

1-way Cassette Type

MMU-UP0031YHP-E/TR
MMU-UP0051YHP-E/TR
MMU-UP0071YHP-E/TR
MMU-UP0091YHP-E/TR
MMU-UP0121YHP-E/TR



Contents

1. Specification
2. Dimensions
3. Center of gravity
4. Piping diagram
5. Wiring diagram
6. Electrical characteristics
7. Sensible capacity table
8. Air flow distance chart
9. Sound data
- 10 Accessories

1. Specifications

Model name			MMU-	UP0031YHP-E/TR	UP0051YHP-E/TR	UP0071YHP-E/TR	UP0091YHP-E/TR	UP0121YHP-E/TR
Power supply				1 ph 50Hz 220-240V (Separate power supply for indoor units is required.)				
Cooling capacity (*1)			(kW)	0.9	1.7	2.2	2.8	3.6
Heating capacity (*1)			(kW)	1.3	1.9	2.5	3.2	4.0
Running current			(A)	0.15	0.15	0.18	0.19	0.20
Power consumption			(kW)	0.015	0.015	0.017	0.018	0.018
FCU dimension	Unit	Height	(mm)	150				
		Width	(mm)	990				
		Depth	(mm)	450				
	Panel	Height	(mm)	30				
		Width	(mm)	1220				
		Depth	(mm)	530				
Total weight	Unit	(kg)	14					
	Panel	(kg)	4					
Heat exchangere				Finned tube				
Soundproof / Heat-insulation material				Non-flammable insulation				
Air flow volume	Indoor unit (H/M/L)	(m3/h)	480/370/270	480/370/270	500/390/270	520/410/290	540/420/290	
Sound pressure	Indoor unit (H/M/L)	dB(A)	37/33/25	37/33/25	38/34/25	39/35/26	40/36/26	
Fan				Cross Flow Fan				
Motor output			(W)	30.0				
Conecting pipe	Gas side	(mm)	Ø 9.52					
	Liquid side	(mm)	Ø 6.35					
	Drain pipe	(mm)	25					

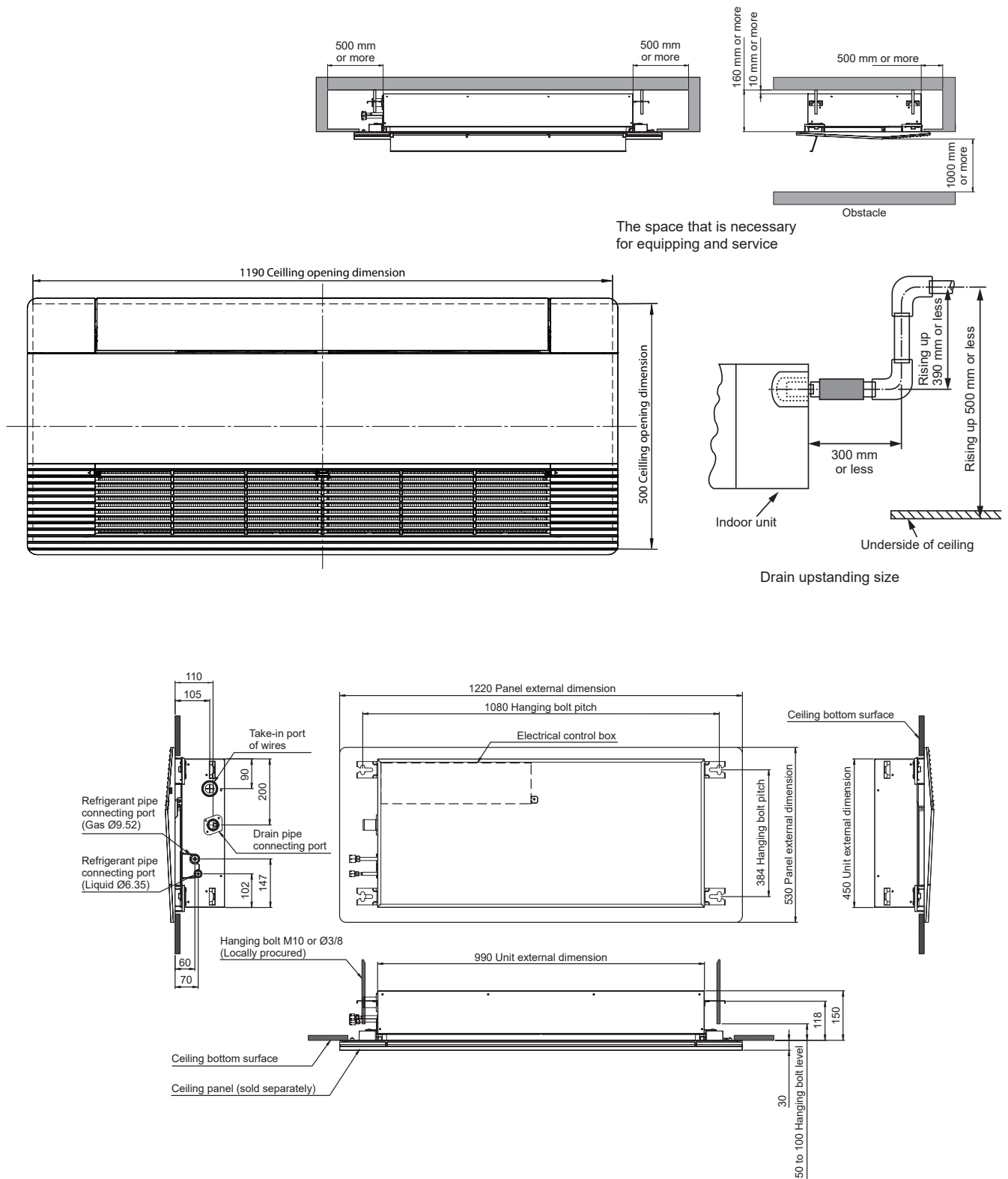
(*1) Rated testing conditions

Cooling : Indoor air tempreature 27 °C DB/ 19°C WB, Outdoor 35 °C DB

Heating : Indoor air tempreature 20 °C DB, Outdoor 7°C DB / 6°C WB

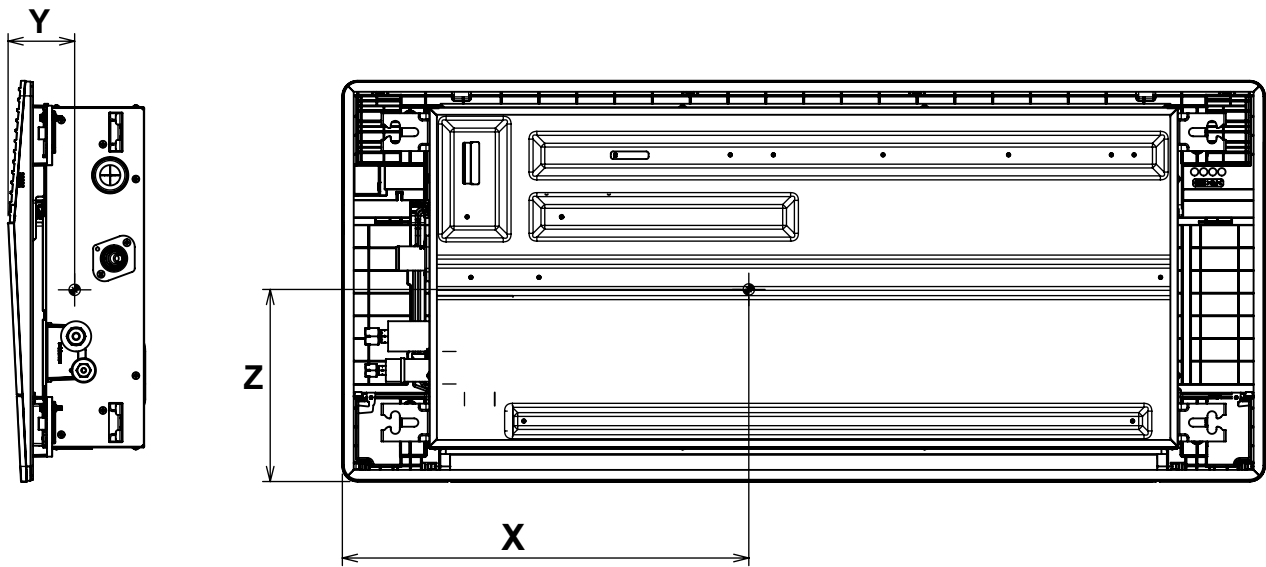
2. Dimension

MMU-UP0031YHP*/ MMU-UP0051YHP*/ MMU-UP0071YHP*/ MMU-UP0091YHP*/ MMU-UP0121YHP*



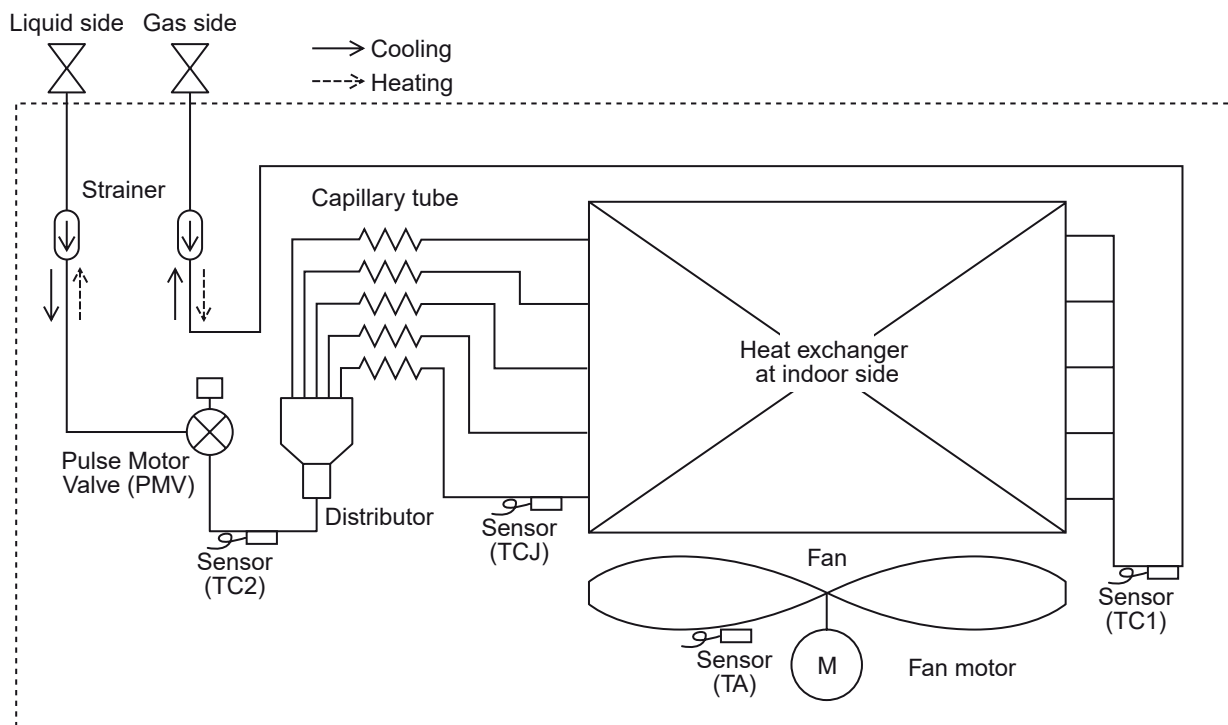
3. Center of gravity

Model name	X (mm)	Y (mm)	Z (mm)	Total weight (kg)
MMU-UP0031YHP-E/TR	537.5	88	254	14
MMU-UP0051YHP-E/TR				
MMU-UP0071YHP-E/TR				
MMU-UP0091YHP-E/TR				
MMU-UP0121YHP-E/TR				



4. Piping diagram

MMU-UP0031YHP*/ MMU-UP0051YHP*/ MMU-UP0071YHP*/ MMU-UP0091YHP*/ MMU-UP0121YHP*

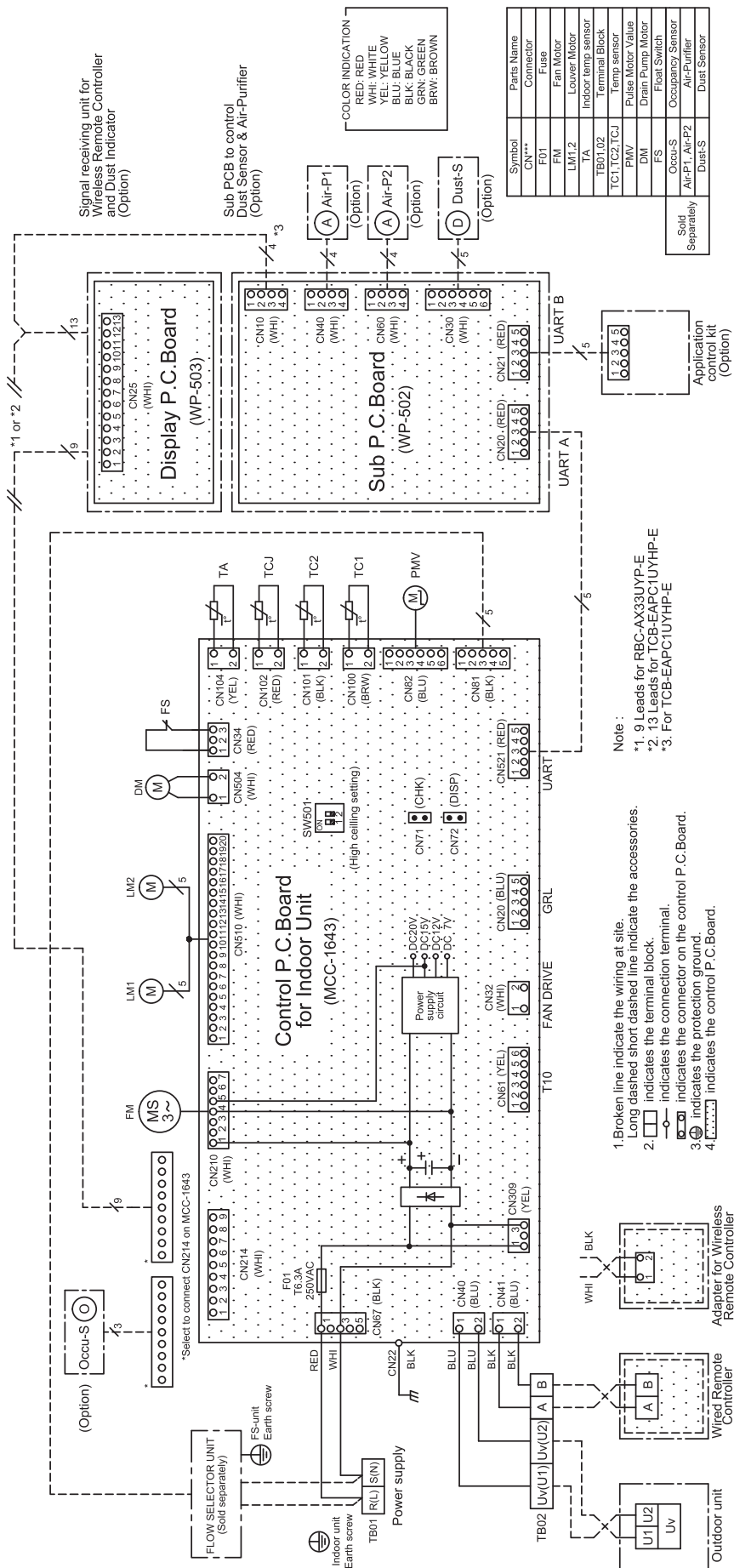


Explanation of functional parts in indoor unit

Functional part name		Functional outline
Pulse Motor Valve	PMV	(Connector CN82 (6P): Blue) 1) Controls superheat in cooling operation 2) Controls subcool in heating operation 3) Recovers refrigerant oil in cooling operation 4) Recovers refrigerant oil in heating operation
	TA	(Connector CN104 (2P): Yellow) 1) Detects indoor suction temperature
Temp. Sensor	TC1	(Connector CN100 (3P): Brown) 1) Controls PMV superheat in cooling operation
	TC2	(Connector CN101 (2P): Black) 1) Controls PMV subcool in heating operation
	TCJ	(Connector CN102 (2P): Red) 1) Controls PMV superheat in cooling operation

5. Wiring diagram

MMU-UP0031YHP*/ MMU-UP0051YHP*/ MMU-UP0071YHP*/ MMU-UP0091YHP*/ MMU-UP0121YHP*



6. Electrical characteristics

1) 50Hz

Type	Model	Nominal Voltage	Voltage Range		Fan Motor		Power Supply	
		(V-Ph-Hz)	Min	Max	kW	FLA	MCA	MOCP
1-Way cassette	MMU-UP0031YHP-E/TR	230-1-50	198	264	0.030	0.32	0.40	15
	MMU-UP0051YHP-E/TR	230-1-50	198	264	0.030	0.32	0.40	15
	MMU-UP0071YHP-E/TR	230-1-50	198	264	0.030	0.32	0.40	15
	MMU-UP0091YHP-E/TR	230-1-50	198	264	0.030	0.32	0.40	15
	MMU-UP0121YHP-E/TR	230-1-50	198	264	0.030	0.32	0.40	15

MCA : Minimum Circuit Amps

FLA : Full Load Amps

MOCP : Maximum Overcurrent Protection (Amps)

kW : Fan Motor Outdoor (kW)

2) 60Hz

Type	Model	Nominal Voltage	Voltage Range		Fan Motor		Power Supply	
		(V-Ph-Hz)	Min	Max	kW	FLA	MCA	MOCP
1-Way cassette	MMU-UP0031YHP-E/TR	220-1-60	198	253	0.030	0.32	0.40	15
	MMU-UP0051YHP-E/TR	220-1-60	198	253	0.030	0.32	0.40	15
	MMU-UP0071YHP-E/TR	220-1-60	198	253	0.030	0.32	0.40	15
	MMU-UP0091YHP-E/TR	220-1-60	198	253	0.030	0.32	0.40	15
	MMU-UP0121YHP-E/TR	220-1-60	198	253	0.030	0.32	0.40	15

MCA : Minimum Circuit Amps

FLA : Full Load Amps

MOCP : Maximum Overcurrent Protection (Amps)

kW : Fan Motor Outdoor (kW)

7. Sensible capacity table

1Way cassette Type (MMU-UP__1YHP-E/TR)

Unit size	indoor air temp.														
	outdoor	14 °C WB		16 °C WB		18 °C WB		19 °C WB		20 °C WB		22 °C WB		24 °C WB	
	air temp.	20 °C DB		23 °C DB		26 °C DB		27 °C DB		28 °C DB		30 °C DB		32 °C DB	
	°C DB	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
003	10.0	0.8	0.6	0.8	0.6	0.9	0.6	0.9	0.7	0.9	0.7	1.0	0.7	1.0	0.6
	12.0	0.8	0.6	0.8	0.6	0.9	0.6	0.9	0.7	0.9	0.7	1.0	0.7	1.0	0.6
	14.0	0.8	0.6	0.8	0.6	0.9	0.6	0.9	0.7	0.9	0.7	1.0	0.7	1.0	0.6
	16.0	0.8	0.6	0.8	0.6	0.9	0.6	0.9	0.7	0.9	0.7	1.0	0.7	1.0	0.6
	18.0	0.8	0.6	0.8	0.6	0.9	0.6	0.9	0.7	0.9	0.7	1.0	0.7	1.0	0.6
	20.0	0.8	0.6	0.8	0.6	0.9	0.6	0.9	0.7	0.9	0.7	1.0	0.7	1.0	0.6
	21.0	0.8	0.6	0.8	0.6	0.9	0.6	0.9	0.7	0.9	0.7	1.0	0.7	1.0	0.6
	23.0	0.8	0.6	0.8	0.6	0.9	0.6	0.9	0.7	0.9	0.7	1.0	0.7	1.0	0.6
	25.0	0.8	0.6	0.8	0.6	0.9	0.6	0.9	0.7	0.9	0.7	1.0	0.7	1.0	0.6
	27.0	0.8	0.6	0.8	0.6	0.9	0.6	0.9	0.7	0.9	0.7	1.0	0.7	1.0	0.6
	29.0	0.8	0.6	0.8	0.6	0.9	0.6	0.9	0.7	0.9	0.7	1.0	0.7	1.0	0.6
	31.0	0.8	0.6	0.8	0.6	0.9	0.6	0.9	0.7	0.9	0.7	1.0	0.7	1.0	0.6
	33.0	0.8	0.6	0.8	0.6	0.9	0.6	0.9	0.7	0.9	0.7	1.0	0.7	1.0	0.6
	35.0	0.8	0.6	0.8	0.6	0.9	0.6	0.9	0.7	0.9	0.7	1.0	0.7	1.0	0.6
	37.0	0.7	0.6	0.8	0.6	0.8	0.6	0.9	0.6	0.9	0.6	0.9	0.6	1.0	0.6
	39.0	0.7	0.6	0.8	0.6	0.8	0.6	0.9	0.6	0.9	0.6	0.9	0.6	1.0	0.6

Unit size	indoor air temp.														
	outdoor	14 °C WB		16 °C WB		18 °C WB		19 °C WB		20 °C WB		22 °C WB		24 °C WB	
	air temp.	20 °C DB		23 °C DB		26 °C DB		27 °C DB		28 °C DB		30 °C DB		32 °C DB	
	°C DB	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
005	10.0	1.4	1.3	1.5	1.4	1.6	1.5	1.7	1.5	1.8	1.5	1.9	1.5	1.9	1.5
	12.0	1.4	1.3	1.5	1.4	1.6	1.5	1.7	1.5	1.8	1.5	1.9	1.5	1.9	1.5
	14.0	1.4	1.3	1.5	1.4	1.6	1.5	1.7	1.5	1.8	1.5	1.9	1.5	1.9	1.5
	16.0	1.4	1.3	1.5	1.4	1.6	1.5	1.7	1.5	1.8	1.5	1.9	1.5	1.9	1.5
	18.0	1.4	1.3	1.5	1.4	1.6	1.5	1.7	1.5	1.8	1.5	1.9	1.5	1.9	1.5
	20.0	1.4	1.3	1.5	1.4	1.6	1.5	1.7	1.5	1.8	1.5	1.9	1.5	1.9	1.5
	21.0	1.4	1.3	1.5	1.4	1.6	1.5	1.7	1.5	1.8	1.5	1.9	1.5	1.9	1.5
	23.0	1.4	1.3	1.5	1.4	1.6	1.5	1.7	1.5	1.8	1.5	1.9	1.5	1.9	1.5
	25.0	1.4	1.3	1.5	1.4	1.6	1.5	1.7	1.5	1.8	1.5	1.9	1.5	1.9	1.5
	27.0	1.4	1.3	1.5	1.4	1.6	1.5	1.7	1.5	1.8	1.5	1.9	1.5	1.9	1.5
	29.0	1.4	1.3	1.5	1.4	1.6	1.5	1.7	1.5	1.8	1.5	1.9	1.5	1.9	1.5
	31.0	1.4	1.3	1.5	1.4	1.6	1.5	1.7	1.5	1.8	1.5	1.9	1.5	1.9	1.5
	33.0	1.4	1.3	1.5	1.4	1.6	1.5	1.7	1.5	1.8	1.5	1.9	1.5	1.9	1.5
	35.0	1.4	1.3	1.5	1.4	1.6	1.5	1.7	1.5	1.8	1.5	1.9	1.5	1.9	1.5
	37.0	1.4	1.3	1.5	1.4	1.6	1.5	1.6	1.5	1.7	1.5	1.8	1.4	1.9	1.4
	39.0	1.3	1.2	1.4	1.3	1.5	1.4	1.6	1.4	1.6	1.4	1.7	1.4	1.8	1.3

Unit size	indoor air temp.														
	outdoor	14 °C WB		16 °C WB		18 °C WB		19 °C WB		20 °C WB		22 °C WB		24 °C WB	
	air temp.	20 °C DB		23 °C DB		26 °C DB		27 °C DB		28 °C DB		30 °C DB		32 °C DB	
	°C DB	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
007	10.0	1.8	1.5	2.0	1.6	2.1	1.7	2.2	1.7	2.3	1.7	2.4	1.7	2.5	1.6
	12.0	1.8	1.5	2.0	1.6	2.1	1.7	2.2	1.7	2.3	1.7	2.4	1.7	2.5	1.6
	14.0	1.8	1.5	2.0	1.6	2.1	1.7	2.2	1.7	2.3	1.7	2.4	1.7	2.5	1.6
	16.0	1.8	1.5	2.0	1.6	2.1	1.7	2.2	1.7	2.3	1.7	2.4	1.7	2.5	1.6
	18.0	1.8	1.5	2.0	1.6	2.1	1.7	2.2	1.7	2.3	1.7	2.4	1.7	2.5	1.6
	20.0	1.8	1.5	2.0	1.6	2.1	1.7	2.2	1.7	2.3	1.7	2.4	1.7	2.5	1.6
	21.0	1.8	1.5	2.0	1.6	2.1	1.7	2.2	1.7	2.3	1.7	2.4	1.7	2.5	1.6
	23.0	1.8	1.5	2.0	1.6	2.1	1.7	2.2	1.7	2.3	1.7	2.4	1.7	2.5	1.6
	25.0	1.8	1.5	2.0	1.6	2.1	1.7	2.2	1.7	2.3	1.7	2.4	1.7	2.5	1.6
	27.0	1.8	1.5	2.0	1.6	2.1	1.7	2.2	1.7	2.3	1.7	2.4	1.7	2.5	1.6
	29.0	1.8	1.5	2.0	1.6	2.1	1.7	2.2	1.7	2.3	1.7	2.4	1.7	2.5	1.6
	31.0	1.8	1.5	2.0	1.6	2.1	1.7	2.2	1.7	2.3	1.7	2.4	1.7	2.5	1.6
	33.0	1.8	1.5	2.0	1.6	2.1	1.7	2.2	1.7	2.3	1.7	2.4	1.7	2.5	1.6
	35.0	1.8	1.5	2.0	1.6	2.1	1.7	2.2	1.7	2.3	1.7	2.4	1.7	2.5	1.6
	37.0	1.7	1.5	1.9	1.6	2.1	1.7	2.1	1.6	2.2	1.6	2.3	1.6	2.4	1.6
	39.0	1.7	1.4	1.9	1.5	2.0	1.6	2.1	1.6	2.1	1.6	2.3	1.6	2.4	1.5

TC : Total Capacity [kW]

SHC : Sensible Heat Capacity [kW]

1Way cassette Type (MMU-UP__1YHP-E/TR)

Unit size	indoor air temp.														
	outdoor air temp.	14 °C WB		16 °C WB		18 °C WB		19 °C WB		20 °C WB		22 °C WB		24 °C WB	
	°C DB	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
009	10.0	2.3	1.8	2.5	1.9	2.7	2.0	2.8	2.0	2.9	2.0	3.1	2.0	3.2	1.9
	12.0	2.3	1.8	2.5	1.9	2.7	2.0	2.8	2.0	2.9	2.0	3.1	2.0	3.2	1.9
	14.0	2.3	1.8	2.5	1.9	2.7	2.0	2.8	2.0	2.9	2.0	3.1	2.0	3.2	1.9
	16.0	2.3	1.8	2.5	1.9	2.7	2.0	2.8	2.0	2.9	2.0	3.1	2.0	3.2	1.9
	18.0	2.3	1.8	2.5	1.9	2.7	2.0	2.8	2.0	2.9	2.0	3.1	2.0	3.2	1.9
	20.0	2.3	1.8	2.5	1.9	2.7	2.0	2.8	2.0	2.9	2.0	3.1	2.0	3.2	1.9
	21.0	2.3	1.8	2.5	1.9	2.7	2.0	2.8	2.0	2.9	2.0	3.1	2.0	3.2	1.9
	23.0	2.3	1.8	2.5	1.9	2.7	2.0	2.8	2.0	2.9	2.0	3.1	2.0	3.2	1.9
	25.0	2.3	1.8	2.5	1.9	2.7	2.0	2.8	2.0	2.9	2.0	3.1	2.0	3.2	1.9
	27.0	2.3	1.8	2.5	1.9	2.7	2.0	2.8	2.0	2.9	2.0	3.1	2.0	3.2	1.9
	29.0	2.3	1.8	2.5	1.9	2.7	2.0	2.8	2.0	2.9	2.0	3.1	2.0	3.2	1.9
	31.0	2.3	1.8	2.5	1.9	2.7	2.0	2.8	2.0	2.9	2.0	3.1	2.0	3.2	1.9
	33.0	2.3	1.8	2.5	1.9	2.7	2.0	2.8	2.0	2.9	2.0	3.1	2.0	3.2	1.9
	35.0	2.3	1.8	2.5	1.9	2.7	2.0	2.8	2.0	2.9	2.0	3.1	2.0	3.2	1.9
	37.0	2.2	1.7	2.5	1.8	2.6	1.9	2.7	1.9	2.8	1.9	3.0	1.9	3.1	1.9
	39.0	2.2	1.7	2.4	1.8	2.6	1.9	2.6	1.9	2.7	1.9	2.9	1.9	3.0	1.8

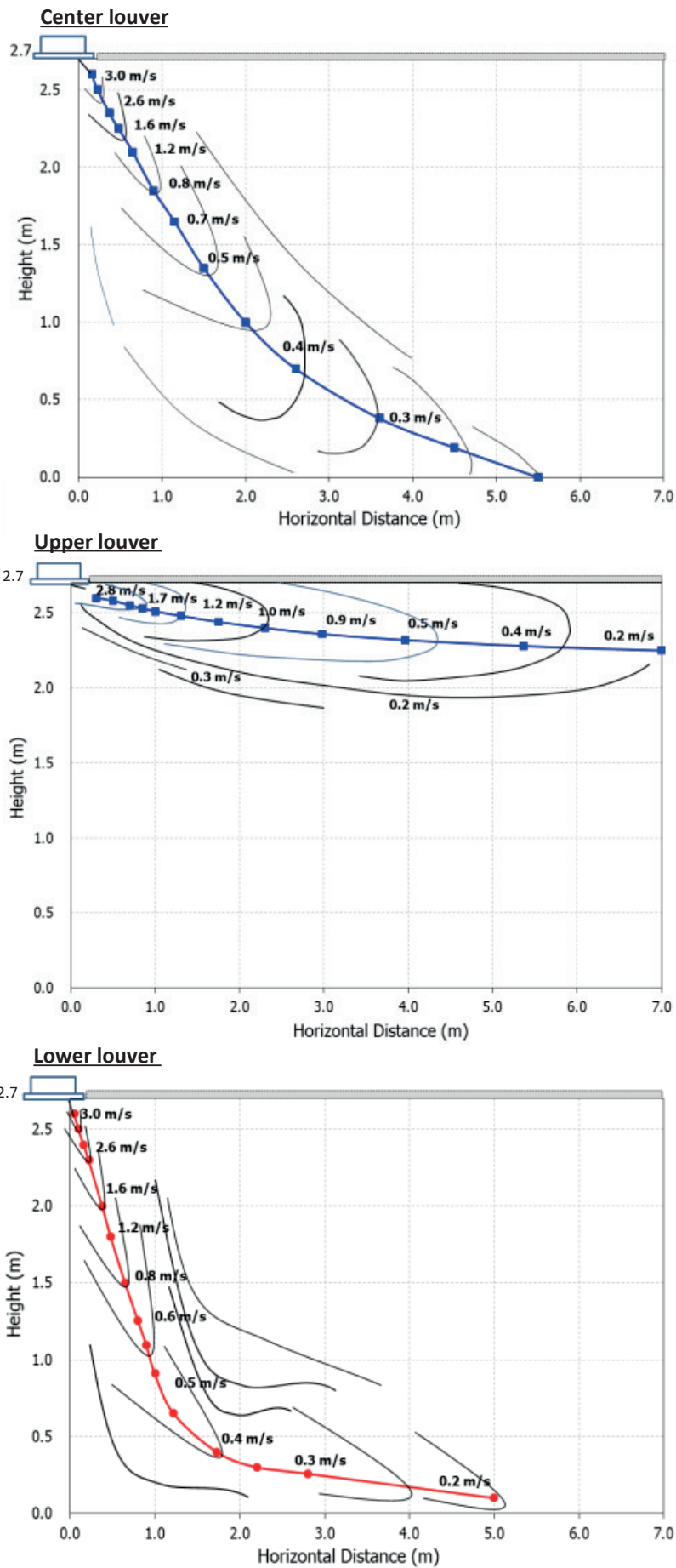
Unit size	indoor air temp.														
	outdoor air temp.	14 °C WB		16 °C WB		18 °C WB		19 °C WB		20 °C WB		22 °C WB		24 °C WB	
	°C DB	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
012	10.0	3.0	2.2	3.3	2.4	3.5	2.5	3.6	2.5	3.7	2.5	3.9	2.5	4.1	2.4
	12.0	3.0	2.2	3.3	2.4	3.5	2.5	3.6	2.5	3.7	2.5	3.9	2.5	4.1	2.4
	14.0	3.0	2.2	3.3	2.4	3.5	2.5	3.6	2.5	3.7	2.5	3.9	2.5	4.1	2.4
	16.0	3.0	2.2	3.3	2.4	3.5	2.5	3.6	2.5	3.7	2.5	3.9	2.5	4.1	2.4
	18.0	3.0	2.2	3.3	2.4	3.5	2.5	3.6	2.5	3.7	2.5	3.9	2.5	4.1	2.4
	20.0	3.0	2.2	3.3	2.4	3.5	2.5	3.6	2.5	3.7	2.5	3.9	2.5	4.1	2.4
	21.0	3.0	2.2	3.3	2.4	3.5	2.5	3.6	2.5	3.7	2.5	3.9	2.5	4.1	2.4
	23.0	3.0	2.2	3.3	2.4	3.5	2.5	3.6	2.5	3.7	2.5	3.9	2.5	4.1	2.4
	25.0	3.0	2.2	3.3	2.4	3.5	2.5	3.6	2.5	3.7	2.5	3.9	2.5	4.1	2.4
	27.0	3.0	2.2	3.3	2.4	3.5	2.5	3.6	2.5	3.7	2.5	3.9	2.5	4.1	2.4
	29.0	3.0	2.2	3.3	2.4	3.5	2.5	3.6	2.5	3.7	2.5	3.9	2.5	4.1	2.4
	31.0	3.0	2.2	3.3	2.4	3.5	2.5	3.6	2.5	3.7	2.5	3.9	2.5	4.1	2.4
	33.0	3.0	2.2	3.3	2.4	3.5	2.5	3.6	2.5	3.7	2.5	3.9	2.5	4.1	2.4
	35.0	3.0	2.2	3.3	2.4	3.5	2.5	3.6	2.5	3.7	2.5	3.9	2.5	4.1	2.4
	37.0	2.9	2.1	3.2	2.3	3.4	2.4	3.5	2.4	3.6	2.4	3.8	2.4	4.0	2.3
	39.0	2.8	2.1	3.1	2.2	3.3	2.4	3.4	2.4	3.5	2.4	3.7	2.3	3.9	2.3

TC : Total Capacity [kW]

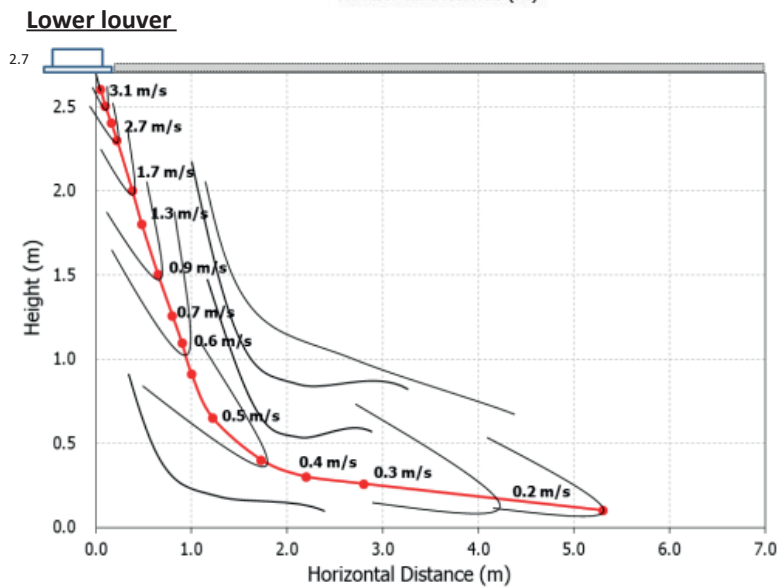
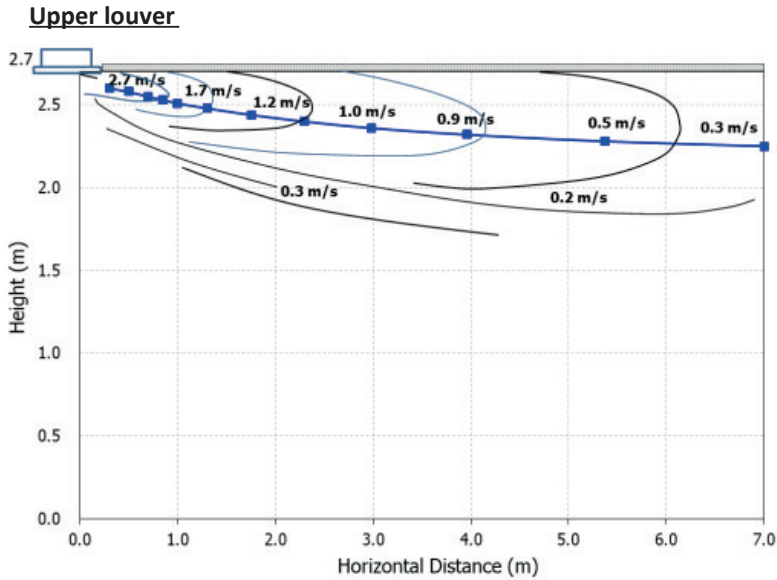
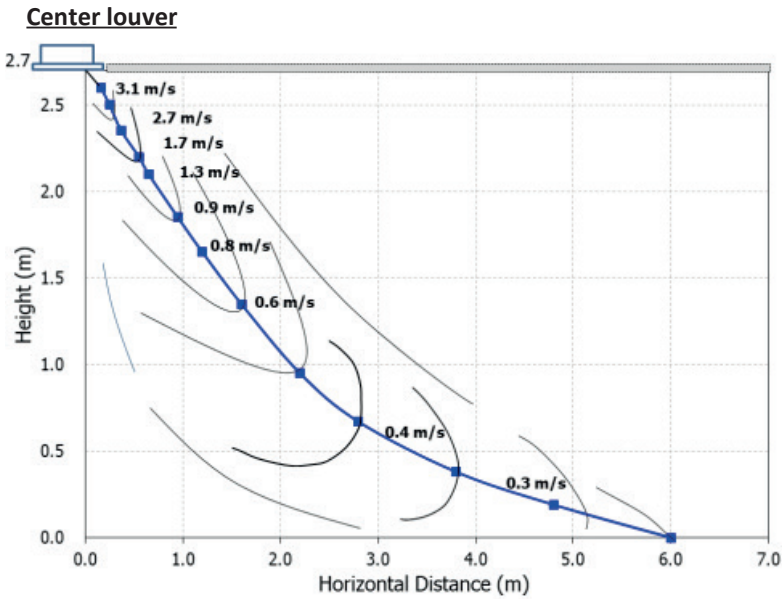
SHC : Sensible Heat Capacity [kW]

8. Air flow distance chart

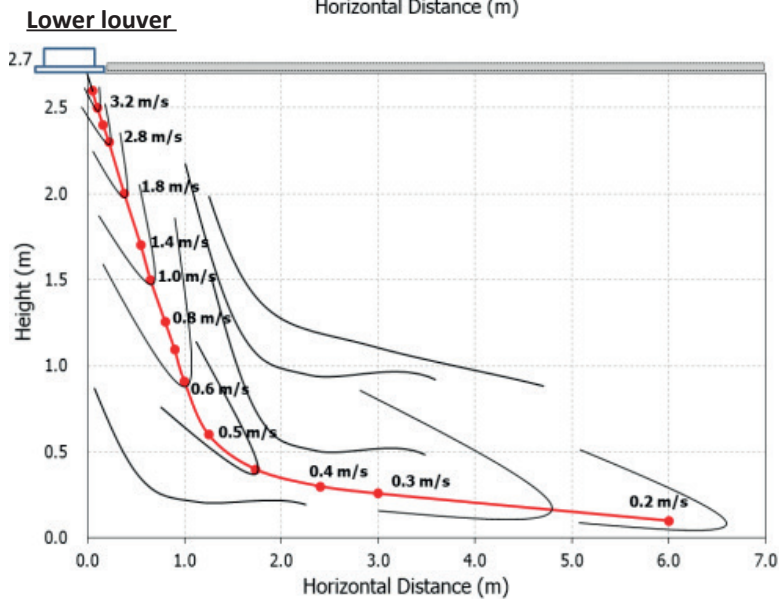
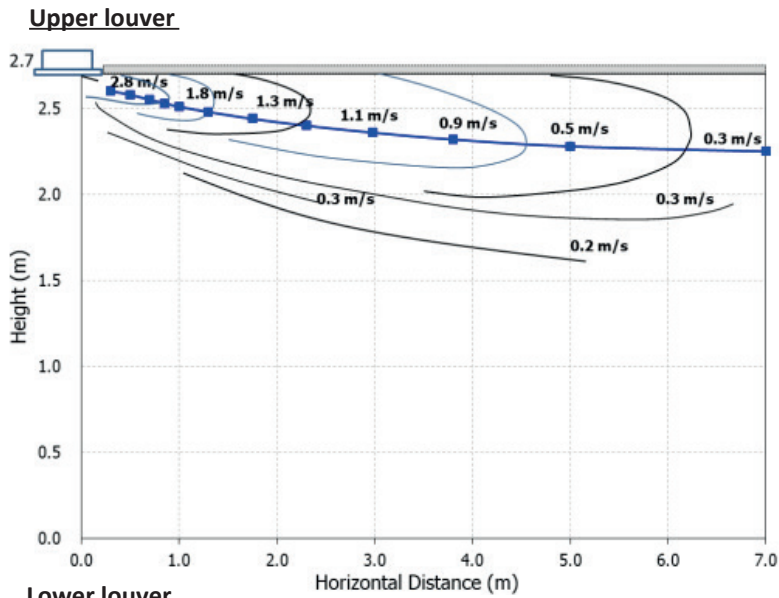
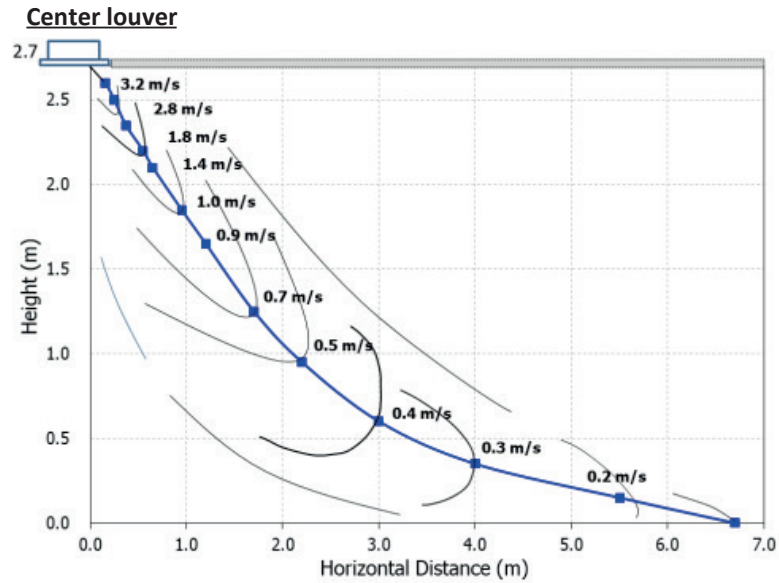
MMU-UP0031-YHP* / MMU-UP0051YHP*



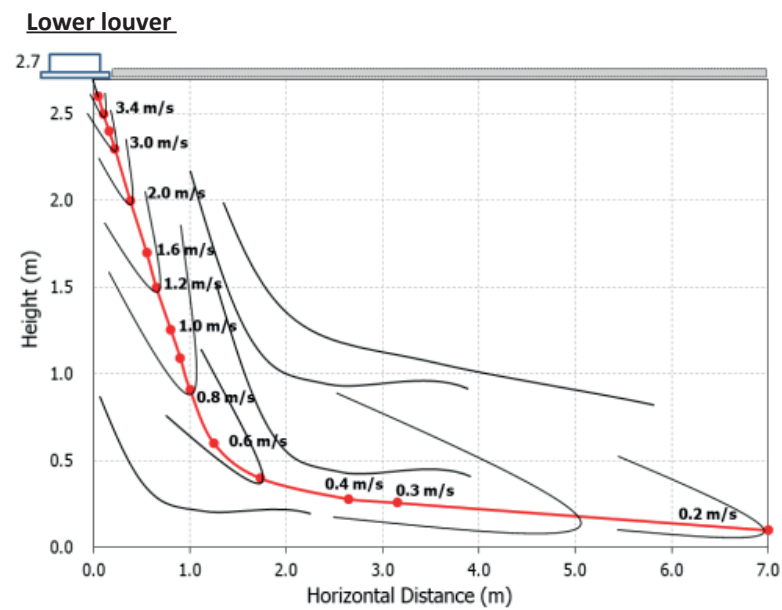
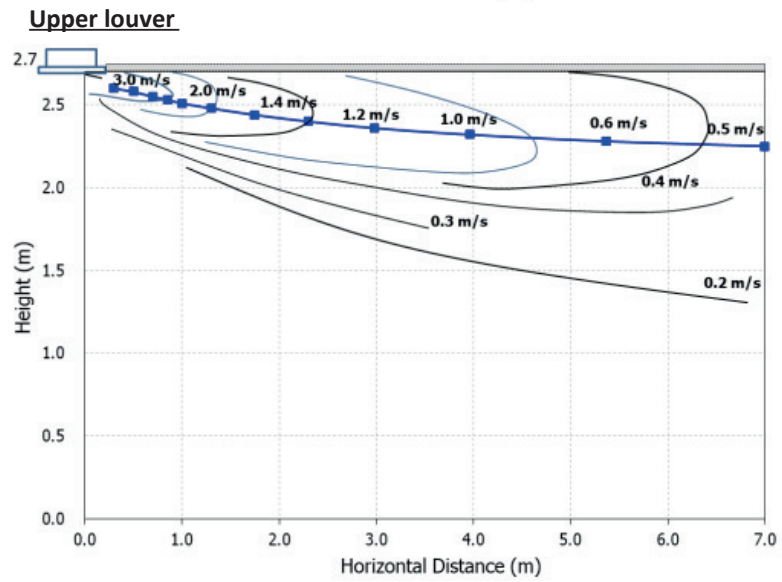
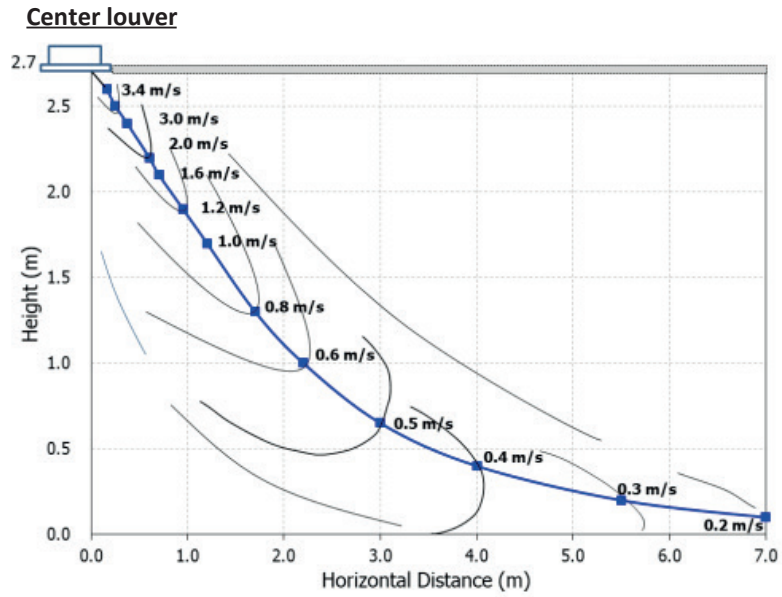
MMU-UP0071YHP*



MMU-UP0091YHP*

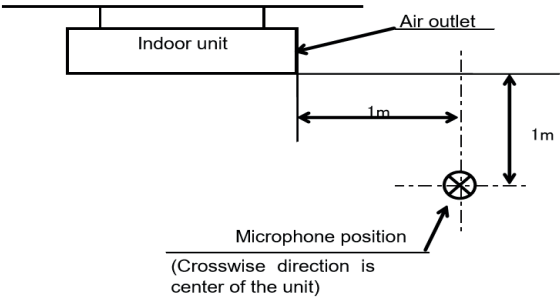


MMU-UP0121YHP*



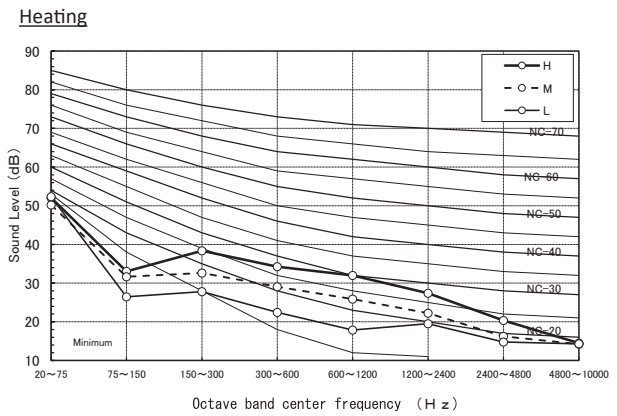
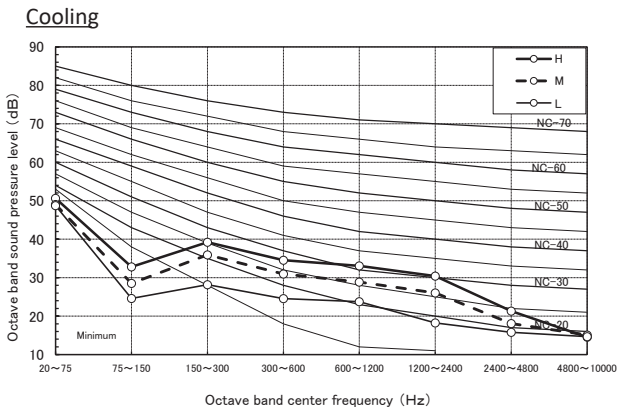
9. Sound data

Sound pressure spectrum



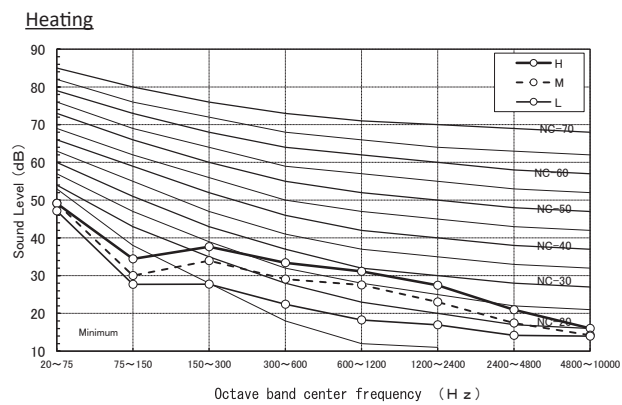
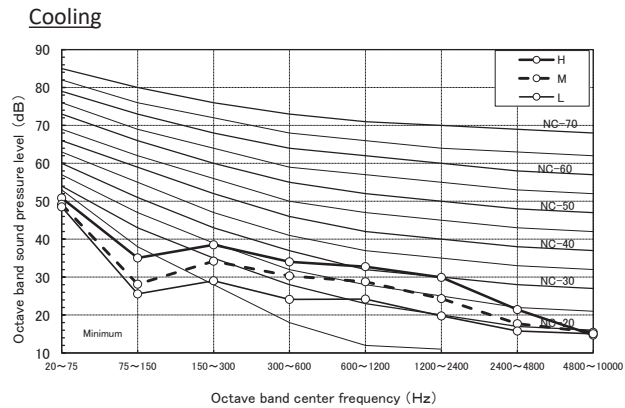
MMU-UP0031YHP-E/TR

Specification (dB)			
Fan tap	H	M	L
Sound pressure level (dB(A))	37	33	25



MMU-UP0051YHP-E / -TR

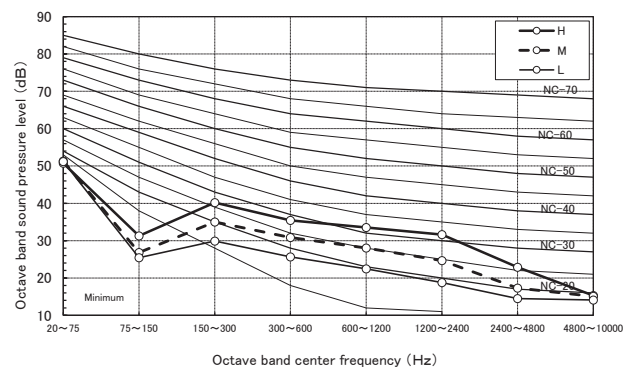
Specification (dB)			
Fan tap	H	M	L
Sound pressure level (dB(A))	37	33	25



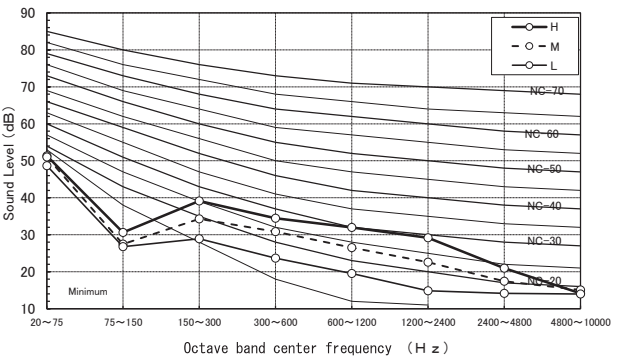
MMU-UP0071YHP-E / -TR

Specification (dB)			
Fan tap	H	M	L
Sound pressure level (dB(A))	38	34	25

Cooling



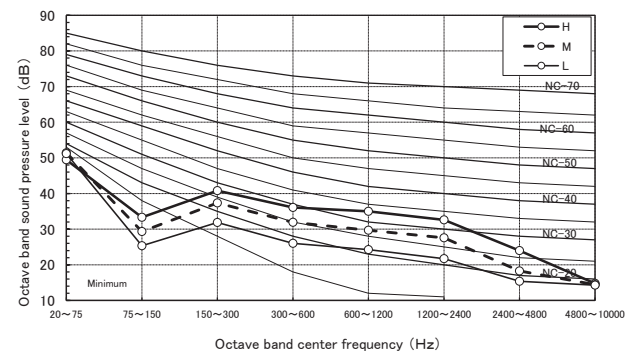
Heating



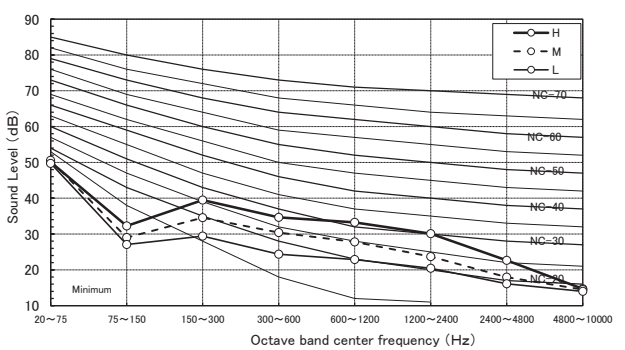
MMU-UP0091YHP-E / -TR

Specification (dB)			
Fan tap	H	M	L
Sound pressure level (dB(A))	39	35	26

Cooling



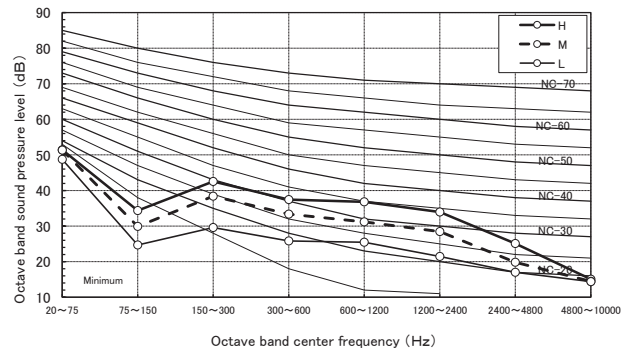
Heating



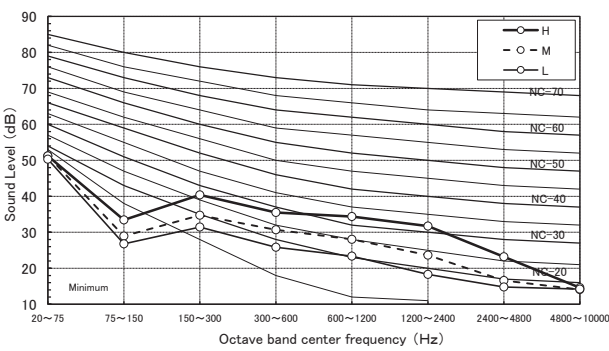
MMU-UP0121YHP-E / -TR

Specification (dB)			
Fan tap	H	M	L
Sound pressure level (dB(A))	40	36	26

Cooling



Heating



10. Accessories

Type	Model name	Feature	Remark
1Way cassette Panel	RBC-UY32P-E	1Way cassette panel without receiver	
Air purifier kit	TCB-EAPC1UYHP-E	Set of Plasma Air Purifier, Dust sensor, Air quality indicator and Wireless receiver	
Occupancy sensor	TCB-SIR41UYP-E	Occupancy sensor for 1Way cassette	
Wireless reciever kit	RBC-AX33UYP-E	wireless RC kit for 1Way cassette	
Wired Remote Controller	RBC-ASCU11-E	Compact type	
	RBC-AMTU31-E	Standard type	
	RBC-AMSU51-EN/ES	Premium type	

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