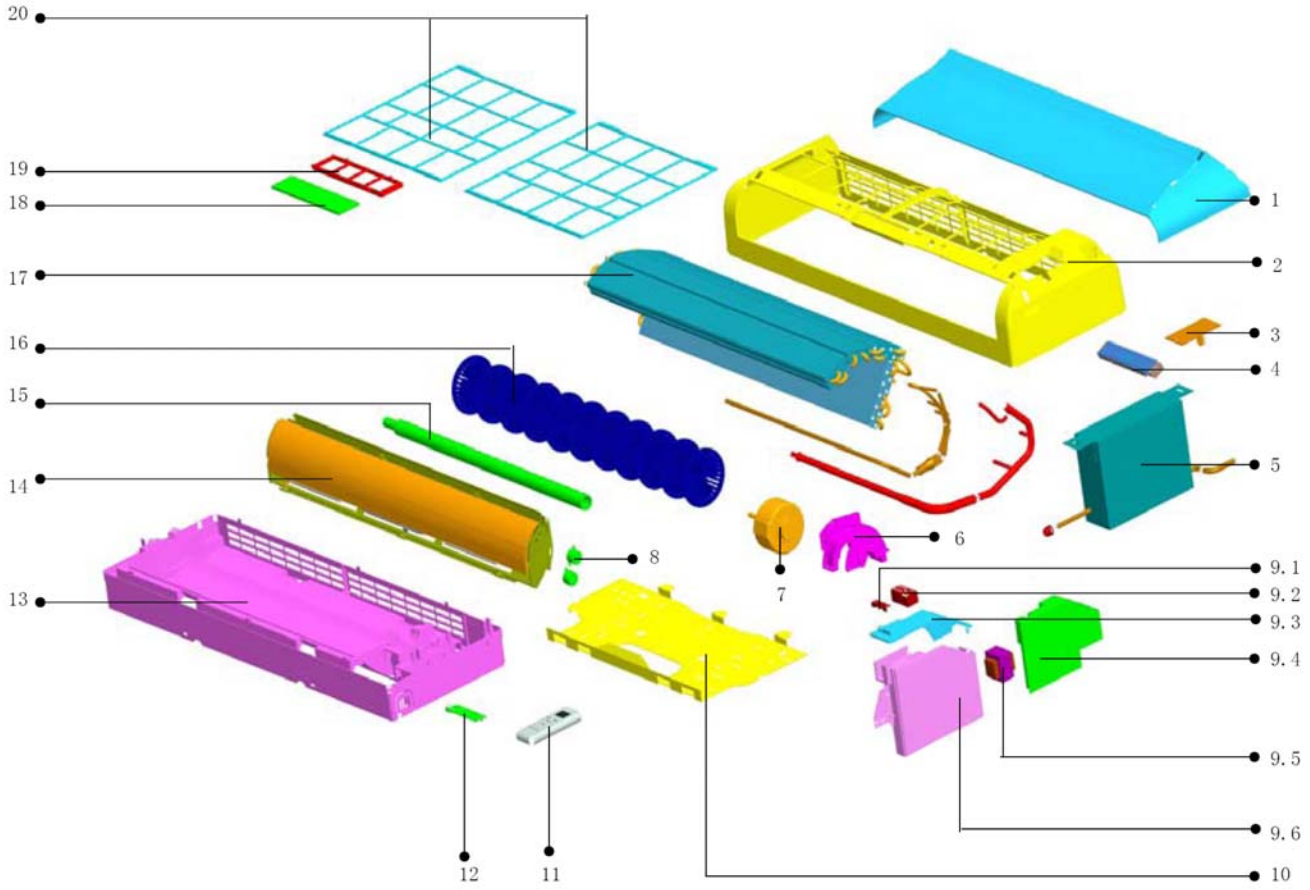
No.	Part Name	Quantity		No.	Part Name	Quantity
1	Panel ass'y	1		12	Pipe clamp board	1
2	Panel frame ass'y	1		13	Base ass'y	1
3	E-Part box cover	1		14	Drain hose	1
4	Display control box ass'y	1		15	Air outlet frame ass'y	1
5	Electric throttle ass'y	1		16	Cross fan ass'y	1
6	Motor cover	1		17	Evaporator ass'y	1
7	Motor	1		17.1	Front Evaporator	1
8	Stepper motor	1		17.2	Rear Evaporator	1
9	E-part box ass'y	1		17.3	Evaporator input pipe ass'y	1
9.1	Wire clamp	1		17.3.1	Pipe joint	1
9.2	Wire joint, 5p	1		17.4	Evaporator output pipe ass'y	1
9.3	E-Part box cover	1		17.4.1	Pipe joint	1
9.4	Main controller ass'y	1		17.5	Sphere pad	1
9.5	Transformer	1		17.6	Sphere pad	1
9.6	E-Part box	1		17.7	Copper nut	1
9.7	Temp. sensor ass'y	1		17.8	Copper nut	1
9.8	Room temp sensor ass'y	1		18	Net	1
9.9	Temp. sensor ass'y	1		19	Net	1
10	Installation board	1		20	Filter	2
11	Remote controller	1		21	Remote controller holder ass'y	1

10.3 MDVi-D22G/N1-E7 MDVi-D28G/N1-E7 MDVi-D36G/N1-E7



No.	Part name	Quantity	No.	Part name	Quantity
1	Front panel	1	14	Drain hose	1
2	Panel frame	1	15	Air out frame	1
3	Cover, electric control box	1	16	Cross flow fan assembly	1
4	Display board，Ass'y	1	17	Evaporator assembly	1
5	Electric throttle	1	17.1	Evaporator front	1
6	Motor cover	1	17.2	Evaporator back	1
7	Fan motor	1	17.3	Liquid input pipe, evaporator, subassembly	1
8	Louver motor	1	17.3.1	Pipe connecter	1
9	Electrical control box subassembly	1	17.4	Gas output pipe, evaporator, subassembly	1
9.1	E-part box cover	1	17.4.1	Pipe connecter	1
9.2	E-Parts box	1	17.5	Pipe nut	1
9.3	Transformer	1	17.6	Pipe nut	1
9.4	Main control board	1	17.7	Sphere pad	1
9.5	Terminal	1	17.8	Sphere pad	1
9.6	Wire clamp	2	17.9	Copper nut	1
10	Installation Plate	1	17.10	Copper nut	1
11	Remote controller	1	18	Air cleaner	1
12	Connecting pipe clamp	1	19	Air cleaner holder	1
13	Chassis assembly	1	20	Air Filter	2

10.4 MDVi-D45G/N1-E7 MDVi-D56G/N1-E7

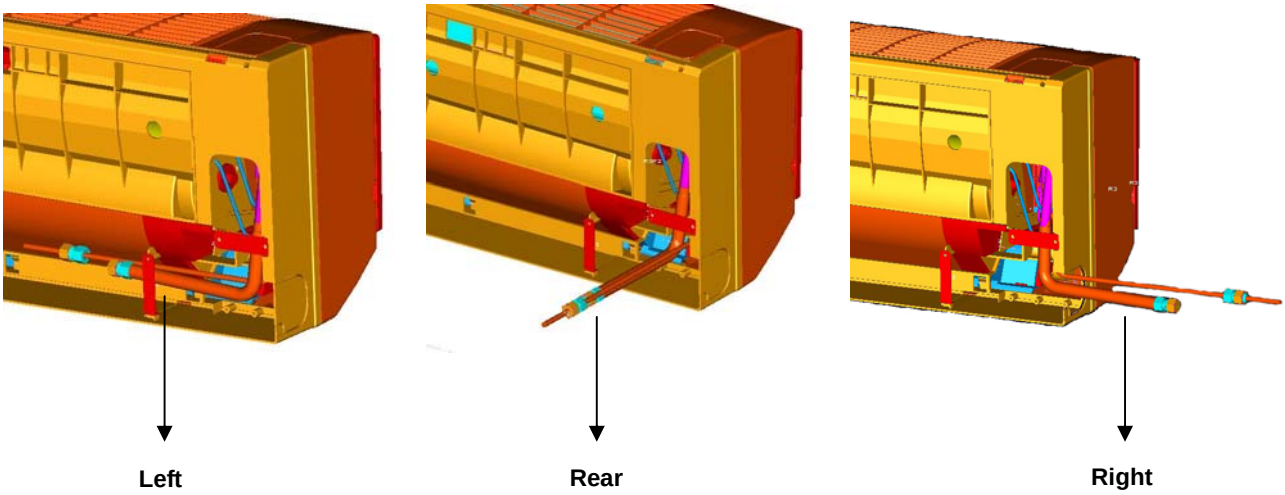


No.	Part name	Quantity	No.	Part name	Quantity
1	Front panel	1	14	Drain hose	1
2	Panel frame	1	15	Air out frame	1
3	Cover, electric control box	1	16	Cross flow fan assembly	1
4	Display board，Ass'y	1	17	Evaporator assembly	1
5	Electric throttle	1	17.1	Evaporator front	1
6	Motor cover	1	17.2	Evaporator back	1
7	Fan motor	1	17.3	Liquid input pipe, evaporator, subassembly	1
8	Louver motor	1	17.4	Gas output pipe, evaporator, subassembly	1
9	Electrical control box subassembly	1	17.5	Pipe nut	1
9.1	Wire clamp	1	17.6	Pipe nut	1
9.2	Terminal	1	17.7	Sphere pad	1
9.3	E-part box cover	1	17.8	Sphere pad	1
9.4	Main control board	1	17.9	Copper nut	1
9.5	Transformer	1	17.10	Copper nut	1
9.6	E-Parts box	1	18	Air cleaner	1
10	Installation Plate	1	19	Air cleaner holder	1
11	Remote controller	1	20	Air Filter	2
12	Connecting pipe clamp	1	21	The temperature sensor	1
13	Chassis assembly	1	22	Room temperature sensory package	1

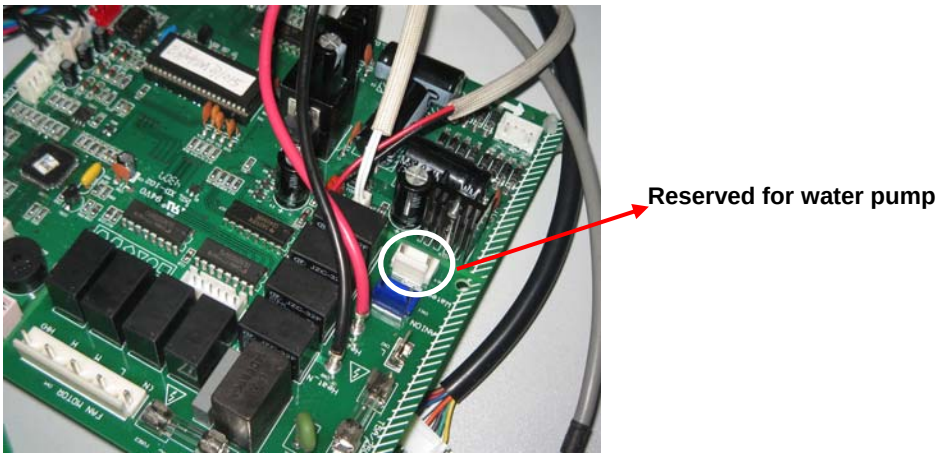
Wall-mounted Type(EXV Integrated)

1.Features

1. LED display.
2. Big and small panels have different colors for choose: white and brown for big panel, blue and brown for small panel, and the other colors can be customized according to the customers' demands.
3. Built-in the electronic throttle kit.
4. Multi-refrigerant outlet pipe method: left\right\rear, satisfy the need of different rooms.



5. Adopt new type installation plate, easy for installation and stable.
6. Reserved the socket on main control board for water pump and PCB can be customized if you need water pump function.



7. Three air flow speed: high、middle and low, double air guides.
8. Low noise, creates quite and comfortable environment.
9. Air cleaning equipment and the high efficiency filter, keep the air fresh.

2.Specifications

Model			MDVi-D22G/N1Y	MDVi-D28G/N1Y	MDVi-D36G/N1Y	MDVi-D45G/N1Y	MDVi-D56G/N1Y
Power supply		V- Ph-Hz	220-240~1~50				
Cooling	Capacity	kW	2.2	2.8	3.6	4.5	5.6
	Input	W	30	30	30	45	45
	Rated current	A	0.14	0.14	0.14	0.2	0.2
Heating	Capacity	kW	2.6	3.2	4.0	5.0	6.3
	Input	W	30	30	30	45	45
	Rated current	A	0.14	0.14	0.14	0.2	0.2
Indoor fan motor	Model		YDK15-6	YDK15-6	YDK15-6	YDK18-4	YDK18-4
	Type		AC motor	AC motor	AC motor	AC motor	AC motor
	Brand		Welling	Welling	Welling	Welling	Welling
	Input	W	30/24/22	30/24/22	30/24/22	44/42/39	44/42/39
	Capacitor	uF	1.2	1.2	1.2	1.2	1.2
	Speed (hi/mid/lo)	r/min	880/810/760	880/810/760	880/810/760	1030/980/880	1030/980/880
Indoor coil	Number of rows		2	2	2	2	2
	Tube pitch(a)x row pitch(b)	mm	21 x13.37	21 x13.37	21 x13.37	21 x13.37	21 x13.37
	Fin spacing	mm	1.5	1.5	1.5	1.5	1.5
	Fin type		Hydrophilic Aluminium				
	Tube outside dia. and type	mm	Φ7, Inner groove Tube	Φ7, Inner groove Tube	Φ7, Inner groove Tube	Φ7, Inner groove Tube	Φ7, Inner groove Tube
	Coil length x height x width	mm	635x315 x26.74	635x315x26.74	635x315x26.74	785x357x26.74	785x357x26.74
	Number of circuits		3	3	3	6	6
Indoor air flow (H/M/L)		m^3/h	580/500/420	580/500/420	580/500/420	900/760/650	900/760/650
Indoor noise level (sound pressure)		dB(A)	35/32/29	35/32/29	35/32/29	40/38/34	40/38/34
Indoor unit	Dimension (WxHxD)	mm	915 x210x290	915 x210x290	915 x210x290	1070 x210x315	1070 x210x315
	Packing (WxHxD)	mm	1020X300X385	1020X300X385	1020X300X385	1180X300X410	1180X300X410
	Net/Gross weight	kg	12/16	12/16	12/16	15/19	16/19
Refrigerant type			R410A	R410A	R410A	R410A	R410A
Throttle			Inside Electric expansive valve				
Design pressure		MPa	4.2/2.0	4.2/2.0	4.2/2.0	4.2/2.0	4.2/2.0
Refrigerant piping	Liquid side/ Gas side	mm	Φ6.4/Φ12.7	Φ6.4/12.7	Φ6.4/Φ12.7	Φ6.4/Φ12.7	Φ9.5/Φ15.9
Connecting wiring	Power wiring	$Nb \times mm^2$	3×2.5(L≤20m); 3×3.5(L≤50m)				
	Signal wiring	$Nb \times mm^2$	3×1.0	3×1.0	3×1.0	3×1.0	3×1.0
Drainage water pipe dia.		mm	Φ20	Φ20	Φ20	Φ20	Φ20
Controller			Wireless remote controller (R51/E)(standard)				
Operation temp		℃	17~30				

Notes:

1. Nominal cooling capacities are based on the following conditions:
   indoor temperature : 27°CDB,19°CWB,outdoor temperature:35°CDB,equivalent ref. Piping: 8m(horizontal).
2. Nominal heating capacities are based on the following conditions:
   indoor temperature: 20°CDB,outdoor temperature: 7°CDB,6°CWB,equivalent ref. Piping: 8m(horizontal).

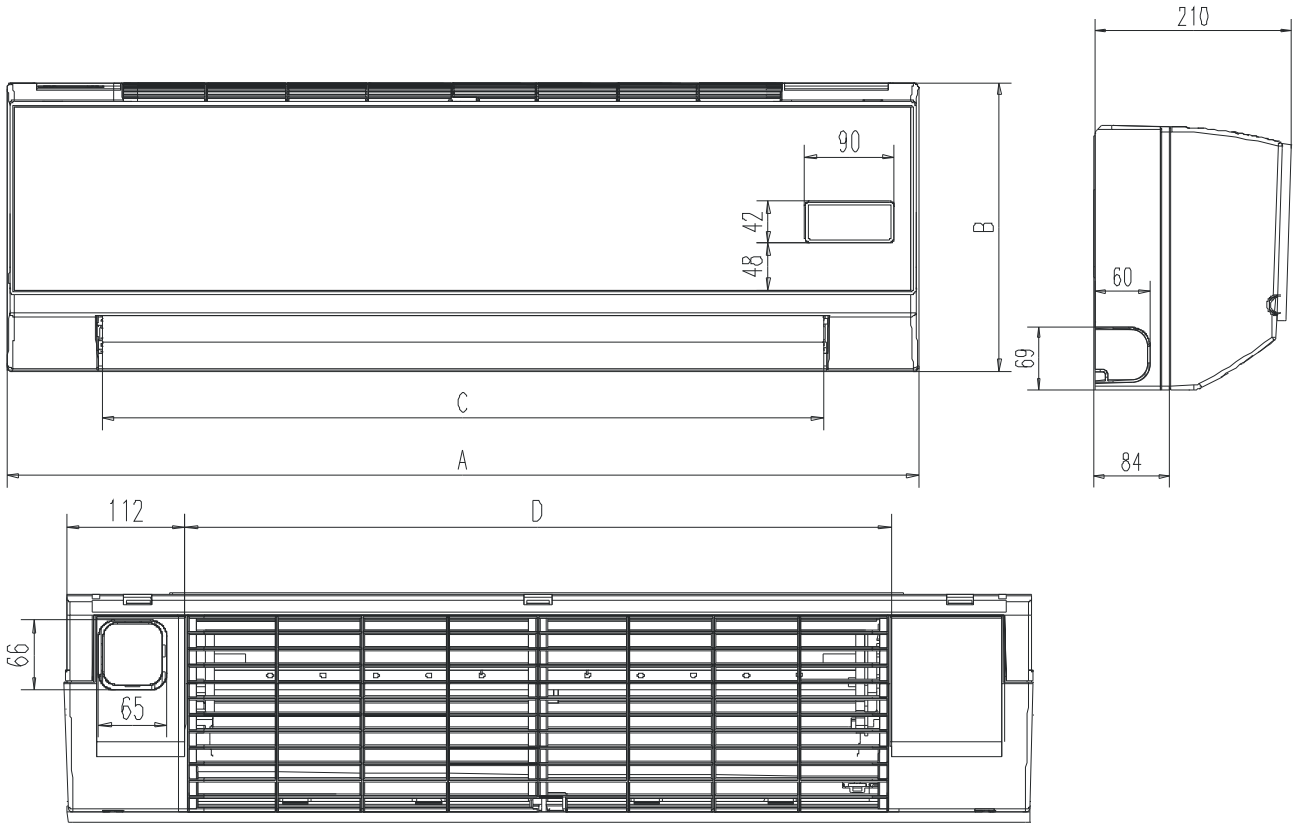
Model			MDVi-D22G/DN1Y	MDVi-D28G/DN1Y	MDVi-D36G/DN1Y	MDVi-D45G/DN1Y	MDVi-D56G/DN1Y
Power supply		V- Ph-Hz	220-240~1~50				
Cooling	Capacity	kW	2.2	2.8	3.6	4.5	5.6
	Input	W	30	30	30	45	45
	Rated current	A	0.14	0.14	0.14	0.2	0.2
Heating	Capacity	kW	2.6	3.2	4.0	5.0	6.3
	Input	W	30	30	30	45	45
	Rated current	A	0.14	0.14	0.14	0.2	0.2
Electric heater	Input	W	750	750	750	900	900
Indoor fan motor	Model		YDK15-6	YDK15-6	YDK15-6	YDK18-4	YDK18-4
	Type		AC motor	AC motor	AC motor	AC motor	AC motor
	Brand		Welling	Welling	Welling	Welling	Welling
	Input	W	30/24/22	30/24/22	30/24/22	44/42/39	44/42/39
	Capacitor	uF	1.2	1.2	1.2	1.2	1.2
	Speed (hi/mid/lo)	r/min	880/810/760	880/810/760	880/810/760	1030/980/880	1030/980/880
Indoor coil	Number of rows		2	2	2	2	2
	Tube pitch(a)x row pitch(b)	mm	21 x13.37	21 x13.37	21 x13.37	21 x13.37	21 x13.37
	Fin spacing	mm	1.5	1.5	1.5	1.5	1.5
	Fin type		Hydrophilic Aluminium				
	Tube outside dia. and type	mm	Φ7, Inner groove Tube	Φ7, Inner groove Tube	Φ7, Inner groove Tube	Φ7, Inner groove Tube	Φ7, Inner groove Tube
	Coil length x height x width	mm	635x315x26.74	635x315x26.74	635x315x26.74	785x357x26.74	785x357x26.74
	Number of circuits		3	3	3	6	6
Indoor air flow (H/M/L)		m^3/h	580/500/420	580/500/420	580/500/420	900/760/650	900/760/650
Indoor noise level (sound pressure)		dB(A)	35/32/29	35/32/29	35/32/29	40/38/34	40/38/34
Indoor unit	Dimension (WxHxD)	mm	915 x210x290	915 x210x290	915 x210x290	1070 x210x315	1070 x210x315
	Packing (WxHxD)	mm	1020X300X385	1020X300X385	1020X300X385	1180X300X410	1180X300X410
	Net/Gross weight	kg	12/16	12/16	12/16	15/19	16/19
Refrigerant type			R410A	R410A	R410A	R410A	R410A
Throttle			Inside Electric expansive valve				
Design pressure		MPa	4.2/2.0	4.2/2.0	4.2/2.0	4.2/2.0	4.2/2.0
Refrigerant piping	Liquid side/ Gas side	mm	Φ6.4/Φ12.7	Φ6.4/Φ12.7	Φ6.4/Φ12.7	Φ6.4/Φ12.7	Φ9.5/Φ15.9
Connecting wiring	Power wiring	$Nb×mm^2$	3×2.5(L≤20m); 3×3.5(L≤50m)				
	Signal wiring	$Nb×mm^2$	3×1.0	3×1.0	3×1.0	3×1.0	3×1.0
Drainage water pipe dia.		mm	Φ20	Φ20	Φ20	Φ20	Φ20
Controller			Wireless remote controller R51/E(standard)				
Operation temp		℃	17~30				

Notes:

1. Nominal cooling capacities are based on the following conditions:
   indoor temperature : 27°CDB,19°CWB,outdoor temperature:35°CDB,equivalent ref. Piping: 8m(horizontal).
2. Nominal heating capacities are based on the following conditions:
   indoor temperature: 20°CDB,outdoor temperature: 7°CDB,6°CWB,equivalent ref. Piping: 8m(horizontal).

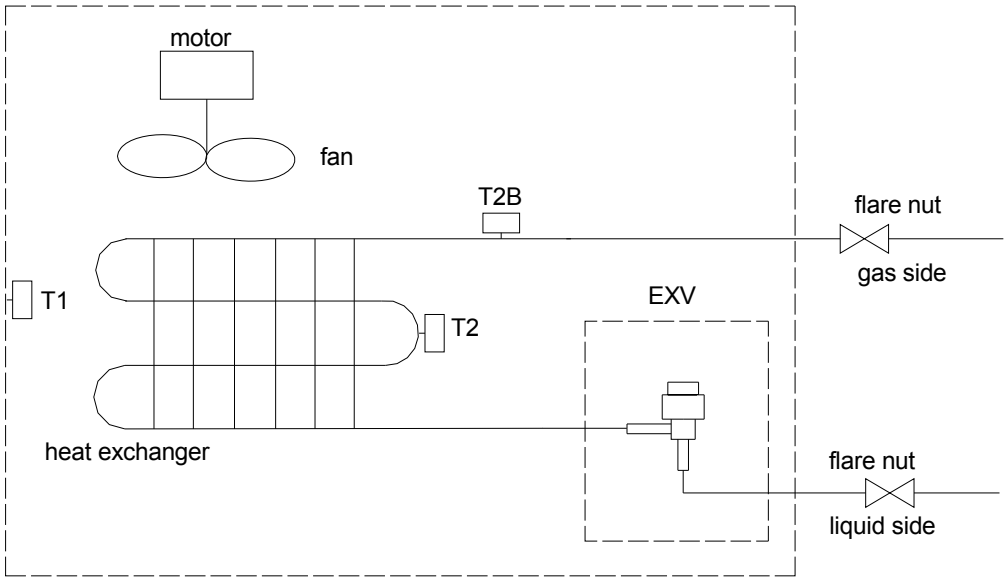
3.Dimensions

MDVi-D22G/N1Y MDVi-D28G/N1Y MDVi-D36G/N1Y MDVi-D45G/N1Y MDVi-D56G/N1Y
MDVi-D22G/DN1Y MDVi-D28G/DN1Y MDVi-D36G/DN1Y MDVi-D45G/DN1Y MDVi-D56G/DN1Y



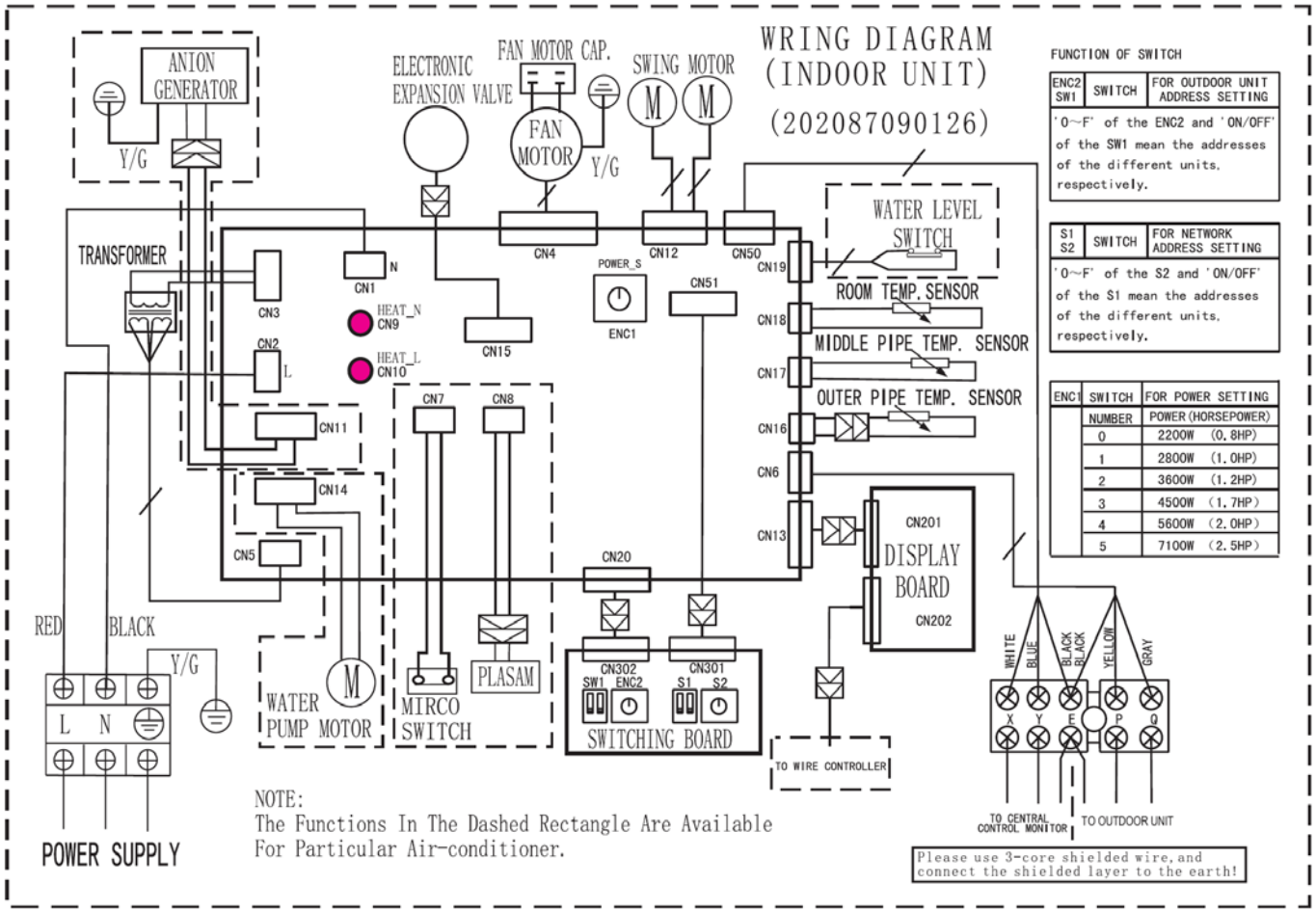
Model	2.2kW	2.8 kW	3.6 kW	4.5 kW	5.6 kW
A	915	915	915	1070	1070
B	290	290	290	315	315
C	725	725	725	885	885
D	670	670	670	815	815

4.Piping Diagram

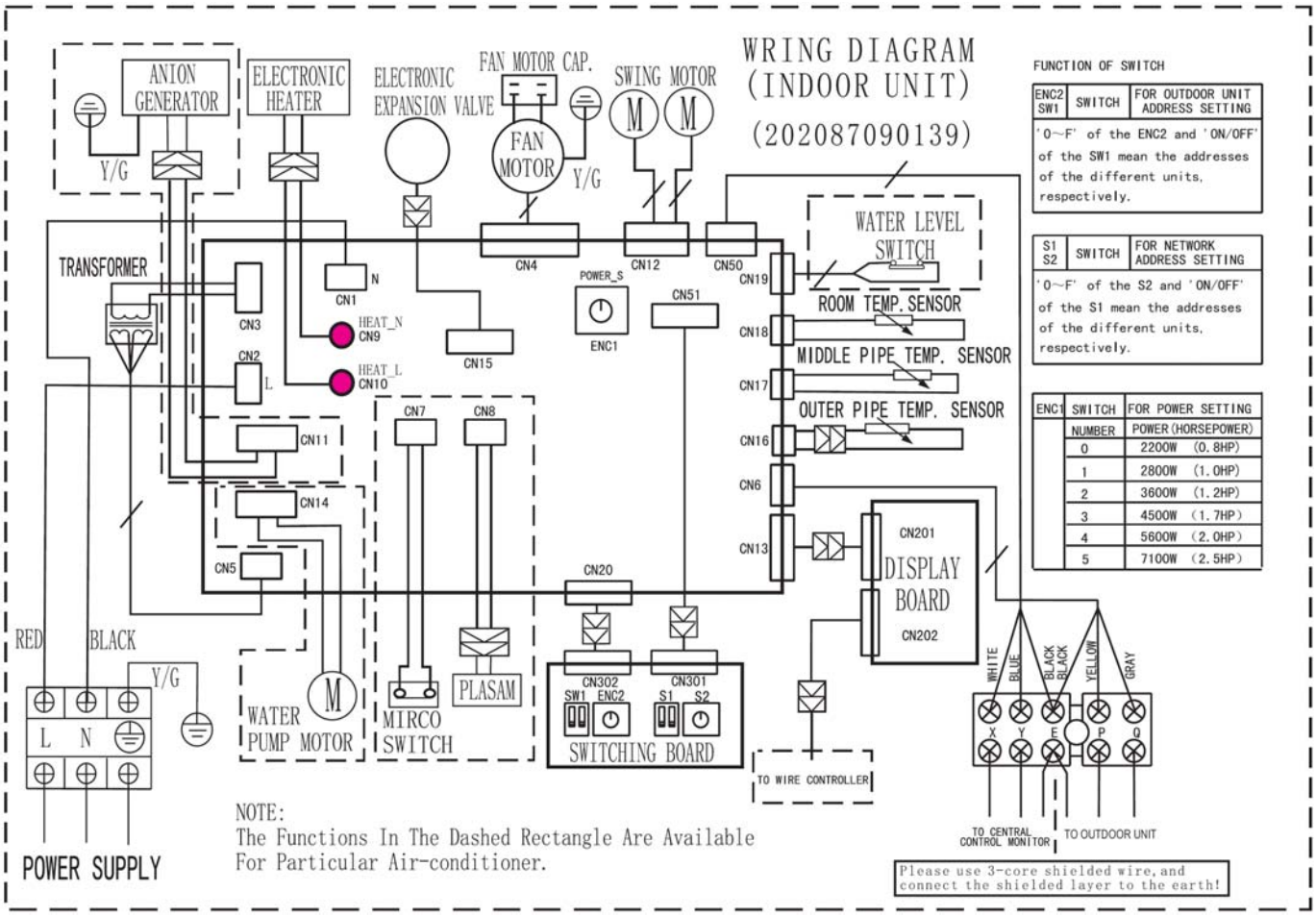


5.Wiring Diagrams

5.1 MDVi-D22G/N1Y MDVi-D28G/N1Y MDVi-D36G/N1Y MDVDi-45G/N1Y MDVi-D56G/N1Y



5.2 MDVi-D22G/DN1Y MDVi-D28G/DN1Y MDVi-D36G/DN1Y MDVi-D45G/DN1Y MDVi-D56G/DN1Y



6.Capacity Tables

6.1 Cooling

TC: total capacity **SC**: sensible capacity **WB**: wet-bulb temperature **DB**: dry-bulb temperature

Indoor Unit size (kW)	Outdoor temperature (℃ DB)	Indoor temperature (℃ WB/DB)													
		14/20		16/23		18/26		19/27		20/28		22/30		24/32	
		TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
2.2	10.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.9	1.7
	12.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.8	1.6
	14.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.8	1.6
	16.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.8	1.6
	18.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.8	1.6
	20.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.7	1.5
	21.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.7	1.5
	23.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.5	1.6	2.7	1.5
	25.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.5	1.6	2.6	1.5
	27.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.5	1.6	2.6	1.5
	29.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.4	1.5	2.5	1.5
	31.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.4	1.5	2.5	1.5
	33.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.4	1.5	2.4	1.5
	35.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.3	1.5	2.4	1.5
	37.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.3	1.5	2.3	1.5
	39.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.2	1.6	2.3	1.5	2.3	1.5
2.8	10.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.7	2.1
	12.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.6	2.1
	14.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.6	2.1
	16.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.6	2.0
	18.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.5	2.0
	20.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.4	1.9
	21.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.4	1.9
	23.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.2	2.1	3.4	1.9
	25.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.2	2.0	3.3	1.9
	27.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.2	2.0	3.3	1.9
	29.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.1	2.0	3.2	1.9
	31.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.1	2.0	3.2	1.9
	33.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.1	2.0	3.1	2.0
	35.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.1	2.9	1.9	3.1	2.0
	37.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.1	2.9	1.9	2.9	1.9
	39.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.8	2.0	2.9	1.9	2.9	1.9
3.6	10.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.8	2.8
	12.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.6	2.7
	14.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.6	2.7
	16.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.5	2.7
	18.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.5	2.7
	20.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.4	2.7
	21.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.4	2.7

	23.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.4	2.7
	25.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.1	2.7	4.2	2.6
	27.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.1	2.7	4.2	2.6
	29.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.0	2.6	4.1	2.5
	31.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.0	2.6	4.1	2.4
	33.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.0	2.6	4.0	2.4
	35.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.7	2.6	3.9	2.6	4.0	2.4
	37.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.7	2.6	3.9	2.6	3.9	2.3
	39.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.7	2.6	3.9	2.7	3.9	2.4
4.5	10.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.9	3.4
	12.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.9	3.4
	14.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.8	3.3
	16.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.6	3.2
	18.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.6	3.2
	20.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.5	3.2
	21.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.4	3.1
	23.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.2	3.2	5.4	3.1
	25.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.2	3.2	5.3	3.0
	27.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.0	3.0	5.3	3.0
	29.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.0	3.0	5.1	2.9
	31.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.3	3.5	5.1	3.0
	33.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.3	3.5	4.9	2.9
	35.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.3	3.5	4.8	2.8
	37.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.6	3.2	4.8	3.1	4.8	2.9
	39.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.6	3.2	4.8	3.1	4.8	2.9
5.6	10.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.3	4.1
	12.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.3	4.1
	14.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.2	4.1
	16.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	6.9	4.0
	18.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.1	4.1
	20.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.1	4.1
	21.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.0	4.1
	23.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	6.9	4.0
	25.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.5	4.1	6.8	3.9
	27.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.4	4.0	6.5	3.8
	29.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.3	4.0	6.4	3.7
	31.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.2	3.9	6.3	3.7
	33.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.0	3.8	6.3	3.7
	35.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	5.9	3.7	6.2	3.6
	37.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	5.9	3.9	6.1	3.5
	39.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	5.7	3.8	5.8	3.8	6.0	3.5

6.2 Heating

TC: total capacity **WB**: wet-bulb temperature **DB**: dry-bulb temperature

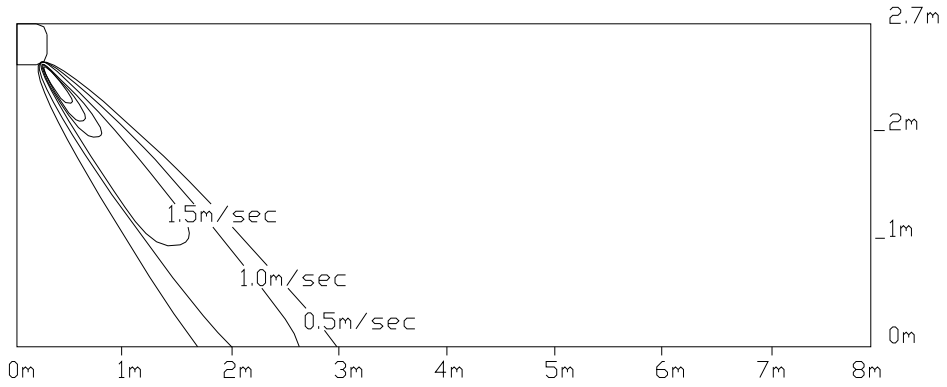
Indoor Unit size (kW)	Outdoor temperature (˚C)		Indoor temperature (˚C DB)					
			16.00	18.00	20.00	21.00	22.00	24.00
			TC	TC	TC	TC	TC	TC
	WB	DB	kW	kW	kW	kW	kW	kW
2.20	-15.00	-14.70	1.64	1.64	1.64	1.64	1.64	1.64
	-13.00	-12.60	1.74	1.74	1.74	1.74	1.74	1.74
	-11.00	-10.50	1.82	1.82	1.82	1.82	1.82	1.82
	-10.00	-9.50	1.90	1.90	1.90	1.90	1.90	1.90
	-9.10	-8.50	1.95	1.95	1.95	1.95	1.95	1.95
	-7.60	-7.00	1.98	1.98	1.98	1.98	1.98	1.98
	-5.60	-5.00	2.05	2.05	2.05	2.05	2.05	2.05
	-3.70	-3.00	2.16	2.16	2.16	2.16	2.16	2.16
	-0.70	0.00	2.31	2.31	2.31	2.31	2.31	2.18
	2.20	3.00	2.44	2.44	2.44	2.44	2.39	2.18
	4.10	5.00	2.52	2.52	2.52	2.52	2.39	2.18
	6.00	7.00	2.60	2.60	2.60	2.52	2.39	2.18
	7.90	9.00	2.68	2.68	2.60	2.52	2.39	2.18
	9.80	11.00	2.76	2.76	2.60	2.52	2.39	2.18
	11.80	13.00	2.86	2.81	2.60	2.52	2.39	2.18
	13.70	15.00	2.94	2.81	2.60	2.52	2.39	2.18
2.80	-15.00	-14.70	2.02	2.02	2.02	2.02	2.02	2.02
	-13.00	-12.60	2.14	2.14	2.14	2.14	2.14	2.14
	-11.00	-10.50	2.24	2.24	2.24	2.24	2.24	2.24
	-10.00	-9.50	2.34	2.34	2.34	2.34	2.34	2.34
	-9.10	-8.50	2.40	2.40	2.40	2.40	2.40	2.40
	-7.60	-7.00	2.43	2.43	2.43	2.43	2.43	2.43
	-5.60	-5.00	2.53	2.53	2.53	2.53	2.53	2.53
	-3.70	-3.00	2.66	2.66	2.66	2.66	2.66	2.66
	-0.70	0.00	2.85	2.85	2.85	2.85	2.85	2.69
	2.20	3.00	3.01	3.01	3.01	3.01	2.94	2.69
	4.10	5.00	3.10	3.10	3.10	3.10	2.94	2.69
	6.00	7.00	3.20	3.20	3.20	3.10	2.94	2.69
	7.90	9.00	3.30	3.30	3.20	3.10	2.94	2.69
	9.80	11.00	3.39	3.39	3.20	3.10	2.94	2.69
	11.80	13.00	3.52	3.46	3.20	3.10	2.94	2.69
	13.70	15.00	3.62	3.46	3.20	3.10	2.94	2.69
3.60	-15.00	-14.70	2.52	2.52	2.52	2.52	2.52	2.52
	-13.00	-12.60	2.68	2.68	2.68	2.68	2.68	2.68
	-11.00	-10.50	2.80	2.80	2.80	2.80	2.80	2.80
	-10.00	-9.50	2.92	2.92	2.92	2.92	2.92	2.92
	-9.10	-8.50	3.00	3.00	3.00	3.00	3.00	3.00
	-7.60	-7.00	3.04	3.04	3.04	3.04	3.04	3.04
	-5.60	-5.00	3.16	3.16	3.16	3.16	3.16	3.16
	-3.70	-3.00	3.32	3.32	3.32	3.32	3.32	3.32
	-0.70	0.00	3.56	3.56	3.56	3.56	3.56	3.36

	2.20	3.00	3.76	3.76	3.76	3.76	3.68	3.36
	4.10	5.00	3.88	3.88	3.88	3.88	3.68	3.36
	6.00	7.00	4.00	4.00	4.00	3.88	3.68	3.36
	7.90	9.00	4.12	4.12	4.00	3.88	3.68	3.36
	9.80	11.00	4.24	4.24	4.00	3.88	3.68	3.36
	11.80	13.00	4.40	4.32	4.00	3.88	3.68	3.36
	13.70	15.00	4.52	4.32	4.00	3.88	3.68	3.36
4.50	-15.00	-14.70	3.15	3.15	3.15	3.15	3.15	3.15
	-13.00	-12.60	3.35	3.35	3.35	3.35	3.35	3.35
	-11.00	-10.50	3.50	3.50	3.50	3.50	3.50	3.50
	-10.00	-9.50	3.65	3.65	3.65	3.65	3.65	3.65
	-9.10	-8.50	3.75	3.75	3.75	3.75	3.75	3.75
	-7.60	-7.00	3.80	3.80	3.80	3.80	3.80	3.80
	-5.60	-5.00	3.95	3.95	3.95	3.95	3.95	3.95
	-3.70	-3.00	4.15	4.15	4.15	4.15	4.15	4.15
	-0.70	0.00	4.45	4.45	4.45	4.45	4.45	4.20
	2.20	3.00	4.70	4.70	4.70	4.70	4.60	4.20
	4.10	5.00	4.85	4.85	4.85	4.85	4.60	4.20
	6.00	7.00	5.00	5.00	5.00	4.85	4.60	4.20
	7.90	9.00	5.15	5.15	5.00	4.85	4.60	4.20
	9.80	11.00	5.30	5.30	5.00	4.85	4.60	4.20
	11.80	13.00	5.50	5.40	5.00	4.85	4.60	4.20
	13.70	15.00	5.65	5.40	5.00	4.85	4.60	4.20
5.60	-15.00	-14.70	3.97	3.97	3.97	3.97	3.97	3.97
	-13.00	-12.60	4.22	4.22	4.22	4.22	4.22	4.22
	-11.00	-10.50	4.41	4.41	4.41	4.41	4.41	4.41
	-10.00	-9.50	4.60	4.60	4.60	4.60	4.60	4.60
	-9.10	-8.50	4.73	4.73	4.73	4.73	4.73	4.73
	-7.60	-7.00	4.79	4.79	4.79	4.79	4.79	4.79
	-5.60	-5.00	4.98	4.98	4.98	4.98	4.98	4.98
	-3.70	-3.00	5.23	5.23	5.23	5.23	5.23	5.23
	-0.70	0.00	5.61	5.61	5.61	5.61	5.61	5.29
	2.20	3.00	5.92	5.92	5.92	5.92	5.80	5.29
	4.10	5.00	6.11	6.11	6.11	6.11	5.80	5.29
	6.00	7.00	6.30	6.30	6.30	6.11	5.80	5.29
	7.90	9.00	6.49	6.49	6.30	6.11	5.80	5.29
	9.80	11.00	6.68	6.68	6.30	6.11	5.80	5.29
	11.80	13.00	6.93	6.80	6.30	6.11	5.80	5.29
	13.70	15.00	7.12	6.80	6.30	6.11	5.80	5.29

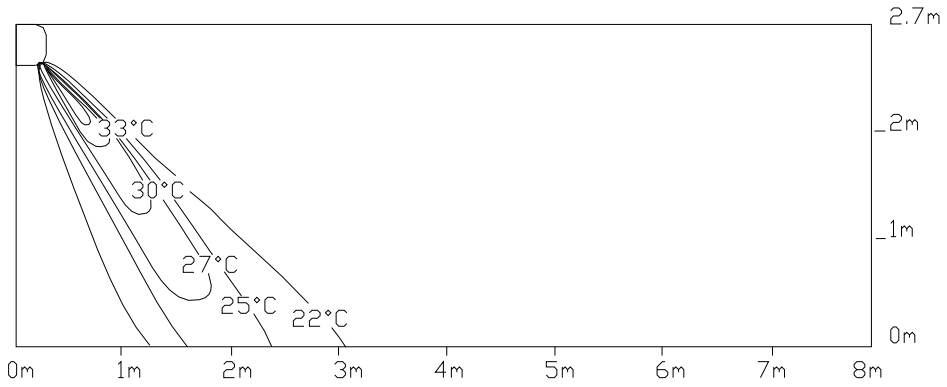
7.Velocity and Temperature Distribution

Discharge angle 70º

Airflow velocity



Temperature



8.Electric Characteristics

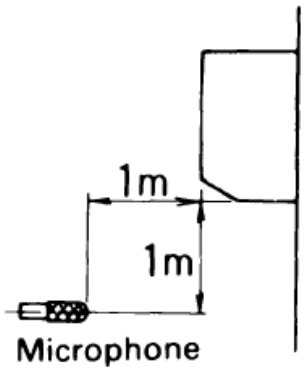
Model	Indoor Unit				Power Supply
	Hz	Voltage	Min.	Max.	MFA
MDVi-D22G/N1Y	50	220-240V	198	254	15A
MDVi-D28G/N1Y	50	220-240V	198	254	15A
MDVi-D36G/N1Y	50	220-240V	198	254	15A
MDVi-D45G/N1Y	50	220-240V	198	254	15A
MDVi-D56G/N1Y	50	220-240V	198	254	15A
MDVi-D22G/DN1Y	50	220-240V	198	254	15A
MDVi-D28G/DN1Y	50	220-240V	198	254	15A
MDVi-D36G/DN1Y	50	220-240V	198	254	15A
MDVi-D45G/DN1Y	50	220-240V	198	254	15A
MDVi-D56G/DN1Y	50	220-240V	198	254	15A

Remark:
MFA: Max. Fuse Amps. (A)

9.Sound Levels

9.1 Test condition

■ Wall Mounted Type

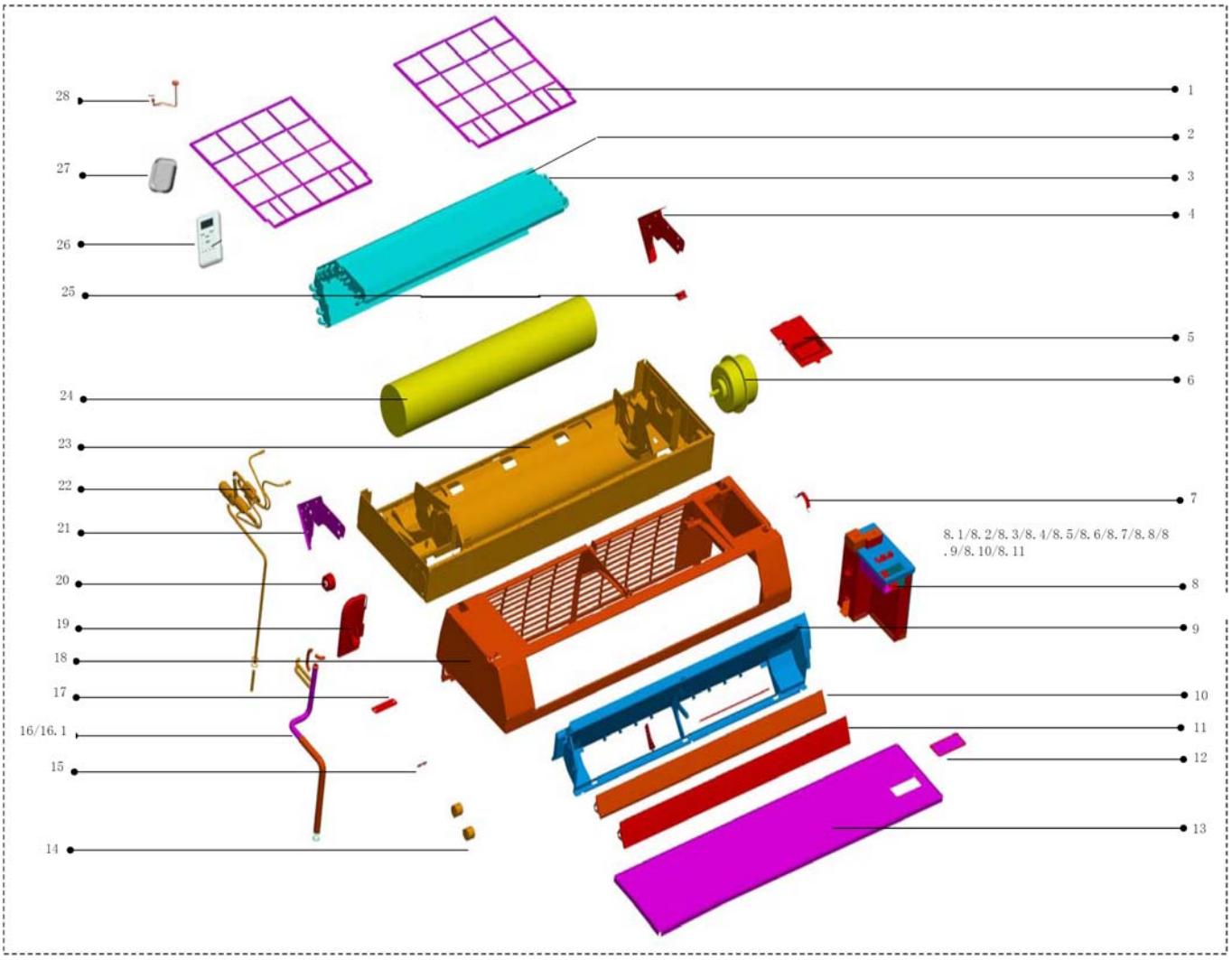


7)

Unit Number	Model	Noise level under three speeds of fan (dB(A))		
		H	M	L
1	MDVi-D22G/N1Y	35	32	29
2	MDVi-D28G/N1Y	35	32	29
3	MDVi-D36G/N1Y	35	32	29
4	MDVi-D45G/N1Y	40	38	34
5	MDVi-D56G/N1Y	40	38	34
6	MDVi-D22G/DN1Y	35	32	29
7	MDVi-D28G/DN1Y	35	32	29
8	MDVi-D36G/DN1Y	35	32	29
9	MDVi-D45G/DN1Y	40	38	34
10	MDVi-D56G/DN1Y	40	38	34

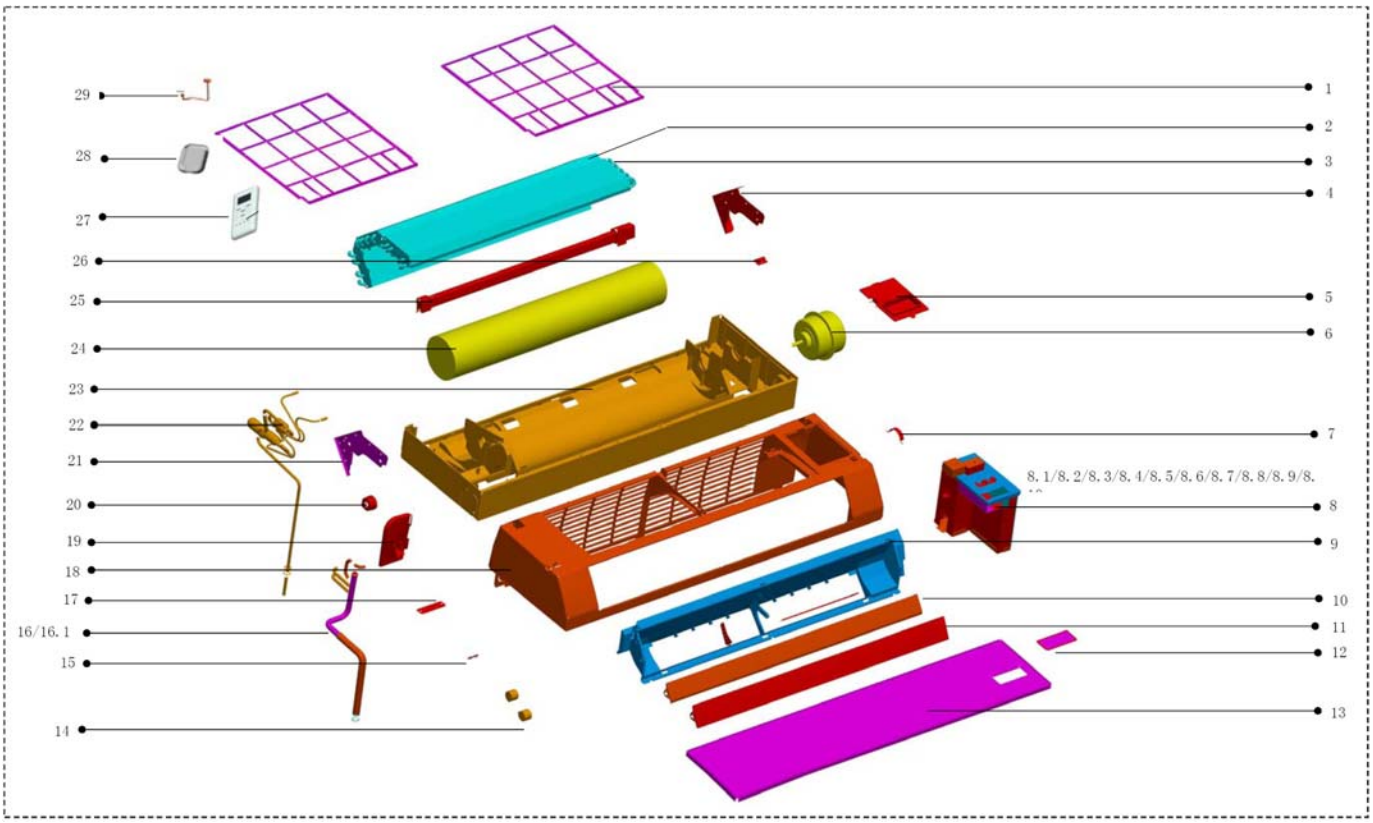
10.Exploded View

10.1 MDVi-D22G/N1Y MDVi-D28G/N1Y MDVi-D36G/N1Y



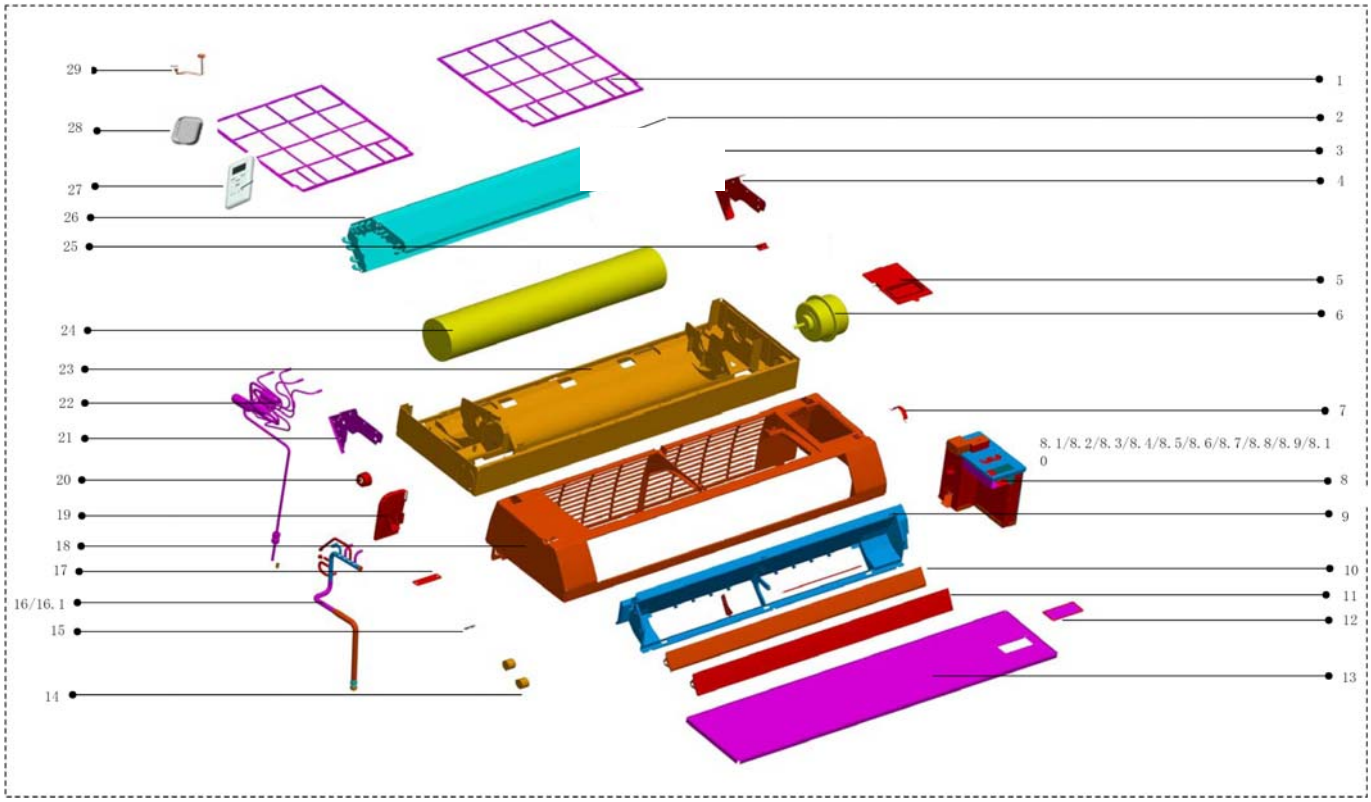
No.	Part name	Quantity		No.	Part name	Quantity
1	Filter	2		9	Air outlet frame ass'y	1
2	Coil temp sensor	1		10	Louver board	1
3	Evaporator	3		11	Louver	1
4	Evaporate connect board	1		12	Panel dalle	1
5	Display board ass'y	1		13	Panel	1
6	Motor	1		14	Stepper motor	1
7	Motor spud	2		15	Screw cover	3
8	E-part box ass'y	1		16	Output pipe ass'y	1
8.1	Electric control box seat	1		16.1	Temp. sensor ass'y	1
8.2	Electric control box side board ass'y	1		17	Pipe clamp	1
8.3	Electric control box soleplate	1		18	Panel frame ass'y	1
8.4	E-Part box cover	1		19	Drainage pan	1
8.5	Dial code switch board ass'y	1		20	Bearing base	1
8.6	Transformer	1		21	Evaporator left clapboard	1
8.7	Wire joint, 5p	1		22	Input pipe ass'y	1
8.8	Main control board ass'y	1		23	Base ass'y	1
8.9	Motor capacitor	1		24	Cross fan	1
8.10	Wire joint, 3p	1		25	Block	1
8.11	Transformer	1		26	Remote controller	1

10.2 MDVi-D22G/DN1Y MDVi-D28G/DN1Y MDVi-D36G/DN1Y



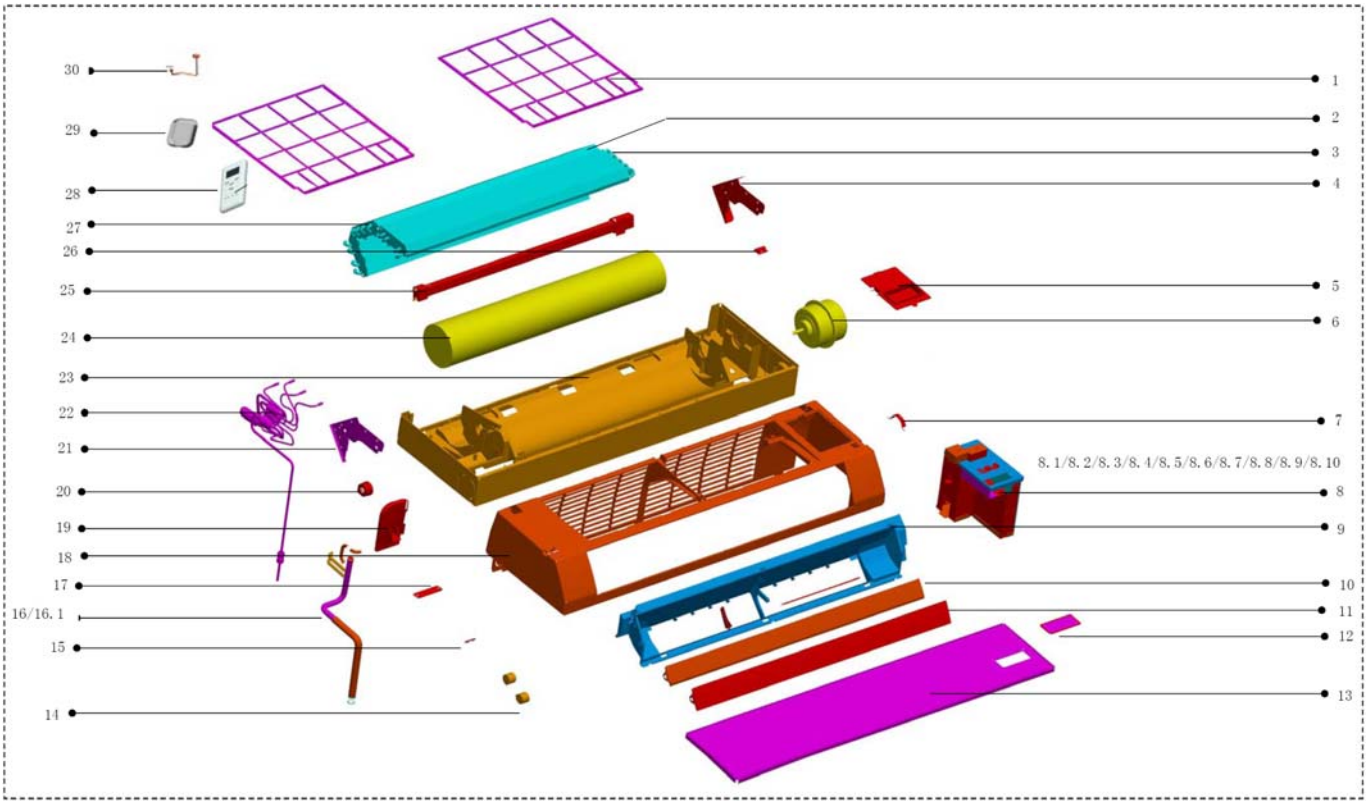
No.	Part name	Quantity		No.	Part name	Quantity
1	Filter	2		11	Louver	1
2	Coil temp sensor	1		12	Panel dalle	1
3	Evaporator	3		13	Panel	1
4	Evaporate connect board	1		14	Stepper motor	1
5	Display board ass'y	1		15	Screw cover	3
6	Motor	1		16	Output pipe ass'y	1
7	Motor spud	2		16.1	Temp. sensor ass'y	1
8	E-part box ass'y	1		17	Pipe clamp	1
8.1	Electric control box seat	1		18	Panel frame ass'y	1
8.2	Electric control box side board ass'y	1		19	Drainage pan	1
8.3	Electric control box soleplate	1		20	Bearing base	1
8.4	E-Part box cover	1		21	Evaporator left clapboard	1
8.5	Dial code switch board ass'y	1		22	Input pipe ass'y	1
8.6	Transformer	1		23	Base ass'y	1
8.7	Wire joint, 5p	1		24	Cross fan	1
8.8	Main controller ass'y	1		25	Auxiliary electric heater ass'y	1
8.9	Motor capacitor	1		26	Block	1
8.10	Wire joint, 3p	1		27	Remote controller	1
9	Air outlet frame ass'y	1		28	Remote controller holder ass'y	1
10	Louver board	1		29	Room temp sensor ass'y	1

10.3 MDVi-D45G/N1Y MDVi-D56G/N1Y



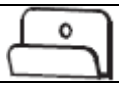
No.	Part name	Quantity		No.	Part name	Quantity
1	Filter	2		11	Louver	1
2	Coil temp sensor	1		12	Panel dalle	1
3	Evaporator	1		13	Panel	1
4	Evaporate connect board	1		14	Stepper motor	1
5	Display board ass'y	1		15	Screw cover	3
6	Motor	1		16	Output pipe ass'y	1
7	Motor spud	2		16.1	Temp. sensor ass'y	1
8	E-part box ass'y	1		17	Pipe clamp	1
8.1	Electric control box seat	1		18	Panel frame ass'y	1
8.2	Electric control box side board ass'y	1		19	Drainage pan	1
8.3	Electric control box soleplate	1		20	Bearing base	1
8.4	E-Part box cover	1		21	Evaporator left clapboard	1
8.5	Dial code switch board ass'y	1		22	Input pipe ass'y	1
8.6	Transformer	1		23	Base ass'y	1
8.7	Wire joint, 5p	1		24	Cross fan	1
8.8	Main controller ass'y	1		25	Block	1
8.9	Motor capacitor	1		26	Evaporator	2
8.10	Wire joint, 3p	1		27	Remote controller	1
9	Air outlet frame ass'y	1		28	Remote controller holder ass'y	1
10	Louver board	1		29	Room temp sensor ass'y	1

10.4 MDVi-D45G/DN1Y MDVi-D56G/DN1Y



No.	Part name	Quantity		No.	Part name	Quantity
1	Filter	2		12	Panel dalle	1
2	Coil temp sensor	1		13	Panel	1
3	Evaporator	1		14	Stepper motor	1
4	Evaporate connect board	1		15	Screw cover	3
5	Display board ass'y	1		16	Output pipe ass'y	1
6	Motor	1		16.1	Temp. sensor ass'y	1
7	Motor spud	2		17	Pipe clamp	1
8	E-part box ass'y	1		18	Panel frame ass'y	1
8.1	Electric control box seat	1		19	Drainage pan	1
8.2	Electric control box side board ass'y	1		20	Bearing base	1
8.3	Electric control box soleplate	1		21	Evaporator left clapboard	1
8.4	E-Part box cover	1		22	Input pipe ass'y	1
8.5	Dial code switch board ass'y	1		23	Base ass'y	1
8.6	Transformer	1		24	Cross fan	1
8.7	Wire joint, 5p	1		25	Auxiliary electric heater ass'y	1
8.8	Main controller ass'y	1		26	Block	1
8.9	Motor capacitor	1		27	Evaporator	2
8.10	Wire joint, 3p	1		28	Remote controller	1
9	Air outlet frame ass'y	1		29	Remote controller holder ass'y	1
10	Louver board	1		30	Room temp sensor ass'y	1
11	Louver	1				

11.Accessories

Name	Shape	Quantity	Function
Installation board		2	/
Screw ST3.9x25 for installation board		3	Secure the installation board
Plastic expanded tube		3	/
Wrapping tape		1	/
Drain pipe		2	/
Sealing clay		2	/
Wall conduit cover		1	/
Remote controller (including operation manual)		1	/
Frame		1	Hold the remote controller
Mounting screw(ST2.9 10-C-H)		2	Installation Holder for remote controller
Alkaline dry batteries (AM4)		2	/
Owner's manual	/	1	/
Installation manual	/	1	/

Exposed & Concealed Floor-standing Type

1.Feaures

Exposed

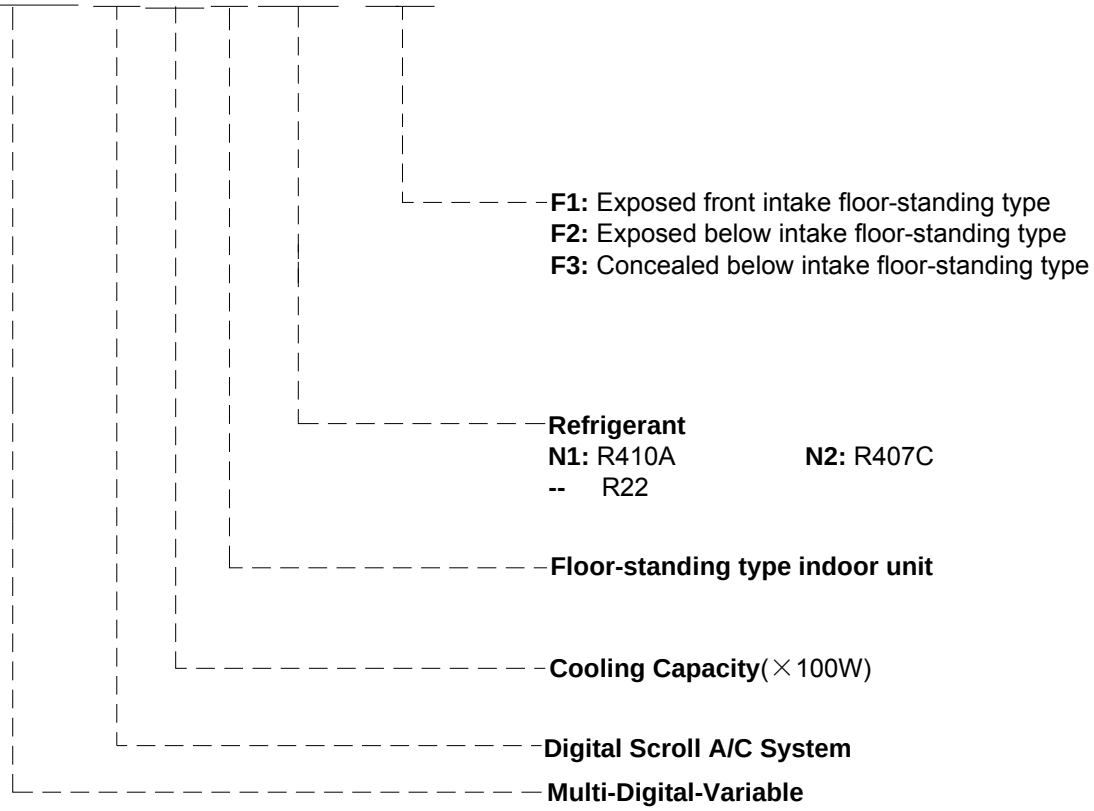
Concealed+

1. Two intake directions: front and below.

2. Built-in the electronic throttle kit
3. Three speeds
4. Low noise operation.
5. Easy installation and maintenance.
6. Air filter easily removed and cleaned
7. Removable blades for easy and effective cleaning
8. Streamlined appearances, flowing lines.
9. All metal parts are made of commercial grade galvanized steel, providing maximum protection against corrosion.

2.Nomenclature

MDVi-D22Z/N1-F1



3.Specifications

Model			MDVi-D22Z/N1-F1	MDVi-D22Z/N1-F2	MDVi-D22Z/N1-F3
Power supply		V- Ph-Hz	220-240V, 1Ph, 50Hz		
Cooling	Capacity	kW	2.2	2.2	2.2
	Input	W	40	40	40
	Rated current	A	0.19	0.19	0.19
Heating	Capacity	kW	2.6	2.6	2.6
	Input	W	40	40	40
	Rated current	A	0.19	0.19	0.19
Indoor fan motor	Model		YSK20-4A	YSK20-4A	YSK20-4A
	Type		AC motor	AC motor	AC motor
	Brand		Welling	Welling	Welling
	Input	W	42/37/34	42/37/34	42/37/34
	Capacitor	μF	0.8	0.8	0.8
	Speed (hi/mid/lo)	r/min	935/810/720	935/810/720	935/810/720
Indoor coil	Number of rows		2	2	2
	Tube pitch(a)x row pitch(b)	Mm	25.4x22	25.4x22	25.4x22
	Fin spacing	Mm	1.8	1.8	1.8
	Fin type		Hydrophilic aluminum		
	Tube outside dia. and type	mm	Φ9.5 innergroove tube	Φ9.5 innergroove tube	Φ9.5 innergroove tube
	Coil length x height x width	mm	568 x254 x44	568 x254 x44	568 x254 x44
	Number of circuits		3	3	3
Indoor air flow (H/M/L)		m^3/h	530/456/400	530/456/400	530/456/400
Indoor external static pressure		Pa	12	12	12
Indoor noise level (Hi/Mid/Lo) (Sound pressure)		dB(A)	37/35/33	37/35/33	37/35/33
Indoor unit	Dimension (WxHxD)	mm	1000×220×625	1000×220×625	840×212×544
	Packing (WxHxD)	mm	1089X722X312	1179X722X312	939X639X305
	Net/Gross weight	kg	30/35	30/38	26/29.5
Refrigerant type			R410A	R410A	R410A
Throttle			Electric expansive valve		
Design pressure		MPa	4.2/2.0	4.2/2.0	4.2/2.0
Refrigerant piping	Liquid side/ Gas side	mm	Φ6.4/Φ12.7	Φ6.4/Φ12.7	Φ6.4/Φ12.7
Connecting wiring	Power wiring	$Nb×mm^2$	3×2.5(L≤20m)；3×3.5(L≤50m)		
	Signal wiring	$Nb×mm^2$	3×1.0	3×1.0	3×1.0
Drainage water pipe dia.		mm	Φ25	Φ25	Φ25
Controller			Wireless remote controller (R51/E) (standard)		
Operation temp		℃	17-30		

Notes:

1. ominal cooling capacities are based on the following conditions: return air temp.: 27°CDB, 19°CWB, and outdoor temp.:35°CDB, equivalent ref. piping: 8m (horizontal)
2. Nominal heating capacities are based on the following conditions: return air temp.: 20°CDB, outdoor temp.: 7°CDB, 6°CWB, and equivalent ref. Piping: 8m (horizontal)

Model			MDVi-D28Z/N1-F1	MDVi-D28Z/N1-F2	MDVi-D28Z/N1-F3
Power supply		V- Ph-Hz	220-240V, 1Ph, 50Hz		
Cooling	Capacity	kW	2.8	2.8	2.8
	Input	W	46	46	46
	Rated current	A	0.2	0.2	0.2
Heating	Capacity	kW	3.2	3.2	3.2
	Input	W	46	46	46
	Rated current	A	0.2	0.2	0.2
Indoor fan motor	Model		YSK20-4A	YSK20-4A	YSK20-4A
	Type		AC motor	AC motor	AC motor
	Brand		Welling	Welling	Welling
	Input	W	42/37/34	42/37/34	42/37/34
	Capacitor	μF	1.0	1.0	1.0
	Speed (hi/mid/lo)	r/min	935/810/720	935/810/720	935/810/720
Indoor coil	Number of rows		2	2	2
	Tube pitch(a)x row pitch(b)	mm	25.4x22	25.4x22	25.4x22
	Fin spacing	mm	1.8	1.8	1.8
	Fin type		Hydrophilic aluminum		
	Tube outside dia. and type	mm	Φ9.5 Inner groove tube	Φ9.5 Inner groove tube	Φ9.5 Inner groove tube
	Coil length x height x width	mm	568 x254 x44	568 x254 x44	568 x254 x44
	Number of circuits		3	3	3
Indoor air flow (H/M/L)		m^3/h	569/485/421	569/485/421	569/485/421
Indoor external static pressure		Pa	12	12	12
Indoor noise level (Hi/Mid/Lo) (Sound pressure)		dB(A)	37/35/33	37/35/33	37/35/33
Indoor unit	Dimension (WxHxD)	mm	1000×220×625	1000×220×625	840×212×544
	Packing (WxHxD)	mm	1089X722X312	1179X722X312	939X639X305
	Net/Gross weight	kg	30/35	30/38	26/29.5
Refrigerant type			R410A	R410A	R410A
Throttle			Electric expansive valve		
Design pressure		MPa	4.2/2.0	4.2/2.0	4.2/2.0
Refrigerant piping	Liquid side/ Gas side	mm	Φ6.4/Φ12.7	Φ6.4/Φ12.7	Φ6.4/Φ12.7
Connecting wiring	Power wiring	$Nb×mm^2$	3×2.5(L≤20m)；3×3.5(L≤50m)		
	Signal wiring	$Nb×mm^2$	3×1.0	3×1.0	3×1.0
Drainage water pipe dia.		mm	Φ25	Φ25	Φ25
Controller			Wireless remote controller (R51/E)(standard)		
Operation temp		℃	17-30		

Notes:

1. ominal cooling capacities are based on the following conditions: return air temp.: 27°CDB, 19°CWB, and outdoor temp.:35°CDB, equivalent ref. piping: 8m (horizontal)
2. ominal heating capacities are based on the following conditions: return air temp.: 20°CDB, outdoor temp.: 7°CDB, 6°CWB, and equivalent ref. Piping: 8m (horizontal)

Model			MDVi-D36Z/N1-F1	MDVi-D36Z/N1-F2	MDVi-D36Z/N1-F3
Power supply		V- Ph-Hz	220-240V, 1Ph, 50Hz		
Cooling	Capacity	kW	3.6	3.6	3.6
	Input	W	35	35	35
	Rated current	A	0.15	0.15	0.15
Heating	Capacity	kW	4.0	4.0	4.0
	Input	W	35	35	35
	Rated current	A	0.15	0.15	0.15
Indoor fan motor	Model		YSK20-6	YSK20-6	YSK20-6
	Type		AC motor	AC motor	AC motor
	Brand		Yongan	Yongan	Yongan
	Input	W	49/40/34	49/40/34	49/40/34
	Capacitor	μF	1.2	1.2	1.2
	Speed (hi/mid/lo)	r/min	820/745/600	820/745/600	820/745/600
Indoor coil	Number of rows		3	3	3
	Tube pitch(a)x row pitch(b)	mm	25.4x22	25.4x22	25.4x22
	Fin spacing	mm	1.8	1.8	1.8
	Fin type		Hydrophilic aluminum		
	Tube outside dia. and type	mm	Φ9.5 innergroove tube	Φ9.5 innergroove tube	Φ9.5 innergroove tube
	Coil length x height x width	mm	768 x254 x66	768 x254 x66	768 x254 x66
	Number of circuits		3	3	3
Indoor air flow (H/M/L)		m^3/h	624/522/375	624/522/375	624/522/375
Indoor external static pressure		Pa	12	12	12
Indoor noise level (Hi/Mid/Lo) (Sound pressure)		dB(A)	39/37/35	39/37/35	39/37/35
Indoor unit	Dimension (WxHxD)	mm	1200×220×625	1200×220×625	1036×212×544
	Packing (WxHxD)	mm	1289X722X312	1379X722X312	1139X639X305
	Net/Gross weight	Kg	37/43	37/46	29.5/34
Refrigerant type			R410A	R410A	R410A
Throttle			Electric expansive valve		
Design pressure		MPa	4.2/2.0	4.2/2.0	4.2/2.0
Refrigerant piping	Liquid side/ Gas side	mm	Φ6.4/Φ12.7	Φ6.4/Φ12.7	Φ6.4/Φ12.7
Connecting wiring	Power wiring	$Nb×mm^2$	3×2.5(L≤20m)；3×3.5(L≤50m)		
	Signal wiring	$Nb×mm^2$	3×1.0	3×1.0	3×1.0
Drainage water pipe dia.		mm	Φ25	Φ25	Φ25
Controller			Wireless remote controller (R51/E)(standard)		
Operation temp		℃	17-30		

Notes:

1. Nominal cooling capacities are based on the following conditions: return air temp.: 27°CDB, 19°CWB, and outdoor temp.:35°CDB, equivalent ref. piping: 8m (horizontal)
2. Nominal heating capacities are based on the following conditions: return air temp.: 20°CDB, outdoor temp.: 7°CDB, 6°CWB, and equivalent ref. Piping: 8m (horizontal)

Model			MDVi-D45Z/N1-F1	MDVi-D45Z/N1-F2	MDVi-D45Z/N1-F3
Power supply		V- Ph-Hz	220-240V, 1Ph, 50Hz		
Cooling	Capacity	kW	4.5	4.5	4.5
	Input	W	49	49	49
	Rated current	A	0.22	0.22	0.22
Heating	Capacity	kW	5.0	5.0	5.0
	Input	W	49	49	49
	Rated current	A	0.22	0.22	0.22
Indoor fan motor	Model		YSK20-6	YSK20-6	YSK20-6
	Type		AC motor	AC motor	AC motor
	Brand		Yongan	Yongan	Yongan
	Input	W	49/40/34	49/40/34	49/40/34
	Capacitor	μF	1.2	1.2	1.2
	Speed (hi/mid/lo)	r/min	820/745/600	820/745/600	820/745/600
Indoor coil	Number of rows		3	3	3
	Tube pitch(a)x row pitch(b)	mm	25.4x22	25.4x22	25.4x22
	Fin spacing	mm	1.8	1.8	1.8
	Fin type		Hydrophilic aluminum		
	Tube outside dia. and type	mm	Φ9.5 innergroove tube	Φ9.5 innergroove tube	Φ9.5 innergroove tube
	Coil length x height x width	mm	768 x254 x66	768 x254 x66	768 x254 x66
	Number of circuits		3	3	3
Indoor air flow (H/M/L)		m^3/h	660/542/440	660/542/440	660/542/440
Indoor external static pressure		Pa	12	12	12
Indoor noise level (Hi/Mid/Lo) (Sound pressure)		dB(A)	39/37/35	39/37/35	39/37/35
Indoor unit	Dimension (WxHxD)	mm	1200×220×625	1200×220×625	1036×212×544
	Packing (WxHxD)	mm	1289X722X312	1379X722X312	1139X639X305
	Net/Gross weight	Kg	37/43	37/46	29.5/34
Refrigerant type			R410A	R410A	R410A
Throttle			Electric expansive valve		
Design pressure		MPa	4.2/2.0	4.2/2.0	4.2/2.0
Refrigerant piping	Liquid side/ Gas side	mm	Φ6.4/Φ12.7	Φ6.4/Φ12.7	Φ6.4/Φ12.7
Connecting wiring	Power wiring	$Nb×mm^2$	3×2.5(L≤20m)；3×3.5(L≤50m)		
	Signal wiring	$Nb×mm^2$	3×1.0	3×1.0	3×1.0
Drainage water pipe dia.		mm	Φ25	Φ25	Φ25
Controller			Wireless remote controller (R51/E)(standard)		
Operation temp		℃	17-30		

Notes:

1. Nominal cooling capacities are based on the following conditions: return air temp.: 27°CDB, 19°CWB, and outdoor temp.:35°CDB, equivalent ref. piping: 8m (horizontal)
2. Nominal heating capacities are based on the following conditions: return air temp.: 20°CDB, outdoor temp.: 7°CDB, 6°CWB, and equivalent ref. Piping: 8m (horizontal)

Model			MDVi-D56Z/N1-F1	MDVi-D56Z/N1-F2	MDVi-D56Z/N1-F3
Power supply		V-Ph-Hz	220-240V, 1Ph, 50Hz		
Cooling	Capacity	kW	5.6	5.6	5.6
	Input	W	88	88	88
	Rated current	A	0.38	0.38	0.38
Heating	Capacity	kW	6.3	6.3	6.3
	Input	W	88	88	88
	Rated current	A	0.38	0.38	0.38
Indoor fan motor	Model		YSK28-4E	YSK28-4E	YSK28-4E
	Type		AC motor	AC motor	AC motor
	Brand		Welling	Welling	Welling
	Input	W	95/77/67	95/77/67	95/77/67
	Capacitor	μF	2.5	2.5	2.5
	Speed (hi/mid/lo)	r/min	915/770/660	915/770/660	915/770/660
Indoor coil	Number of rows		2	2	2
	Tube pitch(a)x row pitch(b)	mm	25.4x22	25.4x22	25.4x22
	Fin spacing	mm	1.8	1.8	1.8
	Fin type		Hydrophilic aluminum		
	Tube outside dia. and type	mm	Φ9.5 innergroove tube	Φ9.5 innergroove tube	Φ9.5 innergroove tube
	Coil length x height x width	mm	1068 x 254 x 44	1068 x 254 x 44	1068 x 254 x 44
	Number of circuits		4	4	4
Indoor air flow (H/M/L)		m^3/h	1150/970/830	1150/970/830	1150/970/830
Indoor external static pressure		Pa	12	12	12
Indoor noise level (Hi/Mid/Lo) (Sound pressure)		dB(A)	41/39/37	41/39/37	41/39/37
Indoor unit	Dimension (WxHxD)	mm	1500×220×625	1500×220×625	1336×212×544
	Packing (WxHxD)	mm	1589X722X312	1679X722X312	1439X639X305
	Net/Gross weight	kg	44/50	44/53	36/40
Refrigerant type			R410A	R410A	R410A
Throttle			Electric expansive valve		
Design pressure		MPa	4.2/2.0	4.2/2.0	4.2/2.0
Refrigerant piping	Liquid side/ Gas side	mm	Φ9.5/Φ15.9	Φ9.5/Φ15.9	Φ9.5/Φ15.9
Connecting wiring	Power wiring	$Nb×mm^2$	3×2.5(L≤20m)；3×3.5(L≤50m)		
	Signal wiring	$Nb×mm^2$	3×1.0	3×1.0	3×1.0
Drainage water pipe dia.		mm	Φ25	Φ25	Φ25
Controller			Wireless remote controller (R51/E)(standard)		
Operation temp		℃	17-30		

Notes:

1. Nominal cooling capacities are based on the following conditions: return air temp.: 27°CDB, 19°C WB, and outdoor temp.:35°CDB, equivalent ref. piping: 8m (horizontal)
2. Nominal heating capacities are based on the following conditions: return air temp.: 20°CDB, outdoor temp.: 7°CDB, 6°CWB, and equivalent ref. Piping: 8m (horizontal)

Model			MDVi-D71Z/N1-F1	MDVi-D71Z/N1-F2	MDVi-D71Z/N1-F3
Power supply		V- Ph-Hz	220-240V, 1Ph, 50Hz		
Cooling	Capacity	kW	7.1	7.1	7.1
	Input	W	130	130	130
	Rated current	A	0.57	0.57	0.57
Heating	Capacity	kW	8.0	8.0	8.0
	Input	W	130	130	130
	Rated current	A	0.57	0.57	0.57
Indoor fan motor	Model		YSK74-4E	YSK74-4E	YSK74-4E
	Type		AC motor	AC motor	AC motor
	Brand		Yongan	Yongan	Yongan
	Input	W	138.5/119/97	138.5/119/97	138.5/119/97
	Capacitor	μF	3	3	3
	Speed (hi/mid/lo)	r/min	1120/1020/880	1120/1020/880	1120/1020/880
Indoor coil	Number of rows		2	2	2
	Tube pitch(a)x row pitch(b)	mm	25.4x22	25.4x22	25.4x22
	Fin spacing	mm	1.8	1.8	1.8
	Fin type		hydrophilic aluminum		
	Tube outside dia. and type	mm	Φ9.5 innergroove tube	Φ9.5 innergroove tube	Φ9.5 innergroove tube
	Coil length x height x width	mm	1068 x 254 x 44	1068 x 254 x 44	1068 x 254 x 44
	Number of circuits		4	4	4
Indoor air flow (H/M/L)		m^3/h	1380/1100/870	1380/1100/870	1380/1100/870
Indoor external static pressure		Pa	12	12	12
Indoor noise level (Hi/Mid/Lo) (Sound pressure)		dB(A)	43/41/38	43/41/38	43/41/38
Indoor unit	Dimension (WxHxD)	mm	1500×220×625	1500×220×625	1336×212×545
	Packing (WxHxD)	mm	1589X722X312	1679X722X312	1439X639X305
	Net/Gross weight	kg	44/50	44/53	36/40
Refrigerant type			R410A	R410A	R410A
Throttle			Electric expansive valve		
Design pressure		MPa	4.2/2.0	4.2/2.0	4.2/2.0
Refrigerant piping	Liquid side/ Gas side	mm	Φ9.5/Φ15.9	Φ9.5/Φ15.9	Φ9.5/Φ15.9
Connecting wiring	Power wiring	$Nb×mm^2$	3×2.5(L≤20m)；3×3.5(L≤50m)		
	Signal wiring	$Nb×mm^2$	3×1.0	3×1.0	3×1.0
Drainage water pipe dia.		mm	Φ25	Φ25	Φ25
Controller			Wireless remote controller (R51/E)(standard)		
Operation temp		℃	17-30		

Notes:

1. Nominal cooling capacities are based on the following conditions: return air temp.: 27°CDB, 19°CWB, and outdoor temp.:35°CDB, equivalent ref. piping: 8m (horizontal)
2. Nominal heating capacities are based on the following conditions: return air temp.: 20°CDB, outdoor temp.: 7°CDB, 6°CWB, and equivalent ref. Piping: 8m (horizontal)

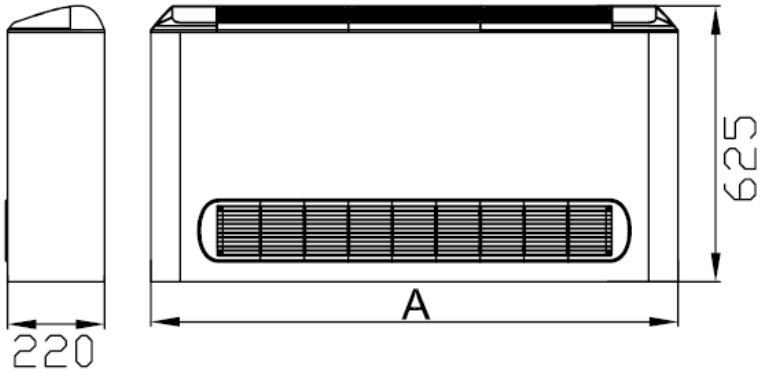
Model			MDVi-D80Z/N1-F1	MDVi-D80Z/N1-F2	MDVi-D80Z/N1-F3
Power supply		V- Ph-Hz	220-240V, 1Ph, 50Hz		
Cooling	Capacity	kW	8.0	8.0	8.0
	Input	W	130	130	130
	Rated current	A	0.56	0.56	0.56
Heating	Capacity	kW	9.0	9.0	9.0
	Input	W	130	130	130
	Rated current	A	0.56	0.56	0.56
Indoor fan motor	Model		YSK74-4E	YSK74-4E	YSK74-4E
	Type		AC motor	AC motor	AC motor
	Brand		Yongan	Yongan	Yongan
	Input	W	138.5/119/97	138.5/119/97	138.5/119/97
	Capacitor	μF	3	3	3
	Speed (hi/mid/lo)	r/min	1120/1020/880	1120/1020/880	1120/1020/880
Indoor coil	Number of rows		3	3	3
	Tube pitch(a)x row pitch(b)	mm	25.4x22	25.4x22	25.4x22
	Fin spacing	mm	1.8	1.8	1.8
	Fin type		Hydrophilic aluminum		
	Tube outside dia. and type	mm	Φ9.5 innergroove tube	Φ9.5 innergroove tube	Φ9.5 innergroove tube
	Coil length x height x width	mm	1068×66×254	1068×66×254	1068×66×254
	Number of circuits		3	3	3
Indoor air flow (H/M/L)		m^3/h	1332/1212/1023	1332/1212/1023	1332/1212/1023
Indoor external static pressure		Pa	12	12	12
Indoor noise level (Hi/Mid/Lo) (Sound pressure)		dB(A)	43/41/38	43/41/38	43/41/38
Indoor unit	Dimension (WxHxD)	mm	1500×220×625	1500×220×625	1336×212×545
	Packing (WxHxD)	mm	1589X722X312	1679X722X312	1439X639X305
	Net/Gross weight	kg	44/50	44/53	36/40
Refrigerant type			R410A	R410A	R410A
Throttle			Electric expansive valve		
Design pressure		MPa	4.2/2.0	4.2/2.0	4.2/2.0
Refrigerant piping	Liquid side/ Gas side	mm(inch)	Φ9.5/Φ15.9	Φ9.5/Φ15.9	Φ9.5/Φ15.9
Connecting wiring	Power wiring	$Nb×mm^2$	3×2.5(L≤20m)；3×3.5(L≤50m)		
	Signal wiring	$Nb×mm^2$	3×1.0	3×1.0	3×1.0
Drainage water pipe dia.		mm	Φ25	Φ25	Φ25
Controller			Wireless remote controller (R51/E)(standard)		
Operation temp		℃	17-30		

Notes:

1. Nominal cooling capacities are based on the following conditions: return air temp.: 27°CDB, 19°CWB, and outdoor temp.:35°CDB, equivalent ref. piping: 8m (horizontal)
2. Nominal heating capacities are based on the following conditions: return air temp.: 20°CDB, outdoor temp.: 7°CDB, 6°CWB, and equivalent ref. Piping: 8m (horizontal)

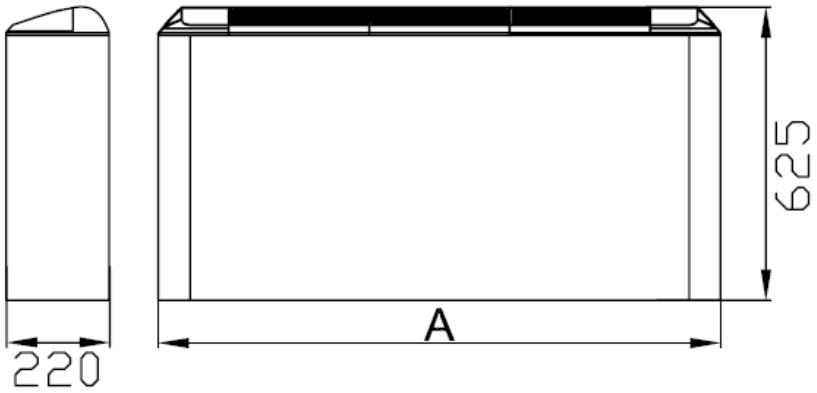
4.Dimensions

4.1 Exposed Floor-standing (air inlet from front)



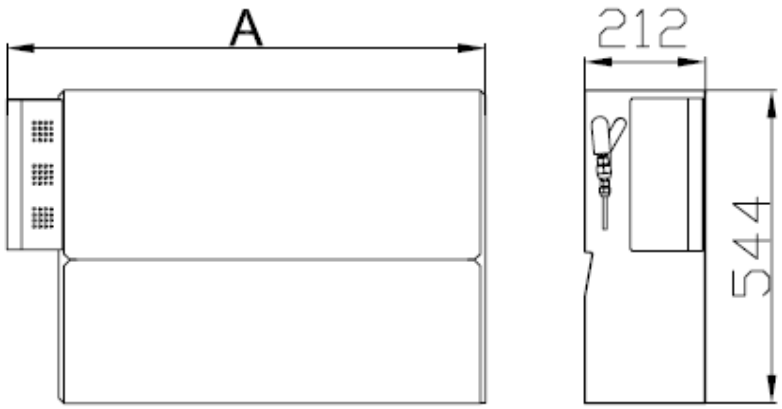
No	Model	A (mm)
1	MDVi-D22Z/N1-F1	1000
2	MDVi-D28Z/N1-F1	1000
3	MDVi-D36Z/N1-F1	1200
4	MDVi-D45Z/N1-F1	1200
5	MDVi-D56Z/N1-F1	1500
6	MDVi-D71Z/N1-F1	1500
7	MDVi-D80Z/N1-F1	1500

4.2 Exposed Floor-standing(air inlet from below)



No	Model	A (mm)
1	MDVi-D22Z/N1-F2	1000
2	MDVi-D28Z/N1-F2	1000
3	MDVi-D36Z/N1-F2	1200
4	MDVi-D45Z/N1-F2	1200
5	MDVi-D56Z/N1-F2	1500
6	MDVi-D71Z/N1-F2	1500
7	MDVi-D80Z/N1-F2	1500

4.3 Concealed Floor-standing

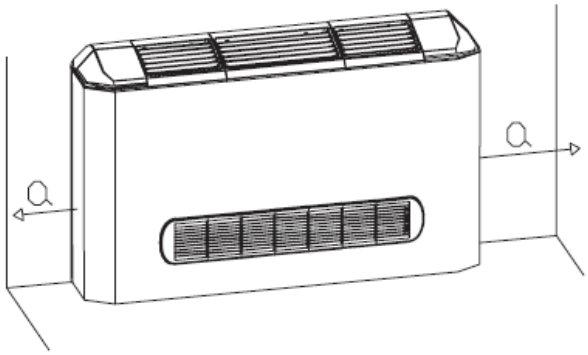


No	Model	A (mm)
1	MDVi-D22Z/N1-F3	840
2	MDVi-D28Z/N1-F3	840
3	MDVi-D36Z/N1-F3	1036
4	MDVi-D45Z/N1-F3	1036
5	MDVi-D56Z/N1-F3	1336
6	MDVi-D71Z/N1-F3	1336
7	MDVi-D80Z/N1-F3	1336

5.Service Space

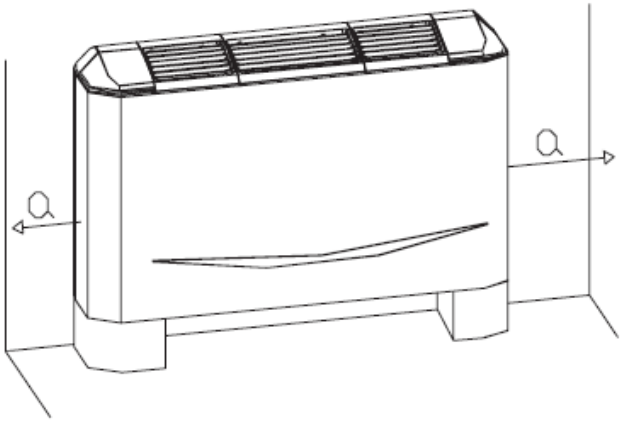
Version Ⅰ

Vertical unit with casing, with air intake from front and air outlet on top, for installation on a wall or on feet on the floor.



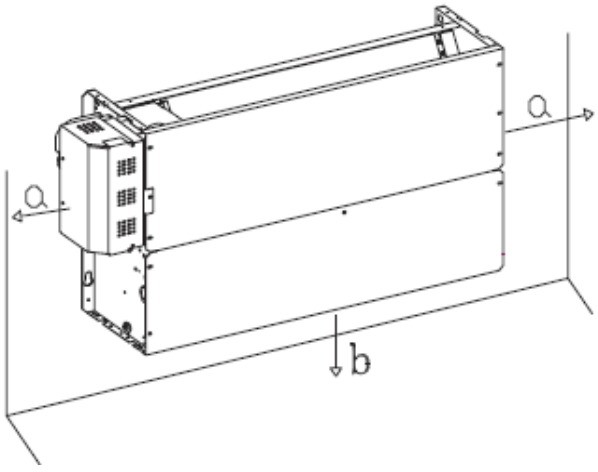
Version Ⅱ

Vertical unit with casing, with air intake from below and air outlet on top, for installation on a wall or on feet on the floor.



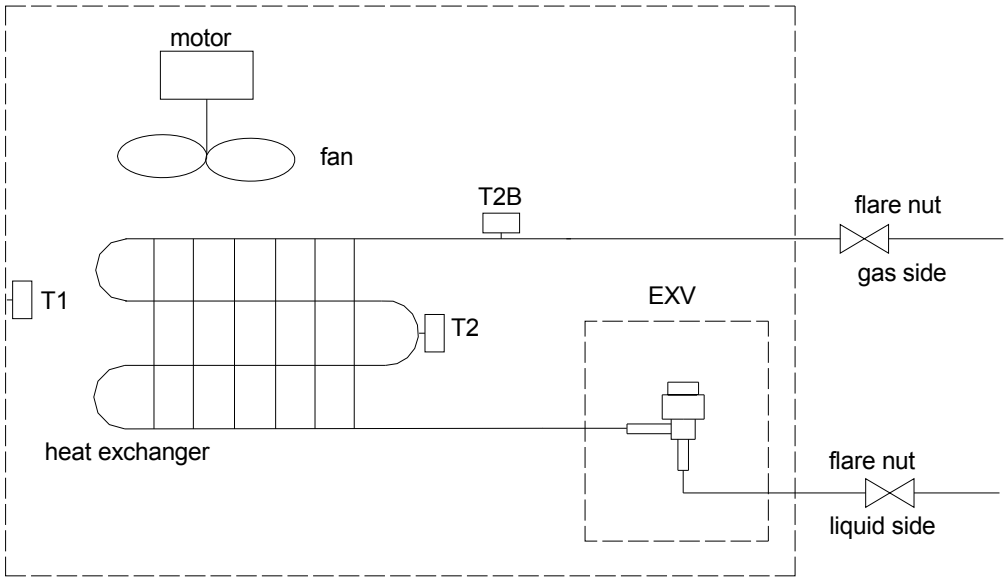
Version Ⅲ

Vertical unit for building-in, with air intake from below and air delivery at the top, for installation on a wall.

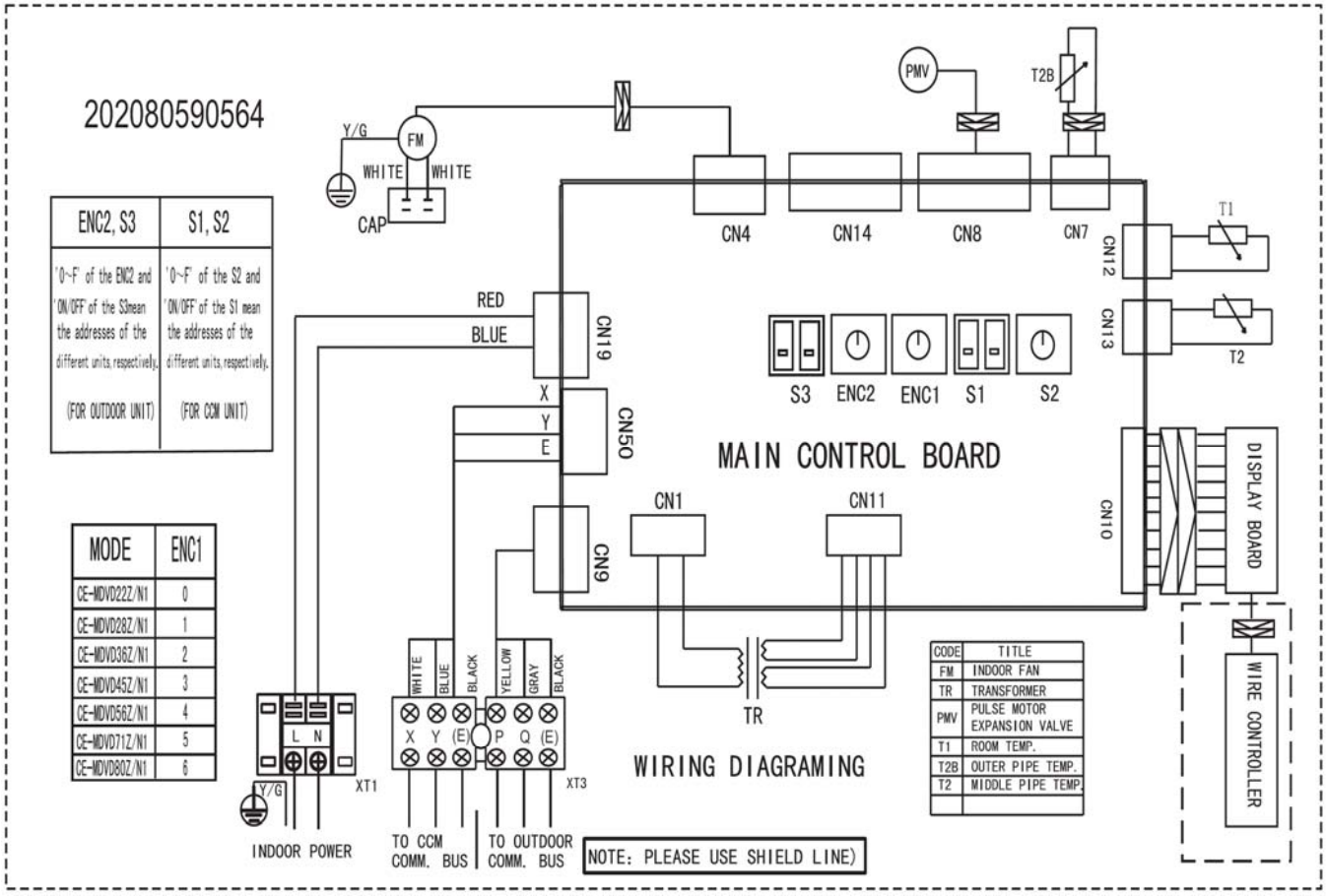


Version	Version Ⅰ	Version Ⅱ	Version Ⅲ
a(mm)	≥150	≥150	≥200
b(mm)	/	/	≥80

6. Piping Diagram



7. Wiring Diagram



8. Capacity Tables

8.1 Cooling

TC: total capacity **SC**: sensible capacity **WB**: wet-bulb temperature **DB**: dry-bulb temperature

Indoor Unit size (kW)	Outdoor temperature (℃ DB)	Indoor temperature (℃ WB/DB)													
		14/20		16/23		18/26		19/27		20/28		22/30		24/32	
		TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
2.2	10.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.9	1.7
	12.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.8	1.6
	14.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.8	1.6
	16.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.8	1.6
	18.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.8	1.6
	20.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.7	1.5
	21.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.7	1.5
	23.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.5	1.6	2.7	1.5
	25.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.5	1.6	2.6	1.5
	27.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.5	1.6	2.6	1.5
	29.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.4	1.5	2.5	1.5
	31.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.4	1.5	2.5	1.5
	33.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.4	1.5	2.4	1.5
	35.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.3	1.5	2.4	1.5
	37.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.3	1.5	2.3	1.5
	39.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.2	1.6	2.3	1.5	2.3	1.5
2.8	10.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.7	2.1
	12.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.6	2.1
	14.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.6	2.1
	16.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.6	2.0
	18.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.5	2.0
	20.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.4	1.9
	21.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.4	1.9
	23.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.2	2.1	3.4	1.9
	25.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.2	2.0	3.3	1.9
	27.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.2	2.0	3.3	1.9
	29.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.1	2.0	3.2	1.9
	31.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.1	2.0	3.2	1.9
	33.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.1	2.0	3.1	2.0
	35.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.1	2.9	1.9	3.1	2.0
	37.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.1	2.9	1.9	2.9	1.9
	39.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.8	2.0	2.9	1.9	2.9	1.9
3.6	10.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.8	2.8
	12.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.6	2.7
	14.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.6	2.7
	16.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.5	2.7
	18.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.5	2.7
	20.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.4	2.7
	21.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.4	2.7

	23.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.4	2.7
	25.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.1	2.7	4.2	2.6
	27.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.1	2.7	4.2	2.6
	29.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.0	2.6	4.1	2.5
	31.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.0	2.6	4.1	2.4
	33.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.0	2.6	4.0	2.4
	35.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.7	2.6	3.9	2.6	4.0	2.4
	37.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.7	2.6	3.9	2.6	3.9	2.3
	39.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.7	2.6	3.9	2.7	3.9	2.4
4.5	10.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.9	3.4
	12.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.9	3.4
	14.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.8	3.3
	16.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.6	3.2
	18.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.6	3.2
	20.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.5	3.2
	21.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.4	3.2	5.4	3.1
	23.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.2	3.2	5.4	3.1
	25.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.2	3.2	5.3	3.0
	27.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.0	3.0	5.3	3.0
	29.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.0	3.0	5.1	2.9
	31.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.3	3.5	5.1	3.0
	33.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.3	3.5	4.9	2.9
	35.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.8	3.3	5.3	3.5	4.8	2.8
	37.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.6	3.2	4.8	3.1	4.8	2.9
	39.0	3.1	2.6	3.6	2.9	4.2	3.1	4.5	3.2	4.6	3.2	4.8	3.1	4.8	2.9
5.6	10.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.3	4.1
	12.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.3	4.1
	14.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.2	4.1
	16.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	6.9	4.0
	18.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.1	4.1
	20.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.1	4.1
	21.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	7.0	4.1
	23.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.6	4.6	6.9	4.0
	25.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.5	4.1	6.8	3.9
	27.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.4	4.0	6.5	3.8
	29.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.3	4.0	6.4	3.7
	31.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.2	3.9	6.3	3.7
	33.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.0	3.8	6.3	3.7
	35.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	5.9	3.7	6.2	3.6
	37.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	6.0	4.0	5.9	3.9	6.1	3.5
	39.0	3.9	3.2	4.6	3.5	5.2	3.9	5.6	4.0	5.7	3.8	5.8	3.8	6.0	3.5
7.1	10.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	9.2	4.9
	12.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	9.1	4.8
	14.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	9.0	4.8
	16.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	8.9	4.7
	18.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	8.7	4.7
	20.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	8.5	4.6

	21.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	8.4	4.5
	23.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	8.3	4.5
	25.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.4	4.9	8.2	4.4
	27.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.1	4.9	8.2	4.4
	29.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	8.0	4.8	8.1	4.5
	31.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	7.9	4.7	7.8	4.4
	33.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	7.8	4.7	7.8	4.4
	35.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	7.6	4.6	7.7	4.3
	37.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.5	4.8	7.5	4.5	7.6	4.3
	39.0	5.0	3.8	5.8	4.2	6.7	4.6	7.1	4.7	7.2	4.6	7.4	4.4	7.6	4.3
8.0	10.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	10.4	5.6
	12.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	10.2	5.5
	14.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	10.2	5.5
	16.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	10.0	5.4
	18.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	9.8	5.3
	20.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	9.6	5.2
	21.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	9.4	5.1
	23.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	9.4	5.1
	25.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	9.3	5.0
	27.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.1	5.3	9.2	5.1
	29.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.5	9.0	5.3	9.1	5.0
	31.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.5	8.9	5.2	8.8	4.8
	33.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.5	8.8	5.2	8.8	4.8
	35.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.5	8.6	5.1	8.6	4.8
	37.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.3	5.4	8.4	5.0	8.6	4.9
	39.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.1	5.3	8.3	5.0	8.6	4.9

8.2 Heating

TC: total capacity **WB**: wet-bulb temperature **DB**: dry-bulb temperature

Indoor Unit size (kW)	Outdoor temperature (℃)		Indoor temperature (℃ DB)					
			16.00	18.00	20.00	21.00	22.00	24.00
			TC	TC	TC	TC	TC	TC
	WB	DB	kW	kW	kW	kW	kW	kW
2.20	-15.00	-14.70	1.64	1.64	1.64	1.64	1.64	1.64
	-13.00	-12.60	1.74	1.74	1.74	1.74	1.74	1.74
	-11.00	-10.50	1.82	1.82	1.82	1.82	1.82	1.82
	-10.00	-9.50	1.90	1.90	1.90	1.90	1.90	1.90
	-9.10	-8.50	1.95	1.95	1.95	1.95	1.95	1.95
	-7.60	-7.00	1.98	1.98	1.98	1.98	1.98	1.98
	-5.60	-5.00	2.05	2.05	2.05	2.05	2.05	2.05
	-3.70	-3.00	2.16	2.16	2.16	2.16	2.16	2.16
	-0.70	0.00	2.31	2.31	2.31	2.31	2.31	2.18
	2.20	3.00	2.44	2.44	2.44	2.44	2.39	2.18
	4.10	5.00	2.52	2.52	2.52	2.52	2.39	2.18
	6.00	7.00	2.60	2.60	2.60	2.52	2.39	2.18
	7.90	9.00	2.68	2.68	2.93	2.52	2.39	2.18
	9.80	11.00	2.76	2.76	2.60	2.52	2.39	2.18
	11.80	13.00	2.86	2.81	2.60	2.52	2.39	2.18
	13.70	15.00	2.94	2.81	2.60	2.52	2.39	2.18
2.80	-15.00	-14.70	2.02	2.02	2.02	2.02	2.02	2.02
	-13.00	-12.60	2.14	2.14	2.14	2.14	2.14	2.14
	-11.00	-10.50	2.24	2.24	2.24	2.24	2.24	2.24
	-10.00	-9.50	2.34	2.34	2.34	2.34	2.34	2.34
	-9.10	-8.50	2.40	2.40	2.40	2.40	2.40	2.40
	-7.60	-7.00	2.43	2.43	2.43	2.43	2.43	2.43
	-5.60	-5.00	2.53	2.53	2.53	2.53	2.53	2.53
	-3.70	-3.00	2.66	2.66	2.66	2.66	2.66	2.66
	-0.70	0.00	2.85	2.85	2.85	2.85	2.85	2.69
	2.20	3.00	3.01	3.01	3.01	3.01	2.94	2.69
	4.10	5.00	3.10	3.10	3.10	3.10	2.94	2.69
	6.00	7.00	3.20	3.20	3.20	3.10	2.94	2.69
	7.90	9.00	3.30	3.30	2.93	3.10	2.94	2.69
	9.80	11.00	3.39	3.39	3.20	3.10	2.94	2.69
	11.80	13.00	3.52	3.46	3.20	3.10	2.94	2.69
	13.70	15.00	3.62	3.46	3.20	3.10	2.94	2.69
3.60	-15.00	-14.70	2.52	2.52	2.52	2.52	2.52	2.52
	-13.00	-12.60	2.68	2.68	2.68	2.68	2.68	2.68
	-11.00	-10.50	2.80	2.80	2.80	2.80	2.80	2.80
	-10.00	-9.50	2.92	2.92	2.92	2.92	2.92	2.92
	-9.10	-8.50	3.00	3.00	3.00	3.00	3.00	3.00
	-7.60	-7.00	3.04	3.04	3.04	3.04	3.04	3.04
	-5.60	-5.00	3.16	3.16	3.16	3.16	3.16	3.16
	-3.70	-3.00	3.32	3.32	3.32	3.32	3.32	3.32
	-0.70	0.00	3.56	3.56	3.56	3.56	3.56	3.36

	2.20	3.00	3.76	3.76	3.76	3.76	3.68	3.36
	4.10	5.00	3.88	3.88	3.88	3.88	3.68	3.36
	6.00	7.00	4.00	4.00	4.00	3.88	3.68	3.36
	7.90	9.00	4.12	4.12	2.93	3.88	3.68	3.36
	9.80	11.00	4.24	4.24	4.00	3.88	3.68	3.36
	11.80	13.00	4.40	4.32	4.00	3.88	3.68	3.36
	13.70	15.00	4.52	4.32	4.00	3.88	3.68	3.36
4.50	-15.00	-14.70	3.15	3.15	3.15	3.15	3.15	3.15
	-13.00	-12.60	3.35	3.35	3.35	3.35	3.35	3.35
	-11.00	-10.50	3.50	3.50	3.50	3.50	3.50	3.50
	-10.00	-9.50	3.65	3.65	3.65	3.65	3.65	3.65
	-9.10	-8.50	3.75	3.75	3.75	3.75	3.75	3.75
	-7.60	-7.00	3.80	3.80	3.80	3.80	3.80	3.80
	-5.60	-5.00	3.95	3.95	3.95	3.95	3.95	3.95
	-3.70	-3.00	4.15	4.15	4.15	4.15	4.15	4.15
	-0.70	0.00	4.45	4.45	4.45	4.45	4.45	4.20
	2.20	3.00	4.70	4.70	4.70	4.70	4.60	4.20
	4.10	5.00	4.85	4.85	4.85	4.85	4.60	4.20
	6.00	7.00	5.00	5.00	5.00	4.85	4.60	4.20
	7.90	9.00	5.15	5.15	2.93	4.85	4.60	4.20
	9.80	11.00	5.30	5.30	5.00	4.85	4.60	4.20
	11.80	13.00	5.50	5.40	5.00	4.85	4.60	4.20
	13.70	15.00	5.65	5.40	5.00	4.85	4.60	4.20
5.60	-15.00	-14.70	3.97	3.97	3.97	3.97	3.97	3.97
	-13.00	-12.60	4.22	4.22	4.22	4.22	4.22	4.22
	-11.00	-10.50	4.41	4.41	4.41	4.41	4.41	4.41
	-10.00	-9.50	4.60	4.60	4.60	4.60	4.60	4.60
	-9.10	-8.50	4.73	4.73	4.73	4.73	4.73	4.73
	-7.60	-7.00	4.79	4.79	4.79	4.79	4.79	4.79
	-5.60	-5.00	4.98	4.98	4.98	4.98	4.98	4.98
	-3.70	-3.00	5.23	5.23	5.23	5.23	5.23	5.23
	-0.70	0.00	5.61	5.61	5.61	5.61	5.61	5.29
	2.20	3.00	5.92	5.92	5.92	5.92	5.80	5.29
	4.10	5.00	6.11	6.11	6.11	6.11	5.80	5.29
	6.00	7.00	6.30	6.30	6.30	6.11	5.80	5.29
	7.90	9.00	6.49	6.49	2.93	6.11	5.80	5.29
	9.80	11.00	6.68	6.68	6.30	6.11	5.80	5.29
	11.80	13.00	6.93	6.80	6.30	6.11	5.80	5.29
	13.70	15.00	7.12	6.80	6.30	6.11	5.80	5.29
7.10	-15.00	-14.70	5.04	5.04	5.04	5.04	5.04	5.04
	-13.00	-12.60	5.36	5.36	5.36	5.36	5.36	5.36
	-11.00	-10.50	5.60	5.60	5.60	5.60	5.60	5.60
	-10.00	-9.50	5.84	5.84	5.84	5.84	5.84	5.84
	-9.10	-8.50	6.00	6.00	6.00	6.00	6.00	6.00
	-7.60	-7.00	6.08	6.08	6.08	6.08	6.08	6.08
	-5.60	-5.00	6.32	6.32	6.32	6.32	6.32	6.32
	-3.70	-3.00	6.64	6.64	6.64	6.64	6.64	6.64

	-0.70	0.00	7.12	7.12	7.12	7.12	7.12	6.72
	2.20	3.00	7.52	7.52	7.52	7.52	7.36	6.72
	4.10	5.00	7.76	7.76	7.76	7.76	7.36	6.72
	6.00	7.00	8.00	8.00	8.00	7.76	7.36	6.72
	7.90	9.00	8.24	8.24	2.93	7.76	7.36	6.72
	9.80	11.00	8.48	8.48	8.00	7.76	7.36	6.72
	11.80	13.00	8.80	8.64	8.00	7.76	7.36	6.72
	13.70	15.00	9.04	8.64	8.00	7.76	7.36	6.72
8.00	-15.00	-14.70	5.67	5.67	5.67	5.67	5.67	5.67
	-13.00	-12.60	6.03	6.03	6.03	6.03	6.03	6.03
	-11.00	-10.50	6.30	6.30	6.30	6.30	6.30	6.30
	-10.00	-9.50	6.57	6.57	6.57	6.57	6.57	6.57
	-9.10	-8.50	6.75	6.75	6.75	6.75	6.75	6.75
	-7.60	-7.00	6.84	6.84	6.84	6.84	6.84	6.84
	-5.60	-5.00	7.11	7.11	7.11	7.11	7.11	7.11
	-3.70	-3.00	7.47	7.47	7.47	7.47	7.47	7.47
	-0.70	0.00	8.01	8.01	8.01	8.01	8.01	7.56
	2.20	3.00	8.46	8.46	8.46	8.46	8.28	7.56
	4.10	5.00	8.73	8.73	8.73	8.73	8.28	7.56
	6.00	7.00	9.00	9.00	9.00	8.73	8.28	7.56
	7.90	9.00	9.27	9.27	2.93	8.73	8.28	7.56
	9.80	11.00	9.54	9.54	9.00	8.73	8.28	7.56
	11.80	13.00	9.90	9.72	9.00	8.73	8.28	7.56
	13.70	15.00	10.17	9.72	9.00	8.73	8.28	7.56

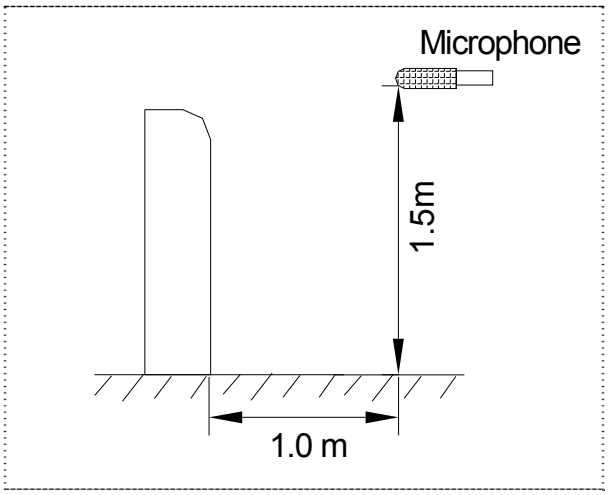
9. Electric Characteristics

Model	Indoor Unit				Power Supply		IFM	
	Hz	Voltage	Min.	Max.	MCA	MFA	KW	FLA
MDVi-D22Z/N1-F1	50	220-240V	198	254	0.25	15	0.02	0.2
MDVi-D22Z/N1-F2	50	220-240V	198	254	0.25	15	0.02	0.2
MDVi-D22Z/N1-F3	50	220-240V	198	254	0.25	15	0.02	0.2
MDVi-D28Z/N1-F1	50	220-240V	198	254	0.25	15	0.02	0.2
MDVi-D28Z/N1-F2	50	220-240V	198	254	0.25	15	0.02	0.2
MDVi-D28Z/N1-F3	50	220-240V	198	254	0.25	15	0.02	0.2
MDVi-D36Z/N1-F1	50	220-240V	198	254	0.3	15	0.02	0.24
MDVi-D36Z/N1-F2	50	220-240V	198	254	0.3	15	0.02	0.24
MDVi-D36Z/N1-F3	50	220-240V	198	254	0.3	15	0.02	0.24
MDVi-D45Z/N1-F1	50	220-240V	198	254	0.4	15	0.02	0.3
MDVi-D45Z/N1-F2	50	220-240V	198	254	0.4	15	0.02	0.3
MDVi-D45Z/N1-F3	50	220-240V	198	254	0.4	15	0.02	0.3
MDVi-D56Z/N1-F1	50	220-240V	198	254	0.6	15	0.028	0.48
MDVi-D56Z/N1-F2	50	220-240V	198	254	0.6	15	0.028	0.48
MDVi-D56Z/N1-F3	50	220-240V	198	254	0.6	15	0.028	0.48
MDVi-D71Z/N1-F1	50	220-240V	198	254	0.8	15	0.07	0.62
MDVi-D71Z/N1-F2	50	220-240V	198	254	0.8	15	0.07	0.62
MDVi-D71Z/N1-F3	50	220-240V	198	254	0.8	15	0.07	0.62
MDVi-D80Z/N1-F1	50	220-240V	198	254	0.8	15	0.07	0.62
MDVi-D80Z/N1-F2	50	220-240V	198	254	0.8	15	0.07	0.62
MDVi-D80Z/N1-F3	50	220-240V	198	254	0.8	15	0.07	0.62

Remark:
MCA: Min. Current Amps. (A)
MFA: Max. Fuse Amps. (A)
KW: Fan Motor Rated Output (kW)
FLA: Full Load Amps. (A)
IFM: Indoor Fan Motor

10. Sound Levels

10.1 Test condition

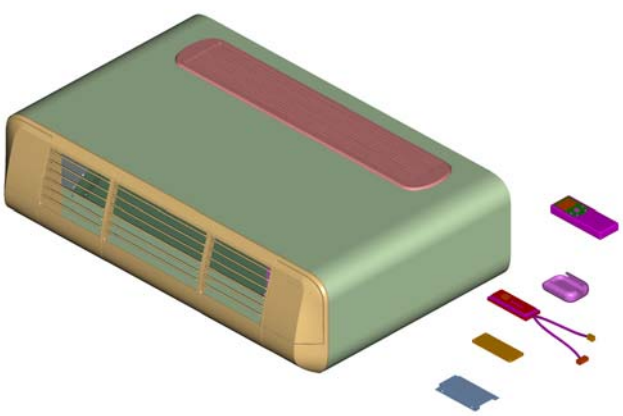


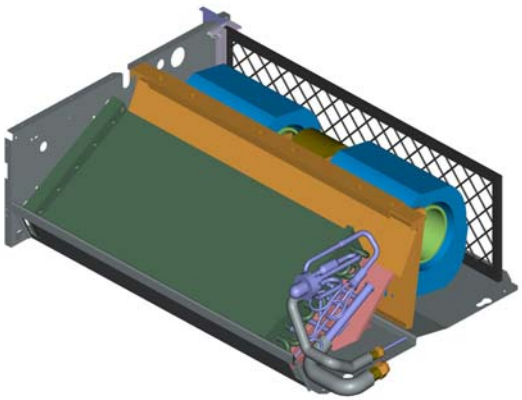
10.2 Test value

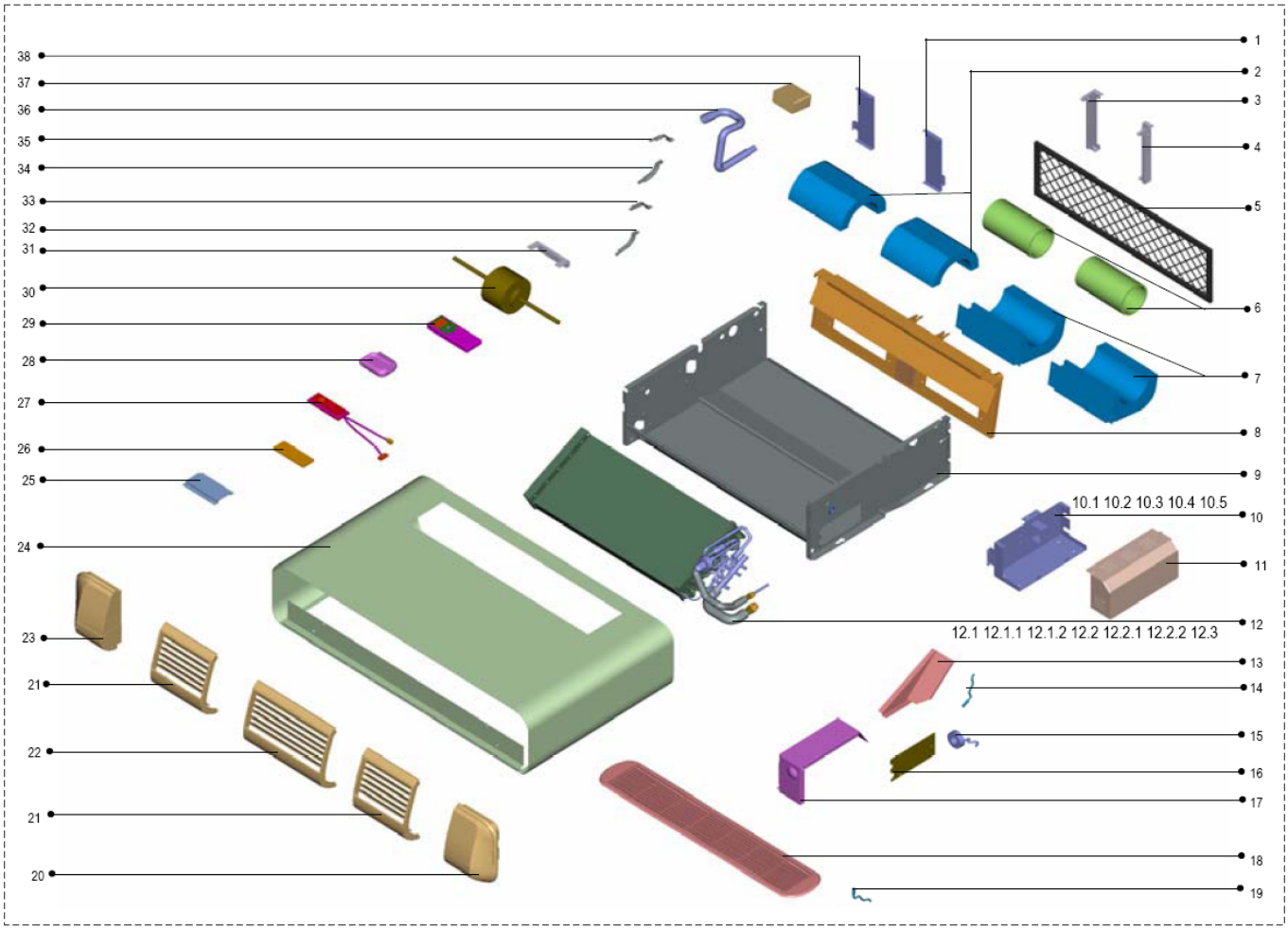
Model	Noise level under three speeds of fan (dB(A))		
	H	M	L
MDVi-D22Z/N1-F1/F2/F3	37	35	33
MDVi-D28Z/N1-F1/F2/F3	37	35	33
MDVi-D36Z/N1-F1/F2/F3	39	37	35
MDVi-D45Z/N1-F1/F2/F3	39	37	35
MDVi-D56Z/N1-F1/F2/F3	41	39	37
MDVi-D71Z/N1-F1/F2/F3	43	41	38
MDVi-D80Z/N1-F1/F2/F3	43	41	38

11. Exploded View

11.1 MDVi-D22Z/N1-F1 MDVi-D28Z/N1-F1

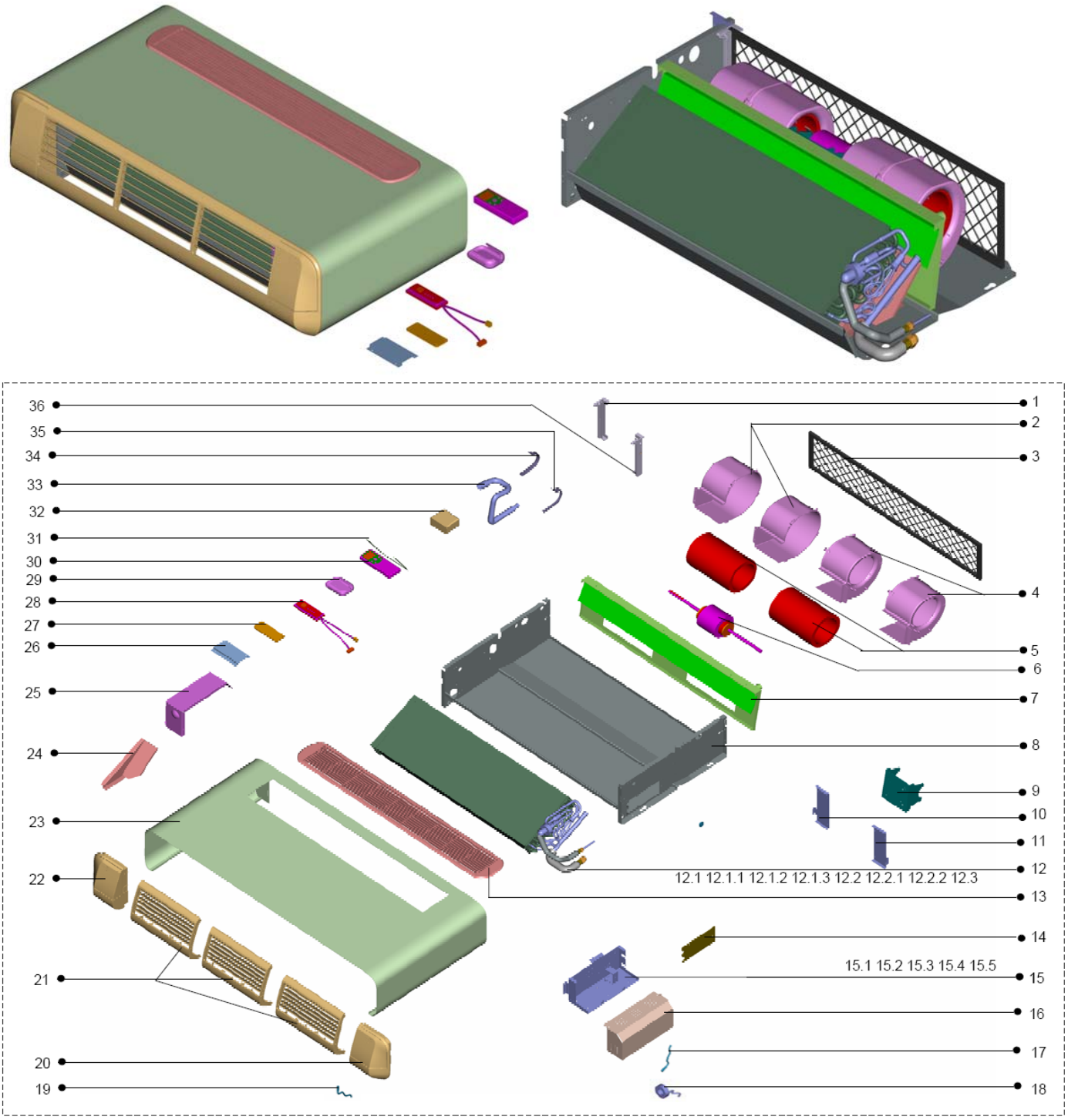






No.	Part name	Quantity	No.	Part name	Quantity
1	Left sealed board ass'y	1	14	Temp. sensor	1
2	Volute shell	2	15	EEV solenoid	1
3	Filter bracket	1	16	Right seal board ass'y	1
4	Filter bracket	1	17	Evaporator connection board ass'y	1
5	Filter	1	18	Louver ass'y	1
6	Fan	2	19	Temp. sensor ass'y	1
7	Volute shell	2	20	Left cover seat ass'y	1
8	Middle beam	1	21	Louver ass'y	2
9	Base	1	22	Louver ass'y	1
10	E-part box ass'y	1	23	Right cover seat ass'y	1
10.1	Main controller ass'y	1	24	Cabinet ass'y	1
10.2	E-part box base	1	25	Installing board	1
10.3	Transformer	1	26	Control box cover	1
10.4	Wire joint, 2p	1	27	Display board ass'y	1
10.5	Wire joint	1	28	Remote controller holder ass'y	1
11	E-Part box cover	1	29	Remote controller	1
12	Evaporator ass'y	1	30	Motor	1
12.1	Input pipe ass'y	1	31	Strengthen board	1
12.1.1	Electronic expansion valve	1	32	Fixing board	1
12.1.2	Copper nut	1	33	Fixing board	1
12.1.3	Pipe joint	1	34	Fixing board	1
12.2	Output pipe ass'y	1	35	Fixing board	1
12.2.1	Copper nut	1	36	Drain hose	1
12.2.2	Pipe joint	1	37	Capacitor box	1
12.3	Temp. sensor ass'y	1	38	Right sealed board ass'y	1
13	Supporting board ass'y	1	39	Motor capacitor	1

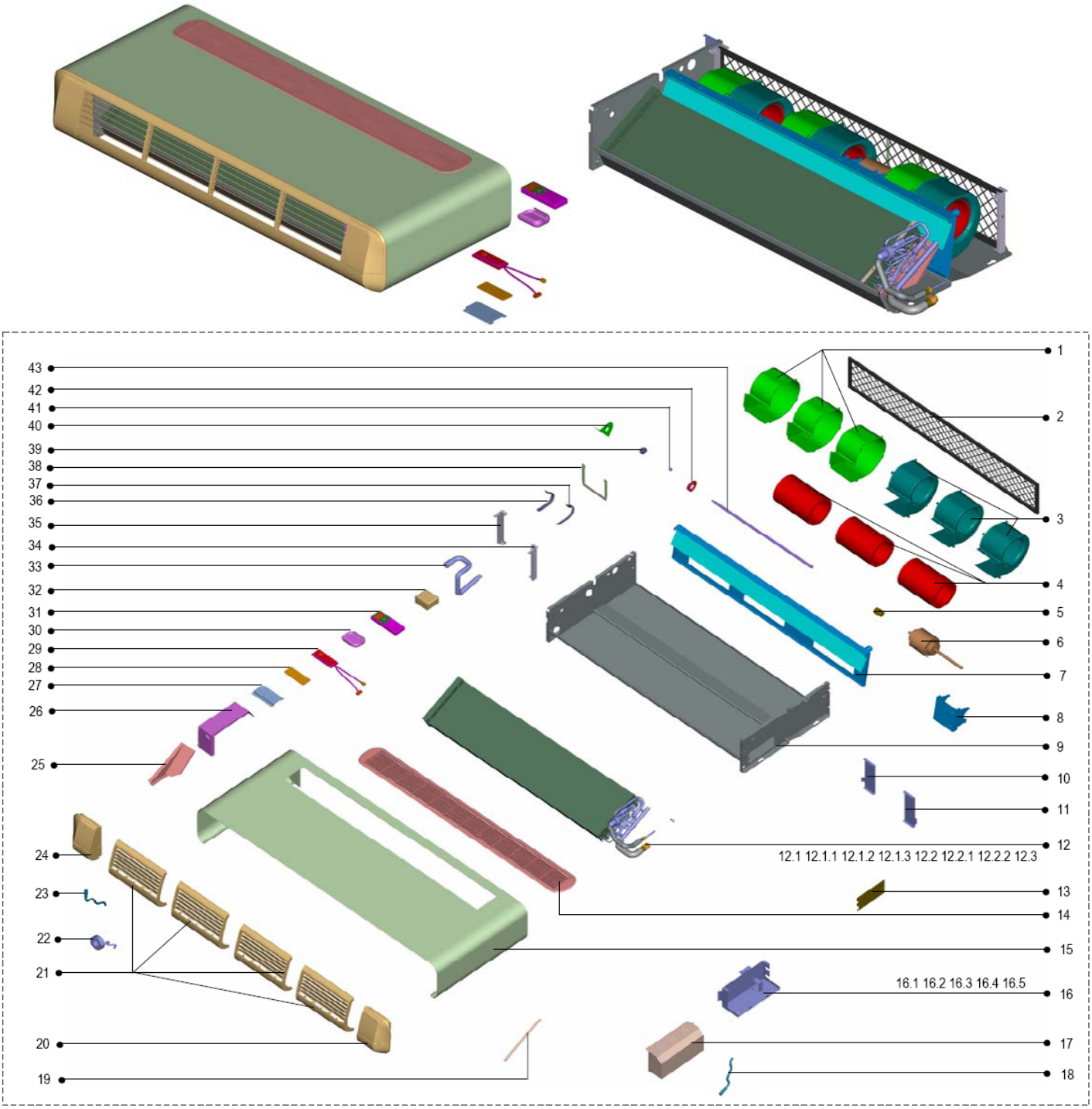
11.2 MDVi-D36Z/N1-F1 MDVi-D45Z/N1-F1



No.	Part name	Quantity
1	Filter bracket	1
2	Volute shell	2
3	Filter	1
4	Left volute shell	2
5	Fan	2
6	Motor	1
7	Middle beam	1
8	Base	1
9	Motor bracket	1
10	Right sealed board ass'y	1
11	Left sealed board ass'y	1
12	Evaporator ass'y	1
12.1	Input pipe ass'y	1
12.1.1	Electronic expansion valve	1
12.1.2	Copper nut	1
12.1.3	Pipe joint	1
12.2	Output pipe ass'y	1
12.2.1	Copper nut	1
12.2.2	Pipe joint	1
12.3	Temp. sensor ass'y	1
13	Louver ass'y	1
14	Right seal board ass'y	1
15	E-part box ass'y	1
15.1	Main controller ass'y	1
15.2	E-part box base	1

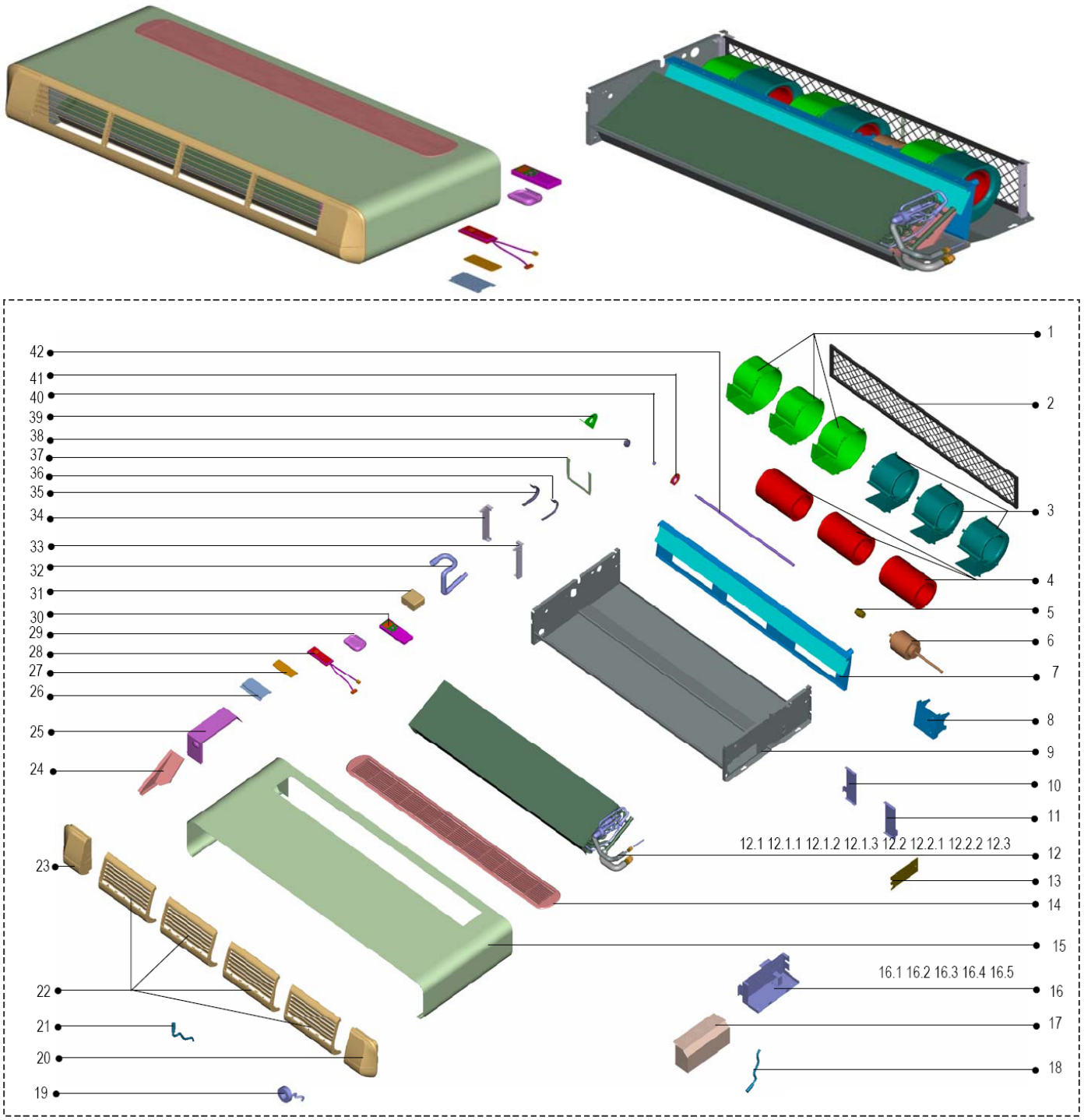
No.	Part name	Quantity
15.3	Transformer	1
15.4	Wire joint, 2p	1
15.5	Wire joint	1
16	E-Part box cover	1
17	Temp. sensor	1
18	EEV solenoid	1
19	Temp. sensor ass'y	1
20	Left cover seat ass'y	1
21	Louver ass'y	3
22	Right cover seat ass'y	1
23	Cabinet ass'y	1
24	Supporting board ass'y	1
25	Evaporator connection board ass'y	1
26	Installing board	1
27	Control box cover	1
28	Display board ass'y	1
29	Remote controller holder ass'y	1
30	Remote controller	1
31	Board	1
32	Capacitor box	1
33	Drain hose	1
34	Motor clamp	1
35	Motor clamp	1
36	Filter bracket	1
37	Motor capacitor	1

11.3 MDVi-D56Z/N1-F1 MDVi-D71Z/N1-F1



No.	Part name	Quantity	No.	Part name	Quantity
1	Volute shell	3	17	E-Part box cover	1
2	Filter	1	18	Temp. sensor	1
3	Left volute shell	3	19	Baffle	1
4	Fan	3	20	Left cover seat ass'y	1
5	Coupling	1	21	Louver ass'y	4
6	Motor	1	22	EEV solenoid	1
7	Middle beam	1	23	Temp. sensor ass'y	1
8	Motor bracket	1	24	Right cover seat ass'y	1
9	Base	1	25	Supporting board ass'y	1
10	Right sealed board ass'y	1	26	Evaporator connection board ass'y	1
11	Left sealed board ass'y	1	27	Installing board	1
12	Evaporator ass'y	1	28	Control box cover	1
12.1	Input pipe ass'y	1	29	Display board ass'y	1
12.1.1	Electronic expansion valve	1	30	Remote controller holder ass'y	1
12.1.2	Copper nut	1	31	Remote controller	1
12.1.3	Pipe joint	1	32	Capacitor box	1
12.2	Output pipe ass'y	1	33	Drain hose	1
12.2.1	Copper nut	1	34	Filter bracket	1
12.2.2	Pipe joint	1	35	Filter bracket	1
12.3	Temp. sensor ass'y	1	36	Motor clamp	1
13	Right seal board ass'y	1	37	Motor clamp	1
14	Louver ass'y	1	38	Board	1
15	Cabinet ass'y	1	39	Bearing base	1
16	E-part box ass'y	1	40	Bearing supporting board	1
16.1	Main controller ass'y	1	41	Bearing	1
16.2	E-part box base	1	42	Bearing Fixing board	1
16.3	Transformer	1	43	Connecting shaft	1
16.4	Wire joint, 2p	1	44	Motor capacitor	1
16.5	Wire joint	1			

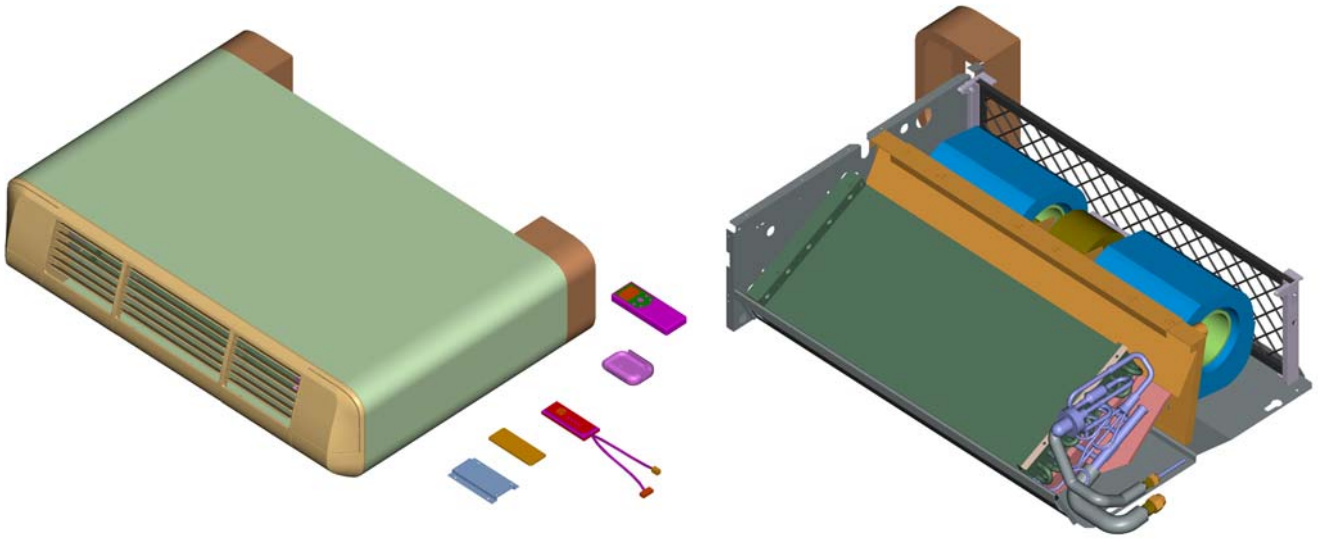
11.4 MDVi-D80Z/N1-F1

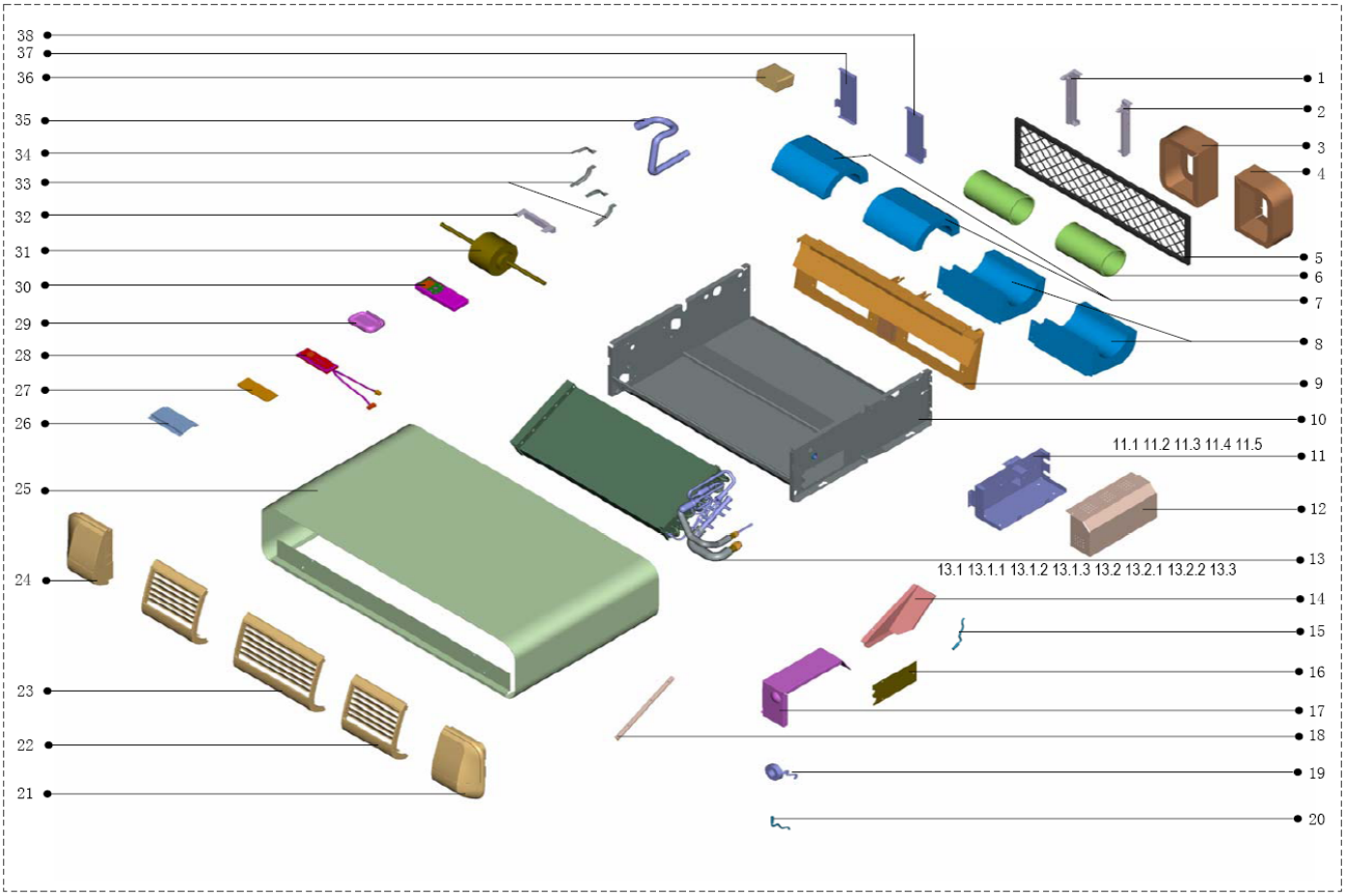


No.	Part name	Quantity
1	Volute shell	3
2	Filter	1
3	Left volute shell	3
4	Fan	3
5	Coupling	1
6	Motor	1
7	Middle beam	1
8	Motor bracket	1
9	Base	1
10	Right sealed board ass'y	1
11	Left sealed board ass'y	1
12	Evaporator ass'y	1
12.1	Input pipe ass'y	1
12.1.1	Electronic expansion valve	1
12.1.2	Copper nut	1
12.1.3	Pipe joint	1
12.2	Output pipe ass'y	1
12.2.1	Copper nut	1
12.2.2	Pipe joint	1
12.3	Temp. sensor ass'y	1
13	Right seal board ass'y	1
14	Louver ass'y	1
15	Cabinet ass'y	1
16	E-part box ass'y	1
16.1	Main controller ass'y	1
16.2	E-part box base	1
16.3	Transformer	1
16.4	Wire joint, 2p	1

No.	Part name	Quantity
16.5	Wire joint	1
17	E-Part box cover	1
18	Temp. sensor	1
19	EEV solenoid	1
20	Left cover seat ass'y	1
21	Temp. sensor ass'y	1
22	Louver ass'y	4
23	Right cover seat ass'y	1
24	Supporting board ass'y	1
25	Evaporator connection board ass'y	1
26	Installing board	1
27	Control box cover	1
28	Display board ass'y	1
29	Remote controller holder ass'y	1
30	Remote controller	1
31	Capacitor box	1
32	Drain hose	1
33	Filter bracket	1
34	Filter bracket	1
35	Motor clamp	1
36	Motor clamp	1
37	Board	1
38	Bearing base	1
39	Bearing supporting board	1
40	Bearing	1
41	Bearing Fixing board	1
42	Connecting shaft	1
43	Motor capacitor	1

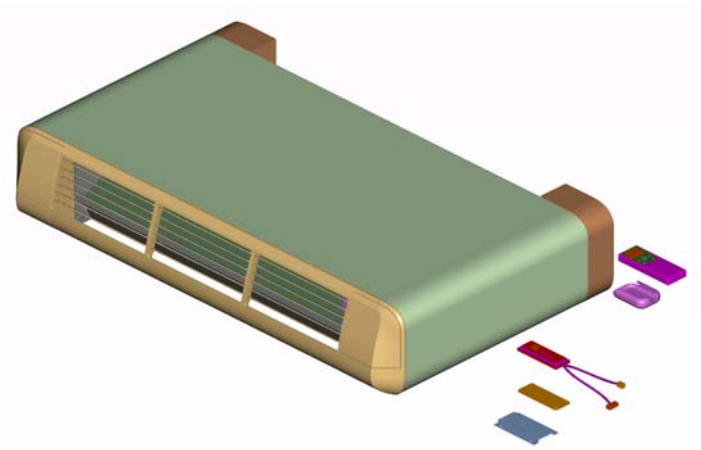
11.5 MDVi-D22Z/N1-F2 MDVi-D28Z/N1-F2

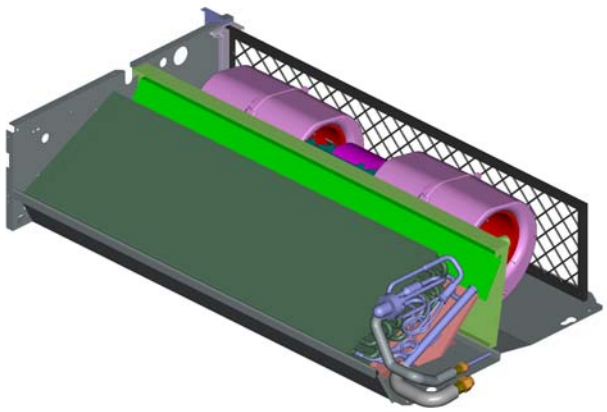


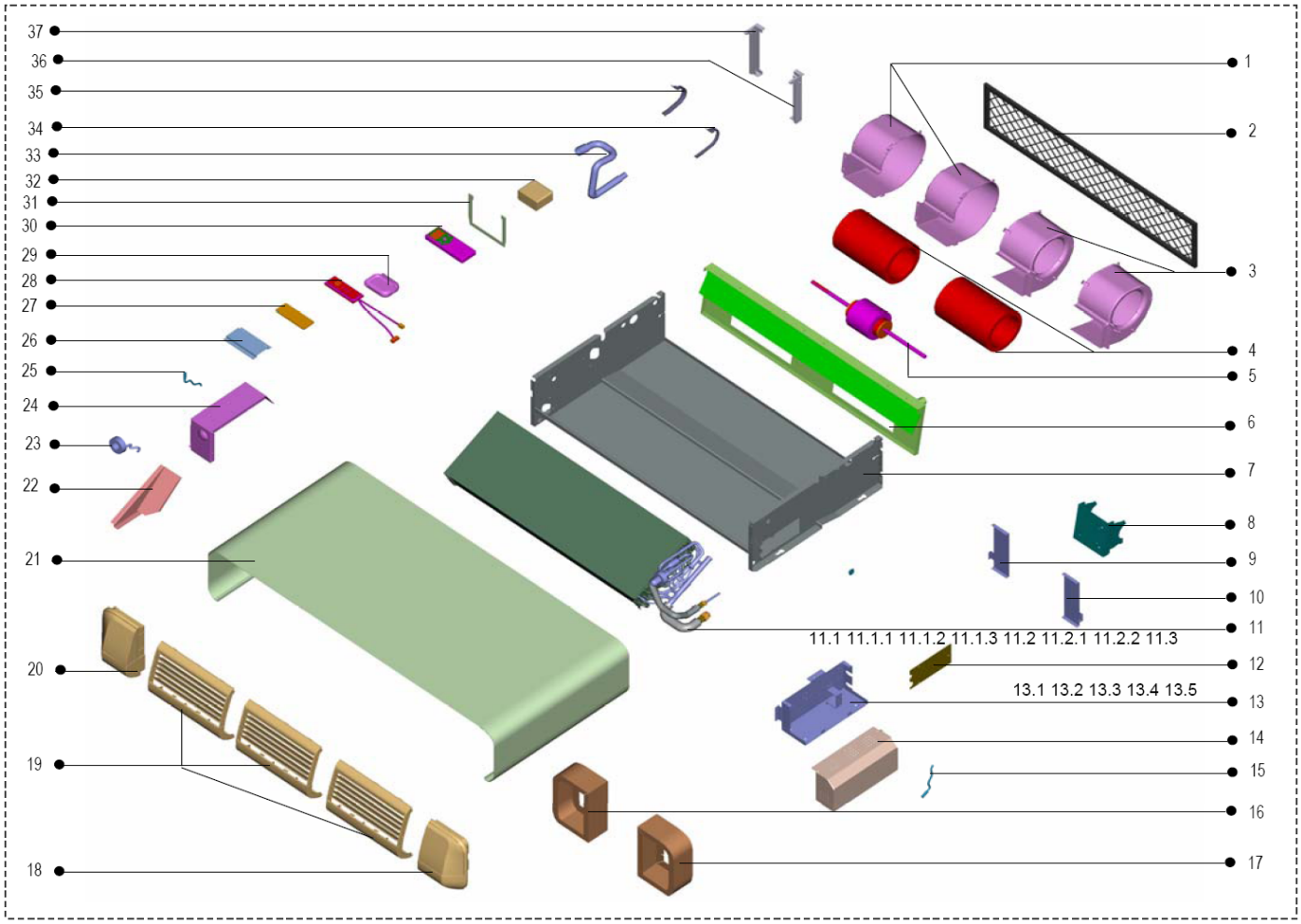


No.	Part name	Quantity	No.	Part name	Quantity
1	Filter bracket	1	14	Supporting board ass'y	1
2	Filter bracket	1	15	Temp. sensor	1
3	Right supporting shelf	1	16	Right seal board ass'y	1
4	Left supporting shelf	1	17	Evaporator connection board ass'y	1
5	Filter	1	18	Baffle	1
6	Fan	2	19	EEV solenoid	1
7	Volute shell	2	20	Temp. sensor ass'y	1
8	Volute shell	2	21	Left cover seat ass'y	1
9	Middle beam	1	22	Louver ass'y	2
10	Base	1	23	Louver ass'y	1
11	E-part box ass'y	1	24	Right cover seat ass'y	1
11.1	Main controller ass'y	1	25	Cabinet ass'y	1
11.2	E-part box base	1	26	Installing board	1
11.3	Transformer	1	27	Control box cover	1
11.4	Wire joint, 2p	1	28	Display board ass'y	1
11.5	Wire joint	1	29	Remote controller holder ass'y	1
12	E-Part box cover	1	30	Remote controller	1
13	Evaporator ass'y	1	31	Motor	1
13.1	Input pipe ass'y	1	32	Strengthen board	1
13.1.1	Electronic expansion valve	1	33	Fixing board	1
13.1.2	Copper nut	1	34	Fixing board	1
13.1.3	Pipe joint	1	35	Drain hose	1
13.2	Output pipe ass'y	1	36	Capacitor box	1
13.2.1	Copper nut	1	37	Right sealed board ass'y	1
13.2.2	Pipe joint	1	38	Left sealed board ass'y	1
13.3	Temp. sensor ass'y	1	39	Motor capacitor	1

11.6 MDVi-D36Z/N1-F2 MDVi-D45Z/N1-F2

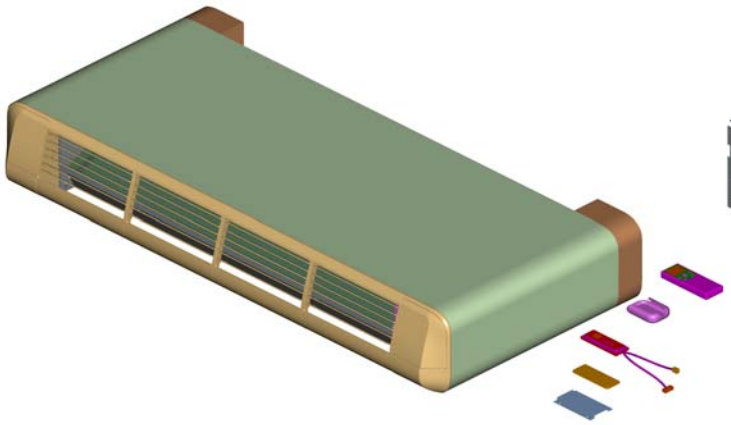


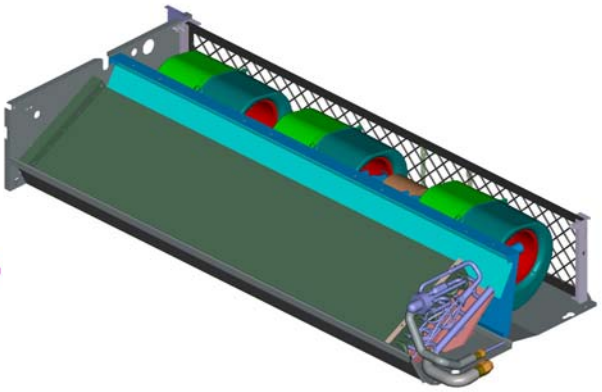


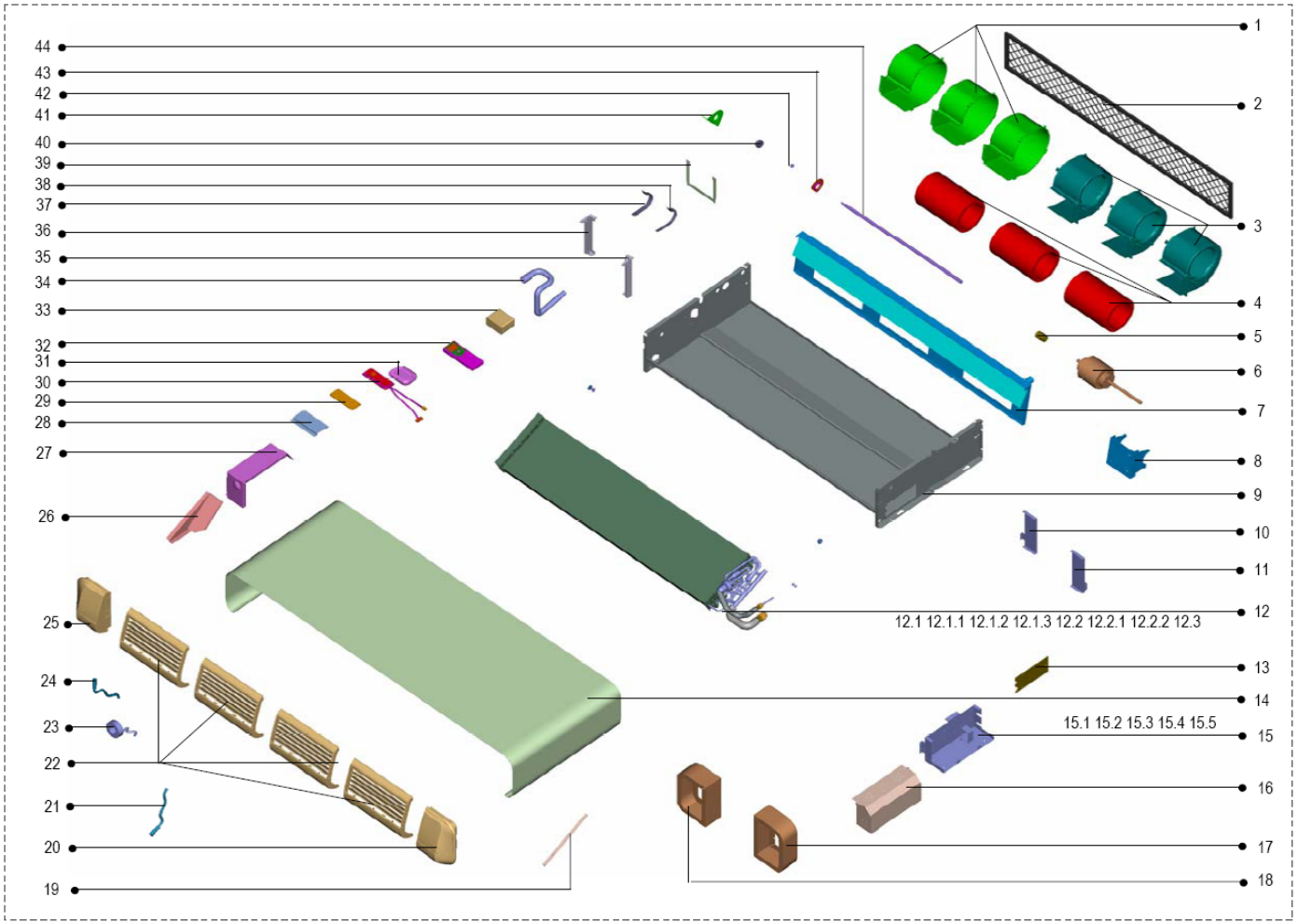


No.	Part name	Quantity	No.	Part name	Quantity
1	Volute shell	2	14	E-Part box cover	1
2	Filter	1	15	Temp. sensor	1
3	Left volute shell	2	16	Right supporting shelf	1
4	Fan	2	17	Left supporting shelf	1
5	Motor	1	18	Left cover seat ass'y	1
6	Middle beam	1	19	Louver ass'y	3
7	Base	1	20	Right cover seat ass'y	1
8	Motor bracket	1	21	Cabinet ass'y	1
9	Right sealed board ass'y	1	22	Supporting board ass'y	1
10	Left sealed board ass'y	1	23	EEV solenoid	1
11	Evaporator ass'y	1	24	Evaporator connection board ass'y	1
11.1	Input pipe ass'y	1	25	Temp. sensor ass'y	1
11.1.1	Electronic expansion valve	1	26	Installing board	1
11.1.2	Copper nut	1	27	Control box cover	1
11.1.3	Pipe joint	1	28	Display board ass'y	1
11.2	Output pipe ass'y	1	29	Remote controller holder ass'y	1
11.2.1	Copper nut	1	30	Remote controller	1
11.2.2	Pipe joint	1	31	Board	1
11.3	Temp. sensor ass'y	1	32	Capacitor box	1
12	Right seal board ass'y	1	33	Drain hose	1
13	E-part box ass'y	1	34	Motor clamp	1
13.1	Main controller ass'y	1	35	Motor clamp	1
13.2	E-part box base	1	36	Filter bracket	1
13.3	Transformer	1	37	Filter bracket	1
13.4	Wire joint, 2p	1	38	Motor capacitor	1
13.5	Wire joint	1			

11.7 MDVi-D56Z/N1-F2 MDVi-D71Z/N1-F2

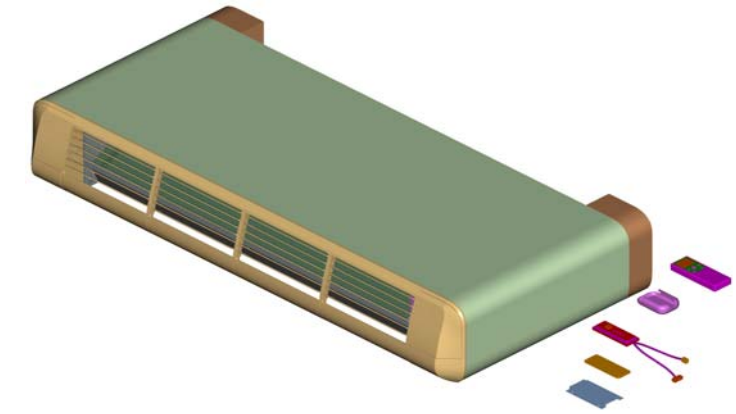


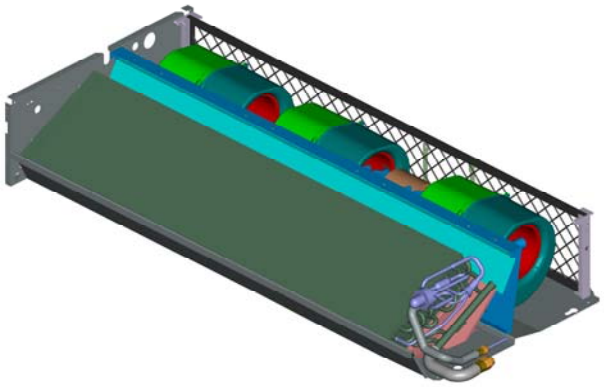


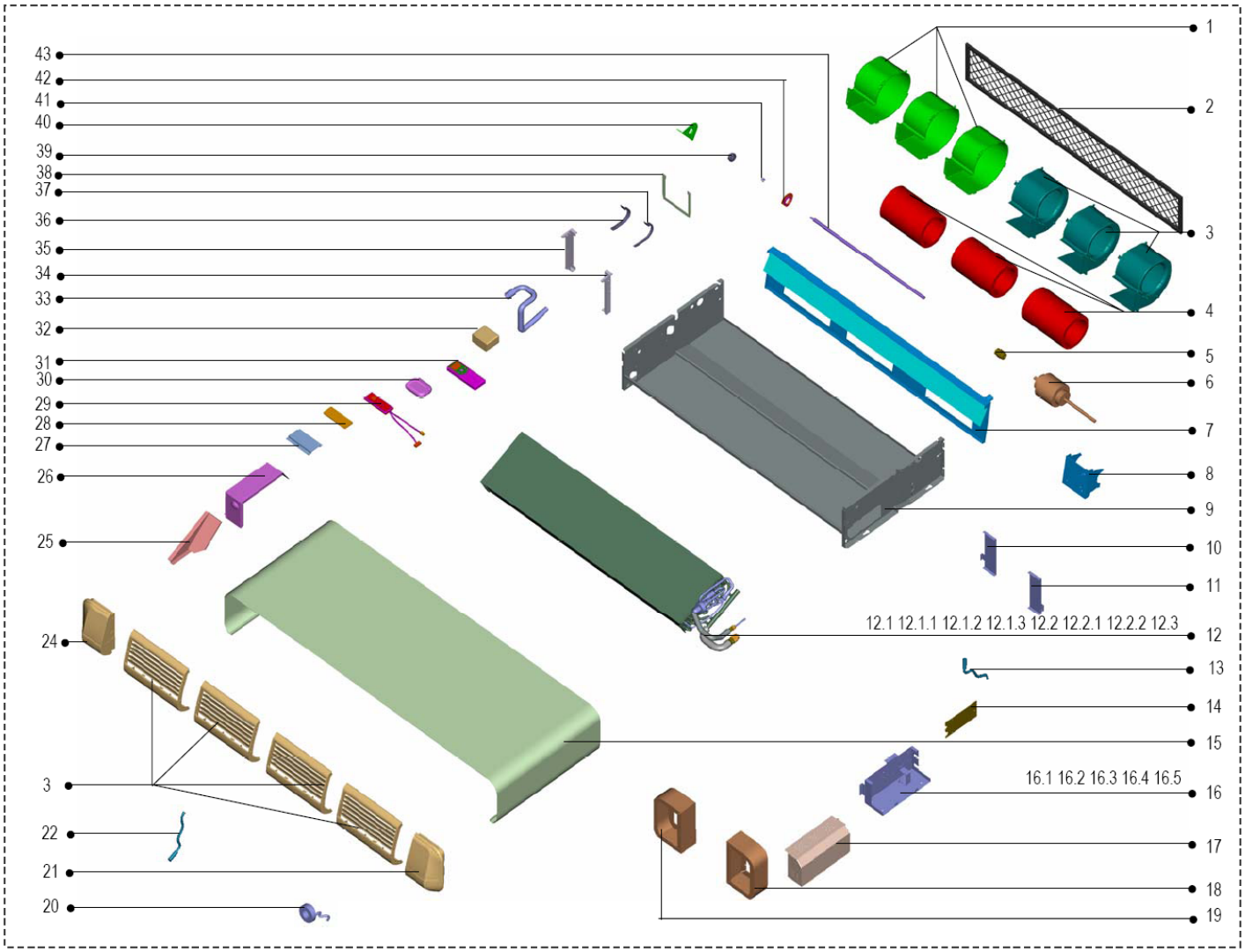


No.	Part name	Quantity	No.	Part name	Quantity
1	Volute shell	3	17	Right supporting shelf	1
2	Filter	1	18	Left supporting shelf	1
3	Left volute shell	3	19	Baffle	1
4	Fan	3	20	Left cover seat ass'y	1
5	Coupling	1	21	Temp. sensor	1
6	Motor	1	22	Louver ass'y	4
7	Middle beam	1	23	EEV solenoid	1
8	Motor bracket	1	24	Temp. sensor ass'y	1
9	Base	1	25	Right cover seat ass'y	1
10	Right sealed board ass'y	1	26	Supporting board ass'y	1
11	Left sealed board ass'y	1	27	Evaporator connection board ass'y	1
12	Evaporator ass'y	1	28	Installing board	1
12.1	Input pipe ass'y	1	29	Control box cover	1
12.1.1	Electronic expansion valve	1	30	Display board ass'y	1
12.1.2	Copper nut	1	31	Remote controller holder ass'y	1
12.1.3	Pipe joint	1	32	Remote controller	1
12.2	Output pipe ass'y	1	33	Capacitor box	1
12.2.1	Copper nut	1	34	Drain hose	1
12.2.2	Pipe joint	1	35	Filter bracket	1
12.3	Temp. sensor ass'y	1	36	Filter bracket	1
13	Right seal board ass'y	1	37	Motor clamp	1
14	Cabinet ass'y	1	38	Motor clamp	1
15	E-part box ass'y	1	39	Board	1
15.1	Main controller ass'y	1	40	Bearing base	1
15.2	E-part box base	1	41	Bearing supporting board	1
15.3	Transformer	1	42	Bearing	1
15.4	Wire joint, 2p	1	43	Bearing Fixing board	1
15.5	Wire joint	1	44	Connecting shaft	1
16	E-Part box cover	1	45	Motor capacitor	1

11.8 MDVi-D80Z/N1-F2

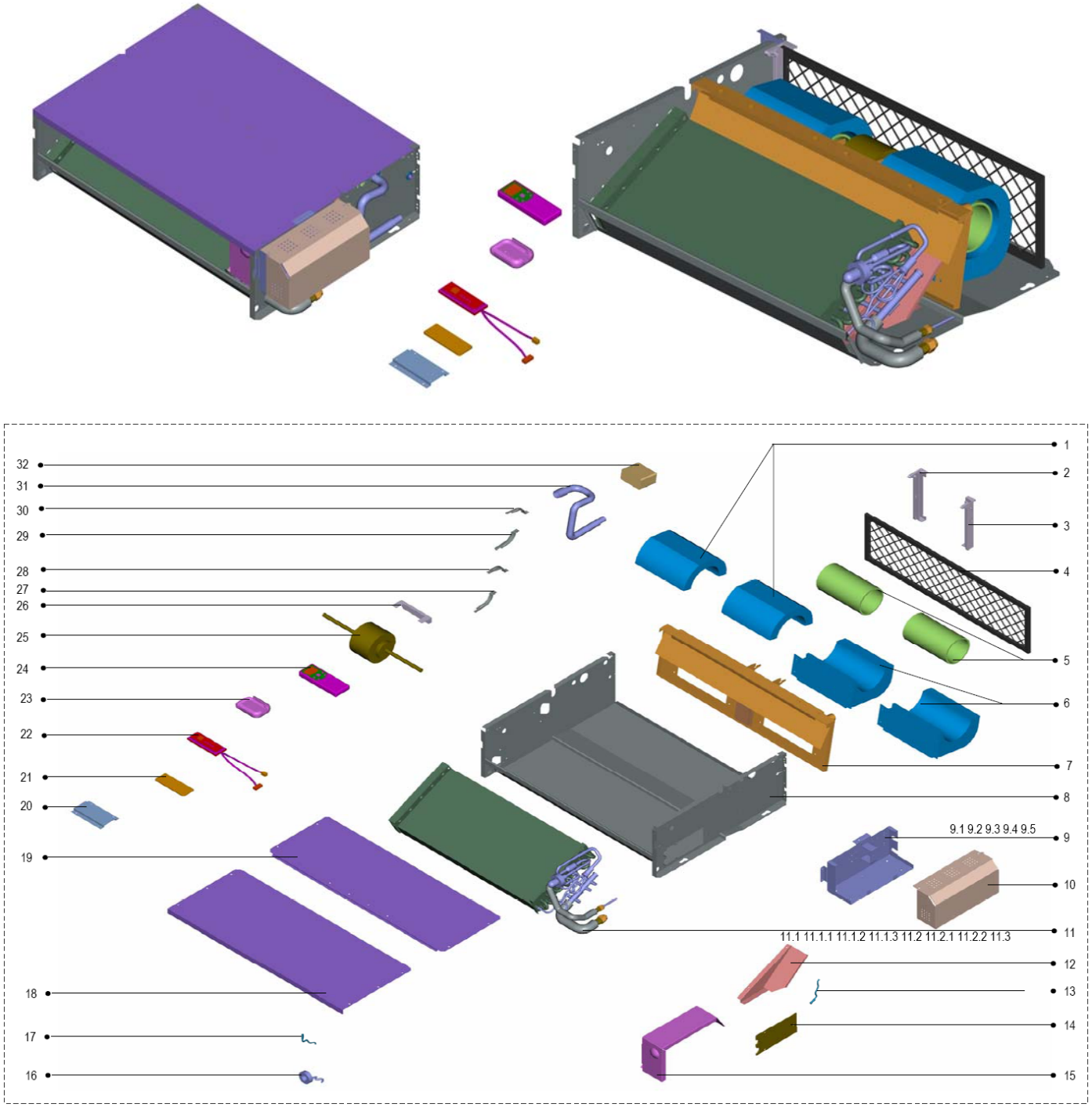






No.	Part name	Quantity	No.	Part name	Quantity
1	Volute shell	3	17	E-Part box cover	1
2	Filter	1	18	Right supporting shelf	1
3	Left volute shell	3	19	Left supporting shelf	1
4	Fan	3	20	EEV solenoid	1
5	Coupling	1	21	Left cover seat ass'y	1
6	Motor	1	22	Temp. sensor	1
7	Middle beam	1	23	Louver ass'y	4
8	Motor bracket	1	24	Right cover seat ass'y	1
9	Base	1	25	Supporting board ass'y	1
10	Right sealed board ass'y	1	26	Evaporator connection board ass'y	1
11	Left sealed board ass'y	1	27	Installing board	1
12	Evaporator ass'y	1	28	Control box cover	1
12.1	Input pipe ass'y	1	29	Display board ass'y	1
12.1.1	Electronic expansion valve	1	30	Remote controller holder ass'y	1
12.1.2	Copper nut	1	31	Remote controller	1
12.1.3	Pipe joint	1	32	Capacitor box	1
12.2	Output pipe ass'y	1	33	Drain hose	1
12.2.1	Copper nut	1	34	Filter bracket	1
12.2.2	Pipe joint	1	35	Filter bracket	1
12.3	Temp. sensor ass'y	1	36	Motor clamp	1
13	Temp. sensor ass'y	1	37	Motor clamp	1
14	Right seal board ass'y	1	38	Board	1
15	Cabinet ass'y	1	39	Bearing base	1
16	E-part box ass'y	1	40	Bearing supporting board	1
16.1	Main controller ass'y	1	41	Bearing	1
16.2	E-part box base	1	42	Bearing Fixing board	1
16.3	Transformer	1	43	Connecting shaft	1
16.4	Wire joint, 2p	1	44	Motor capacitor	1
16.5	Wire joint	1			

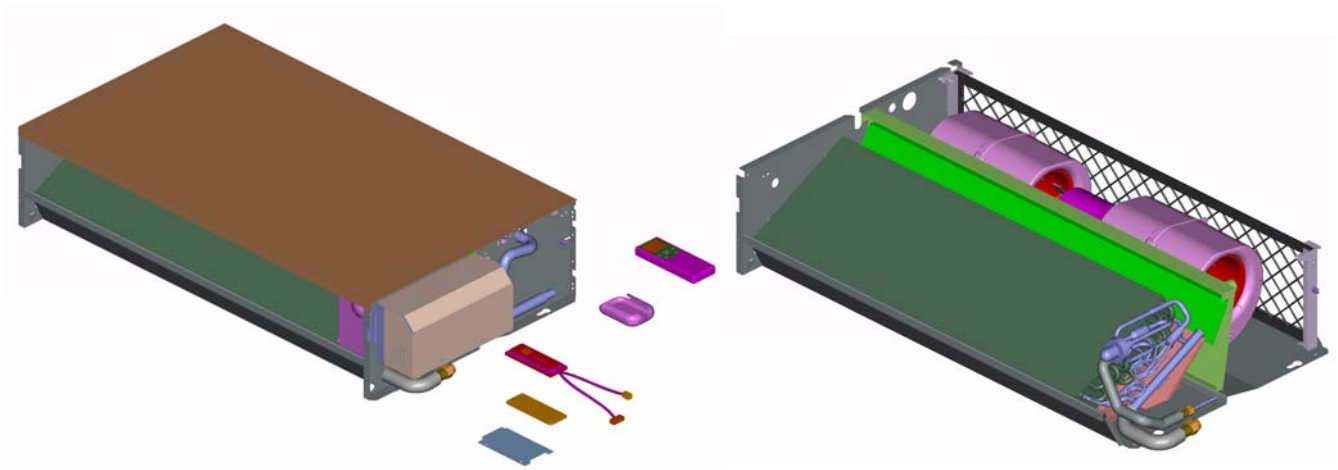
11.9 MDVi-D22Z/N1-F3 MDVi-D28Z/N1-F3

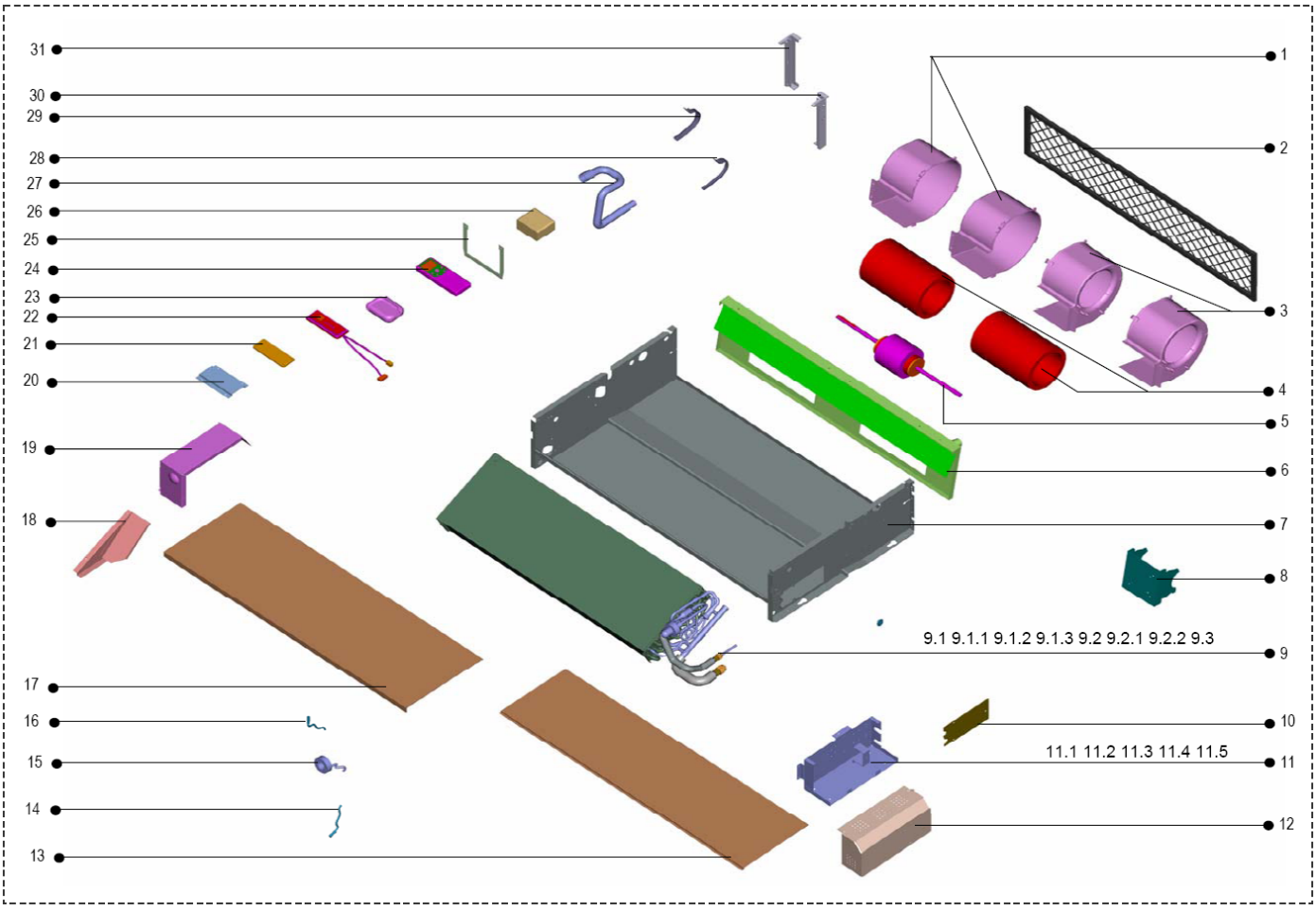


No.	Part name	Quantity
1	Volute shell	2
2	Filter bracket	1
3	Filter bracket	1
4	Filter	1
5	Fan	2
6	Volute shell	2
7	Middle beam	1
8	Base	1
9	E-part box ass'y	1
9.1	Main controller ass'y	1
9.2	E-part box base	1
9.3	Transformer	1
9.4	Wire joint, 2p	1
9.5	Wire joint	1
10	E-Part box cover	1
11	Evaporator ass'y	1
11.1	Input pipe ass'y	1
11.1.1	Electronic expansion valve	1
11.1.2	Copper nut	1
11.1.3	Pipe joint	1
11.2	Output pipe ass'y	1
11.2.1	Copper nut	1
11.2.2	Pipe joint	1

No.	Part name	Quantity
11.3	Temp. sensor ass'y	1
12	Supporting board ass'y	1
13	Temp. sensor	1
14	Right seal board ass'y	1
15	Evaporator connection board ass'y	1
16	EEV solenoid	1
17	Temp. sensor ass'y	1
18	Covering plate	1
19	Covering plate	1
20	Installing board	1
21	Control box cover	1
22	Display board ass'y	1
23	Remote controller holder ass'y	1
24	Remote controller	1
25	Motor	1
26	Strengthen board	1
27	Fixing board	1
28	Fixing board	1
29	Fixing board	1
30	Fixing board	1
31	Drain hose	1
32	Capacitor box	1
33	Motor capacitor	1

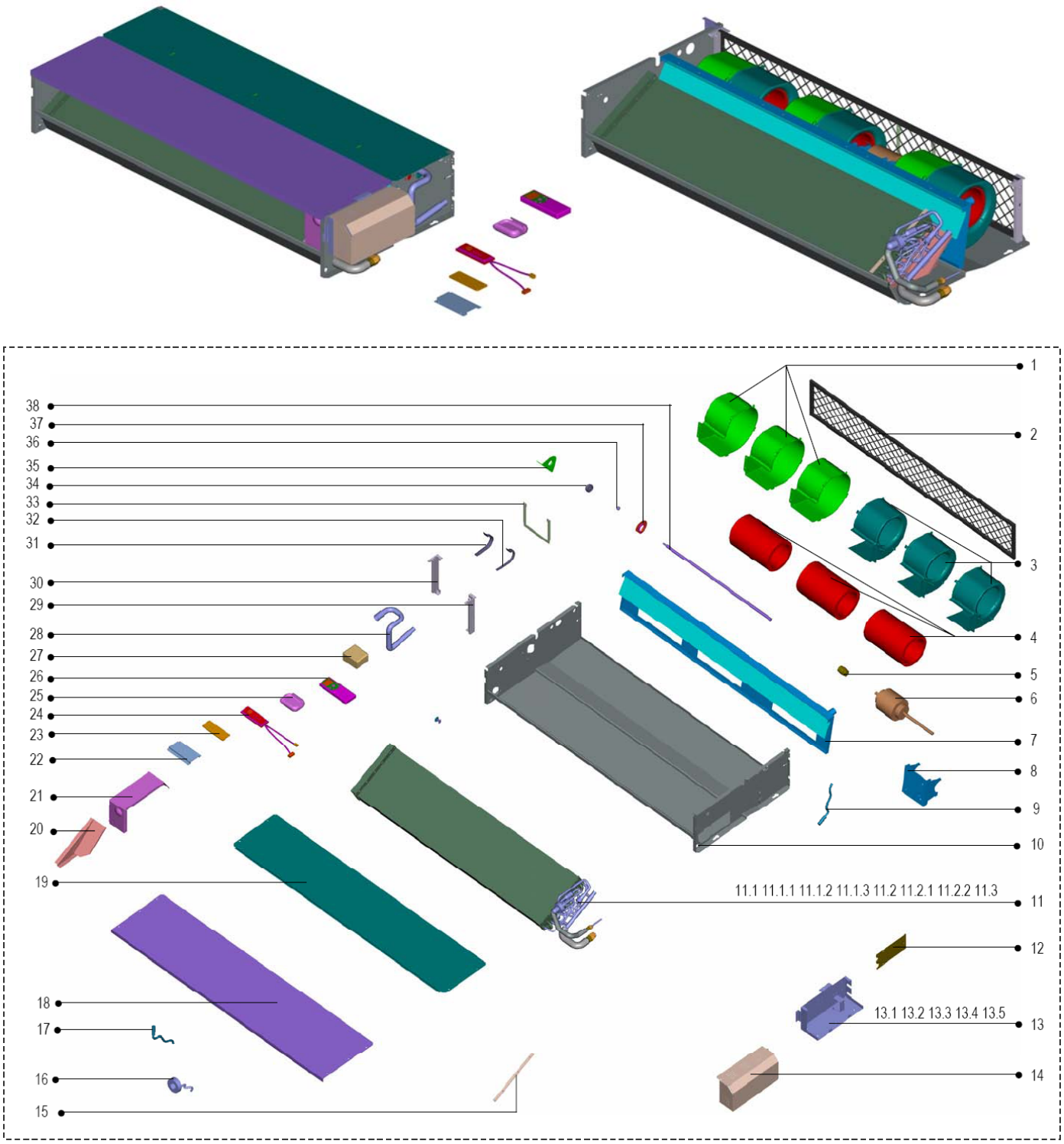
11.10 MDVi-D36Z/N1-F3 MDVi-D45Z/N1-F3





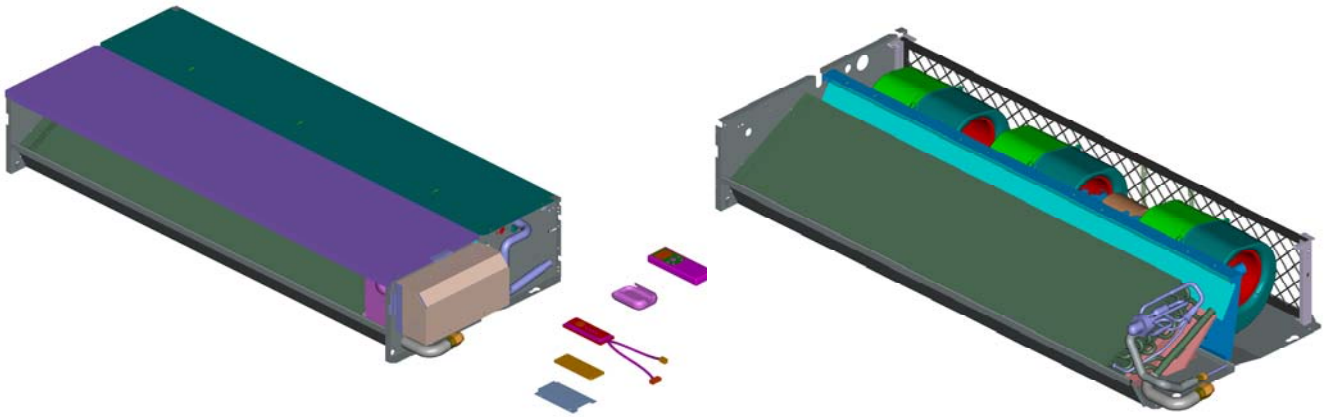
No.	Part name	Quantity	No.	Part name	Quantity
1	Volute shell	2	11.5	Wire joint	1
2	Filter	1	12	E-Part box cover	1
3	Left volute shell	2	13	Covering plate	1
4	Fan	2	14	Temp. sensor	1
5	Motor	1	15	EEV solenoid	1
6	Middle beam	1	16	Temp. sensor ass'y	1
7	Base	1	17	Covering plate	1
8	Motor bracket	1	18	Supporting board ass'y	1
9	Evaporator ass'y	1	19	Evaporator connection board ass'y	1
9.1	Input pipe ass'y	1	20	Installing board	1
9.1.1	Electronic expansion valve	1	21	Control box cover	1
9.1.2	Copper nut	1	22	Display board ass'y	1
9.1.3	Pipe joint	1	23	Remote controller holder ass'y	1
9.2	Output pipe ass'y	1	24	Remote controller	1
9.2.1	Copper nut	1	25	Board	1
9.2.2	Pipe joint	1	26	Capacitor box	1
9.3	Temp. sensor ass'y	1	27	Drain hose	1
10	Right seal board ass'y	1	28	Motor clamp	1
11	E-part box ass'y	1	29	Motor clamp	1
11.1	Main controller ass'y	1	30	Filter bracket	1
11.2	E-part box base	1	31	Filter bracket	1
11.3	Transformer	1	32	Motor capacitor	1
11.4	Wire joint, 2p	1			

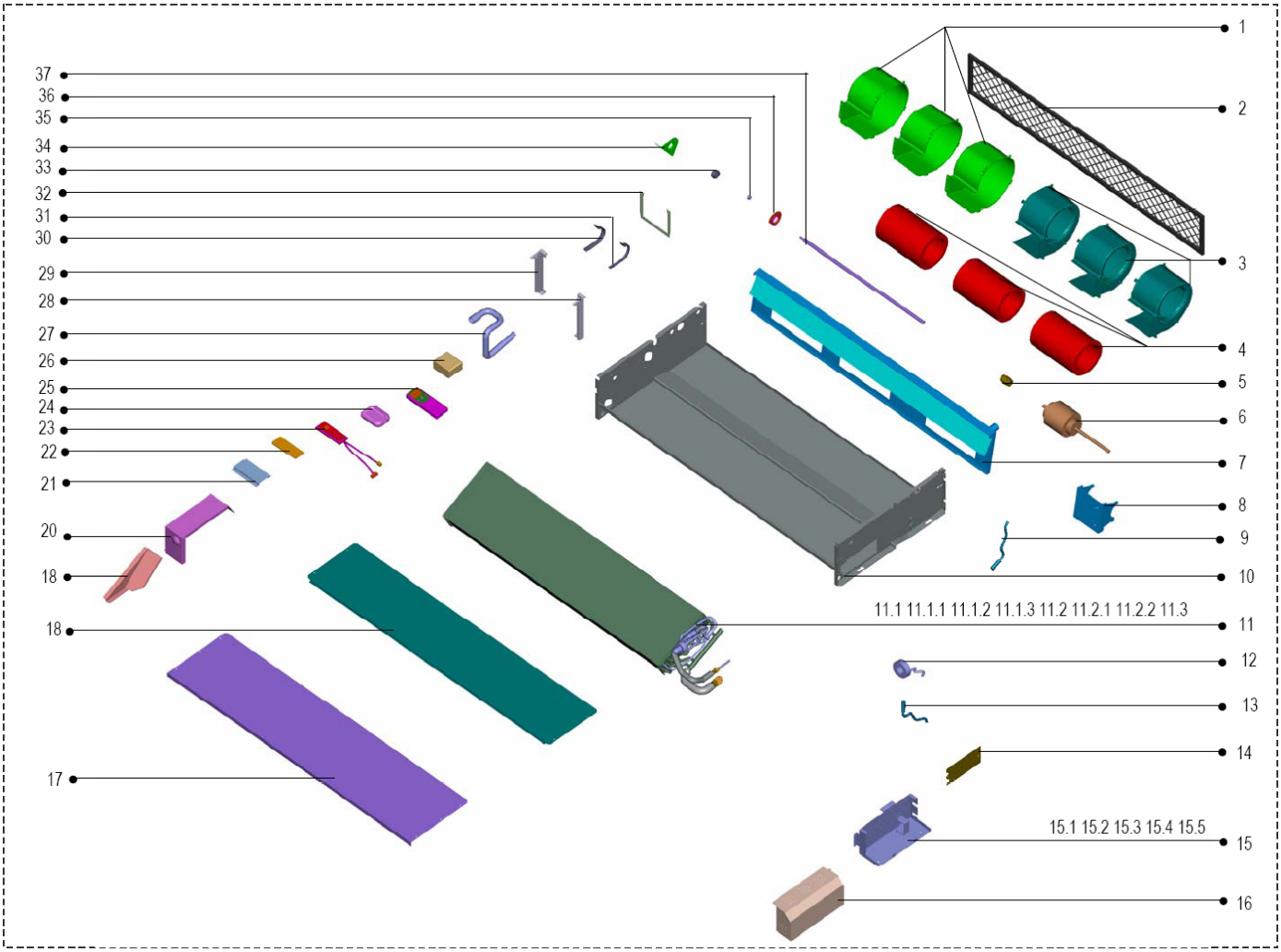
11.11 MDVi-D56Z/N1-F3 MDVi-D71Z/N1-F3



No.	Part name	Quantity	No.	Part name	Quantity
1	Volute shell	3	14	E-Part box cover	1
2	Filter	1	15	Baffle	1
3	Left volute shell	3	16	EEV solenoid	1
4	Fan	3	17	Temp. sensor ass'y	1
5	Coupling	1	18	Covering plate	1
6	Motor	1	19	Covering plate	1
7	Middle beam	1	20	Supporting board ass'y	1
8	Motor bracket	1	21	Evaporator connection board ass'y	1
9	Temp. sensor	1	22	Installing board	1
10	Base	1	23	Control box cover	1
11	Evaporator ass'y	1	24	Display board ass'y	1
11.1	Input pipe ass'y	1	25	Remote controller holder ass'y	1
11.1.1	Electronic expansion valve	1	26	Remote controller	1
11.1.2	Copper nut	1	27	Capacitor box	1
11.1.3	Pipe joint	1	28	Drain hose	1
11.2	Output pipe ass'y	1	29	Filter bracket	1
11.2.1	Copper nut	1	30	Filter bracket	1
11.2.2	Pipe joint	1	31	Motor clamp	1
11.3	Temp. sensor ass'y	1	32	Motor clamp	1
12	Right seal board ass'y	1	33	Board	1
13	E-part box ass'y	1	34	Bearing base	1
13.1	Main controller ass'y	1	35	Bearing supporting board	1
13.2	E-part box base	1	36	Bearing	1
13.3	Transformer	1	37	Bearing Fixing board	1
13.4	Wire joint, 2p	1	38	Connecting shaft	1
13.5	Wire joint	1	39	Motor capacitor	1

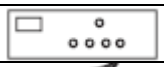
11.12 MDVi-D80Z/N1-F3





No.	Part name	Quantity	No.	Part name	Quantity
1	Volute shell	3	15.4	Wire joint, 2p	1
2	Filter	1	15.5	Wire joint	1
3	Left volute shell	3	16	E-Part box cover	1
4	Fan	3	17	Covering plate	1
5	Coupling	1	18	Covering plate	1
6	Motor	1	19	Supporting board ass'y	1
7	Middle beam	1	20	Evaporator connection board ass'y	1
8	Motor bracket	1	21	Installing board	1
9	Temp. sensor	1	22	Control box cover	1
10	Base	1	23	Display board ass'y	1
11	Evaporator ass'y	1	24	Remote controller holder ass'y	1
11.1	Input pipe ass'y	1	25	Remote controller	1
11.1.1	Electronic expansion valve	1	26	Capacitor box	1
11.1.2	Copper nut	1	27	Drain hose	1
11.1.3	Pipe joint	1	28	Filter bracket	1
11.2	Output pipe ass'y	1	29	Filter bracket	1
11.2.1	Copper nut	1	30	Motor clamp	1
11.2.2	Pipe joint	1	31	Motor clamp	1
11.3	Temp. sensor ass'y	1	32	Board	1
12	EEV solenoid	1	33	Bearing base	1
13	Temp. sensor ass'y	1	34	Bearing supporting board	1
14	Right seal board ass'y	1	35	Bearing	1
15	E-part box ass'y	1	36	Bearing Fixing board	1
15.1	Main controller ass'y	1	37	Connecting shaft	1
15.2	E-part box base	1	38	Motor capacitor	1
15.3	Transformer	1			

12. Accessories

Name of Accessories	Quantity	Outline	Usage
Owner's manual	1	/	/
Installation manual	1	/	/
Pipe insulation material	2		Heat insulation
Signal receiver display board	1		Receive Signal
Mounting screw (ST3.9x12-C-H)	4		/
Remote controller	1		Control the indoor unit
Frame	1		Hold the remote controller
Mounting screw (ST2.9x10-C-H)	2		/
Alkaline dry batteries(AM4)	2		/

High Static Pressure Duct Type

1.Features

(1) In case the ceiling is super-high.

Blowing pressure of Indoor Unit can reach 196Pa. The air conditioner delivers cold wind to every indoor corner even the ceiling is super-high.

The max. distance of air supply is about 14m, the height of air supply is 6.5m.

(2) Multi-blowing outlets

To satisfy your fitment's needs.

(3) Fresh air supply.

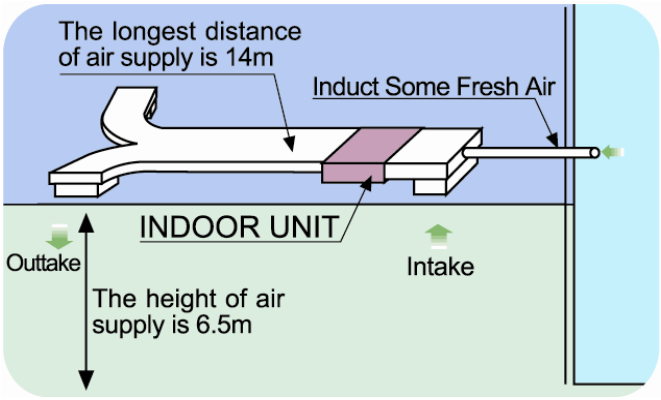
Fresh air can be drawn in by the Indoor Unit, which improves the Indoor Air Quality greatly.

(4) Wired control and group control available.

(5) High capacity of cooling/heating, efficient, and energy-saving.

(6) Innovative air supply, which provides homogeneous conditioning of the room temperature.

(7) It is suitable be used for office, hospital, commercial place and home, the air conditioner will create the comfortable and elegance environment for you.



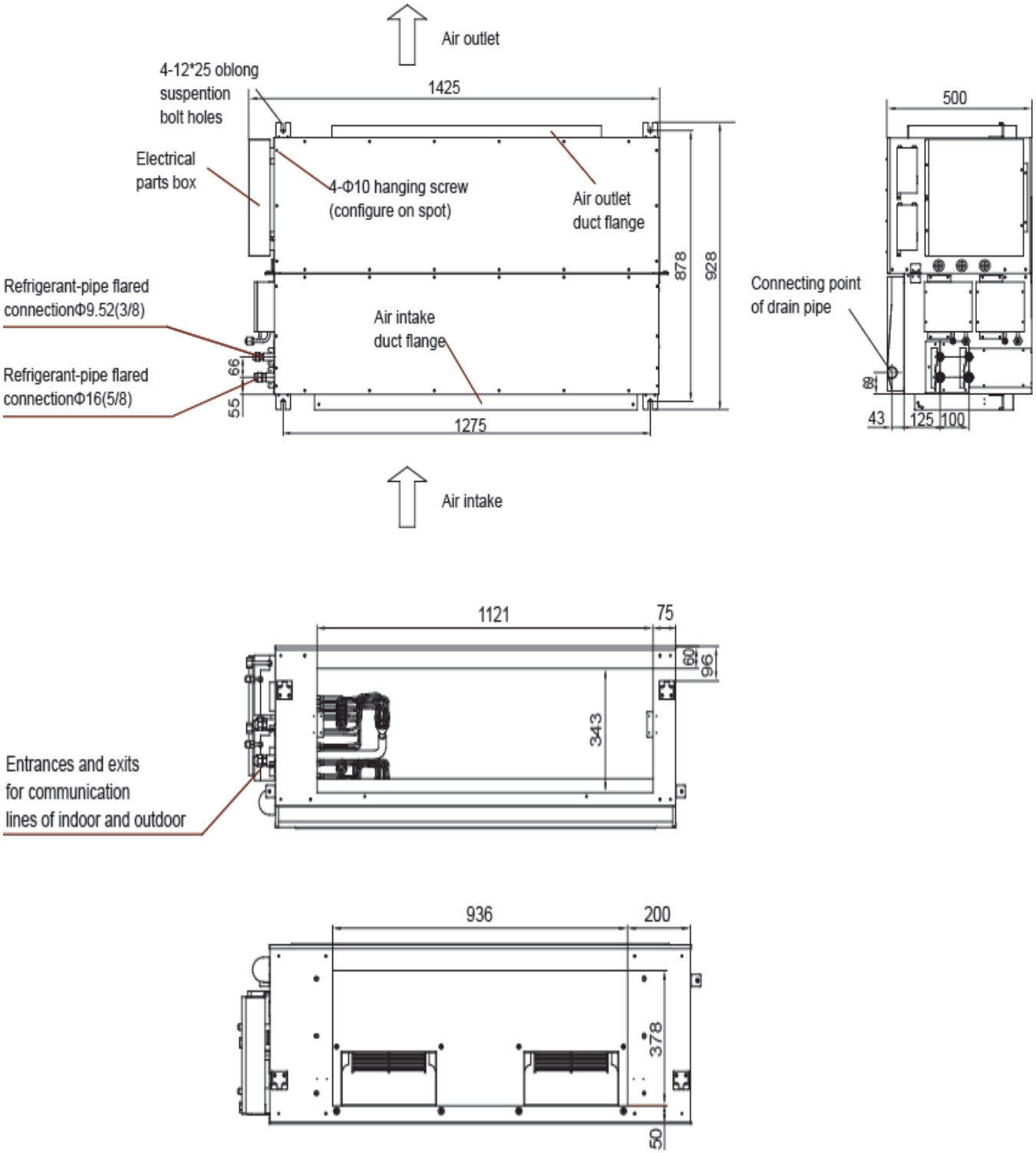
2.Specification

Sale Model			MDVi-D280T1/N1	MDVi-D250T1/N1	MDVi-D200T1/N1
Power supply		V-Ph-Hz	220V-1Ph-50Hz	220V-1Ph-50Hz	220V-1Ph-50Hz
Cooling	Capacity	kW	28.0	25.0	20.0
	Input	W	1400	1400	1400
	Rated current	A	17.0	16.0	14.0
Heating	Capacity	kW	31.5	26.0	22.5
	Input	W	1400	1400	1400
	Rated current	A	17.0	16.0	14.0
Max. input consumption		W	14500	14500	14500
Max. current		A	24.5	24.5	24.5
Indoor fan motor	Model		YDK550-4X (×2)	YDK550-4X (×2)	YDK550-4X (×2)
	Type		Ac Motor	Ac Motor	Ac Motor
	Brand		YongAn	YongAn	YongAn
	Input	W	900/820/630(×2)	900/820/630(×2)	900/820/630(×2)
	Capacitor	uF	15(×2)	12(×2)	12(×2)
	Speed(hi/mi/lo)	r/min	1300/1100/900(×2)	1300/1100/900(×2)	1300/1100/900(×2)
Indoor coil	Number of rows		4	4	4
	Tube pitch(a)x row pitch(b)	mm	25.4×22	25.4×22	25.4×22
	Fin spacing	mm	1.8	1.8	1.8
	Fin type (code)		hydrophillia arcuate fin aluminurn foil		
	Tube outside dia. and type	mm	9.52	9.52	9.52
			innergroove tube	innergroove tube	innergroove tube
	Coil length x height x width	mm	1125×512×88	1125×512×88	1125×512×88
	Number of circuits		20	20	20
Indoor air flow (Hi/Mi/Lo)		m3/h	4400/3940/3300	4180/3820/3200	4180/3820/3200
Indoor external static pressure		Pa	196	196	196
Indoor noise level (Sound pressure)(Hi/Mi/Lo)		dB(A)	61/58/55	61/58/55	61/58/55
Indoor unit	Dimension (W×H×D)	mm	1425×928×500	1425×928×500	1425×928×500
	Packing (W×H×D)	mm	1509×964×570	1509×964×570	1509×964×570
	Net/Gross weight	Kg	122/128	122/128	122/128
Refrigerant type			R410A	R410A	R410A
Throttle type			Electric expansive valve		
Design pressure		MPa	4.2/2.0	4.2/2.0	4.2/2.0
Refrigerant piping	Liquid side/ Gas side	mm	Φ9.5/Φ15.9	Φ9.5/Φ15.9	Φ9.5/Φ15.9
Connection wiring	Power wiring	Nb×mm^2	3×4.0	3×4.0	3×4.0
	Signal wiring	Nb×mm^2	3×1.0	3×1.0	3×1.0
Drainage pipe diameter		mm^2	Φ32	Φ32	Φ32
Controller			Wireless remote controller (R51/E)(standard)		
Operation temp		℃	17-30	17-30	17-30

Notes:

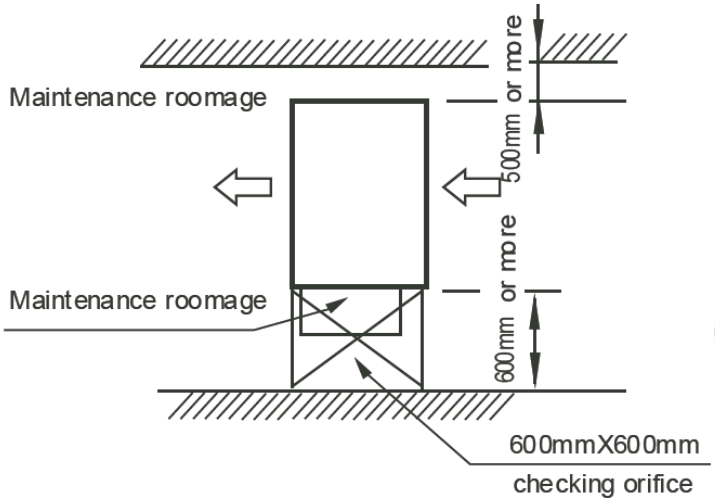
1. Nominal cooling capacities are based on the following conditions: return air temp. : 27°CDB, 19°CWB, and outdoor temp.:35°CDB, equivalent ref. piping: 8m (horizontal)
2. Nominal heating capacities are based on the following conditions: return air temp.: 20°CDB, outdoor temp.: 7°CDB, 6°CWB, and equivalent ref. Piping: 8m (horizontal)

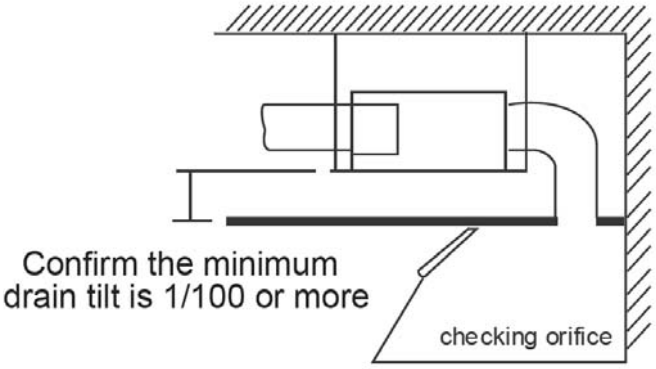
3.Dimension


Air outlet
4-12*25 oblong
suspention
bolt holes
1425
Electrical
parts box
4-Φ10 hanging screw
(configure on spot)
Air outlet
duct flange
878
928
Refrigerant-pipe flared
connectionΦ9.52(3/8)
Air intake
duct flange
Refrigerant-pipe flared
connectionΦ16(5/8)
66
55
1275
Air intake
500
Connecting point
of drain pipe
89
43
125
100
1121
75
60
96
343
Entrances and exits
for communication
lines of indoor and outdoor
936
200
378
50

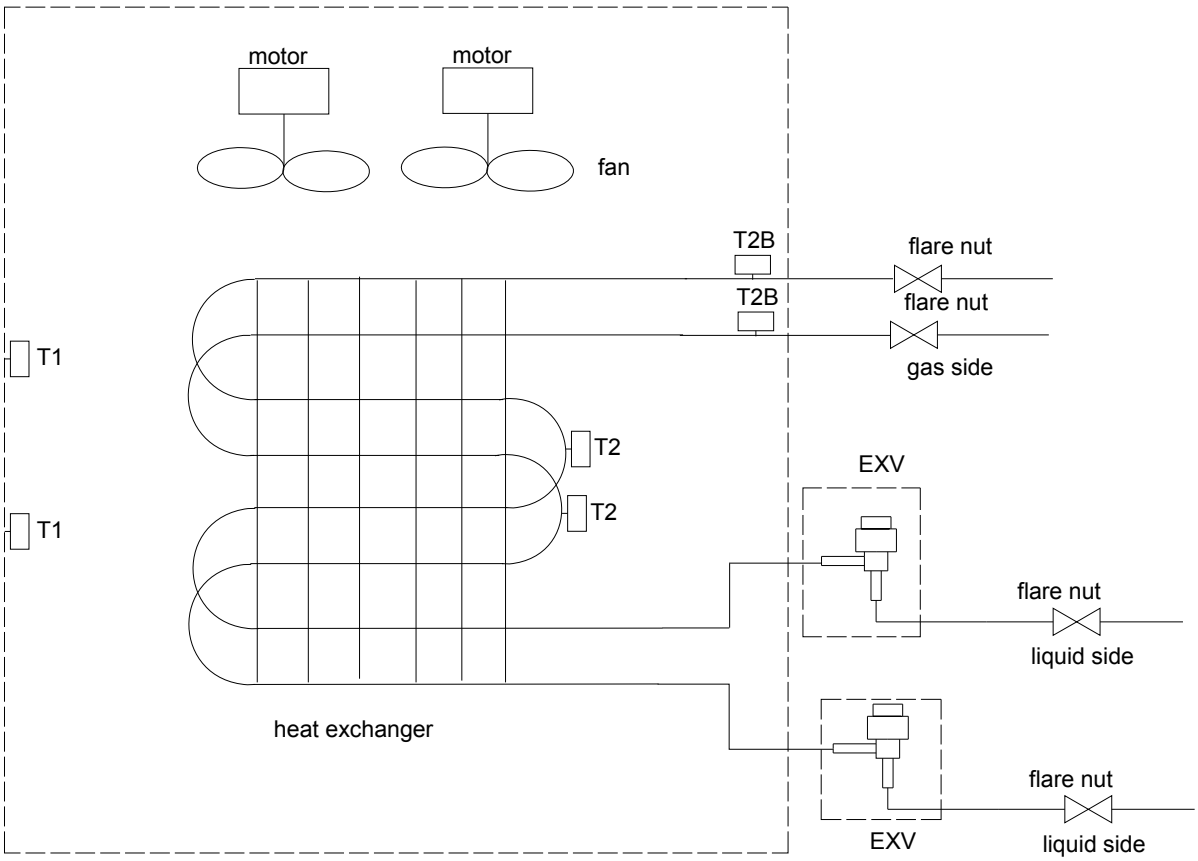
4.Service Space

Ensure enough space required for installation and maintenance.

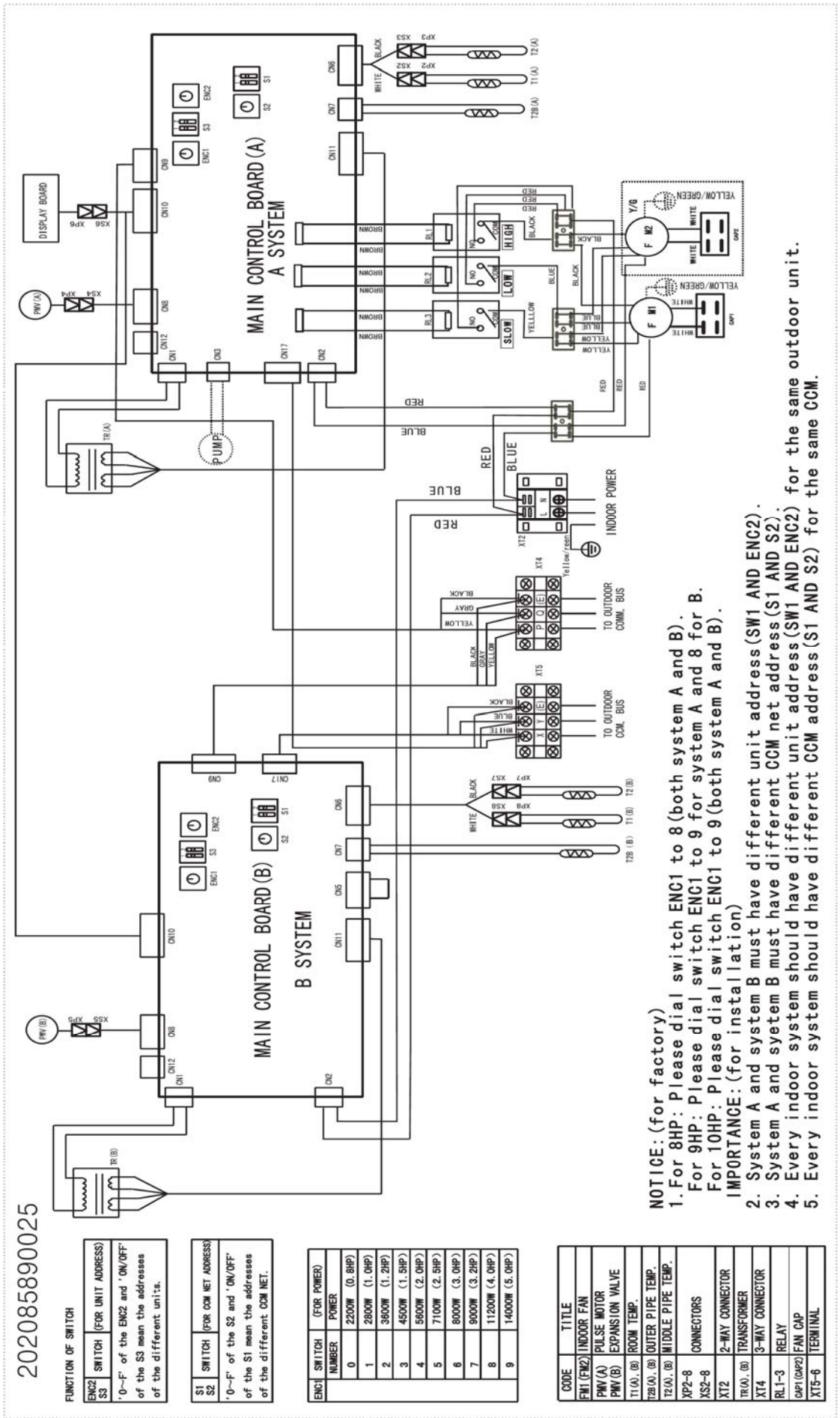




5.Piping Diagram



6.Wiring Diagram



7.Capacity Tables

7.1 Cooling

TC: total capacity **SC**: sensible capacity **WB**: wet-bulb temperature **DB**: dry-bulb temperature

Indoor Unit size (kW)	Outdoor temperature (℃ DB)	Indoor temperature (℃ WB/DB)													
		14/20		16/23		18/26		19/27		20/28		22/30		24/32	
		TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
20.0	10.0	13.6	12.6	16.4	13.6	19.0	14.4	20.0	14.6	21.0	15.5	23.6	15.3	26.4	15.3
	12.0	13.6	12.6	16.4	13.6	19.0	14.4	20.0	14.6	21.0	15.5	23.6	15.3	25.8	15.0
	14.0	13.6	12.6	16.4	13.6	19.0	14.4	20.0	14.6	21.0	15.5	23.6	15.3	25.8	15.0
	16.0	13.6	12.6	16.4	13.6	19.0	14.4	20.0	14.6	21.0	15.5	23.6	15.3	25.4	14.5
	18.0	13.6	12.6	16.4	13.6	19.0	14.4	20.0	14.6	21.0	15.5	23.6	15.3	25.0	14.3
	20.0	13.6	12.6	16.4	13.6	19.0	14.4	20.0	14.6	21.0	15.5	23.6	15.3	24.2	13.8
	21.0	13.6	12.6	16.4	13.6	19.0	14.4	20.0	14.6	21.0	15.5	23.6	15.3	24.2	13.8
	23.0	13.6	12.6	16.4	13.6	19.0	14.4	20.0	14.6	21.0	15.5	22.8	14.8	24.2	13.8
	25.0	13.6	12.6	16.4	13.6	19.0	14.4	20.0	14.6	21.0	15.5	22.8	14.6	23.6	13.7
	27.0	13.6	12.6	16.4	13.6	19.0	14.4	20.0	14.6	21.0	15.5	22.8	14.6	23.6	13.7
	29.0	13.6	12.6	16.4	13.6	19.0	14.4	20.0	14.6	21.0	15.5	22.0	14.1	22.8	13.5
	31.0	13.6	12.6	16.4	13.6	19.0	14.4	20.0	14.6	21.0	15.5	22.0	14.1	22.8	13.7
	33.0	13.6	12.6	16.4	13.6	19.0	14.4	20.0	14.6	21.0	15.5	22.0	14.1	22.1	13.9
	35.0	13.6	12.6	16.4	13.6	19.0	14.4	20.0	14.6	21.0	15.3	20.8	13.3	22.1	13.9
	37.0	13.6	12.6	16.4	13.6	19.0	14.4	20.0	14.6	21.0	15.3	20.8	13.3	21.0	13.7
	39.0	13.6	12.6	16.4	13.6	19.0	14.4	20.0	14.6	20.0	14.6	20.8	13.3	21.0	13.7
25.0	10.0	17.0	15.8	20.5	17.0	23.8	18.1	25.0	18.3	26.3	19.4	29.5	19.2	33.0	19.1
	12.0	17.0	15.8	20.5	17.0	23.8	18.1	25.0	18.3	26.3	19.4	29.5	19.2	32.3	18.7
	14.0	17.0	15.8	20.5	17.0	23.8	18.1	25.0	18.3	26.3	19.4	29.5	19.2	32.3	18.7
	16.0	17.0	15.8	20.5	17.0	23.8	18.1	25.0	18.3	26.3	19.4	29.5	19.2	31.8	18.1
	18.0	17.0	15.8	20.5	17.0	23.8	18.1	25.0	18.3	26.3	19.4	29.5	19.2	31.3	17.8
	20.0	17.0	15.8	20.5	17.0	23.8	18.1	25.0	18.3	26.3	19.4	29.5	19.2	30.3	17.2
	21.0	17.0	15.8	20.5	17.0	23.8	18.1	25.0	18.3	26.3	19.4	29.5	19.2	30.3	17.2
	23.0	17.0	15.8	20.5	17.0	23.8	18.1	25.0	18.3	26.3	19.4	28.5	18.5	30.3	17.2
	25.0	17.0	15.8	20.5	17.0	23.8	18.1	25.0	18.3	26.3	19.4	28.5	18.2	29.5	17.1
	27.0	17.0	15.8	20.5	17.0	23.8	18.1	25.0	18.3	26.3	19.4	28.5	18.2	29.5	17.1
	29.0	17.0	15.8	20.5	17.0	23.8	18.1	25.0	18.3	26.3	19.4	27.5	17.6	28.5	16.8
	31.0	17.0	15.8	20.5	17.0	23.8	18.1	25.0	18.3	26.3	19.4	27.5	17.6	28.5	17.1
	33.0	17.0	15.8	20.5	17.0	23.8	18.1	25.0	18.3	26.3	19.4	27.5	17.6	27.7	17.4
	35.0	17.0	15.8	20.5	17.0	23.8	18.1	25.0	18.3	26.3	19.2	26.0	16.6	27.7	17.4
	37.0	17.0	15.8	20.5	17.0	23.8	18.1	25.0	18.3	26.3	19.2	26.0	16.6	26.3	17.1
	39.0	17.0	15.8	20.5	17.0	23.8	18.1	25.0	18.3	25.0	18.3	26.0	16.6	26.3	17.1
28.0	10.0	19.0	17.7	23.0	19.1	26.6	20.2	28.0	20.4	29.4	21.8	33.0	21.5	37.0	21.4
	12.0	19.0	17.7	23.0	19.1	26.6	20.2	28.0	20.4	29.4	21.8	33.0	21.5	36.1	20.9
	14.0	19.0	17.7	23.0	19.1	26.6	20.2	28.0	20.4	29.4	21.8	33.0	21.5	36.1	20.9
	16.0	19.0	17.7	23.0	19.1	26.6	20.2	28.0	20.4	29.4	21.8	33.0	21.5	35.6	20.3
	18.0	19.0	17.7	23.0	19.1	26.6	20.2	28.0	20.4	29.4	21.8	33.0	21.5	35.0	20.0
	20.0	19.0	17.7	23.0	19.1	26.6	20.2	28.0	20.4	29.4	21.8	33.0	21.5	33.9	19.3
	21.0	19.0	17.7	23.0	19.1	26.6	20.2	28.0	20.4	29.4	21.8	33.0	21.5	33.9	19.3
	23.0	19.0	17.7	23.0	19.1	26.6	20.2	28.0	20.4	29.4	21.8	31.9	20.7	33.9	19.3
	25.0	19.0	17.7	23.0	19.1	26.6	20.2	28.0	20.4	29.4	21.8	31.9	20.4	33.0	19.2
	27.0	19.0	17.7	23.0	19.1	26.6	20.2	28.0	20.4	29.4	21.8	31.9	20.4	33.0	19.2
	29.0	19.0	17.7	23.0	19.1	26.6	20.2	28.0	20.4	29.4	21.8	30.8	19.7	31.9	18.8
	31.0	19.0	17.7	23.0	19.1	26.6	20.2	28.0	20.4	29.4	21.8	30.8	19.7	31.9	19.2
	33.0	19.0	17.7	23.0	19.1	26.6	20.2	28.0	20.4	29.4	21.8	30.8	19.7	31.0	19.5
	35.0	19.0	17.7	23.0	19.1	26.6	20.2	28.0	20.4	29.4	21.5	29.1	18.6	31.0	19.5
	37.0	19.0	17.7	23.0	19.1	26.6	20.2	28.0	20.4	29.4	21.5	29.1	18.6	29.4	19.1
	39.0	19.0	17.7	23.0	19.1	26.6	20.2	28.0	20.4	28.0	20.4	29.1	18.6	29.4	19.1

7.2 Heating

TC: total capacity **WB**: wet-bulb temperature **DB**: dry-bulb temperature

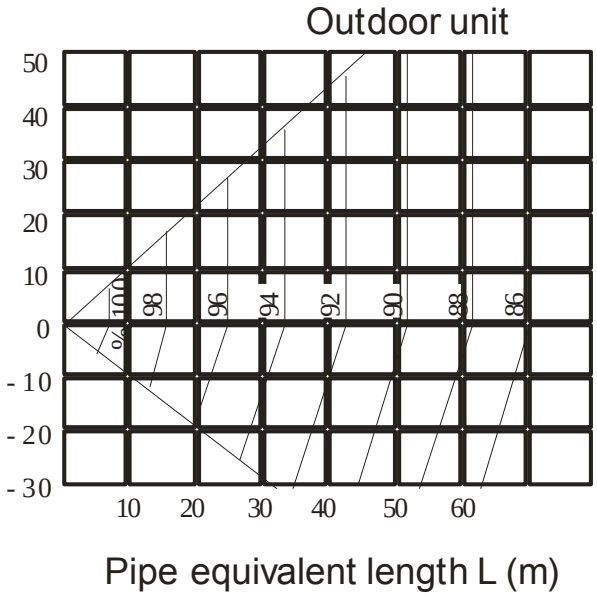
Indoor Unit size (kW)	Outdoor temperature (℃)		Indoor temperature (℃ DB)					
			16.00	18.00	20.00	21.00	22.00	24.00
			TC	TC	TC	TC	TC	TC
	WB	DB	kW	kW	kW	kW	kW	kW
20.00	-15	-14.7	14.18	14.18	14.18	14.18	14.18	14.18
	-13	-12.6	15.08	15.08	15.08	15.08	15.08	15.08
	-11	-10.5	15.75	15.75	15.75	15.75	15.75	15.75
	-10	-9.5	16.43	16.43	16.43	16.43	16.43	16.43
	-9.1	-8.5	16.88	16.88	16.88	16.88	16.88	16.88
	-7.6	-7	17.10	17.10	17.10	17.10	17.10	17.10
	-5.6	-5	17.78	17.78	17.78	17.78	17.78	17.78
	-3.7	-3	18.68	18.68	18.68	18.68	18.68	18.68
	-0.7	0	20.03	20.03	20.03	20.03	20.03	18.90
	2.20	3.00	21.15	21.15	21.15	21.15	20.70	18.90
	4.10	5.00	21.83	21.83	21.83	21.83	20.70	18.90
	6.00	7.00	22.50	22.50	22.50	21.83	20.70	18.90
	7.90	9.00	23.18	23.18	22.50	21.83	20.70	18.90
	9.80	11.00	23.85	23.85	22.50	21.83	20.70	18.90
	11.80	13.00	24.75	24.30	22.50	21.83	20.70	18.90
	13.70	15.00	25.43	24.30	22.50	21.83	20.70	18.90
25.00	-15	-14.7	16.38	16.38	16.38	16.38	16.38	16.38
	-13	-12.6	17.42	17.42	17.42	17.42	17.42	17.42
	-11	-10.5	18.20	18.20	18.20	18.20	18.20	18.20
	-10	-9.5	18.98	18.98	18.98	18.98	18.98	18.98
	-9.1	-8.5	19.50	19.50	19.50	19.50	19.50	19.50
	-7.6	-7	19.76	19.76	19.76	19.76	19.76	19.76
	-5.6	-5	20.54	20.54	20.54	20.54	20.54	20.54
	-3.7	-3	21.58	21.58	21.58	21.58	21.58	21.58
	-0.7	0	23.14	23.14	23.14	23.14	23.14	21.84
	2.20	3.00	24.44	24.44	24.44	24.44	23.92	21.84
	4.10	5.00	25.22	25.22	25.22	25.22	23.92	21.84
	6.00	7.00	26.00	26.00	26.00	25.22	23.92	21.84
	7.90	9.00	26.78	26.78	26.00	25.22	23.92	21.84
	9.80	11.00	27.56	27.56	26.00	25.22	23.92	21.84
	11.80	13.00	28.60	28.08	26.00	25.22	23.92	21.84
	13.70	15.00	29.38	28.08	26.00	25.22	23.92	21.84
28.00	-15	-14.7	19.85	19.85	19.85	19.85	19.85	19.85
	-13	-12.6	21.11	21.11	21.11	21.11	21.11	21.11
	-11	-10.5	22.05	22.05	22.05	22.05	22.05	22.05
	-10	-9.5	23.00	23.00	23.00	23.00	23.00	23.00
	-9.1	-8.5	23.63	23.63	23.63	23.63	23.63	23.63
	-7.6	-7	23.94	23.94	23.94	23.94	23.94	23.94
	-5.6	-5	24.89	24.89	24.89	24.89	24.89	24.89
	-3.7	-3	26.15	26.15	26.15	26.15	26.15	26.15
	-0.7	0	28.04	28.04	28.04	28.04	28.04	26.46
	2.20	3.00	29.61	29.61	29.61	29.61	28.98	26.46
	4.10	5.00	30.56	30.56	30.56	30.56	28.98	26.46
	6.00	7.00	31.50	31.50	31.50	30.56	28.98	26.46
	7.90	9.00	32.45	32.45	31.50	30.56	28.98	26.46
	9.80	11.00	33.39	33.39	31.50	30.56	28.98	26.46
	11.80	13.00	34.65	34.02	31.50	30.56	28.98	26.46
	13.70	15.00	35.60	34.02	31.50	30.56	28.98	26.46

8.Capacity Correction Factors

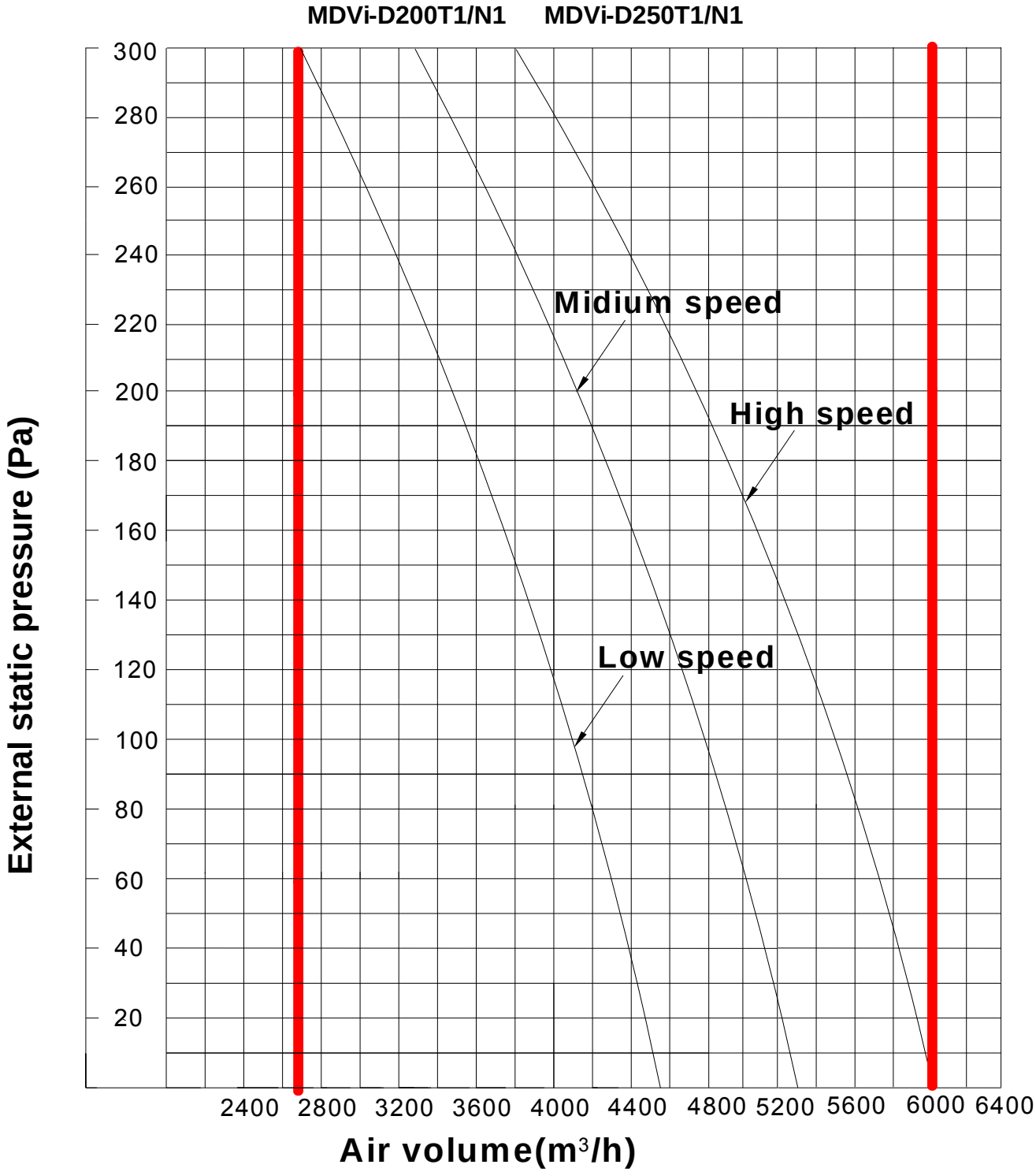
8.1 Correction factor of indoor air-flow changing rate

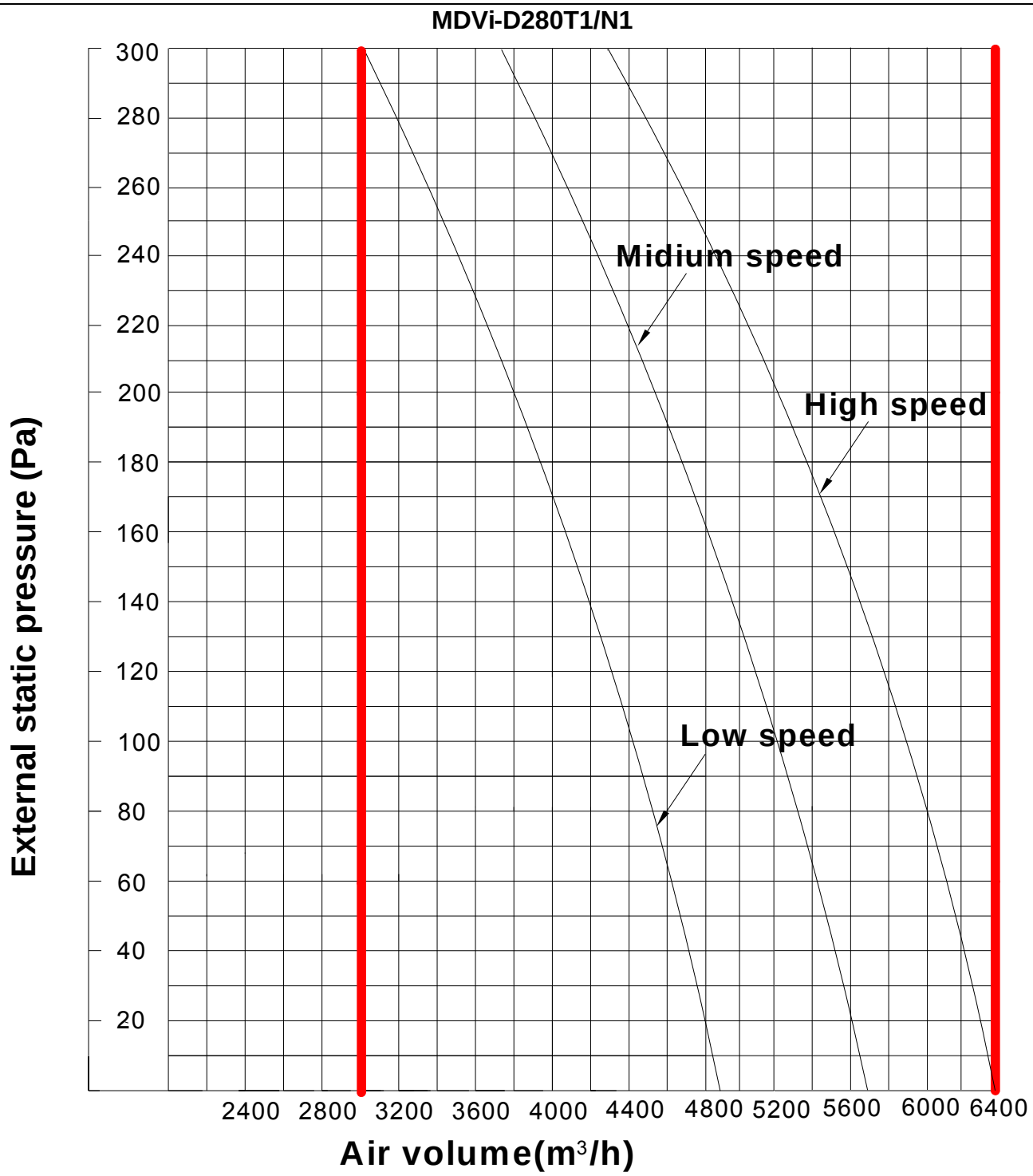
Unit Model	Air flow (m^3/h)	Air delivery capacity correction factor	
		Total	Sensible
MDVi-D200T1/N1	4180	1.05	1.08
	3820	1.0	1.0
	3500	0.96	0.92
	3200	0.92	0.85
MDVi-D250T1/N1	4180	1.05	1.08
	3820	1.0	1.0
	3500	0.96	0.92
	3200	0.92	0.85
MDVi-D280T1/N1	4400	1.06	1.09
	3940	1.0	1.0
	3600	0.96	0.92
	3300	0.92	0.85

8.2 Correction factor of the length and elevation difference of refrigerant pipe



9.Static Pressure



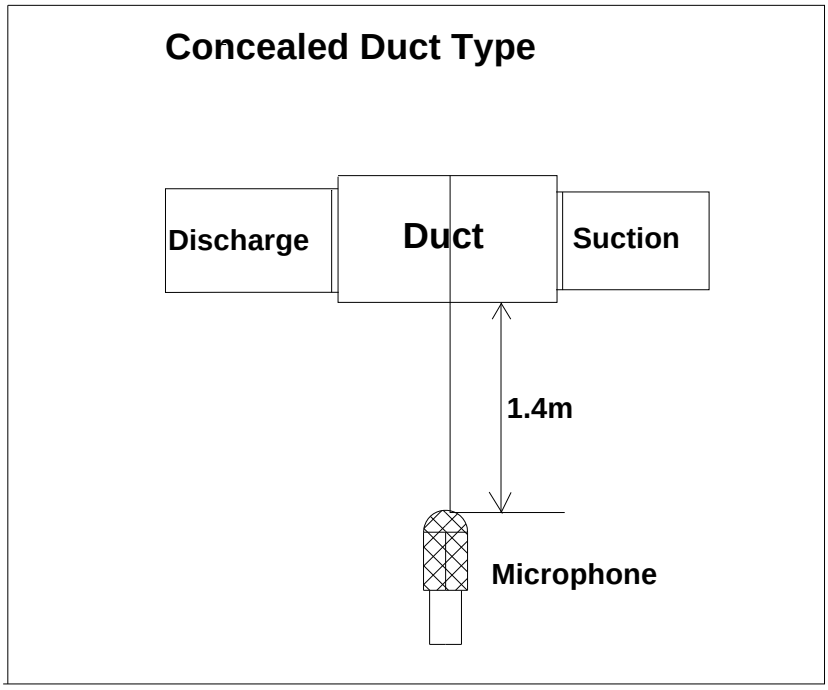

MDVi-D280T1/N1
External static pressure (Pa)
300
280
260
240
220
200
180
160
140
120
100
80
60
40
20
Midium speed
High speed
Low speed
2400 2800 3200 3600 4000 4400 4800 5200 5600 6000 6400
Air volume(m3/h)

10.Electric Characteristics

Model	Indoor Unit				Power Supply		IFM	
	Hz	Voltage	Min.	Max.	MCA	MFA	KW	FLA
MDVi-D200T1/N1	50	220-240V	198V	254V	9.93	20	0.55（×2）	7.94
MDVi-D250T1/N1	50	220-240V	198V	254V	9.93	20	0.55（×2）	7.94
MDVi-D280T1/N1	50	220-240V	198V	254V	10	20	0.55（×2）	8

Remark:
MCA: Min. Current Amps. (A)
MFA: Max. Fuse Amps. (A)
KW: Fan Motor Rated Output (KW)
FLA: Full Load Amps. (A)
IFM: Indoor Fan Motor

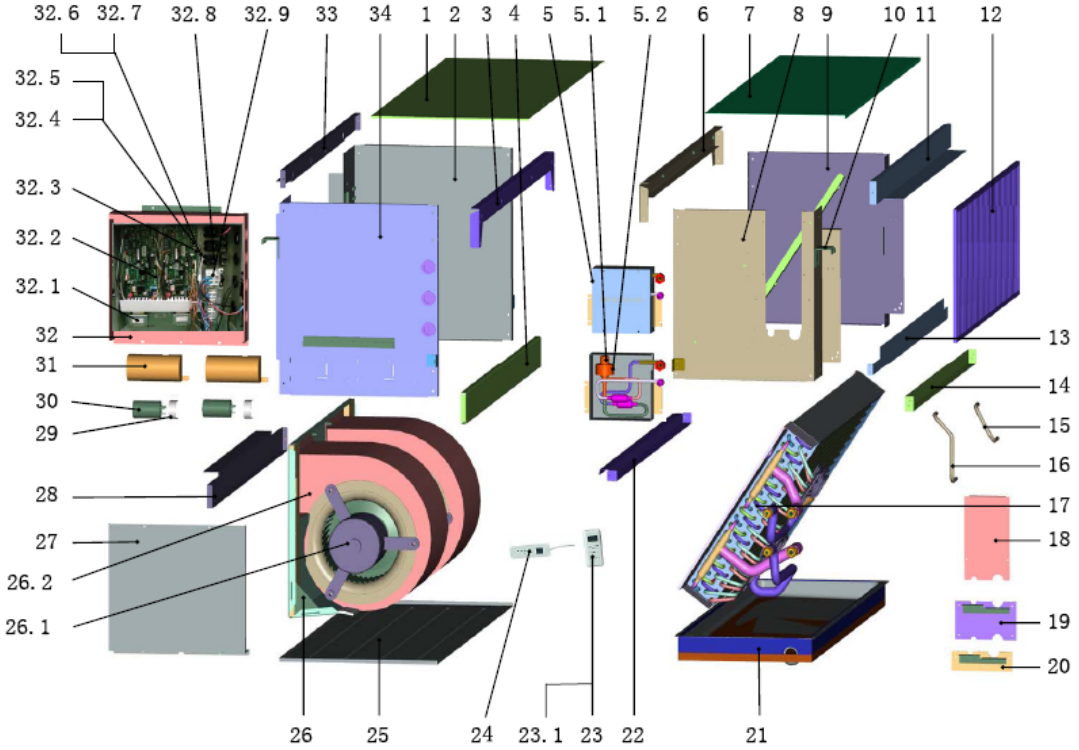
11.Sound Levels



Unit Number	Model	Noise level under three speeds of fan (dB(A))		
		H	M	L
1	MDVi-D200T1/N1	61	58	55
2	MDVi-D250T1/N1	61	58	55
3	MDVi-D280T1/N1	61	58	55

12.Exploded View

MDVi-D200T1/N1 MDVi-D250T1/N1 MDVi-D280T1/N1



No.	Part name	Quantity	No.	Part name	Quantity
1	Top cover subassembly 1	1	23	Remote controller	1
2	Left cover subassembly 1	1	23.1	remote controller holder	1
3	Top joint board 1	1	24	Display board ass'y	1
4	Nether joint board 1	1	25	Bedrock module	1
5	Electric throttle assembly	2	26	Flow fan plate subassembly	1
5.1	Electronic expansion valve	1	26.1	Fan motor	2
5.2	EEV solenoid	1	26.2	Fan volute shell subassembly	2
6	Top joint board 2	1	27	E-Part box cover	1
7	Top cover subassembly 2	1	28	Down flange ass'y of air outlet	1
8	Right cover subassembly 2	1	29	Capacitor clamp	2
9	Left cover subassembly 2	1	30	Compressor Capacitor	2
10	Installation hanger	4	31	Compressor capacitor box	2
11	Top flange ass'y of air inlet	1	32	E-part box ass'y	1
12	Air filter	1	32.1	Transformer	2
13	Drip tray fixing board subassembly	1	32.2	Main controller ass'y	1
14	Down flange ass'y of air inlet	1	32.3	Middle wire joint for evaporator temp sensor	2
15	Joint subassembly 1 for electric throttle	1	32.4	Middle wire joint for evaporator temp sensor	2
16	Joint subassembly 2 for electric throttle	1	32.5	Evaporator temp. sensor ass'y	
17	Evaporator assembly	1	32.6	Middle wire joint for indoor temp sensor	2
18	Pipe clamp board subassembly 1	1	32.7	Temp sensor	
19	Pipe clamp	1	32.8	Relay	3
20	Pipe clamp	1	32.9	Wire joint	3
21	Drip tray subassembly	1	33	Top flange ass'y of air outlet	1
22	Nether joint board 2	1	34	Right cover subassembly 1	1

13. Accessories

Name	Quantity	Function
Installation manual	1	/
Pipe insulation material	2	Heat insulation
Accessory drain pipe	1	To connect drain pipe
Adhesive tape for seal	1	To connect drain pipe
Adhesive tape for seal	1	To connect refrigerant pipe
Remove controller	1	Remote controller the air-conditioner
Connective pipe	2	To connect electrical restriction assembly
Remote controller manual	1	/

Console Type

1.Features

1. Compact unit body, space saving

- this unit body is very thin and harmonious with room. It is elegant and space saving.
- beautiful and compact.
- The EXV is fixed inside of the indoor unit, Compact unit body.

2. Achieves set temperature more quickly

- air supplying from top and bottom or from top only
- air inlet from four directions

3. Flexible installation.

- can be used for floor standing or lower wall applications
- as a floor standing floor model, it can be semi or fully recessed without loss of capacity.

4. High efficiency filter

- built in Formaldehyde nemesis filter
- active-carbon and biological anti-virus filter is optional.

5. Comfort

- flexible air blow: vertical auto swing and wide angle louvers ensure that warm air reaches the furthest corners of the room and increase the air flow coverage
- Low noise operation, lowest to 26Db
- Low starting power and precise room temperature adjustment

6. Powerful mode can be selected for rapid cooling or heating.

COOLING MODE **HEATING MODE**

Quick cooling to maintain temp anti-cold air normal operation

7. Easy cleaning grille and maintenance

8. Indoor unit adopts DC motor, it has five level fan speed meet different requirements.

2.Specifications

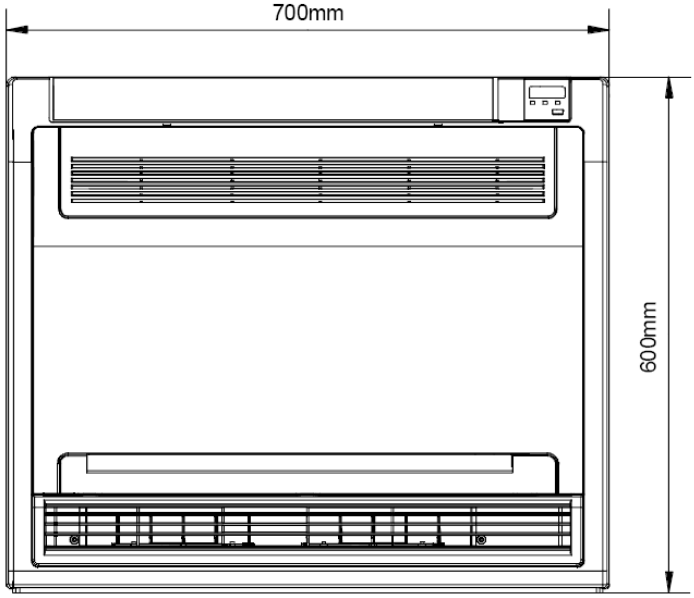
Model			MDVi-D22Z/DN1-A	MDVi-D28Z/DN1-A	MDVi-D36Z/DN1-A	MDVi-D45Z/DN1-A
Power supply		V- Ph-Hz	220-240V~, 1Ph, 50Hz			
Cooling	Capacity	kW	2.2	2.8	3.6	4.5
	Input	W	20	25	25	45
	Rated current	A	0.09	0.11	0.11	0.20
Heating	Capacity	kW	2.6	3.2	4.0	5.0
	Input	W	20	25	25	45
	Rated current	A	0.09	0.11	0.11	0.20
Indoor fan motor	Model		RD-280-20-8A	RD-280-20-8A	RD-280-20-8A	RD-280-20-8A
	Type		DC brushless motor			
	Brand		Welling			
	Input	W	20	20	20	20
	Capacitor	μF	--	--	--	--
	Speed (hi/mid/lo)	r/min	560/530/460	610/560/460	610/560/460	780/680/530
Indoor coil	Number of rows		1	1.5	2	2
	Tube pitch(a)x row pitch(b)	mm	21*13.37	21*13.37	21*13.37	21*13.37
	Fin spacing	mm	1.3	1.3	1.3	1.3
	Fin type		Hydrophilic aluminum			
	Tube outside diameter and type	mm	Φ7 Inner groove tube			
	Coil length x height x width	mm	512*318*21	512*318*42	512*318*42	512*318*42
	Number of circuits		1	2	2	2
Indoor air flow (H/M/L)		m^3/h	430/345/229	510/430/229	510/430/229	660/512/400
Indoor external static pressure (Hi)		Pa	0	0	0	0
Indoor noise level		dB(A)	38/32/26	39/33/27	39/33/27	42/39/36
Indoor unit	Dimension (W×H×D)	mm	700*210*600			
	Packing (W×H×D)	mm	810*305*710			
	Net/Gross weight	kg	13/18			
Refrigerant type			R410A			
Throttle		Type	Electronic expansion valve			
		Model	FUJIKOKI			
Design pressure		MPa	4.4/2.6			
Refrigerant piping	Liquid side/ Gas side	mm	Φ6.4/ Φ12.7	Φ6.4/ Φ12.7	Φ6.4/ Φ12.7	Φ6.4/ Φ12.7
Connecting wiring	Power wiring	mm^2	3*2			
	Signal wiring	mm^2	4*0.8			
Drainage water pipe diameter			Φ16			
Controller			Wireless remote controller R51/E(standard)			
Operation temp		℃	17-30	17-30	17-30	17-30

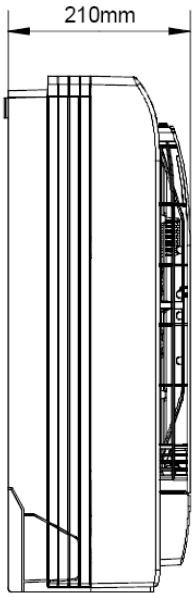
Notes:

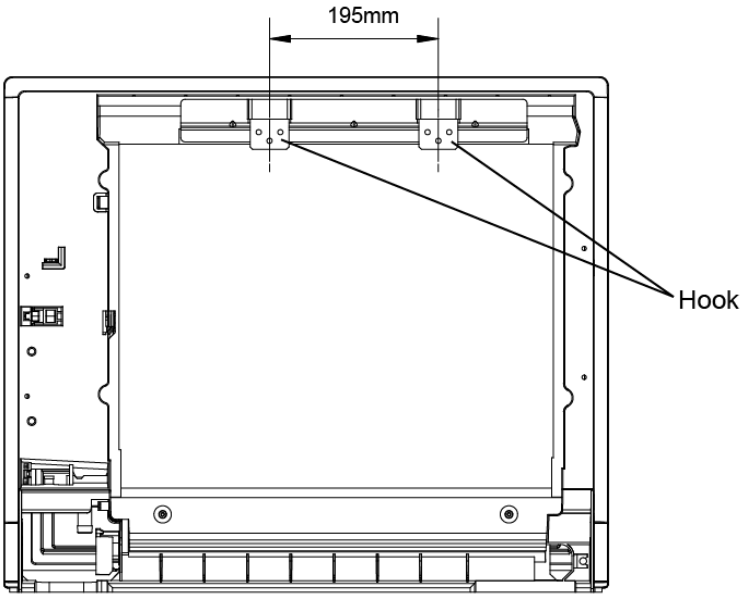
1. Nominal cooling capacities are based on the following conditions: return air temp. : 27°CDB, 19°CWB, outdoor temp.:35°CDB,equivalent ref. Piping: 8m(horizontal)
2. Nominal heating capacities are based on the following conditions: return air temp.: 20°CDB, outdoor temp.: 7°CDB,6°CWB,equivalent ref. Piping: 8m(horizontal)

3.Dimensions

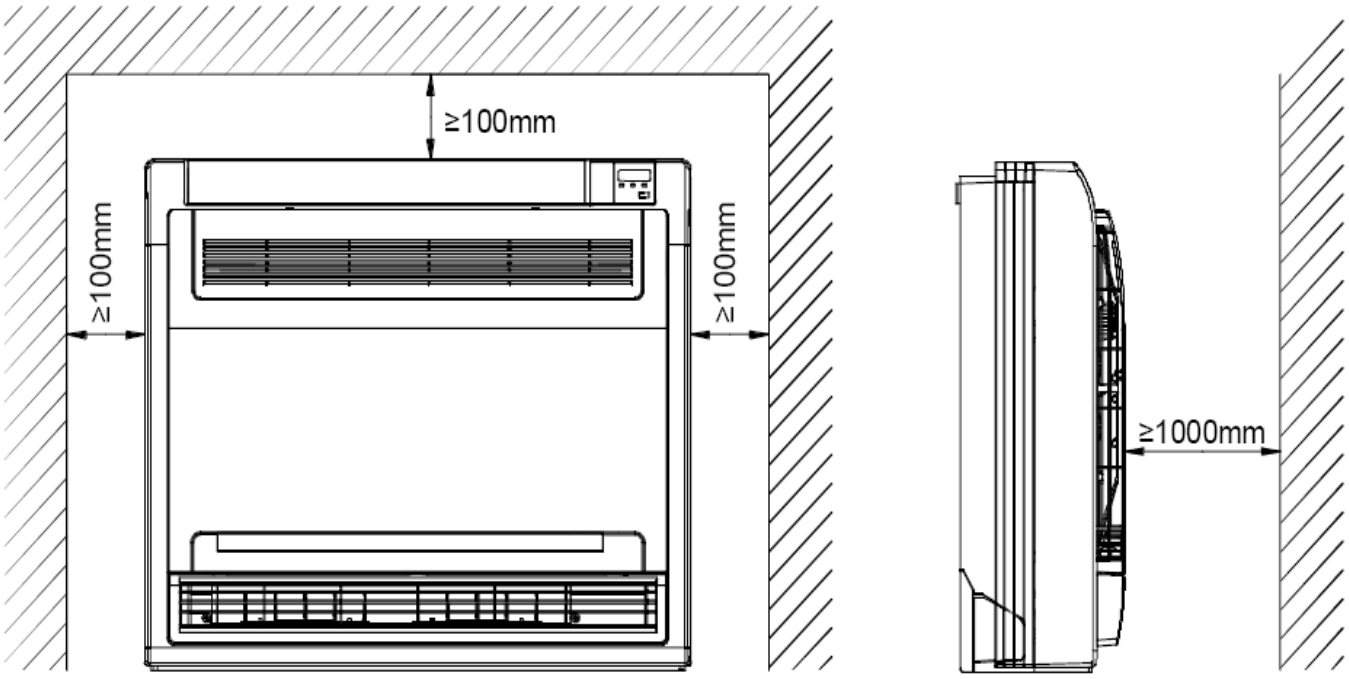
MDVi-D22Z/DN1-A MDVi-D28Z/DN1-A MDVi-D36Z/DN1-A MDVi-D452Z/DN1-A





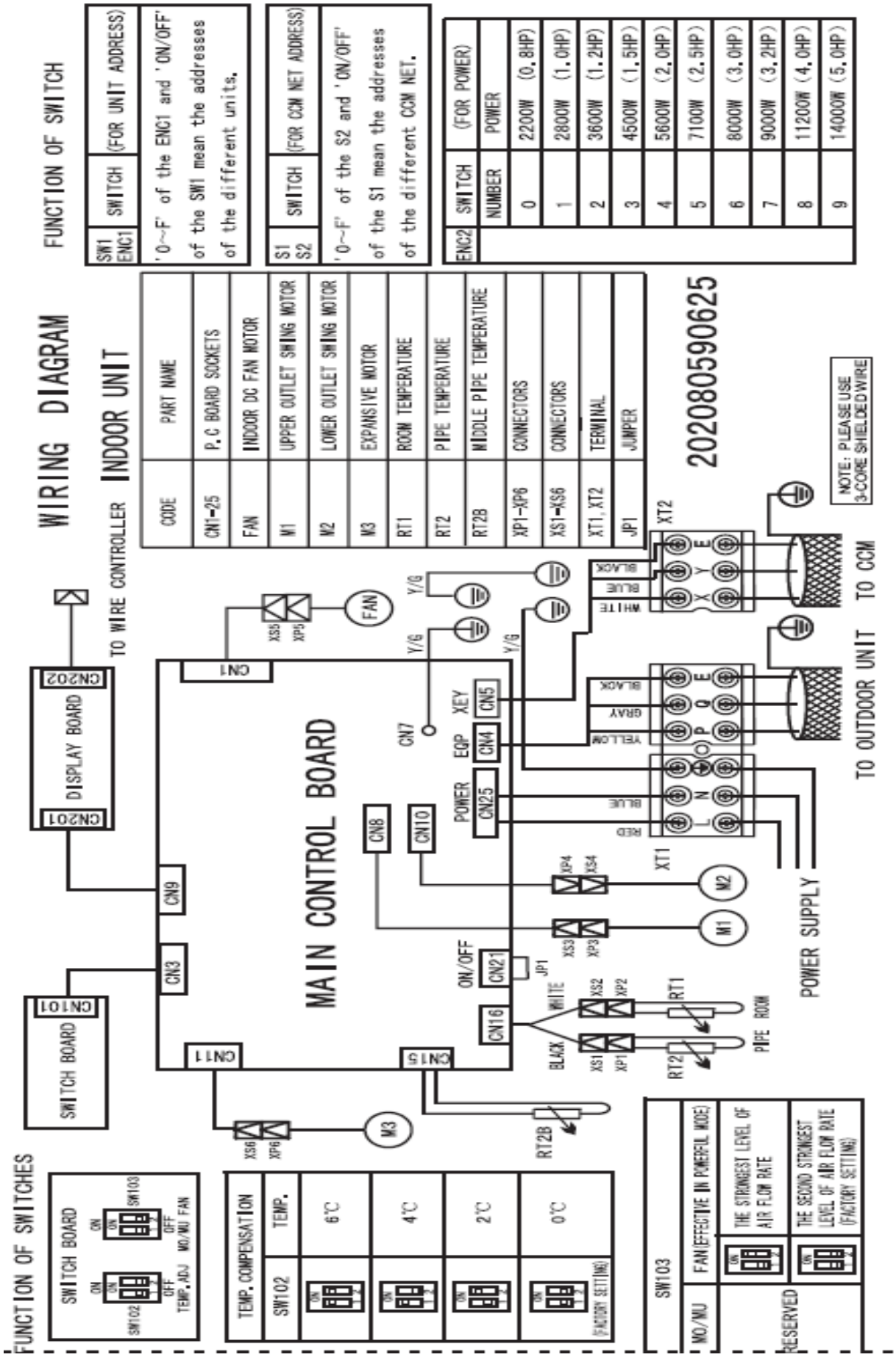


4.Service Space



5.Wiring Diagrams

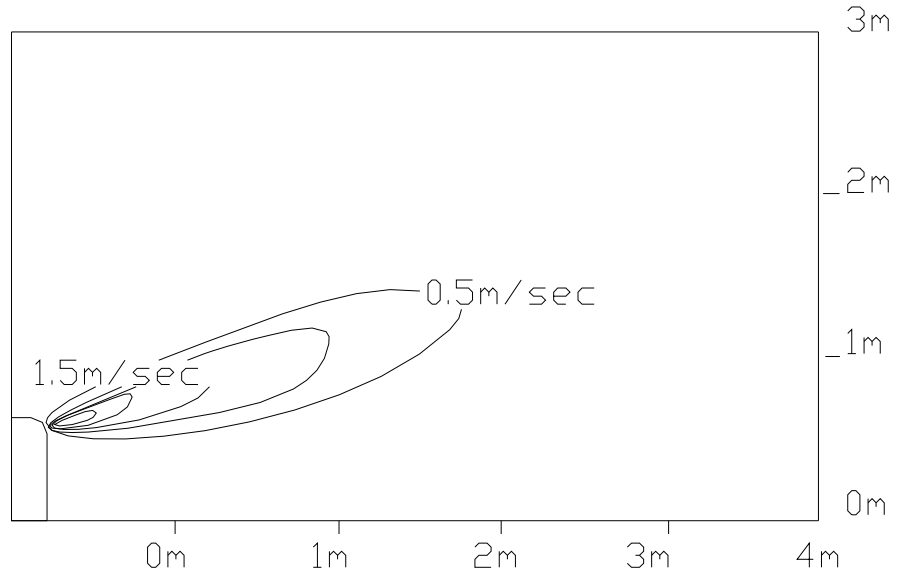
MDVi-D22Z/DN1-A MDVi-D28Z/DN1-A MDVi-D36Z/DN1-A MDVi-D45Z/DN1-A



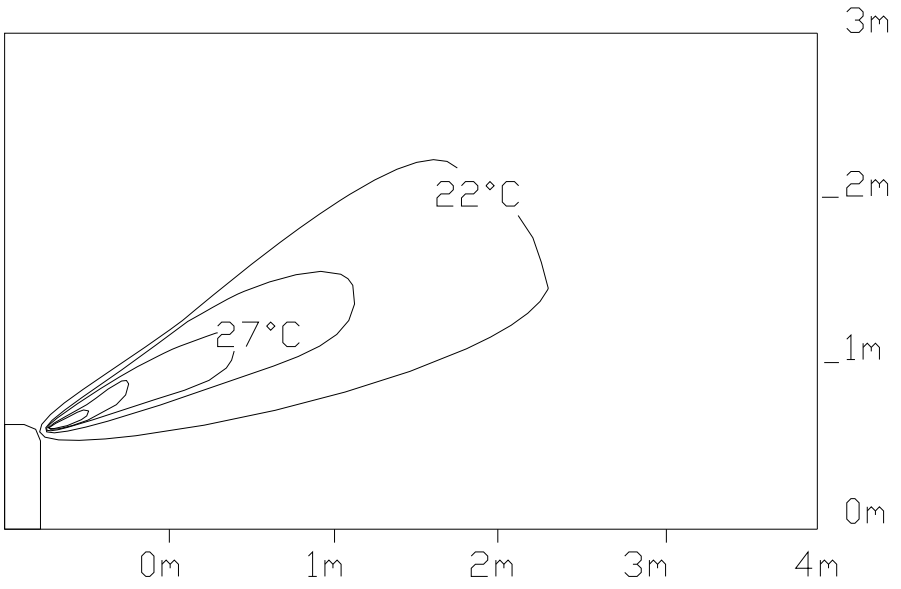
6.Air Velocity and Temperature Distributions

Discharge angle 60

Airflow velocity



Temperature



7.Capacity Tables

7.1 Cooling

TC: total capacity **SC**: sensible capacity **WB**: wet-bulb temperature **DB**: dry-bulb temperature

Indoor Unit size (kW)	Outdoor temperature (℃ DB)	Indoor temperature (℃ WB/DB)													
		14/20		16/23		18/26		19/27		20/28		22/30		24/32	
		TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
2.2	10.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.9	1.7
	12.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.8	1.6
	14.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.8	1.6
	16.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.8	1.6
	18.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.8	1.6
	20.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.7	1.5
	21.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.6	1.7	2.7	1.5
	23.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.5	1.6	2.7	1.5
	25.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.5	1.6	2.6	1.5
	27.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.5	1.6	2.6	1.5
	29.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.4	1.5	2.5	1.5
	31.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.4	1.5	2.5	1.5
	33.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.4	1.5	2.4	1.5
	35.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.3	1.5	2.4	1.5
	37.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.3	1.7	2.3	1.5	2.3	1.5
	39.0	1.5	1.4	1.8	1.5	2.1	1.6	2.2	1.6	2.2	1.6	2.3	1.5	2.3	1.5
2.8	10.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.7	2.1
	12.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.6	2.1
	14.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.6	2.1
	16.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.6	2.0
	18.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.5	2.0
	20.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.4	1.9
	21.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.3	2.1	3.4	1.9
	23.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.2	2.1	3.4	1.9
	25.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.2	2.0	3.3	1.9
	27.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.2	2.0	3.3	1.9
	29.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.1	2.0	3.2	1.9
	31.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.1	2.0	3.2	1.9
	33.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.2	3.1	2.0	3.1	2.0
	35.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.1	2.9	1.9	3.1	2.0
	37.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.9	2.1	2.9	1.9	2.9	1.9
	39.0	1.9	1.8	2.3	1.9	2.7	2.0	2.8	2.0	2.8	2.0	2.9	1.9	2.9	1.9
3.6	10.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.8	2.8
	12.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.6	2.7
	14.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.6	2.7
	16.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.5	2.7
	18.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.5	2.7
	20.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.4	2.7

	21.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.4	2.7
	23.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.2	2.8	4.4	2.7
	25.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.1	2.7	4.2	2.6
	27.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.1	2.7	4.2	2.6
	29.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.0	2.6	4.1	2.5
	31.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.0	2.6	4.1	2.4
	33.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.9	2.7	4.0	2.6	4.0	2.4
	35.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.7	2.6	3.9	2.6	4.0	2.4
	37.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.7	2.6	3.9	2.6	3.9	2.3
	39.0	2.4	2.2	3.0	2.5	3.3	2.7	3.6	2.7	3.7	2.6	3.9	2.7	3.9	2.4
4.5	10.0	3.0	2.6	3.6	2.8	4.1	3.1	4.4	3.2	4.7	3.3	5.2	3.1	5.8	3.3
	12.0	3.0	2.6	3.6	2.8	4.1	3.1	4.4	3.2	4.7	3.3	5.2	3.1	5.8	3.3
	14.0	3.0	2.6	3.6	2.8	4.1	3.1	4.4	3.2	4.7	3.3	5.2	3.1	5.7	3.2
	16.0	3.0	2.6	3.6	2.8	4.1	3.1	4.4	3.2	4.7	3.3	5.2	3.1	5.5	3.1
	18.0	3.0	2.6	3.6	2.8	4.1	3.1	4.4	3.2	4.7	3.3	5.2	3.1	5.5	3.1
	20.0	3.0	2.6	3.6	2.8	4.1	3.1	4.4	3.2	4.7	3.3	5.2	3.1	5.4	3.1
	21.0	3.0	2.6	3.6	2.8	4.1	3.1	4.4	3.2	4.7	3.3	5.2	3.1	5.3	3.0
	23.0	3.0	2.6	3.6	2.8	4.1	3.1	4.4	3.2	4.7	3.3	5.1	3.1	5.2	3.0
	25.0	3.0	2.6	3.6	2.8	4.1	3.1	4.4	3.2	4.7	3.3	5.1	3.1	5.1	2.9
	27.0	3.0	2.6	3.6	2.8	4.1	3.1	4.4	3.2	4.7	3.3	4.9	3.0	5.1	2.9
	29.0	3.0	2.6	3.6	2.8	4.1	3.1	4.4	3.2	4.7	3.3	4.9	3.0	5.0	2.9
	31.0	3.0	2.6	3.6	2.8	4.1	3.1	4.4	3.2	4.7	3.3	5.2	3.4	5.0	2.9
	33.0	3.0	2.6	3.6	2.8	4.1	3.1	4.4	3.2	4.7	3.3	5.2	3.4	4.8	2.8
	35.0	3.0	2.6	3.6	2.8	4.1	3.1	4.4	3.2	4.7	3.3	5.1	3.4	4.7	2.8
	37.0	3.0	2.6	3.6	2.8	4.1	3.1	4.4	3.2	4.5	3.2	4.7	3.1	4.7	2.8
	39.0	3.0	2.6	3.6	2.8	4.1	3.1	4.4	3.2	4.5	3.2	4.7	3.1	4.7	2.8

7.2 Heating

TC: total capacity **WB**: wet-bulb temperature **DB**: dry-bulb temperature

Indoor Unit size (kW)	Outdoor temperature (℃)		Indoor temperature (℃ DB)					
			16.00	18.00	20.00	21.00	22.00	24.00
			TC	TC	TC	TC	TC	TC
	WB	DB	kW	kW	kW	kW	kW	kW
2.20	-15.00	-14.70	1.64	1.64	1.64	1.64	1.64	1.64
	-13.00	-12.60	1.74	1.74	1.74	1.74	1.74	1.74
	-11.00	-10.50	1.82	1.82	1.82	1.82	1.82	1.82
	-10.00	-9.50	1.90	1.90	1.90	1.90	1.90	1.90
	-9.10	-8.50	1.95	1.95	1.95	1.95	1.95	1.95
	-7.60	-7.00	1.98	1.98	1.98	1.98	1.98	1.98
	-5.60	-5.00	2.05	2.05	2.05	2.05	2.05	2.05
	-3.70	-3.00	2.16	2.16	2.16	2.16	2.16	2.16
	-0.70	0.00	2.31	2.31	2.31	2.31	2.31	2.18
	2.20	3.00	2.44	2.44	2.44	2.44	2.39	2.18
	4.10	5.00	2.52	2.52	2.52	2.52	2.39	2.18
	6.00	7.00	2.60	2.60	2.60	2.52	2.39	2.18
	7.90	9.00	2.68	2.68	2.93	2.52	2.39	2.18
	9.80	11.00	2.76	2.76	2.60	2.52	2.39	2.18
	11.80	13.00	2.86	2.81	2.60	2.52	2.39	2.18
	13.70	15.00	2.94	2.81	2.60	2.52	2.39	2.18
2.80	-15.00	-14.70	2.02	2.02	2.02	2.02	2.02	2.02
	-13.00	-12.60	2.14	2.14	2.14	2.14	2.14	2.14
	-11.00	-10.50	2.24	2.24	2.24	2.24	2.24	2.24
	-10.00	-9.50	2.34	2.34	2.34	2.34	2.34	2.34
	-9.10	-8.50	2.40	2.40	2.40	2.40	2.40	2.40
	-7.60	-7.00	2.43	2.43	2.43	2.43	2.43	2.43
	-5.60	-5.00	2.53	2.53	2.53	2.53	2.53	2.53
	-3.70	-3.00	2.66	2.66	2.66	2.66	2.66	2.66
	-0.70	0.00	2.85	2.85	2.85	2.85	2.85	2.69
	2.20	3.00	3.01	3.01	3.01	3.01	2.94	2.69
	4.10	5.00	3.10	3.10	3.10	3.10	2.94	2.69
	6.00	7.00	3.20	3.20	3.20	3.10	2.94	2.69
	7.90	9.00	3.30	3.30	2.93	3.10	2.94	2.69
	9.80	11.00	3.39	3.39	3.20	3.10	2.94	2.69
	11.80	13.00	3.52	3.46	3.20	3.10	2.94	2.69
	13.70	15.00	3.62	3.46	3.20	3.10	2.94	2.69
3.60	-15.00	-14.70	2.52	2.52	2.52	2.52	2.52	2.52
	-13.00	-12.60	2.68	2.68	2.68	2.68	2.68	2.68
	-11.00	-10.50	2.80	2.80	2.80	2.80	2.80	2.80
	-10.00	-9.50	2.92	2.92	2.92	2.92	2.92	2.92
	-9.10	-8.50	3.00	3.00	3.00	3.00	3.00	3.00
	-7.60	-7.00	3.04	3.04	3.04	3.04	3.04	3.04
	-5.60	-5.00	3.16	3.16	3.16	3.16	3.16	3.16

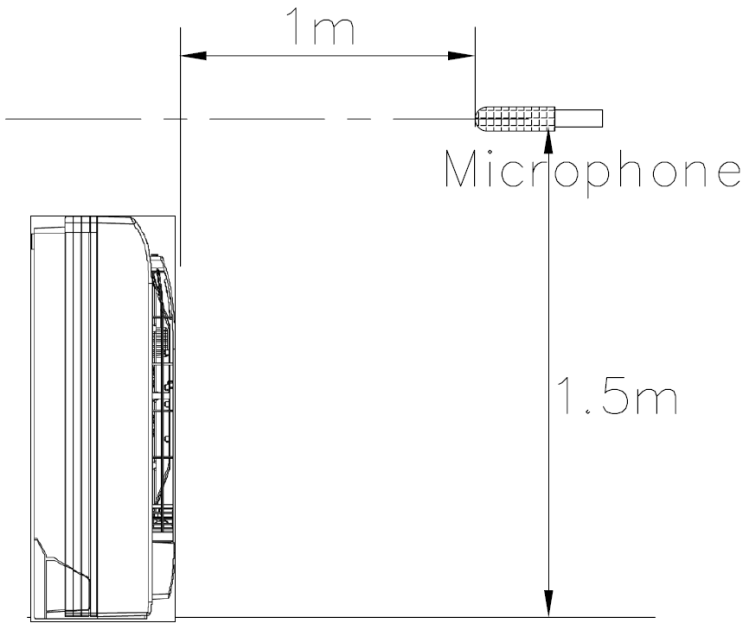
	-3.70	-3.00	3.32	3.32	3.32	3.32	3.32	3.32
	-0.70	0.00	3.56	3.56	3.56	3.56	3.56	3.36
	2.20	3.00	3.76	3.76	3.76	3.76	3.68	3.36
	4.10	5.00	3.88	3.88	3.88	3.88	3.68	3.36
	6.00	7.00	4.00	4.00	4.00	3.88	3.68	3.36
	7.90	9.00	4.12	4.12	2.93	3.88	3.68	3.36
	9.80	11.00	4.24	4.24	4.00	3.88	3.68	3.36
	11.80	13.00	4.40	4.32	4.00	3.88	3.68	3.36
	13.70	15.00	4.52	4.32	4.00	3.88	3.68	3.36
4.50	-15.00	-14.70	3.15	3.15	3.15	3.15	3.15	3.15
	-13.00	-12.60	3.35	3.35	3.35	3.35	3.35	3.35
	-11.00	-10.50	3.50	3.50	3.50	3.50	3.50	3.50
	-10.00	-9.50	3.65	3.65	3.65	3.65	3.65	3.65
	-9.10	-8.50	3.75	3.75	3.75	3.75	3.75	3.75
	-7.60	-7.00	3.80	3.80	3.80	3.80	3.80	3.80
	-5.60	-5.00	3.95	3.95	3.95	3.95	3.95	3.95
	-3.70	-3.00	4.15	4.15	4.15	4.15	4.15	4.15
	-0.70	0.00	4.45	4.45	4.45	4.45	4.45	4.20
	2.20	3.00	4.70	4.70	4.70	4.70	4.60	4.20
	4.10	5.00	4.85	4.85	4.85	4.85	4.60	4.20
	6.00	7.00	5.00	5.00	5.00	4.85	4.60	4.20
	7.90	9.00	5.15	5.15	2.93	4.85	4.60	4.20
	9.80	11.00	5.30	5.30	5.00	4.85	4.60	4.20
	11.80	13.00	5.50	5.40	5.00	4.85	4.60	4.20
	13.70	15.00	5.65	5.40	5.00	4.85	4.60	4.20

8.Electric Characteristics

Model	Indoor Unit				Power Supply	IFM	
	Hz	Voltage	Min	Max	MFA	kW	FLA
MDVi-D22Z/DN1-A	50	220~240V	220V	240V	15	0.012	0.0135
MDVi-D28Z/DN1-A	50	220~240V	220V	240V	15	0.015	0.0158
MDVi-D36Z/DN1-A	50	220~240V	220V	240V	15	0.015	0.0158
MDVi-D45Z/DN1-A	50	220~240V	220V	240V	15	0.030	0.0296

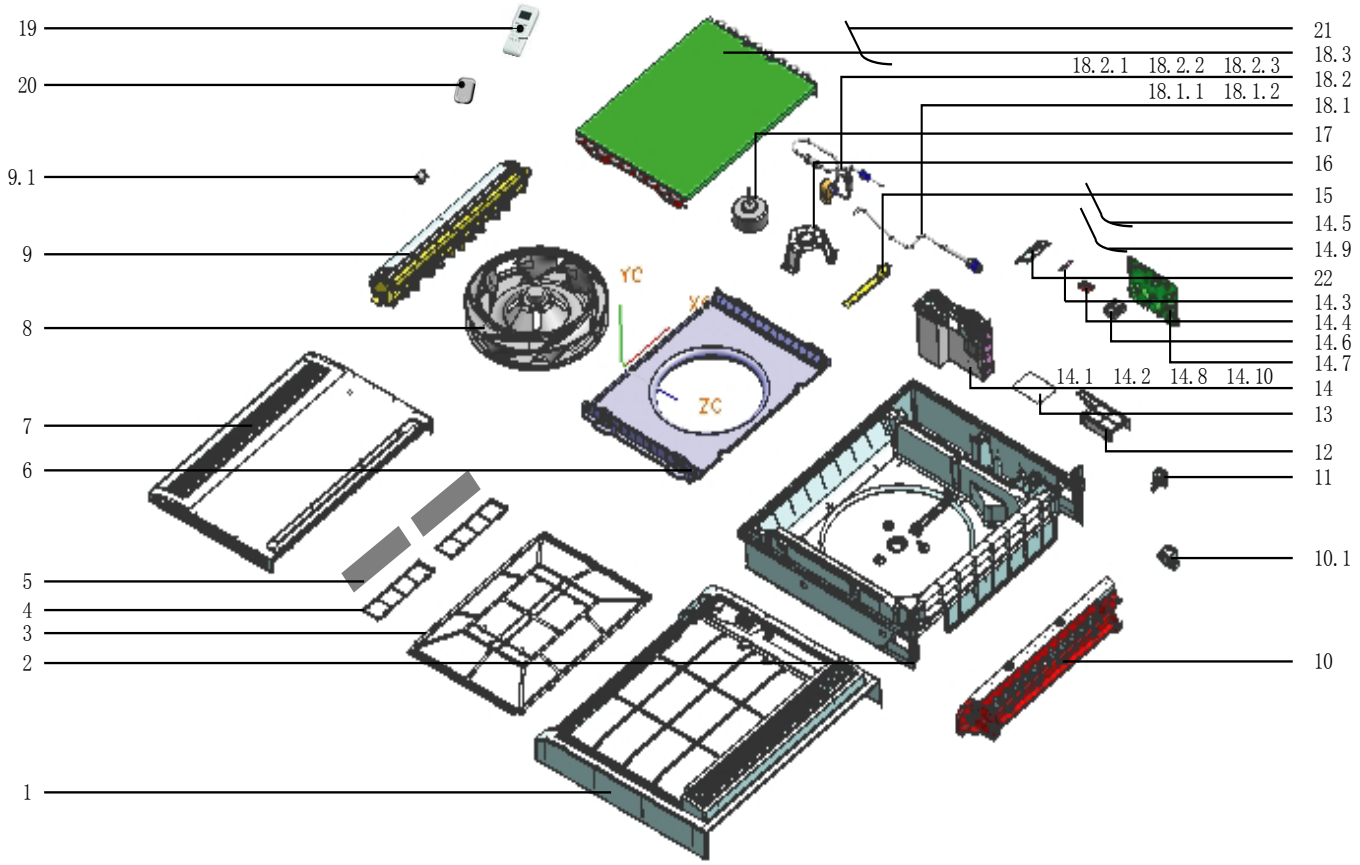
Remark:
MFA: Max. Fuse Amps. (A)
KW: Fan Motor Rated Output (KW)
FLA: Full Load Amps. (A)
IFM: Indoor Fan Motor

9.Sound Levels



Model	super	higher	H	M	L
MDVi-D22Z/DN1-A	38	38	38	32	26
MDVi-D28Z/DN1-A	40	40	39	33	27
MDVi-D36Z/DN1-A	41	41	39	33	27
MDVi-D45Z/DN1-A	42	42	42	38	30

10.Exploded View



No.	Part Name	Quantity	No.	Part Name	Quantity
1	Panel frame ass'y	1	14.8	Wire joint, 3p	1
2	Base ass'y	1	14.9	Temp.sensor ass'y	1
3	Filter	1	14.10	Installation boad ass'y	1
4	Net	2	14.11		1
5	Formaldehyde-kille	2	14.12		1
6	Ring ass'y	1	15	Wire clamp	1
7	Panel ass'y	1	16	Motor bracket	1
8	Centrifugal fan	1	17		1
9	Air outlet frame ass'y	1	18	Evaporator ass'y	1
9.1	Stepper motor	1	18.1	Output pipe ass'y	1
10	Drainage pan ass'y	1	18.1.1	Sphere pad	1
10.1	Stepper motor	1	18.1.2	Pipe joint	1
11	Pipe clamp	1	18.1.3	Copper nut	1
12	E-Part box cover	1	18.2	Input pipe ass'y	1
13	Insulation washer	1	18.2.1	EEV solenoid	1
14	E-part box ass'y	1	18.2.2	Pipe joint	1
14.1	Electronic control box	1	18.2.3	Copper nut	1
14.2	Electric installation board	1	18.3	Evaporator	1
14.3	Display board ass'y	1	19	Remote controller	1
14.4	Dial-up board ass'y	1	20	Remote controller holder ass'y	1
14.5	Room temp sensor ass'y	1	21	Temp.sensor ass'y	1
14.6	Wire joint	1	22	Display panel assy	1
14.7	Main controller ass'y	1	23		1
			24		1

11.Accessories

Standard accessories

Please check whether the following fittings are of full scope. If there are some spare fittings, Please restore them carefully.

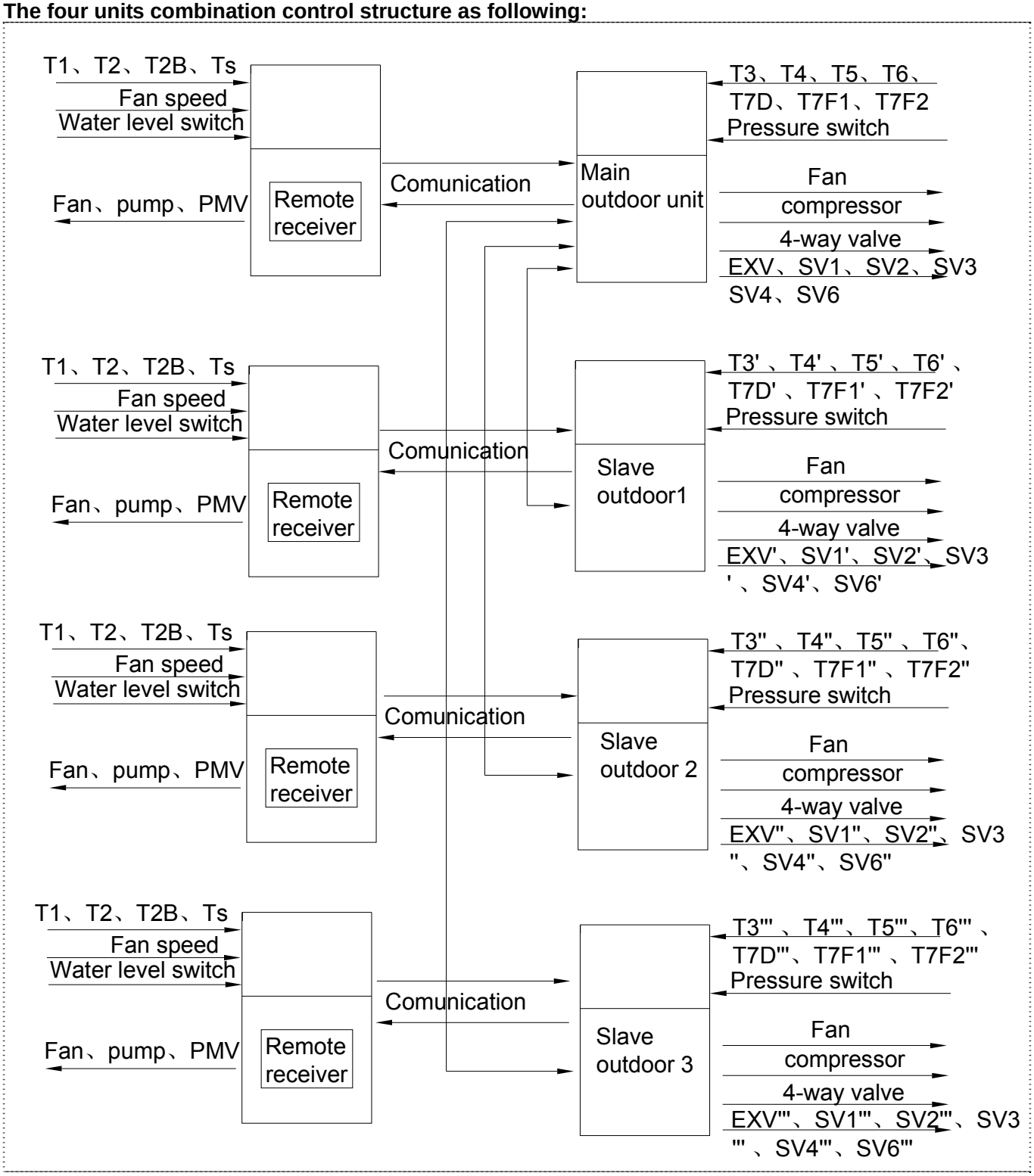
	NAME	SHAPE	QUANTITY
Installation fittings	1.Hook		2
Remote controller & Its Frame	2. Remote controller		1
	3. Frame		1
	4. Mounting screw(ST2.9×10-C-H)		2
	5. Alkaline dry batteries (AM4)		2
Others	6. Owner's manual	——	1
	7. Installation manual	——	1

Part 3 Control System

1. Brief Introduction about Controlling System

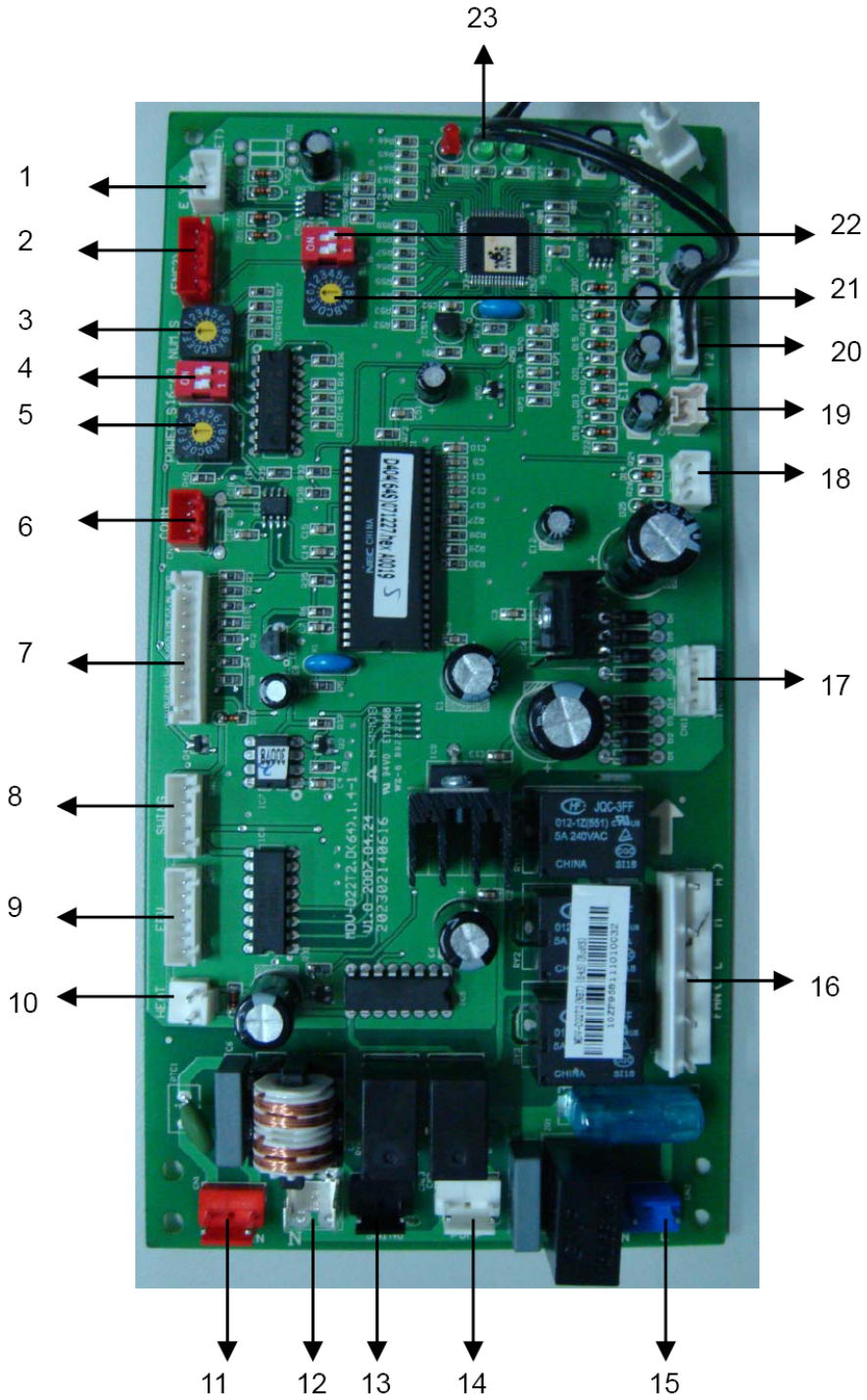
The control system adopts modular design, that is, all indoor units communicate with outdoor units, refer to the following figures for the control structure between indoor units and outdoor units. In the structure, the indoor control board receives the information from users (for exam. set temp., fan speed etc.) and environment (ex, indoor coil temp., indoor temp. etc.) ,and organize it to control the action of relevant parts such as EXV, four-way valve etc , then transmits the signals to outdoor control board through the following communication circuit. Outdoor main control board can deal with the information from indoor unit and figure out the best running mode, then transfer the instruction to the outdoor auxiliary units and indoor units to carry out it.

The four units combination control structure as following:



T1	Indoor ambient temp.
T2	Indoor evaporator middle part temp.
T2B	Indoor evaporator outlet pipe temp.
Ts	Indoor setting temp.
T3	Main outdoor heat-exchanger outlet pipe temp. (Cooling mode)
T3’	No.1 auxiliary outdoor heat-exchanger outlet pipe temp. (Cooling mode)
T3’’	No.2 auxiliary outdoor heat-exchanger outlet pipe temp. (Cooling mode)
T3’’’	No.3 auxiliary outdoor heat-exchanger outlet pipe temp. (Cooling mode)
T4	Main outdoor ambient temp.
T4’	Auxiliary outdoor 1 ambient temp.
T4’’	Auxiliary outdoor 2 ambient temp.
T4’’’	Auxiliary outdoor 3 ambient temp.
T5	Digital scroll compressor discharge temp.
T5’	Auxiliary outdoor 1 digital scroll compressor discharge temp.
T5’’	Auxiliary outdoor 2 digital scroll compressor discharge temp.
T5’’’	Auxiliary outdoor 3 digital scroll compressor discharge temp.
T6	Main outdoor heat-exchanger inlet temp. (Cooling mode)
T6’	Auxiliary outdoor 1 heat-exchanger inlet temp. (Cooling mode)
T6’’	Auxiliary outdoor 2 heat-exchanger inlet temp. (Cooling mode)
T6’’’	Auxiliary outdoor 3 heat-exchanger inlet temp. (Cooling mode)
T7D	Main digital scroll compressor discharge temp.
T7D’	Auxiliary outdoor 1 digital scroll compressor discharge temp.
T7D’’	Auxiliary outdoor 2 digital scroll compressor discharge temp.
T7D’’’	Auxiliary outdoor 3 digital scroll compressor discharge temp.
T7F1	Main fix-speed Compressor F1 discharge temp. Fix-speed
T7F1’	Auxiliary outdoor 1 fix-speed Compressor F1 discharge temp. Fix-speed
T7F1’’	Auxiliary outdoor 2 fix-speed Compressor F1 discharge temp. Fix-speed
T7F1’’’	Auxiliary outdoor 3 fix-speed Compressor F1 discharge temp. Fix-speed
T7F2	Main fix-speed Compressor F2 discharge temp.
T7F2’	Auxiliary 1 fix-speed Compressor F2 discharge temp.
T7F2’’	Auxiliary 2 fix-speed Compressor F2 discharge temp.
T7F2’’’	Auxiliary 3 fix-speed Compressor F2 discharge temp.

Indoor electric control (take T2 as example)



1—EXY (NET) — Net control socket

X, Y, E of all air-conditioners are connected together in Bus to the X, Y, E of CCM.

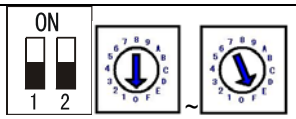
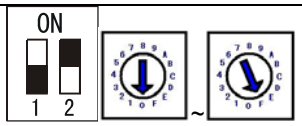
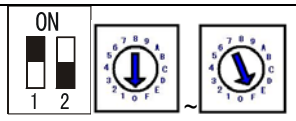
2—CN15 (ENC2) — Number Setting port from outside

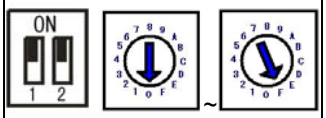
It has same function as ENC2 ((NUM_S) — Number Setting (for outdoor), the difference is that it is suitable for some special indoor unit such as one-way cassette (compact), which has no enough space to operate ENC2 (NUM_S) — Number Setting (for outdoor), so we support this port to extend Number Setting Switch outside.

3—ENC2 (NUM_S) — Number Setting (for outdoor)

The present address setting has been put outside the electric control board for convenient setting. The range is 0-F. Before indoor units are power on, the address setting must be finished and the address setting of indoor units that match with the same outdoor unit can't be repeated, or it may cause compressor jumping-down, indoor EXV can't open, indoor fan motor jumping-down, and so on. After finishing address setting, indoor units must be power on again and address setting must be checked again to ensure no repeated setting. The checking method is as follows: press the button on the display board for 5 seconds, the display board will

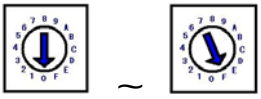
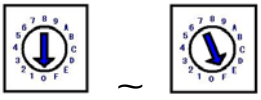
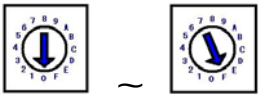
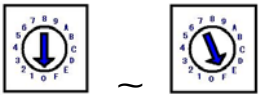
display address setting, continue to press for 5 seconds, the display board will display power setting. The setting is as follows:

Buzzer	Operation lamp	Timer lamp	Defrosting lamp	Alarm lamp	Communication Address	Indoor HP
Buzzer doesn't alarm	OFF	OFF	OFF	OFF	 0	0.8HP
	OFF	OFF	OFF	ON	1	1.0HP
	OFF	OFF	ON	OFF	2	1.2 HP
	OFF	OFF	ON	ON	3	1.5 HP
	OFF	ON	OFF	OFF	4	2 HP
	OFF	ON	OFF	ON	5	2.5 HP
	OFF	ON	ON	OFF	6	3 HP
	OFF	ON	ON	ON	7	3.2 HP
	ON	OFF	OFF	OFF	8	4 HP
	ON	OFF	OFF	ON	9	5 HP
	ON	OFF	ON	OFF	10	
	ON	OFF	ON	ON	11	
	ON	ON	OFF	OFF	12	
	ON	ON	OFF	ON	13	
	ON	ON	ON	OFF	14	
	ON	ON	ON	ON	15	
	OFF	OFF	OFF	OFF	 16	0.8 HP
	OFF	OFF	OFF	Flash	17	1.0 HP
	OFF	OFF	Flash	OFF	18	1.2 HP
	OFF	OFF	Flash	Flash	19	1.5 HP
	OFF	Flash	OFF	OFF	20	2 HP
	OFF	Flash	OFF	Flash	21	2.5 HP
	OFF	Flash	Flash	OFF	22	3 HP
	OFF	Flash	Flash	Flash	23	3.2 HP
	Flash	OFF	OFF	OFF	24	4 HP
	Flash	OFF	OFF	Flash	25	5 HP
	Flash	OFF	Flash	OFF	26	
	Flash	OFF	Flash	Flash	27	
	Flash	Flash	OFF	OFF	28	
	Flash	Flash	OFF	Flash	29	
	Flash	Flash	Flash	OFF	30	
	Flash	Flash	Flash	Flash	31	
Buzzer alarm.	OFF	OFF	OFF	OFF	 32	0.8 HP
	OFF	OFF	OFF	ON	33	1.0 HP
	OFF	OFF	ON	OFF	34	1.2 HP
	OFF	OFF	ON	ON	35	1.5 HP
	OFF	ON	OFF	OFF	36	2 HP
	OFF	ON	OFF	ON	37	2.5 HP
	OFF	ON	ON	OFF	38	3 HP

	OFF	ON	ON	ON	39	3.2 HP
	ON	OFF	OFF	OFF	40	4 HP
	ON	OFF	OFF	ON	41	5 HP
	ON	OFF	ON	OFF	42	
	ON	OFF	ON	ON	43	
	ON	ON	OFF	OFF	44	
	ON	ON	OFF	ON	45	
	ON	ON	ON	OFF	46	
	ON	ON	ON	ON	47	
	OFF	OFF	OFF	OFF	 48	0.8 HP
	OFF	OFF	OFF	Flash	49	1.0 HP
	OFF	OFF	Flash	OFF	50	1.2 HP
	OFF	OFF	Flash	Flash	51	1.5 HP
	OFF	Flash	OFF	OFF	52	2 HP
	OFF	Flash	OFF	Flash	53	2.5 HP
	OFF	Flash	Flash	OFF	54	3 HP
	OFF	Flash	Flash	Flash	55	3.2 HP
	Flash	OFF	OFF	OFF	56	4 HP
	Flash	OFF	OFF	Flash	57	5 HP
	Flash	OFF	Flash	OFF	58	
	Flash	OFF	Flash	Flash	59	
	Flash	Flash	OFF	OFF	60	
	Flash	Flash	OFF	Flash	61	
	Flash	Flash	Flash	OFF	62	
	Flash	Flash	Flash	Flash	63	

4—SW1 (0-15, 16-31, 32-47, 48-63) — Number Setting Switch (for outdoor)

Match with NUM_S.

Address Set		Address Code
		00 ~ 15
		16 ~ 31
		32 ~ 47
		48 ~ 63

5—ENC1 (POWER_S) — Power Setting

The range is 0~9. In normal case, the power setting of indoor units has been set well.

The matching capacity of indoor units is as follows:

Power setting	Capacity of indoor units
0	0.8 (2200W)
1	1.0 (2800W)
2	1.2 (3600W)
3	1.7 (4500W)
4	2.0 (5600W)
5	2.5 (7100W)
6	3.0 (8000W)
7	3.2 (9000W)
8	4.0 (11200W)
9	5.0(14000W)

6—CN9 — Communication port (COM)

The indoor and outdoor units adopt RS-485 communication standard. P and Q is for communication and have polarity. E is shield layer and is connected to +5V on the display board to strengthen the anti-jamming ability of the communication wire. When the indoor and outdoor units can't communicate for 1 minute, it will display communication malfunction.

7—CN10—Display board socket

The display board in digital scroll system is just to display running conditions and malfunction information. The manual button is just to check the address code and power code of indoor units

8—CN14—SWING

9—CN8 —Indoor EXV

12V weak-electricity control. After the compressor starts, the EXV of the matching indoor units under ON mode will be open at certain opening-degree, and the EXV of the matching indoor units under OFF, standing-by, Fan mode or Mode confliction will be close.

When forced-cooling, all indoor EXV will be forced open.

The action of EXV can be seen from a 5-core or 6-core step-motor that is connected here to replace EXV.

10—CN12—Auxiliary electric-heater, 220V AC.

11—CN1—Transformer input socket (TRANS IN), 220V strong-electricity.

The power supply of 220V passes the fuse, anti-jamming inductance and PTC protector and then connects to the terminal in the PCB.

12—N — Zero-wire output socket.

Supply to indoor fan motor that needs separate zero-wire.

13—CN13—SWING

Output 220V. Use 220V in-phase swing-motor. The action is as same as CN14 step-motor.

14—CN3—PUMP

220V output. When indoor unit starts to cooling operation, the pump starts at once and running continue until stopping this mode. At any time, if the water-level in the water receiver raises to the position point of the water-level switch, that is, the water-level switch signal is cut down, the pump will start at once and forced running. If the water level falls to below the alarm water-level (the drain pump delay 1 minute to be off), operation recovers according to former setting mode. On the otherwise, after 3 minutes, indoor unit stops(including pump) and display water-level alarm signal, and indoor unit takes part in the whole system operation according to standing-by mode. When again checking the water-level alarm signal is off, the protection will be released and recover operation according to former setting.

15—CN2—Power input 220V (L, N)

16—CN4—Indoor Fan output

220V output. There are four relays in the electric control board and four-speed output (High/Middle/Low/breeze). The Low speed and Breeze speed have been short-connected, and the indoor breeze speed have been deleted, so even the relay of breeze speed suck-in, the indoor fan motor still operates in Low speed. That is, all indoor units have only three fan speeds, even operate in Low speed in heating anti-cooling and oil-return period

17—CN11—Transformer output (TRANS OUT)

12V AC output. Input 220V AC to transformer, then output 12V AC, and then input to the electric board. There are two commute filter circuits, one is 7805, output 5V to the chip, the other one is 7812, output 12V to 2003 and relays.

18—CN5—Water-level switch (WATER)

Disconnect when full of water and be close when water level recovers normal. For indoor units without water-level switch, this switch needs be short connected.

19—CN7—Evaporator outlet temp. (T2B)

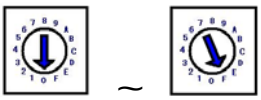
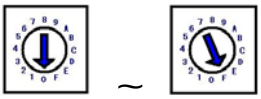
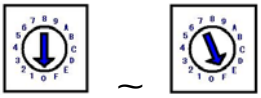
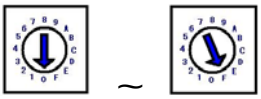
20—CN6—T1, T2

21—S2 —Address Setting (for CCM)

This setting presents the address relative to a CCM, match with S1 switch, the address range is 0-63, Before using a CCM to group control indoor units or using Midea Intelligent Network Air-Condition Control& Monitor System to control indoor units, the address setting must be finished and the address setting of indoor units that match with the same CCM can't be repeated.

22—S1 —Address Setting Switch (for CCM)

Match with S2 — Address Setting (for CCM), setting indoor unit address relative to a CCM.

Address Set		Address Code
		00 ~ 15
		16 ~ 31
		32 ~ 47
		48 ~ 63

23—LED's for Intelligent A/C control and monitor system.

From the left side:

LED1 (Run): When the AC communicated well with the NIM, it will be light; otherwise it will be extinguished. But when the system stayed in the remote controller lock mode and mode lock state, it will flash with frequency of 1Hz.

LED2 (Link):It will be light when there is any communication between the AC and Intelligent A/C control and monitor system including any receiving and sending the signal.

LED3 (ERR):It will flash with frequency of 1Hz when the communication malfunction occurs between the AC and Intelligent A/C control and monitor system or other malfunctions come from the NIM. It will extinguish in normality.

Indoor LED Malfunction Code

Display Contents	Explanation of Malfunction
All lamps are off	Standing-by
Operation lamp is on	ON
PRE./DEF. lamp is on	Anti-cooling or Defrosting
Timer lamp is on	Timer function is on
Timer lamp flashes	Indoor/outdoor communication malfunction
Operation lamp flashes	Indoors temp. Sensor abnormal
Alarm lamp flashes quickly	Water-level switch abnormal
DEF. Lamp flashes	Mode-confliction malfunction
Alarm lamp flashes slowly	Outdoor malfunction

2. Indoor Unit Central Control Monitor System

2.1 CCM03

Indoor CCM, max. 64 indoor units control. Single or all units query and control, such as ON/OFF/Mode setting/Temp. setting/Fan setting/Mode lock function, Blue background light, LCD display screen.

2.1.1 Basic conditions o f operating the electric controller:

(1) Applicable range of supply voltage:

Input voltage: Single-phase 198V ~ 242V;
AC input power supply frequency: 50Hz/60Hz compatible.

(2) Operating environment temperature of electric controller: -15°C~+43°C.

Operating environment RH of electric controller: RH40%~RH90%.

2.1.2 Function categories o f electric controller

Functions of the electric controller:

(1) System composition

(2) Keywords and general function description

(3) Description of electric control functions of centralized controller

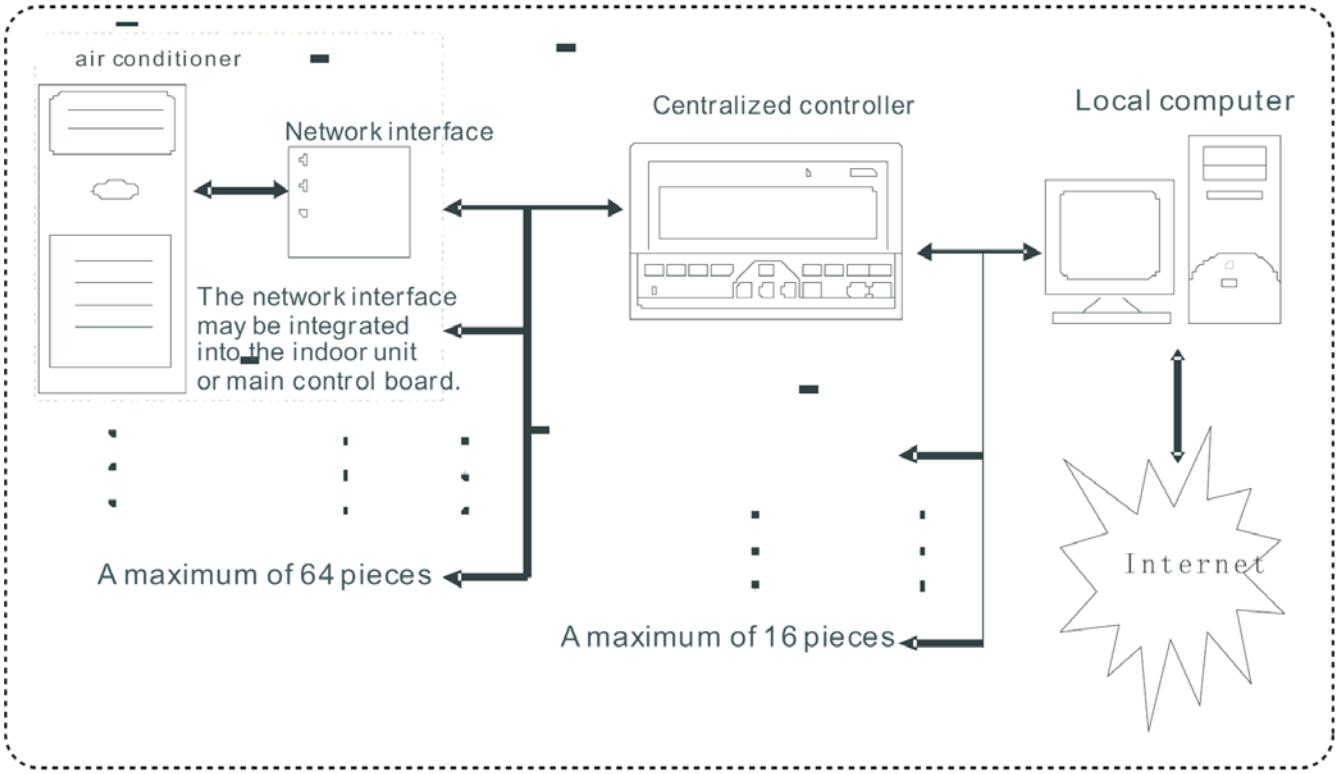
(4) Technical indices and requirements

2.1.3 Function description of each part

System composition:

1. The centralized controller is used to perform centralized control and data query for the network air conditioner. Each centralized controller can communicate with a maximum of 64 air conditioners to make up an air conditioner LAN, and implement centralized monitoring for the air conditioners in the network.
2. The centralized controller can be interfaced with computer or gateway to implement centralized control and status query for all air conditioners in the network. It can be connected with WAN via computer or gateway to implement remote computerized control (with support of computer software). Each local computer or gateway can be connected to 16 centralized controllers as a maximum.
3. The master/slave answer mode is implemented for communication between the centralized controller and the air conditioner, between the computer and the centralized controller. In the LAN composed of centralized controller and air conditioner, the centralized controller is a master, and the air conditioner is a slave. In the LAN composed of computer and centralized controller, the computer or gateway is a master, and the centralized controller is a slave.

Schematic diagram of network control system composition of air conditioner:



Keywords and general function description

1. Power on or reset

When the centralized controller is powered on or reset, all display segments of the LCD are luminous for 2 seconds and then goes off. 1 second later, the system enters the normal display status. The centralized controller is in the main page display status and displays the first page, and searches the in-service air conditioners in the network. Once the search is finished, the centralized controller enters the mode setting page, and sets the first in-service air conditioner by default.

2. Network area address of centralized controller

The local computer or gateway can be connected with 16 centralized controllers for communication. Each centralized controller serves as an area of the air conditioner network. The centralized controllers are differentiated by bit selection address. The configurable range is 0~15.

3. State indication

If any local keypad operation is setting the operation status of the air conditioner, the indicator is on when the signals are sent. Upon completion of the setting process, the indicator goes off. If an in-service air conditioner in the network is faulty, or the centralized controller network itself is faulty, the indicator will blink at 2Hz. If one or more in-service air conditioners in the network are running, including under setting of timing

start/shutdown, the indicator will be luminous. Otherwise, the indicator is off.

4. Locking of centralized controller

After receiving the centralized controller locking command sent from the computer, the centralized controller disables the startup/shutdown and setting of the air conditioner, and sends commands to lock remote controllers of all air conditioners in the network of the centralized controller. After receiving the unlocking command, the centralized controller enables the startup/shutdown operation, and sends commands to unlock the remote controller of all air conditioners. The locking status of the remote controller can be locked or unlocked by the computer or centralized controller separately. The locking status of the centralized controller is memorized after power failure of the centralized controller, and will not vanish after the power supply is restored, unless the command of unlocking is received.

5. Mode locking function

After the mode locking command is received, the command is forwarded to the air conditioner, and the centralized controller displays the mode locking flag. After the command of unlocking is received, the non-conflict mode can be selected freely. The centralized controller can also lock modes of all indoor units.

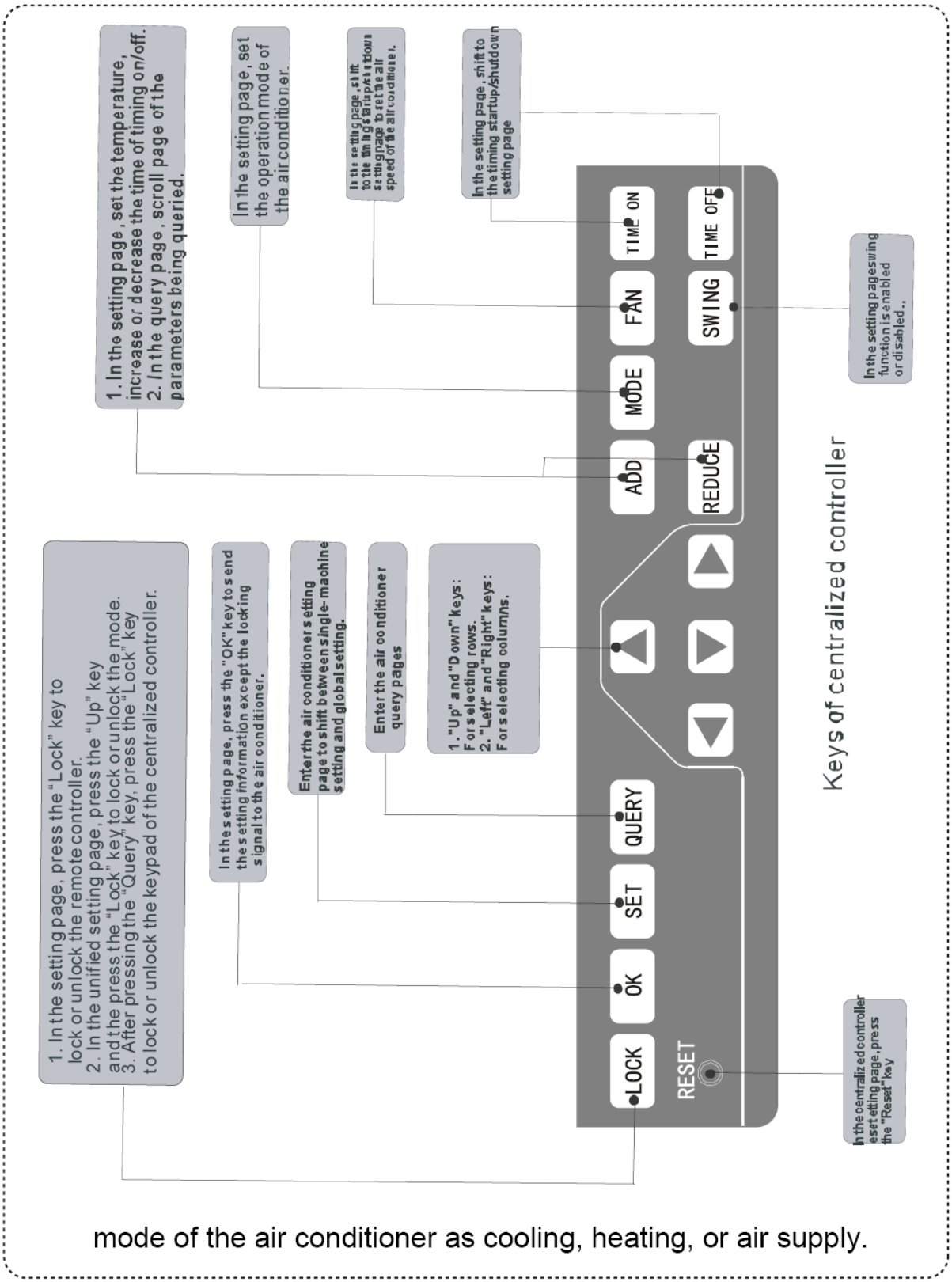
6. Emergent shutdown and compulsory startup

When the emergent shutdown switch of the centralized controller is turned on, all air conditioners in the network of the centralized controller will shut down compulsorily. The centralized controller and computer and all functional modules are disabled from startup and shutdown until the foregoing switch is turned off. When

the compulsory startup switch of the centralized controller is turned on, all air conditioners in the network of the centralized controller will start up compulsorily. By default, they will run in the cooling mode. The startup and shutdown operations of the centralized controller and the computer and all functional modules will be disabled (only the command of startup is sent to the air conditioner, without affecting operation of the remote controller after startup) until the foregoing switch is turned off. If the foregoing two switches are turned on concurrently, the emergent shutdown switch shall have preference.

Electric controller function description

---Keypad operation description



mode of the air conditioner as cooling, heating, or air supply.

1) Query key

Any time when you press the key, the selected operation mode is to query the operation status of the air conditioner. By default, the first in-service air conditioner will be queried. Through the Increase and Decrease keys, you can change the parameter page to be queried; through the Up, Down, Left and Right keys, you can change to query status of other in-service air conditioners.

2) Set key

In other display mode, press the key to enter the setting mode. By default, it is single setting, and the first in-service air conditioner is displayed. In setting operation mode, press the key again, and the operation will be performed for all air conditioners in the network. Press the key repeatedly to shift between single setting and global setting.

→ Single → Global →

3) Mode key

In setting operation mode, press this key to set the operation

→cooling → heating → supply air only → stop →

In other display mode, press the key to enter the setting mode. By default, it is single-machine setting, and the first in-service air conditioner is displayed.

4) Fan key

In setting operation mode, press this key to set the fan of the indoor unit of the air conditioner to run in the automatic, high, medium or low level of air.

→ auto → low → medium → high →

5) Time on key

In setting operation mode, press this key to set the timing startup of air conditioner; press the key again to exit the timing setting, and restore the normal temperature regulation operation mode.

→ time on → set temperature regulation →

6) Time off key

In setting operation mode, press this key to set the timing shutdown of air conditioner; press the key again to exit the timing setting, and restore the normal temperature regulation operation mode.

→ time on → set temperature regulation →

7) Swing key

In setting operation mode, press this key to enable or disable the swing function. If all currently selected air conditioners have no swing function, no effect will result after pressing the key.

8) Leftward key

In the query mode, every time when you press the key, the operation status data of the previous air conditioner will be displayed. If it is currently on the first machine, press the key again, and the data of the last machine will be displayed. If you hold down this key, the address will decrease one by one. In the setting mode, every time when you press the key, if it is in single operation mode, the air conditioner of the previous in-service address number will be selected. If it is in the global operation mode, no effect will result after the key is pressed. In the main page, press the key to enter the query mode. By default, it is the first in-service air conditioner.

9) Rightward key

In the query mode, every time when you press the key, the operation status data of the last air conditioner will be displayed. If it is currently on the last machine, press the key, and the data of the first machine will be displayed. If you hold down this key, the address will increase one by one. In the setting mode, every time when you press the key, if it is in the single operation mode, the air conditioner of the next in-service address number will be selected. If it is in the global operation mode, no effect will result after the key is pressed. In the main page, press the key to enter the query mode. By default, it is the first in-service air conditioner.

10) Downward key

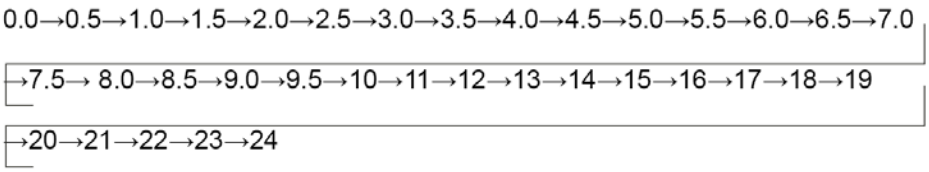
In the query mode, every time when you press the key, the operation status data of the air conditioner corresponding to the next row of the matrix will be displayed. If it is currently in the last row, press the key, and the data of the air conditioner corresponding to the first row will be displayed. If you hold down this key, the row will increase one by one. In the setting mode, every time when you press the key, if it is in the single operation mode, the air conditioner corresponding to the last row will be selected. If it is in the global operation mode, no effect will result after the key is pressed. In the main page, press the key to enter the query mode. By default, it is the first in-service air conditioner.

11) Upward key

In the query mode, every time when you press the key, the operation status data of the air conditioner corresponding to the previous row of the matrix will be displayed. If it is currently in the first row, press the key, and the data of the air conditioner corresponding to the last row will be displayed. If you hold down this key, the row will decrease one by one. In the setting mode, every time when you press the key, if it is in the single operation mode, the air conditioner corresponding to the previous row will be selected. If it is in the global operation mode, no effect will result after the key is pressed. In the main page, press the key to enter the query mode. By default, it is the first in-service air conditioner.

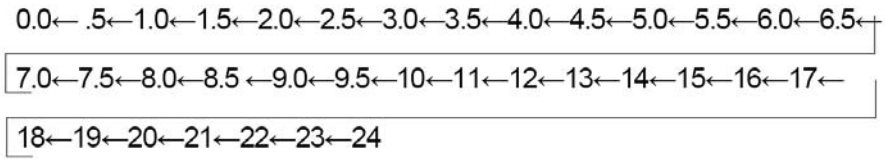
12) Add key

In the main page or the query mode, every time when you press the key, the data of the last page will be displayed. If it is now in the last page, press the key again, and the first page will be displayed. In the setting mode, every time when you press the key, if it is in the temperature regulation mode, the set temperature will decrease by 1 °C until the highest allowed set temperature; if it is in the timing startup/shutdown time setting mode, select the upper-level set time, if no time is set, 0.0 will be displayed, if you hold down the key, the upper-level data will be selected consecutively. The specific change mode is as follows:



13) Reduce key

In the main page or the query mode, every time when you press a key, the data of the current page will be displayed. If it is now in the first page, press the key again, and the last page will be displayed. In the setting mode, every time when you press the key, if it is in the temperature regulation mode, the set temperature will decrease by 1 degree until the lowest allowed set temperature; if it is in the timing startup/shutdown time setting mode, select the upper-level set time, if no time is set, 0.0 will be displayed, if you hold down the key, the upper-level data will be selected consecutively. The specific change mode is as follows:



14) ON/OFF key

Any time when you press the key, the centralized startup/shutdown operation is performed for all current in-service air conditioners in the centralized controller network. If all in-service air conditioners in the network are in the power-off status, press the key to perform the startup operation. If it is in the mode setting page currently, and the parameters such as startup mode, temperature and air speed are selected, the air conditioner will be started according to the selected parameters. If no mode is selected currently, and the air conditioner is powered off or it is in other display page currently, and the default startup mode is: Cooling, strong air, set temperature 24°C, swing function enabled. The default startup mode is locked according to the system mode or judged according to other constraint conditions. If any conflict exists, the next conflict-free mode will apply automatically. If conflict exists for all modes, startup will be impossible. If one or more in-service air conditioners in the network (including in the timing process of timing startup/shutdown), pressing this key will shut down all air conditioners. When performing the shutdown operation, the shutdown command is issued to the air conditioners in the startup status only, and is not issued to those in the shutdown status.

15) Lock key

In the mode setting mode, press the Lock key, and the remote controller of the currently selected air conditioner will be locked/unlocked. The operation mode is: If you select single-machine setting, the operation is performed for the air conditioner of the current address only. If the remote controller of the air conditioner is locked currently, issue the lock command; otherwise, send the lock command. If you does not select the single-machine mode, and the remote controller of one or more currently selected air conditioners is locked, issue the unlock command; if the remote controllers of all currently selected air conditioners are in the non-locked status, issue the remote controller lock command. When the remote controller of the air conditioner is locked, the air conditioner does not receive remote control signals from the remote controller or wire controller until the remote controller is unlocked. Press the Query key and then press the Lock key, and the keys of the centralized controller will be locked or unlocked. If the keys are currently locked, press the foregoing keys concurrently again, and the keys will be unlocked; if the keys are currently unlocked, press the foregoing keys concurrently, and the keys will be locked. If the keys are locked, pressing of any key other than

the Unlock key will be ineffective. In the unified setting page, press the Up key and the Lock key concurrently to lock all air conditioner modules in the network. The mode locking is cancelled when the key is pressed again. Note: When you lock or cancel locking, the corresponding icon indication appears or disappears only after all the attached air conditioners are set completely, so it takes a time period. When the number of attached air conditioners is high, wait patiently.

16) Confirmation key

In the setting mode, press the key to send the currently selected mode status and the auxiliary function status to the selected air conditioner, and display the mode setting operation results. After you select the operation mode and auxiliary function status information of the air conditioner, if you do not press the confirmation key, the selected information will not be sent to the air conditioner, and will not affect the current operation of the air conditioner. The operations of remote controller locking and unlocking need no pressing of the confirmation key. The command information is sent directly after the locking key is pressed.

17) Reset key

Anytime when the reset key is pressed, the centralized controller will reset. The result is the same as the result of restoring power-on after power failure.

General display data entries:

1) General display data is displayed in all display pages.

a. Under the interconnected control of the computer or gateway, the data is displayed in graphic. Otherwise, no data is displayed.

b. If the centralized controller is connected with the functional module for communication, the data is displayed in graphics. Otherwise, no data is displayed.

c. If the centralized controller is connected with the SMS remote control module for communication, the data is displayed in graphics. Otherwise, no data is displayed.

d. If the centralized controller is connected with the telephone remote control module for communication, the data is displayed in graphics. Otherwise, no data is displayed.

e. In normal operation of the centralized controller, the periodical cycle module communicates with the network interface module, and the data is displayed dynamically and cyclically (blank).

f. In the centralized control locked status or the keypad locked status, the locking flag is displayed. After unlocking, it is not displayed. In the centralized controller locked status, the flag blinks at 0.5Hz; in the keypad locked status, the flag is displayed constantly. If both of them are locked concurrently, the flag is displayed constantly.

g. In the setting page, if the selected air conditioner is in the remote controller locked status (in case of non-single machine operation, as long as one machine is in the remote controller locked status, it is deemed the locked status), the flag is displayed constantly.

h. If all indoor units lock the cooling mode, this flag will display; if all indoor units lock the heating mode, this flag will display.

2) Data display handling

1. Indoor unit code (address) display: Display range: 00~63; with "#" being luminous concurrently.

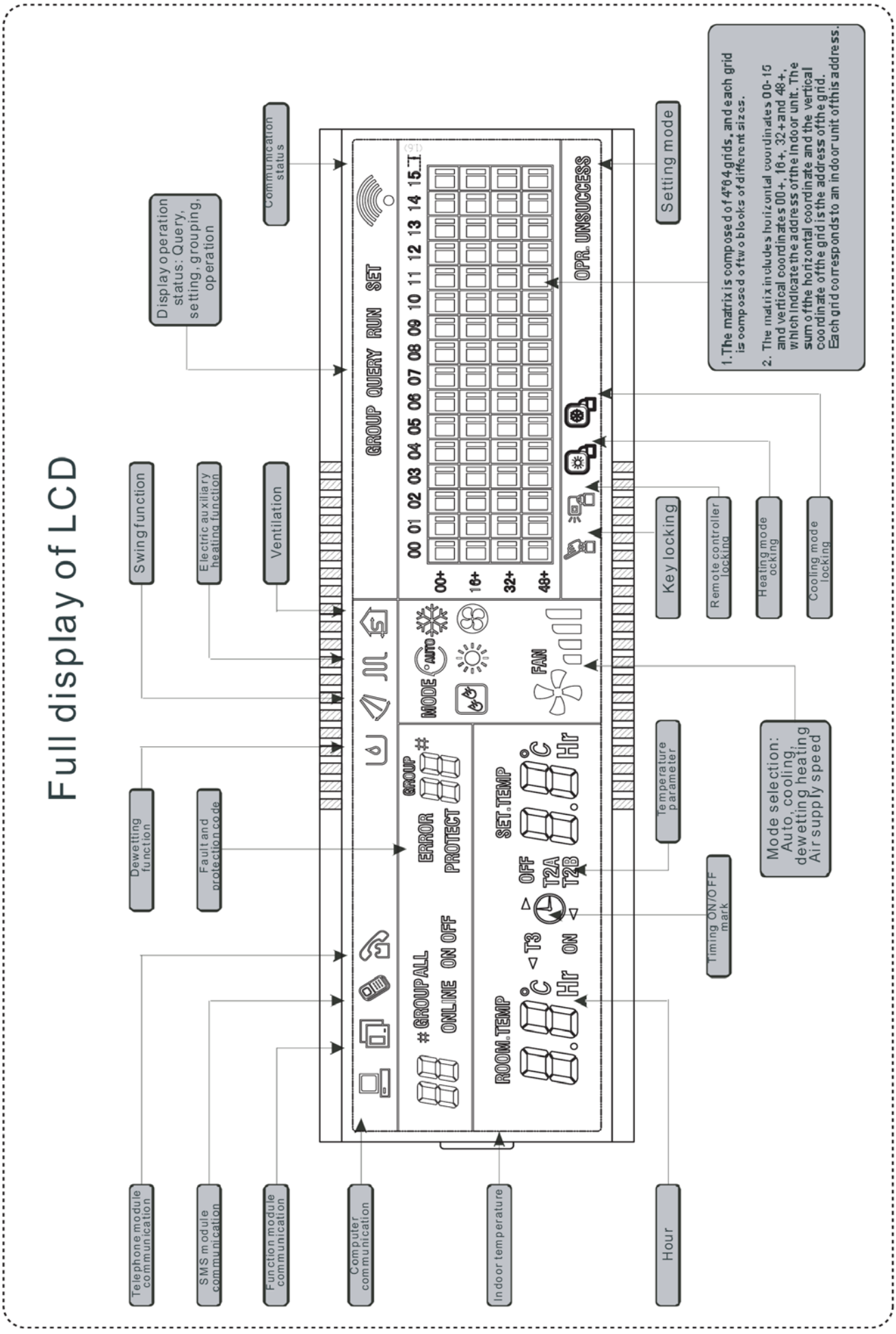
2. Indoor temperature display: Display range: 00~99°C. "°C" and "indoor temperature" are displayed concurrently. If the temperature is higher than 99°C, "_99°C" is displayed. If the temperature value is invalid, "—" is displayed.

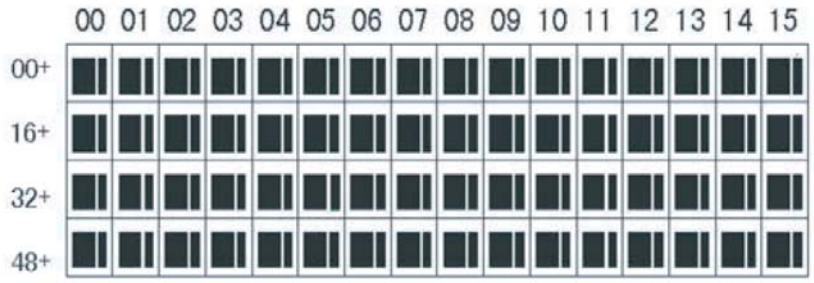
3. If timing startup/shutdown is set, the flag is displayed.

4. T3, T2A and T2B display: In the single-machine query page, display can shift between "T3", "T2A" and "T2B", and the temperature value is displayed concurrently, with the corresponding "°C" being luminous.

5. In case of air conditioner fault or protection, the corresponding fault code or protection code can be displayed.

6. Liquid crystal matrix display description:





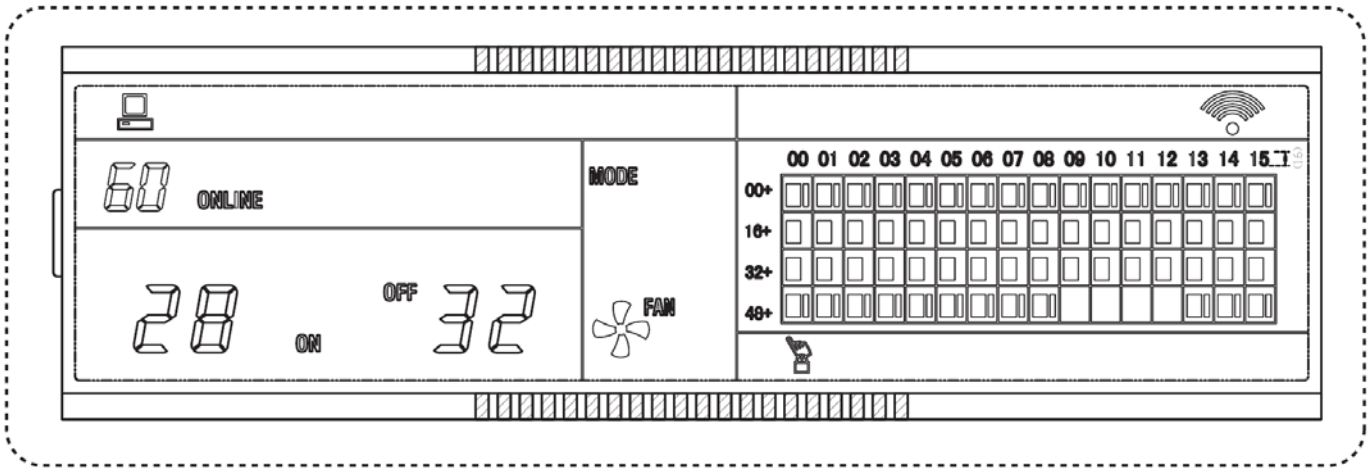
1. The liquid crystal matrix is composed of 4*64 grids, and each grid is composed of two blocks of different sizes (as shown in the above figure).

2. The matrix includes horizontal coordinates 00-15 on the upper side and vertical coordinates 00+, 16+, 32+ and 48+ on the left side, which indicate the address of the indoor unit. The sum of the horizontal coordinate and the vertical coordinate of the grid is the address of the grid. Each grid corresponds to an indoor unit of this address.

3. One grid is composed of two blocks of different sizes. The status indication table is as follows:

Status / Object	Constantly on	Slow blink		Fast blink
Big black block	In-service	Selected		Out of service
Small black block	Power on		Fault of indoor unit	Power off

LCD display description



1. Description of the standby page

1) The LCD displays the standby page, 60 air conditioners are in service, of which 28 are powered on and 32 off.

2) In the matrix, the big dots of (00, 16+) and (15,32+) are luminous, and the small dots are not luminous. It indicates the 32 air conditioners with the addresses from 16 to 47 are powered off.

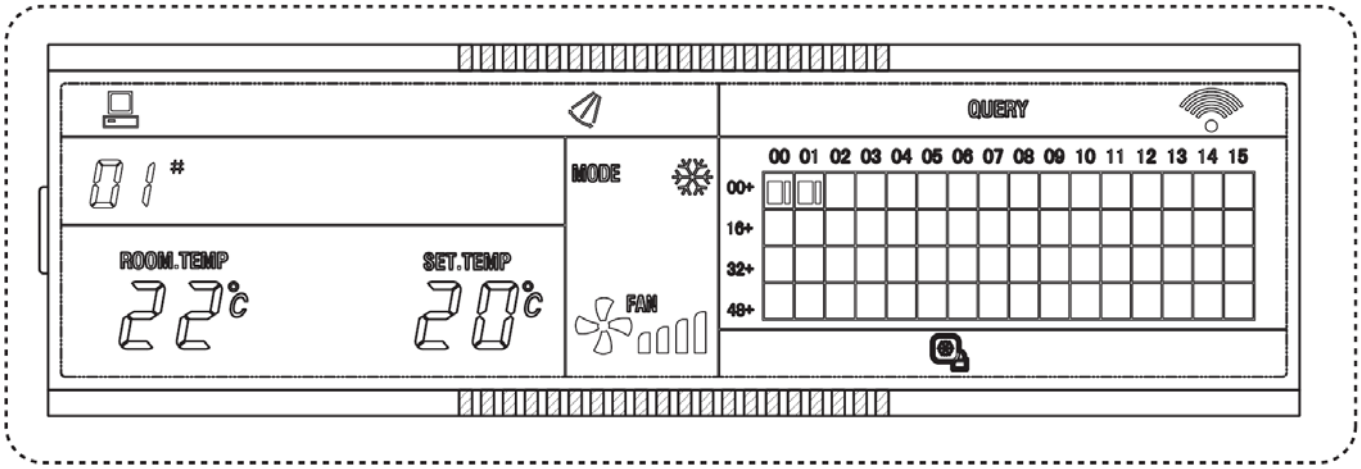
3) In the matrix, the big and small dots of (09, 48+) and (12, 48+) are not luminous. It indicates the four air conditioners with the addresses from 57 to 60 are outside the network.

4) All other big and small dots in the matrix are luminous. It indicates all other air conditioners are in the network and powered on.

5) The address of the air conditioner is sum of the coordinates. For example, the address of (09, 48+) is 09+48=57.

6) The centralized controller keypad is locked, and the centralized controller communicates with the computer normally.

2. Description of the query page

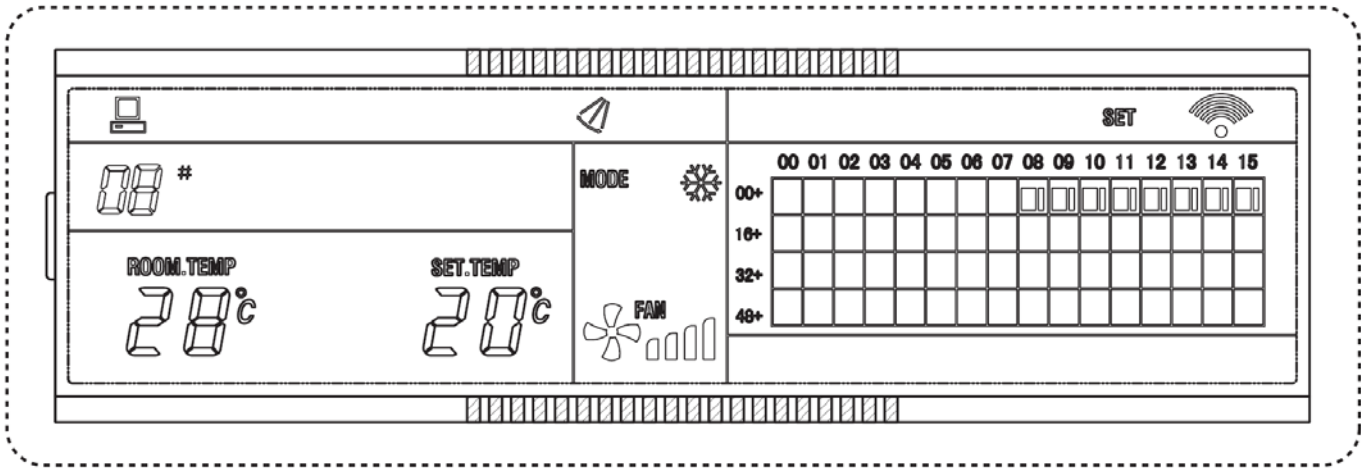


1) The LCD displays the query page, and the air conditioner with the address of 08 is being queried. Mode of the air conditioner with the address 01 is: Cooling, strong air, swing on, indoor temperature 22°C, set temperature 20°C, cooling mode “lock”.

2) In the matrix, only the big and small black dots at (00, 00+) and (01,00+) are luminous. It indicates the in-service and power-on status of the air conditioners with the addresses of 00 and 01.

3) The centralized controller communicates with the computer normally.

3. Description of the setting page

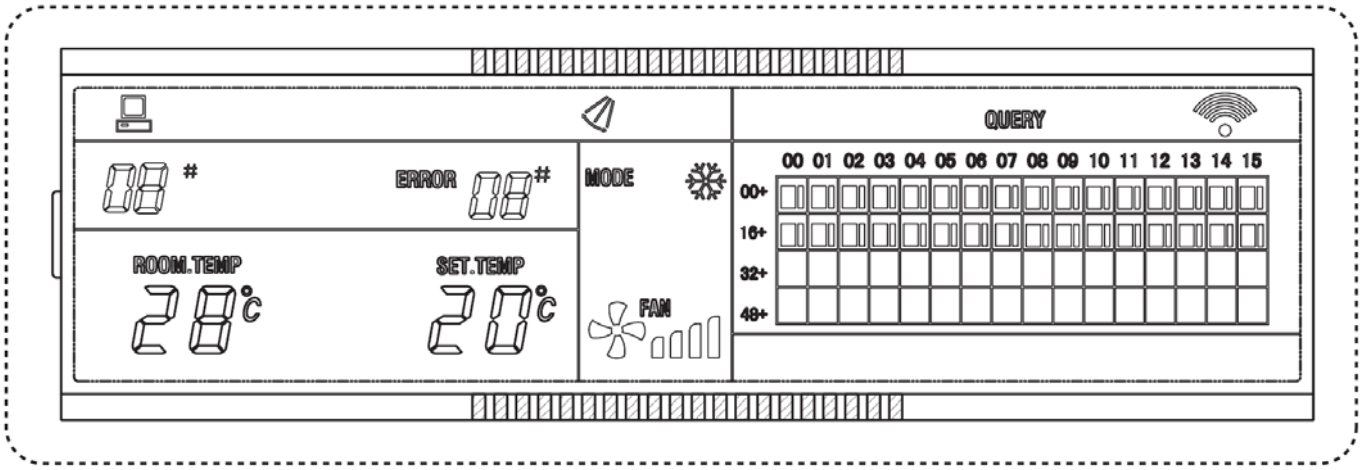


1) The LCD displays the setting page, and queries the air conditioner with the address of 08. The mode of the air conditioner with the address 08 is: Cooling, strong air, swing on, indoor temperature 28°C, set temperature 22°C, cooling.

2) In the matrix, only the big black dots from (08, 00+) to (16, 00+) are luminous. It indicates the air conditioners with the addresses from 08 to 16 are in service.

3) The centralized controller communicates with the computer normally.

4. Fault page display description



1) Query the air conditioner with the address of 08 in the query page. The air conditioner with the address of 08 is faulty, and the fault code is 08. The big black dot below (08, 0+) blinks.

2) In the matrix, only the big and small black dots from (00, 00+) to (16, 15+) illuminate. It indicates the in-service status of the air conditioners with the addresses of 00 and 01.

3) The centralized controller communicates with the computer normally.

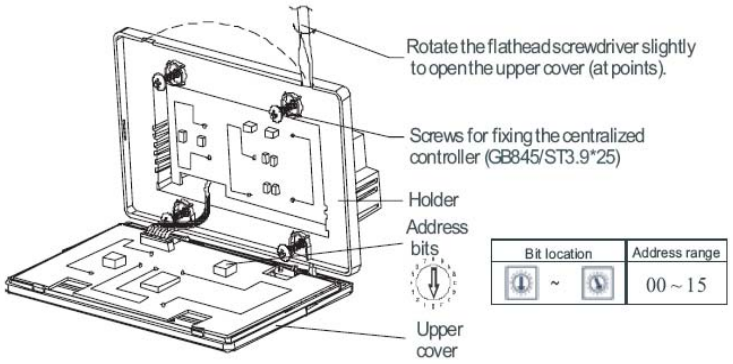
Fault and protection code table:

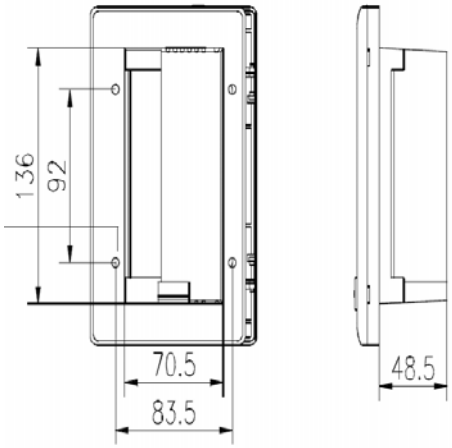
Fault code	Fault content
EF	Other faults
EE	Water level detection faults
ED	Outdoor unit fault protection
EC	Cleaning fault
EB	Inverter module protection
EA	Over-current of compressor (4 times)
E9	Fault of communication between main board and display board
E8	Air speed detection out of control
E7	EEPROM error
E6	Zero crossing detection error
E5	T3 or T4 or digital compressor discharge temperature sensor fault
E4	T2B sensor fault
E3	T2A sensor fault
E2	T1 sensor fault
E1	Communication fault
E0	Phase order error or phase loss
07#	
06#	
05#	
04#	
03#	
02#	
01#	Fault of communication between centralized controller and computer (gateway)
00#	Fault of communication between centralized controller and functional module
	Fault of communication between centralized controller and network interface module
	Fault of communication between network interface module and main control board
PF	Other protection
PE	Reserved
PD	Reserved
PC	Reserved
PB	Reserved
PA	Reserved
P9	Reserved
P8	Over-current of compressor
P7	Power supply over-voltage and under-voltage protection
P6	Discharge low pressure protection
P5	Discharge high pressure protection
P4	Discharge pipe temperature protection
P3	Compressor temperature protection
P2	Condenser high-temperature protection
P1	Anti cool air or defrost protection
P0	Evaporator temperature protection

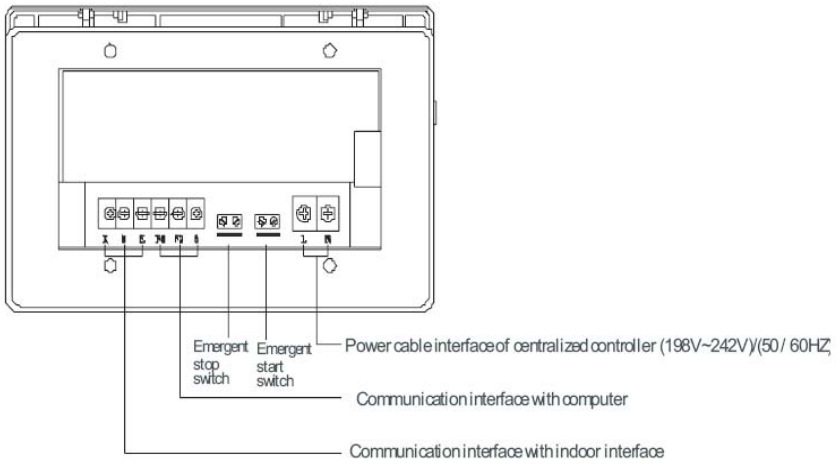
Technical indices and requirements:

1. EMC and EMI comply with the CE certification requirements.
2. The electric safety complies with the requirements of GB4706.32-2004 and GB/T7725-2004.

Dimension:


Rotate the flathead screwdriver slightly to open the upper cover (at points).
Screws for fixing the centralized controller (GB845/ST3.9*25)
Holder
Address bits
Bit location
Address range
~
00 ~ 15
Upper cover

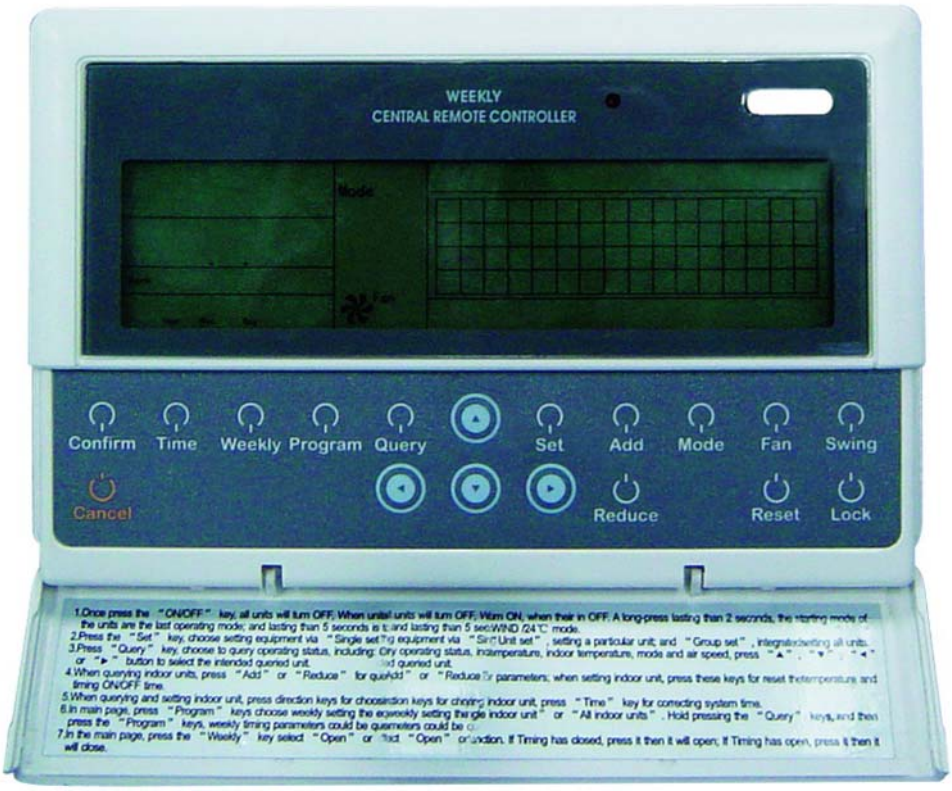

136
92
70.5
83.5
48.5


Emergent stop switch
Emergent start switch
Power cable interface of centralized controller (198V~242V)(50 / 60HZ)
Communication interface with computer
Communication interface with indoor interface

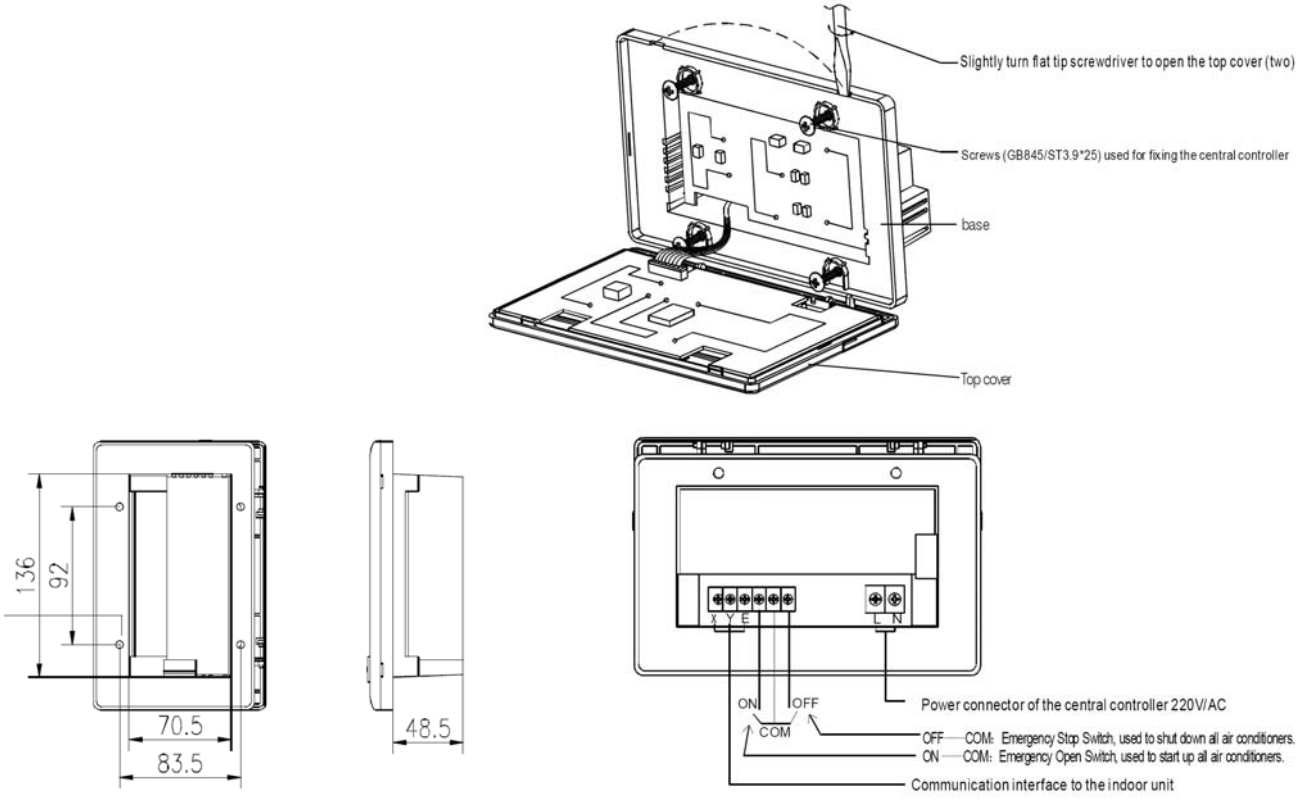
CCM09:

Designed base on the CCM03, max. 64 indoor units control, weekly schedule timer function.

Note: It can't be connected to the network control system.

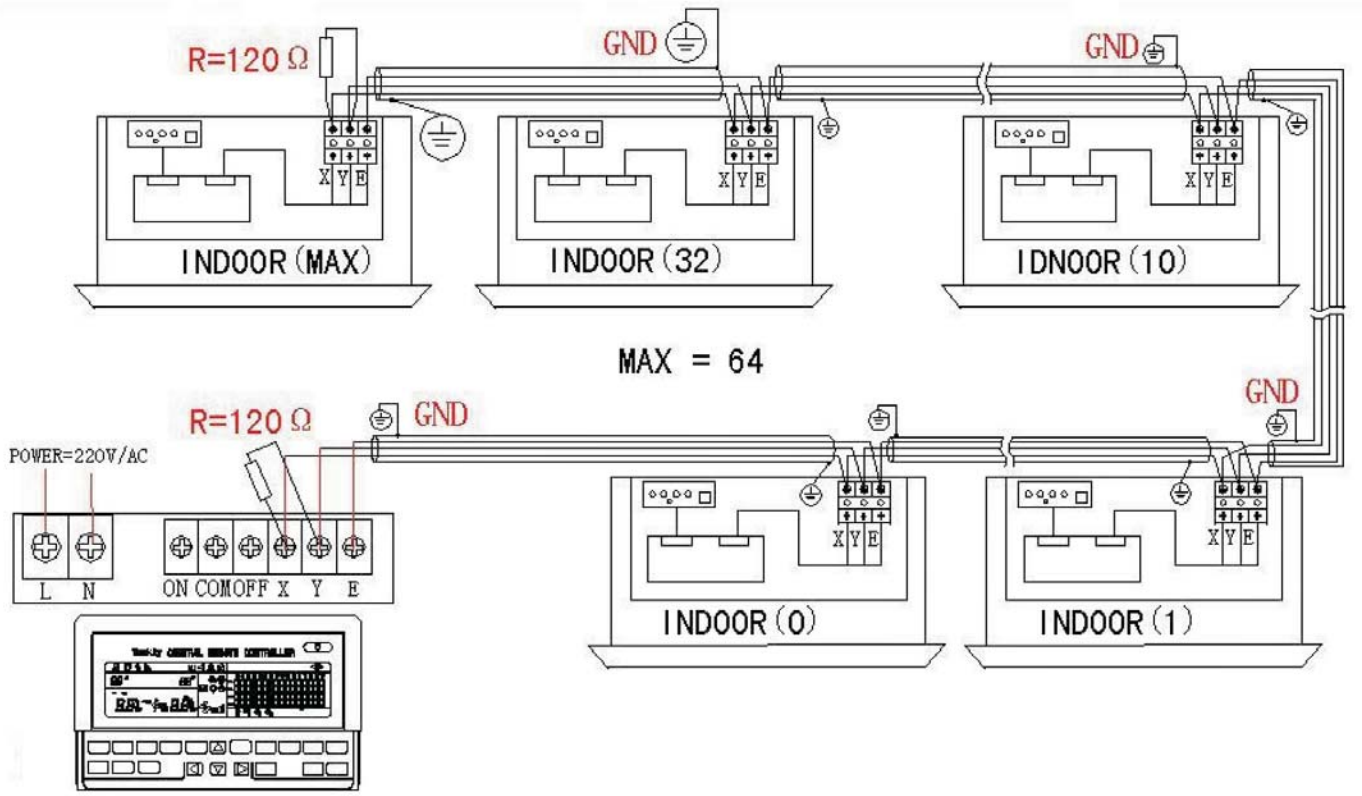


Dimension:

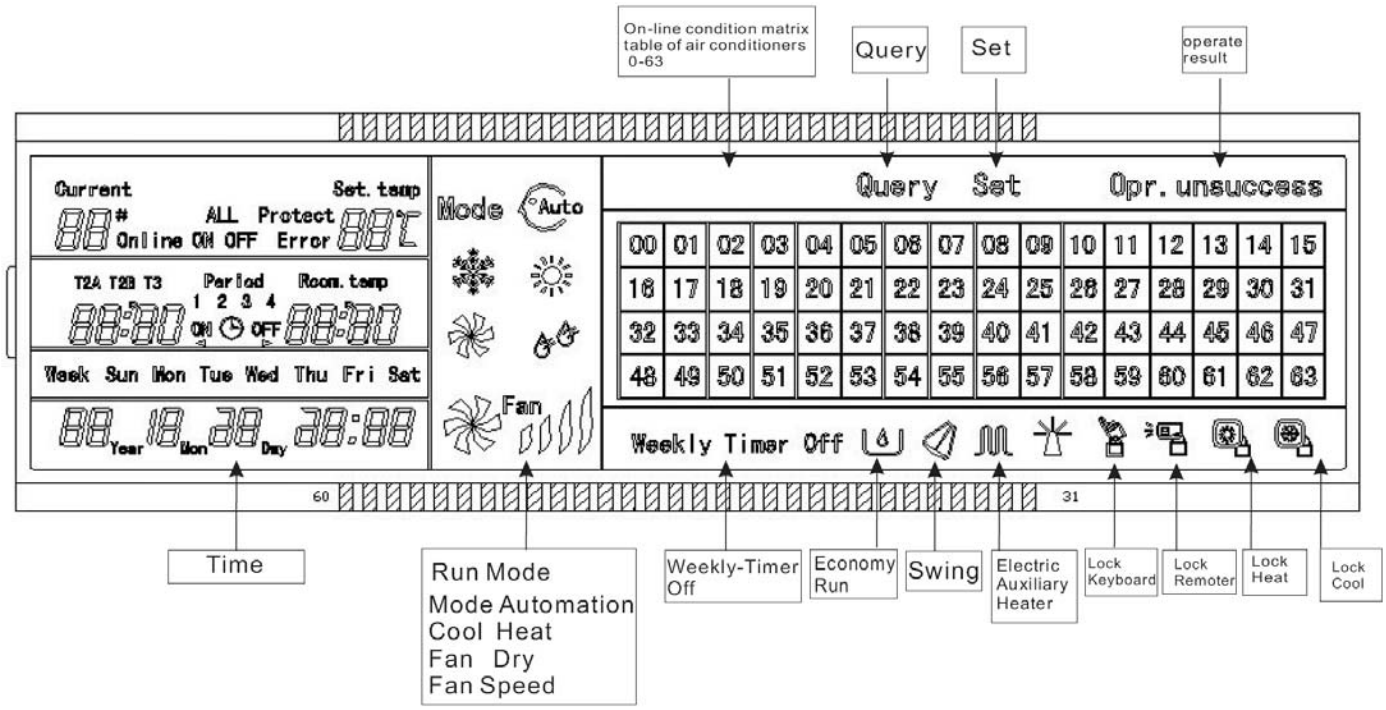


Installation Method:

Connecting diagram of network-based air conditioning system (There are two types of indoor units, namely indoor unit with external network interface module on the main control board or built-in network interface module in the main control board.)



General drawing of the liquid crystal display of the weekly-timer central controller:

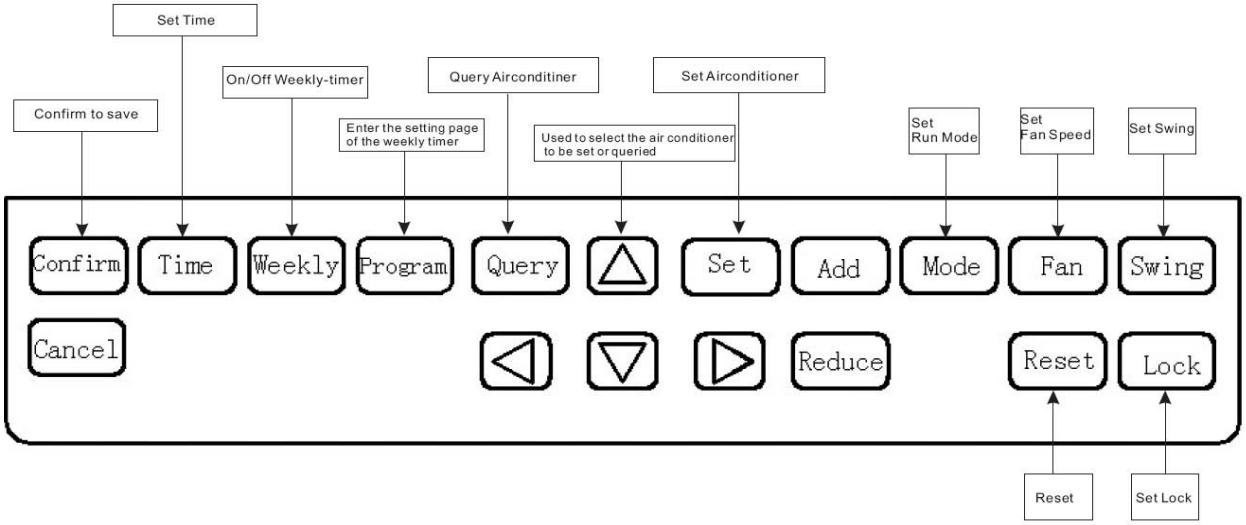


LCD icon description of the weekly-timer central controller:

Icon	Meaning	Icon	Meaning
Auto	Automation Mode		Fan Only Mode
	Cool Mode		Dry Mode
	Heat Mode	Fan	Fan Speed High/Middle/Low
	Electric Auxiliary Heater		Lock Heat
	Lock Cool		Lock Remoter
	Lock Keyboard	Set	Setting
Query	Querying	Opr. unsuccess	Operate Result
Weekly Timer Off	Weely Timer Off	ALL	All
Online	Online	Protect	Protecting
Error	Error	Set. temp	Set Temperature
Period 1 2 3 4	Period1、2、3、4	Room. temp	Room Temperature
T2A T2B T3	T2A Indoor pipe Temperature A T2B Indoor pipe Temperature B T3 Outdoor pipe Temperature	Mon	Monday
Tue	Tuesday	Wed	Wednesday
Thu	Thursday	Fri	Friday
Sat	Saturday	Sun	Sunday

Key description of the weekly-timer central controller:

General Key layout of the weekly-timer central controller:



Key instructions of the weekly-timer central controller:

Key Name	Usage
	Press the ON/OFF button. All air conditioners will be shut down if they are running; on the contrary, they will be started up. If you press the button for less than 5 seconds, the startup mode is the last running mode of the air conditioner. If you press the button for more than 5 seconds, the startup mode is cooling, high Speed, 24 degrees.
Set	Press the “SET” button, and then select “set single” or “set all”. “set single” indicates to set the parameter (such as mode/ temperature/Fan speed/ weekly timer) of an selected air conditioner. “set all” indicates to set the parameter of all air conditioners controlled by the central controller.
Query	Press the “query” button to query the running condition of the air conditioner, such as on/off, temperature setting, indoor temperature, running mode and Fan speed. Press “up”, “down”, “Left” and “right” to select the air conditioner that you want to query.
	When querying or setting the indoor unit, press the “up” to select the indoor unit to be set or queried.
	When querying or setting the indoor unit, press “down” to select the indoor unit that you want to set or query.
	When querying or setting the indoor unit, press “Left” to select the indoor unit to be set or queried. In setting the weekly timer, it is used for selecting the day of the week and the time of startup and shutdown.
	When querying or setting the indoor unit, press “right” to select the indoor unit to be set or queried. In setting the weekly timer, it is used for selecting the day of the week and the time of startup and shutdown.
Add	When querying the indoor unit, press the “Add” button to query more parameter of the indoor unit. In setting the indoor unit, it is for modifying the setting temperature. In setting the weekly timer, it is for modifying the time of startup and shutdown.
Reduce	When querying the indoor unit, press the “Reduce” button to query more parameter of the indoor unit. In setting the indoor unit, it is for modifying the setting temperature. In setting the weekly timer, it is for modifying the time of startup and shutdown.
Mode	In setting the indoor unit, it is used for setting the running mode of the indoor unit which includes Automation, Cool, Heat, Fan Only, Dry and Off. You can select among them.
Fan	In setting the indoor unit, it is for setting the wind speed of the indoor unit which includes high speed, middle speed, low speed and automatic speed. You can select among them.
Swing	In setting the indoor unit, it is for setting the swing-function of the indoor unit. The running mode is selected between “swing-on” and“ swing-off”.
Lock	When setting, press the “Lock” button to lock the remote controller of all or single indoor unit. Press the “Query” button and hold under the main page, then repress the“ Lock” button again to lock the keyboard of the central controller; press the “Mode” button and then repress the “Lock” button to lock the running mode.
Reset	The central controller re-scans the indoor unit in the network as recharging after power off.
Program	Under the main page, press the “Program” button to set the weekly timer of “single indoor unit” or “all indoor units”. Press the “Query” button and hold, and then press the “Program” button to query the weekly timer parameters of the indoor unit.
Weekly	Under the main page, press the “Weekly” button to start up or shut down the weekly timer function. .
Time	Under the main page, press the “Time” button for 5 seconds to enter the time-modifying status, and then press “Add” or “Reduce” button to modify the time. Press “Left” or “Right” to select minute/ hour/ day/ month/ year. Finally, press the “Confirm” button to save the modification.
Confirm	Save data and send the command required to the indoor unit, such as setting the mode of the air conditioner.
Cancel	Cancel the last operation and return to the last interface.

2-1 Query Button
Push it to enter into the query state.

2-2 Previous Button
On the query state, push it to query in default the running states of other online air-conditioners.

2-3 Next Button
On the query state, push it to query in default the running states of other online air-conditioners.

2-4 Page Up Button
Pushing the Page Up button when choosing a online air-conditioner on the query state can display the parameters in previous page, and this can be cycled.

2-5 Page Down Button
Pushing the Page Down button when choosing a online air-conditioner on the query state can display the parameters in next page, and this can be cycled.

2-6 Set Button
Press Set button enter into Set Page.

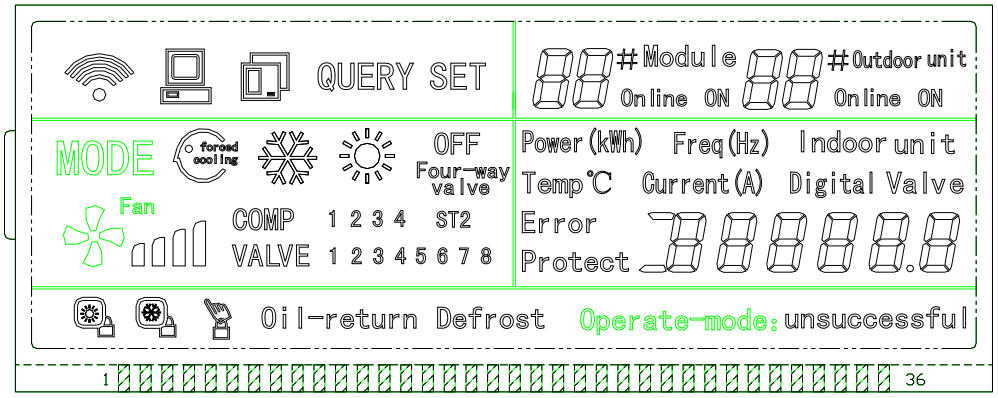
2-7 Mode Button
Pressing OK button to enter into Mode Set, and select circularly between Forced Cooling and OFF state.

2-8 OK Button
Pressing OK button to confirm all setting and send to the corresponding air-conditioners.

2-9 Lock Button
All the other button will not be on controlled anytime when pushing the button, and unlock happens when push it again.

2-10 Address Set Button
In Set page, pressing the Set button repeatedly, the address will be increased one by one. When the address is equal 31 and you press once more, the address will restart from 16.

3) Data



3-1 Common Display Data:

3-1-1 Figure means CCM is sending query order.

3-1-2 Figure means CCM is in communication with PC, and it will be off in 20 seconds with no communication.

3-1-3 Figure means CCM is in communication connection with outdoor unit, and it will be off in 20 seconds with no communication.

3-1-4 Press the OK button in setting page and waiting for 4 seconds, “success” or “fail” will be shown in the operation state area.

3-2 Stand-by Page Display:

3-2-1 Figure #Module Online ON means the total number of online modules

3-2-2 Figure #Outdoor unit Online ON means the total number of online units

3-2-3 Stand-by Page can display the address of CCM with the address format of “Addr XX”, here ”XX” equals the real address of CCM plus 16,so the range of “XX” is 16-31.

3-3 Query Page Display:

3-3-1 Query Page Display the symbol of query

3-3-2 Displaying the address of selected outdoor unit with #Module and #Outdoor unit

3-3-3 Mode display : means cool, means heat, OFF means shut off, means locked cool, means locked heat.

3-3-4 Fan Speed Display: means low speed, means middle speed, means high speed.

3-3-5 Compressor State Display: “COMP. 1 2 3 4 5 6”

3-3-6 Electromagnetism Valve Display: “EMV. 1 2 3 4 5 6”

3-3-7 4-Way Valve Display “4-ways valve” St2

3-3-8 Defrost Display: “Defrost”

3-3-9 Oil Return Display: “OIL RETURN”

3-3-10 Page 0 displays the consumption of electric energy with “ELECTRIC ENERGY Kwh” and the number.

3-3-11 Page 1 displays the input power frequency with “Frequency Hz” and the number.

3-3-12 Page 2 displays the total number of indoor units.

3-3-13 Page 3 displays the temperature symbol T3 with “TEMP.℃”, “T3” and the number.

3-3-14 Page 4 displays the temperature symbol T4 with “TEMP.℃”, “T4” and the number.

3-3-15 Page 5 displays the temperature symbol T6 with “TEMP.℃”, “T6” and the number.

3-3-16 Page 6 displays the discharge temperature of compressor symbol C1 with “TEMP.℃”, “C1” and the number.

3-3-17 Page 7 displays the discharge temperature of compressor symbol C2 with “TEMP.℃”, “C2” and the number.

3-3-18 Page 8 displays the discharge temperature of compressor symbol C3 with “TEMP.℃”, “C3” and the number.

3-3-19 Page 9 displays the compressor current symbol 1 with “CURRENT A”, “1” and the number.

3-3-20 Page 10 displays the compressor current symbol 2 with “CURRENT A”, “2” and the number.

3-3-21 Page 11 displays the compressor current symbol 3 with “CURRENT A”, “3” and the number.

3-3-22 Page 12 displays the digital capacity with “DIGITAL CAPACITY” and the number.

3-3-23 Page 13 displays the openness of electromagnetism valve symbol 1 with “VALVE OPENNESS”,”1” and the number.

3-3-24 Page 14 displays the openness of electromagnetism valve symbol 2 with “VALVE OPENNESS”,”2” and the number.

3-3-25 Page 15 displays the most advanced malfunction with “MALFUNCTION” and the code.

3-3-26 Page 16 displays the most advanced protection with “PROTECTION” and the code.

NOTE:

The page will increase or decrease by 1 every time you press “PAGE UP” or “PAGE DOWN”.

Select the online outdoor unit by push the “previous” or “next” freely.

3-4 SET PAGE DISPLAY:

3-4-1 Set Page Displays” Set”

3-4-2 Mode display: Pressing MODE button to enter into MODE set, and select circularly between Forced Cooling 

and OFF state.

3-4-3 Set page displays the address of selected outdoor units and module.

3-4-4 Pressing OK button to confirm all setting and send to the corresponding air-conditioners.

3-4-5 “Successful” or “Unsuccessful” shown in the operation state area indicates whether the transmission is confirmed or not.

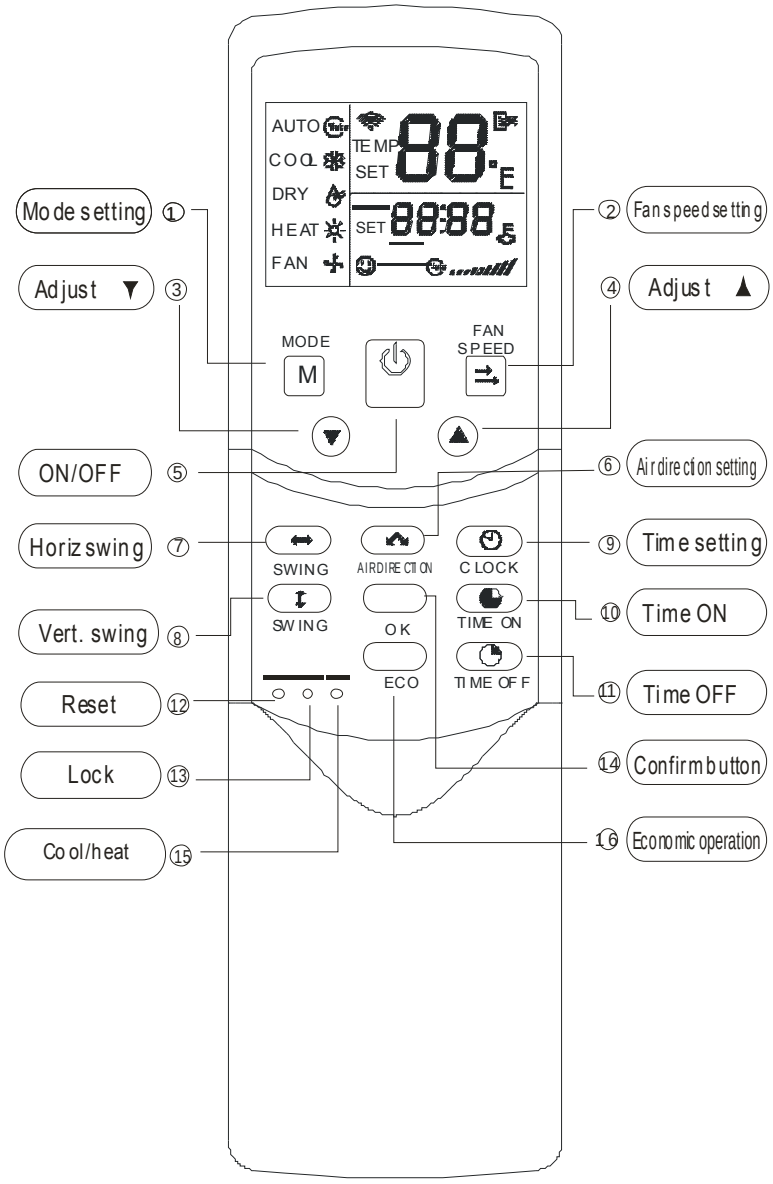
4) Malfunction and Protection Code Table

Error Code	Error Contents	Description	Error Code	Error Contents	Description
H3	Outdoor Adding Malfunction (Valid For Host Unit)		Pa	Defrost Protection	
H2	Outdoor Decreasing Malfunction (Valid For Host Unit)		P8	Compressor Current 3rd Preotection	
H1	Net Communiction Malfunction		P7	Compressor Current 2rd Preotection	
Ef	Other Malfunction		P5	Condenser High Temp Protection	
E4t4	Temp Sensor Malfunction		P4	Discharge Pipe Temp Protection	
E3t3	Temp Sensor Malfunction		P3	Compressor Current 1st Protection	
E2	Sensor Malfunction		P2	Discharge Low-Pressure Protection	
E1	Phase Sequence Or Lack Of Phase		P1	Discharge High-Pressure Protection	
E0	Communiction Malfunction		P0	Compressor High Temp Protection	
Pf	Othe Protection				
Pe	Oil Balance				
Pd	Oil Return				

3. Control System

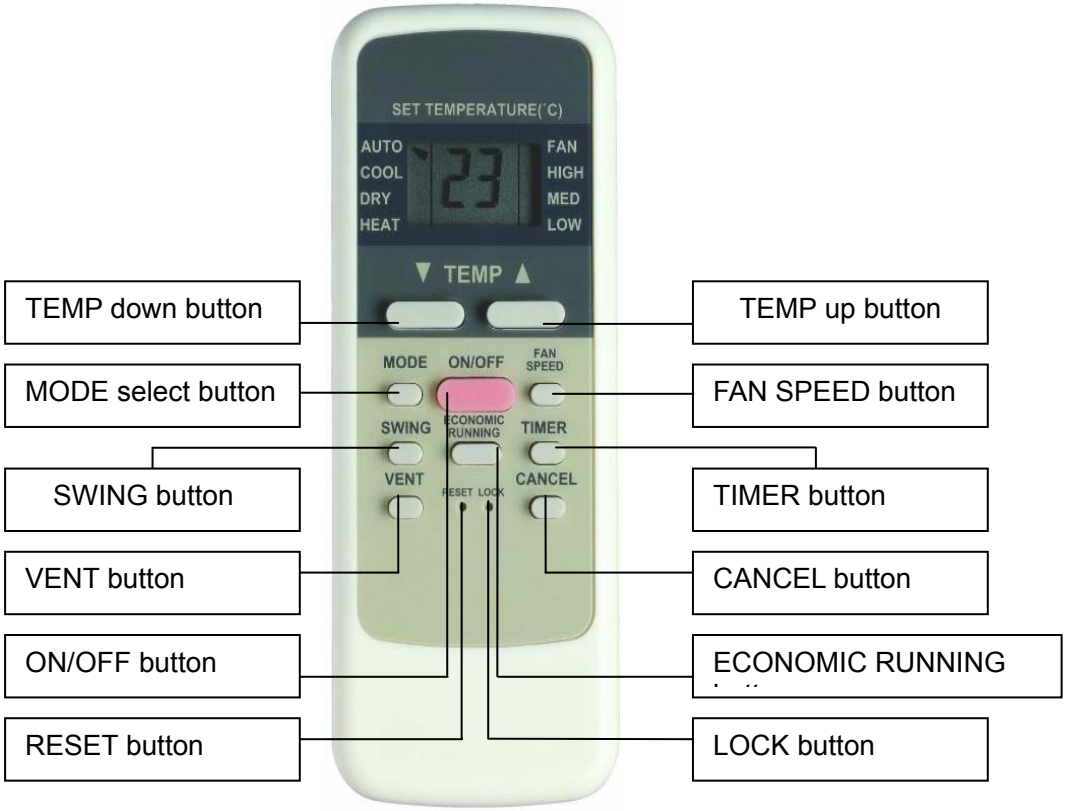
3.1 Remote Controller

3.1.1 R05



Visual photo

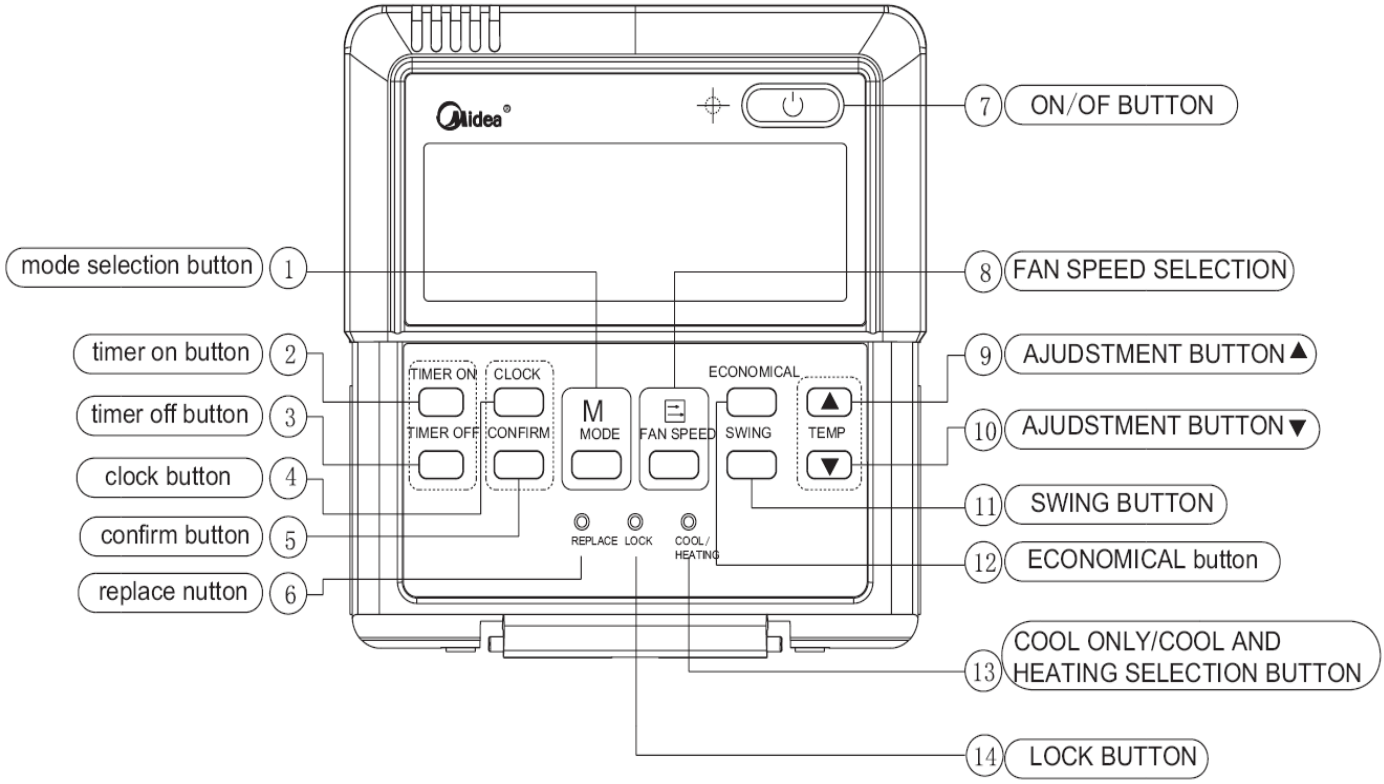
3.1.2 R51


SET TEMPERATURE(°C)
AUTO
COOL
DRY
HEAT
23
FAN
HIGH
MED
LOW
▼ TEMP ▲
MODE
ON/OFF
FAN SPEED
SWING
ECONOMIC RUNNING
TIMER
VENT
CANCEL
RESET
LOCK
TEMP down button
TEMP up button
MODE select button
FAN SPEED button
SWING button
TIMER button
VENT button
CANCEL button
ON/OFF button
ECONOMIC RUNNING
RESET button
LOCK button

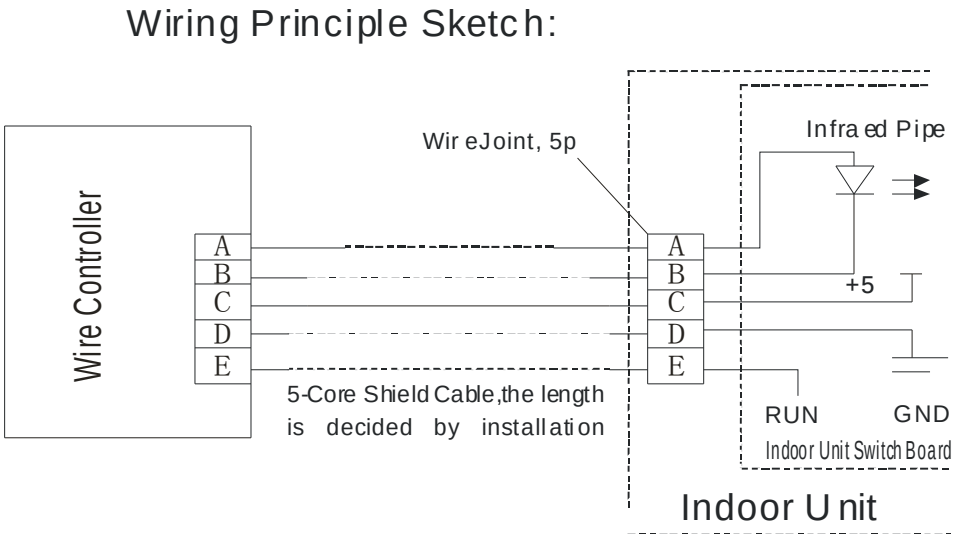
3.2 Wired controller

3.2.1KJR-10B

1) Outlook



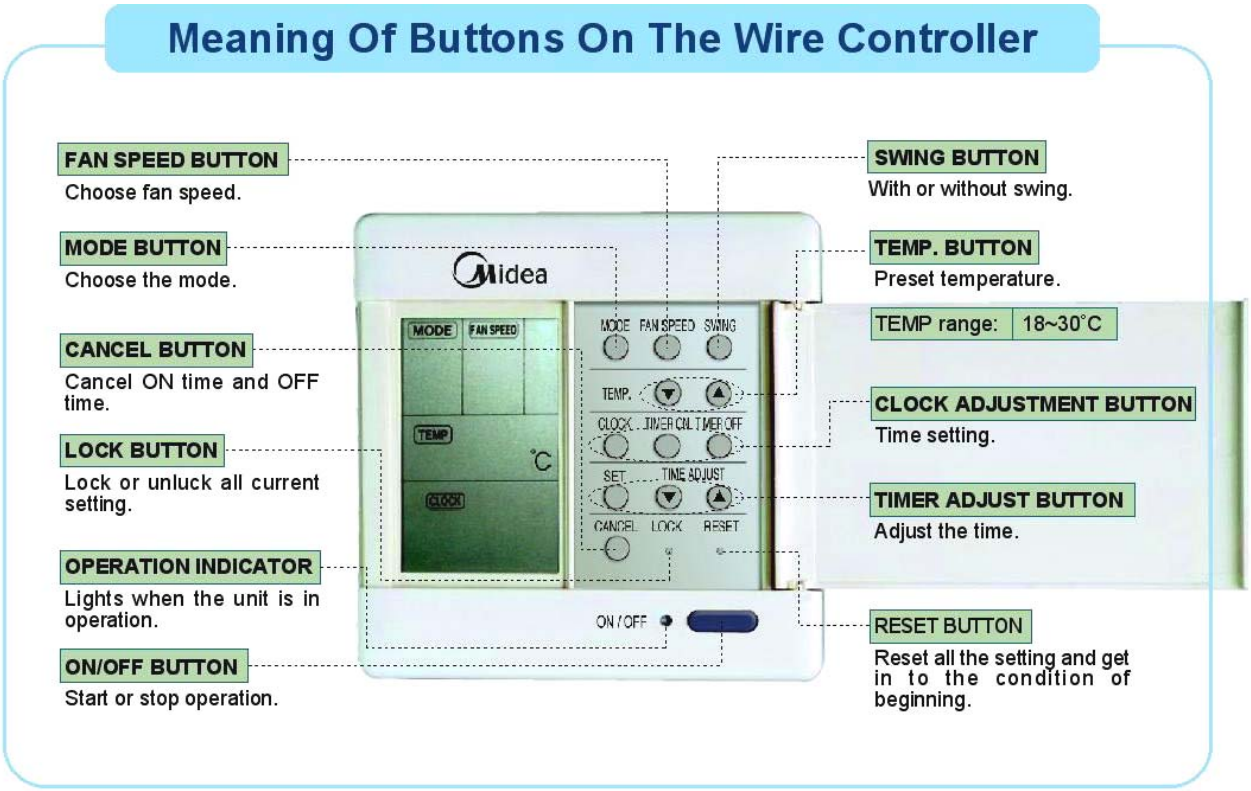
2) Installation



Note:
When the air conditioner needs the constant frequency wire Controller. Be sure adding a Wire Joint with 5 terminal named A, B, C, D, E in indoor unit. And fixing a infrared emitter whose anode and cathode connecting with A and B near the receiver in the Indoor Unit Switch Board, then connecting the terminal +5V, GND, Run in the Switch Board to C, D, E respectively.

3.2.2KJR-01B

1) Outlook



General constant wire controller is available for cooling & heating type as default Its function of Mid-speed Fan can be adjusted by the dial switch (Sw1) in the main panel of wire controller, which is shown as follows:

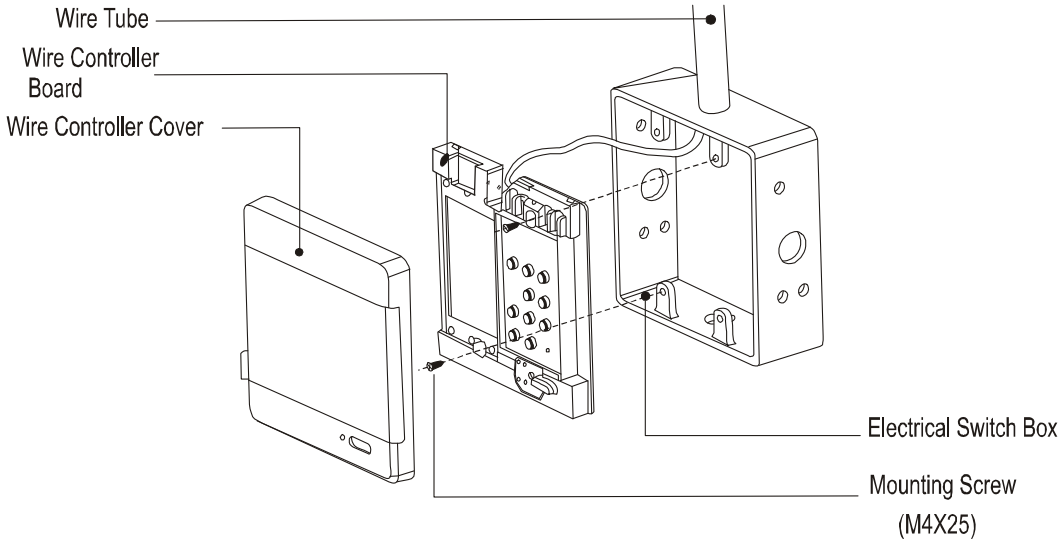
 SW1	 SW1	 SW1	 SW1
1 ON 2 ON	1 ON 2 OFF	1 OFF 2 ON	1 OFF 2 OFF
Mid-speed Fan cooling&heating	Mid-speed Fan cooling only	No mid-speed Fan cooling&heating	No mid-speed Fan cooling only

Customers can adjust it according to the model and their requirement. It is necessary to re-electrify after adjustment.

2) Installation

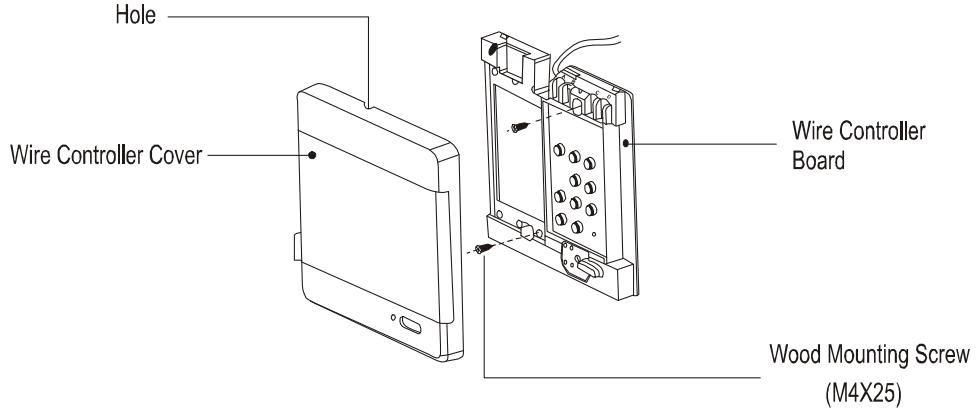
2-1 Installation into the wall

The diameter of Wire Controller wire must be suitable for its length. Wiring Tube must be suitable for the wires. Remove a screw at the concave on bottom panel of the Wire Controller to dismantle the Cover.



2-2 Installation on the wall

Cut a hole that can let a Three-cores Rubber Insulating Screen Cable pass by from the middle of Wire Controller Top Cover before installation.



NOTE:

- Never turn screw too tightly, or else the cover may be dented, or cause the Liquid Crystal break.
- Don't cut wires when install Wire Controller cover.

3.3 Weekly Timer (CCM04)

3.5.1 Outlook

3.5.2General Introduction

1) Summarize

Using condition:

1-1 Power Supply: 5V DC.

1-2 Operation temperature: -15℃ - +43℃.

1-3 Operation Humidity: 40% - 90%, RH.

2) Function Summary

Main Function:

2-1 Connecting to indoor unit by +5V, E, X, Y, E terminal.

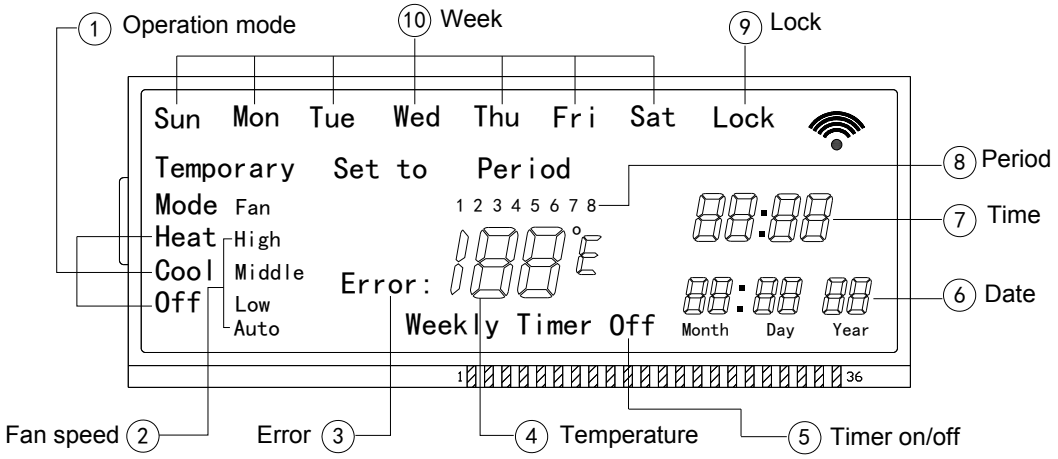
2-2 Button setting action mode.

2-3 LCD display.

2-4 Timer for every week.

3.5.3 Operation

1) Meaning of Screen displayed



1-1 Operation mode indication: When press “MODE” and “ADD” or “REDUCE” button, the following mode can be selected in circle: Cool – Heat – Off.

For cooling only model, heating only mode should be shipped.

1-2 Fan speed indication: There are four fan modes: low, middle, high, auto. For some models, no middle fan then the middle fan is seen as high speed.

1-3 Fault indication.

1-4 Temperature indication.

1-5 Weekly Schedule Controller switch indication.

1-6 Data indication.

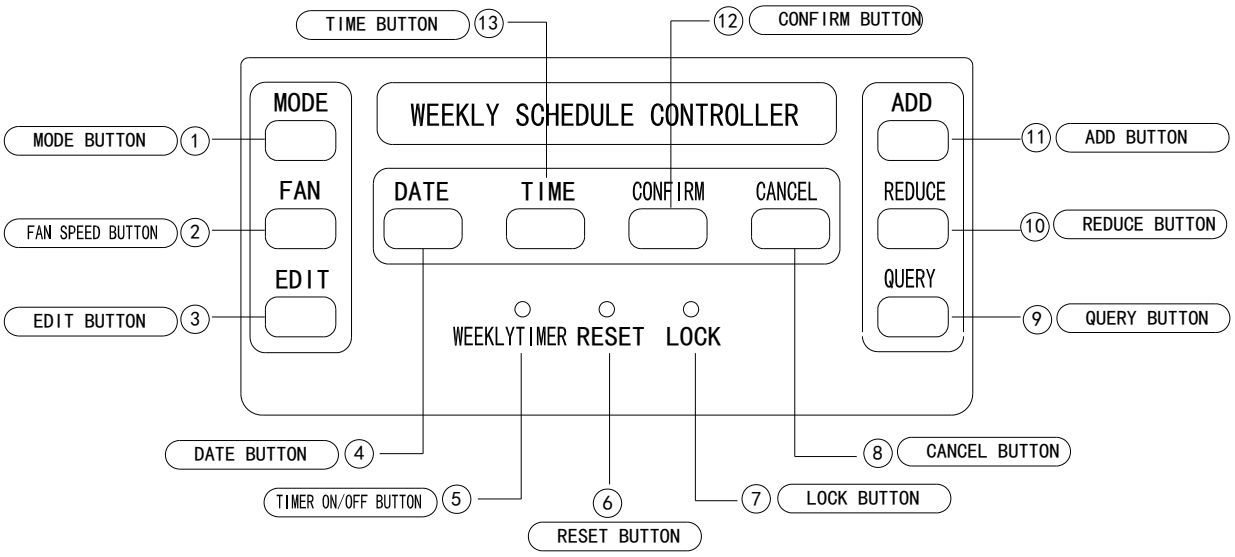
1-7 Time indication.

1-8 Period indication.

1-9 Lock indication.

1-10 Week indication.

2)Operation of the buttons



2-1 Mode button: When press this button and ADD or REDUCE button to select Heat or Cool or Off, Press Confirm to save and back.

Remark: For the cooling only model, the heating mode should be skipped.

2-2 Fan speed button: Press this button and ADD or REDUCE button to select of High or Middle or Low or Auto, press Confirm to save and back.

2-3 Edit button: When press this button, can setup Week and Data and Period.

2-4 Day button: Press this button and ADD or REDUCE button to select data, Press Confirm to save and back.

2-5 Timer on/off button: Press this button, can turn off the weekly timer function.

2-6 Reset button: When press this button, All of the display part of LCD will be light last 2 second when weekly timer has been electrified or reset. Following the lamp will be closed and last 1 second. So the system will come into normal display state and need to carry out initial setting.

2-7 Lock button: Press this button, weekly timer come into lock mode, Press LOCK again, lock mode is unchained at once. Weekly timer lock mode state can not be canceled when weekly timer has come back to supply power after interruption of power supply.

2-8 Cancel button: It is used for not saving and retreating, or to cancel the lock.

2-9 Query button: Press “Query” select “query” present temperature value press “Cancel” to back, press” Confirm” time section parameters’ setting: Press “Add” or” Reduce” to select several days from “Sun” to “Sat” 7 days, press “Confirm” : “1”~”8” time section selection, beginning from N0.1 time section, setting mode, fan’s velocity, starting time and end time, till 8 time sections are finished press” Confirm” to save press “Cancel” to retreat.

2-10 Reduce button: It is used for reducing to numbers and moving left or up to the other.

2-11 Add button: It is used for adding to numbers, and moving right or down to the other.

2-12 Confirm button: It is used for confirm selection.

2-13 Time button: When press button, and press “Add” or “Reduce” to adjust the hours value, press” Confirm” adjust minutes: press “Add” or” Reduce” to adjust the minutes value, press” Confirm” to save and back.

3)Using method

Cool / Heat / Fan mode operation

3-1 Press “Mode” button, select “Cool”, “Heat”, or “Off” mode.

3-2 Press “Add/Reduce” button to select setting temperature.

3-3 Press ”Fan” button to select high / mid / low / auto.

Normal timer setting

In normal page display: Press Edit button setting page display of weekly timing, Press Add or Reduce button to select one day range from Monday to Sunday and press Confirm button to enter into Time Setting of this day (Similar to the initialization setting). Analogically finish 8 period of time setting.

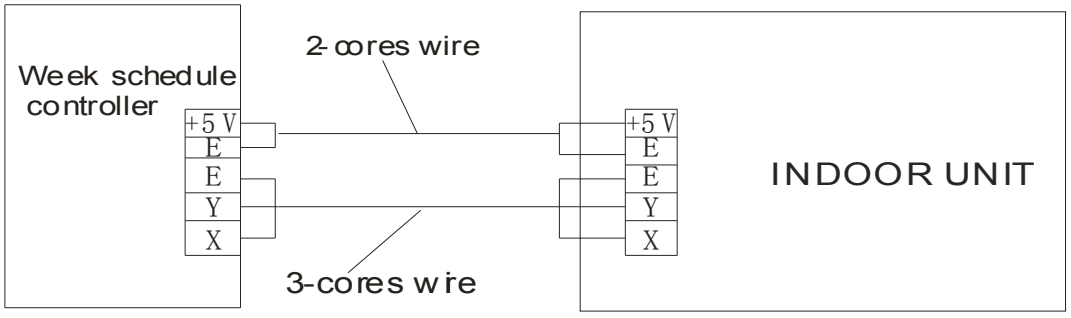
Temporary timer setting

In normal page display: Press Mode, Fan, Add or Reduce button to enter into “TEMPORARY SETTING” page press Mode to select and press Confirm to return. “Temporary” will remain ON. For Fan mode it is the same. After pressing Cancel button “Temporary” will be off.

Query setting

Press Query button to show the current indoor temperature, Press Cancel backward. Press Confirm to enter into Query page of period setting. Press Add or Reduce to select and press Confirm to query the time period of the day. Press Add or Reduce button to select and Confirm button to query the parameters of the period. Press Cancel to Quit.

3.5.4 Installation



When a weekly schedule controller is needed, A small 2-cores wire and 3-cores wire should be added. Connect with same color.