

Under Ceiling Type

MMC-UP0151HP-E / TR
MMC-UP0181HP-E / TR
MMC-UP0241HP-E / TR
MMC-UP0271HP-E / TR
MMC-UP0361HP-E / TR
MMC-UP0481HP-E / TR
MMC-UP0561HP-E / TR



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1. Specifications

Model name		MMC-	UP0151HP-E/TR	UP0181HP-E/TR	UP0241HP-E/TR	UP0271HP-E/TR
Power supply			1 ph 230V (220-240V) ~ 50 Hz & 1 ph 220V (208-230V) ~ 60 Hz			
Cooling capacity (*1)		(kW)	4.5	5.6	7.1	8.0
Heating capacity (*1)		(kW)	5.0	6.3	8.0	9.0
Running current		(A)	0.38	0.39	0.68	0.68
Power consumption		(kW)	0.033	0.034	0.067	0.067
Starting current		(A)	0.54	0.55	0.97	0.97
FCU dimension	Main unit	Height (mm)	235		235	
		Width (mm)	952		1270	
		Depth (mm)	690		690	
Total weight	Main unit (kg)	24		30		
Heat exchanger			Finned tube			
Soundproof / Heat-insulation material			Polyethylene foam			
Fan			Centrifugal fan (Sirocco fan)			
Air flow volume	Indoor unit (H/M/L)	(m ³ /h)	840 / 690 / 540	960 / 720 / 540	1440 / 1020 / 750	1440 / 1020 / 750
Sound pressure	Indoor unit (H/M/L)	dB(A)	36 / 34 / 28	37 / 35 / 28	41 / 36 / 29	41 / 36 / 29
Motor			94			
Connecting pipe	Gas side	(mm)	Ø 12.7		Ø 15.88	
	Liquid side	(mm)	Ø 6.35		Ø 9.52	
	Drain pipe	(mm)	20 (Polyvinyl chloride tube)			
Operating Range for SMMS-u	Cooling	(°C)	5 ~ 46 - 52 (*2)			
	Heating	(°C)	-10 ~ 46			
Operating Range for Super MMS-l	Cooling	(°C)	5 ~ 43			
	Heating	(°C)	-10 ~ 43			

(*1) Rated testing conditions Cooling : Indoor air temperature 27 °C DB/ 19°C WB, Outdoor 35 °C DB

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

(*2) 46-52 °C is also available but temporary operate

Model name		MMC-	UP0361HP-E/TR	UP0481HP-E/TR	UP0561HP-E/TR
Power supply			1 ph 230V (220-240V) ~ 50 Hz & 1 ph 220V (208-230V) ~ 60 Hz		
Cooling capacity (*1)		(kW)	11.2	14.0	16.0
Heating capacity (*1)		(kW)	12.5	16.0	18.0
Running current		(A)	0.80	0.80	1.03
Power consumption		(kW)	0.083	0.083	0.111
Starting current		(A)	1.16	1.16	1.49
FCU dimension	Main unit	Height (mm)	235		
		Width (mm)	1586		
		Depth (mm)	690		
Total weight	Main unit	(kg)	39		
Heat exchangere			Finned tube		
Soundproof / Heat-insulation material			Polyethylene foam		
Fan			Centrifugal fan (Sirocco fan)		
Air flow volume	Indoor unit (H/M/L)	(m ³ /h)	1860 / 1350 / 1020	1860 / 1530 / 1200	2040 / 1650 / 1260
Sound pressure	Indoor unit (H/M/L)	dB(A)	44 / 38 / 32	44 / 41 / 35	46 / 42 / 36
Motor			139		
Conecting pipe	Gas side	(mm)	Ø 15.88		
	Liquid side	(mm)	Ø 9.52		
	Drain pipe	(mm)	20 (Polyvinyl chloride tube)		
Operating Range for SMMS-u	Cooling	(°C)	5 ~ 46 - 52 (*2)		
	Heating	(°C)	-10 ~ 46		
Operating Range for Super MMS-l	Cooling	(°C)	5 ~ 43		
	Heating	(°C)	-10 ~ 43		

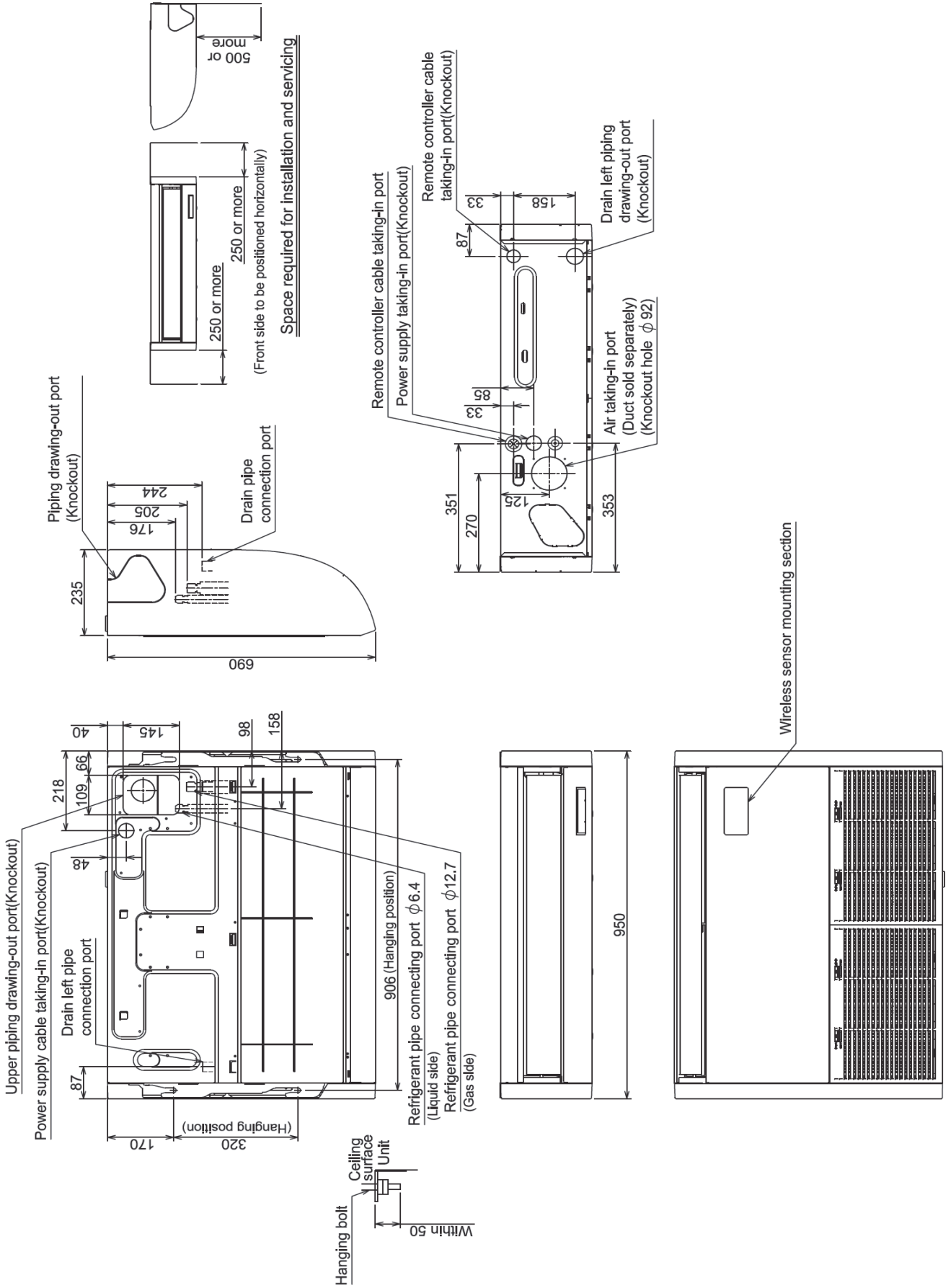
(*1) Rated testing conditions Cooling : Indoor air tempreature 27 °C DB/ 19°C WB, Outdoor 35 °C DB

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

(*2) 46-52 °C is also availabel but temporary operate

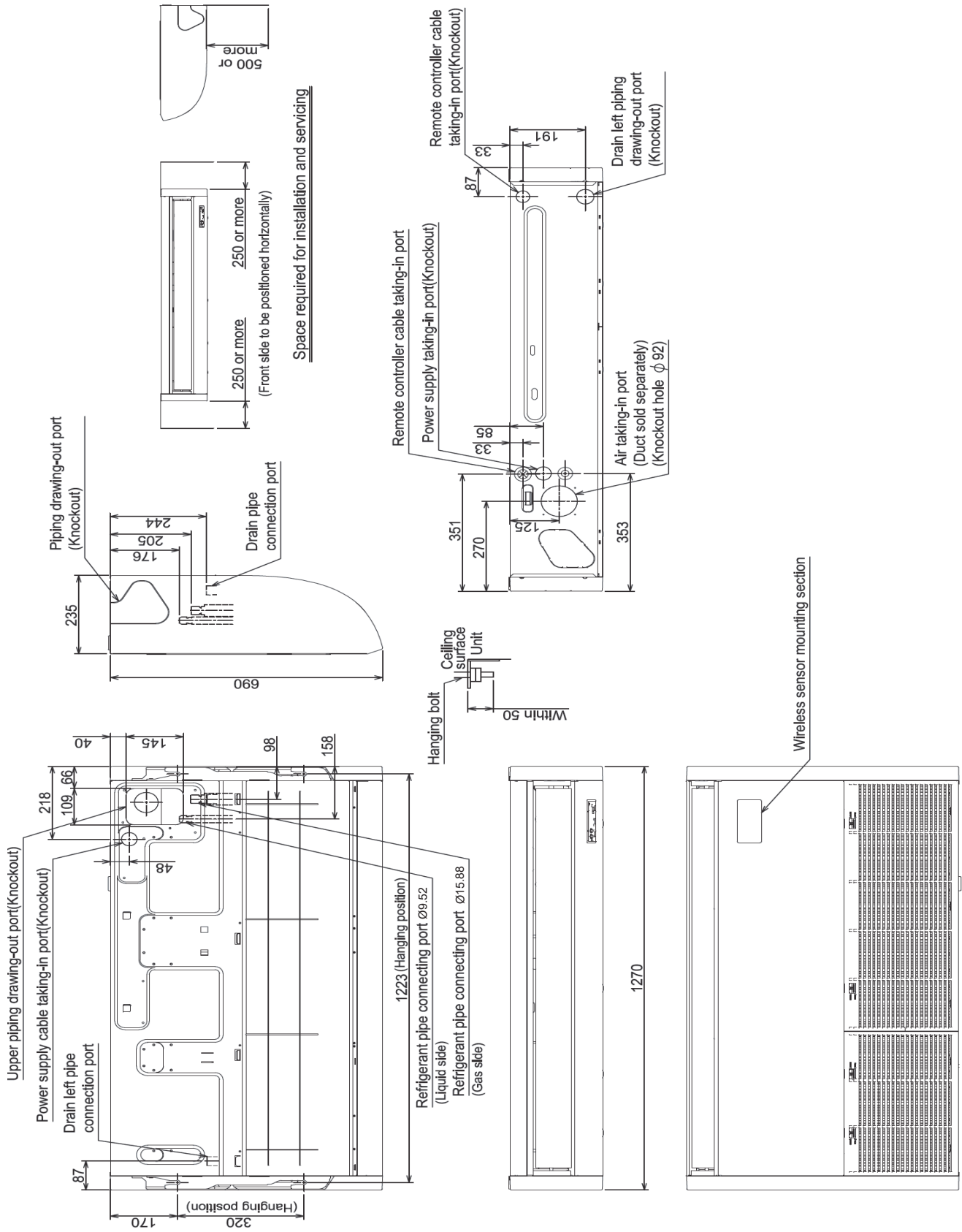
2. Dimension

MMC-UP0151HP* / MMC-UP0181HP*



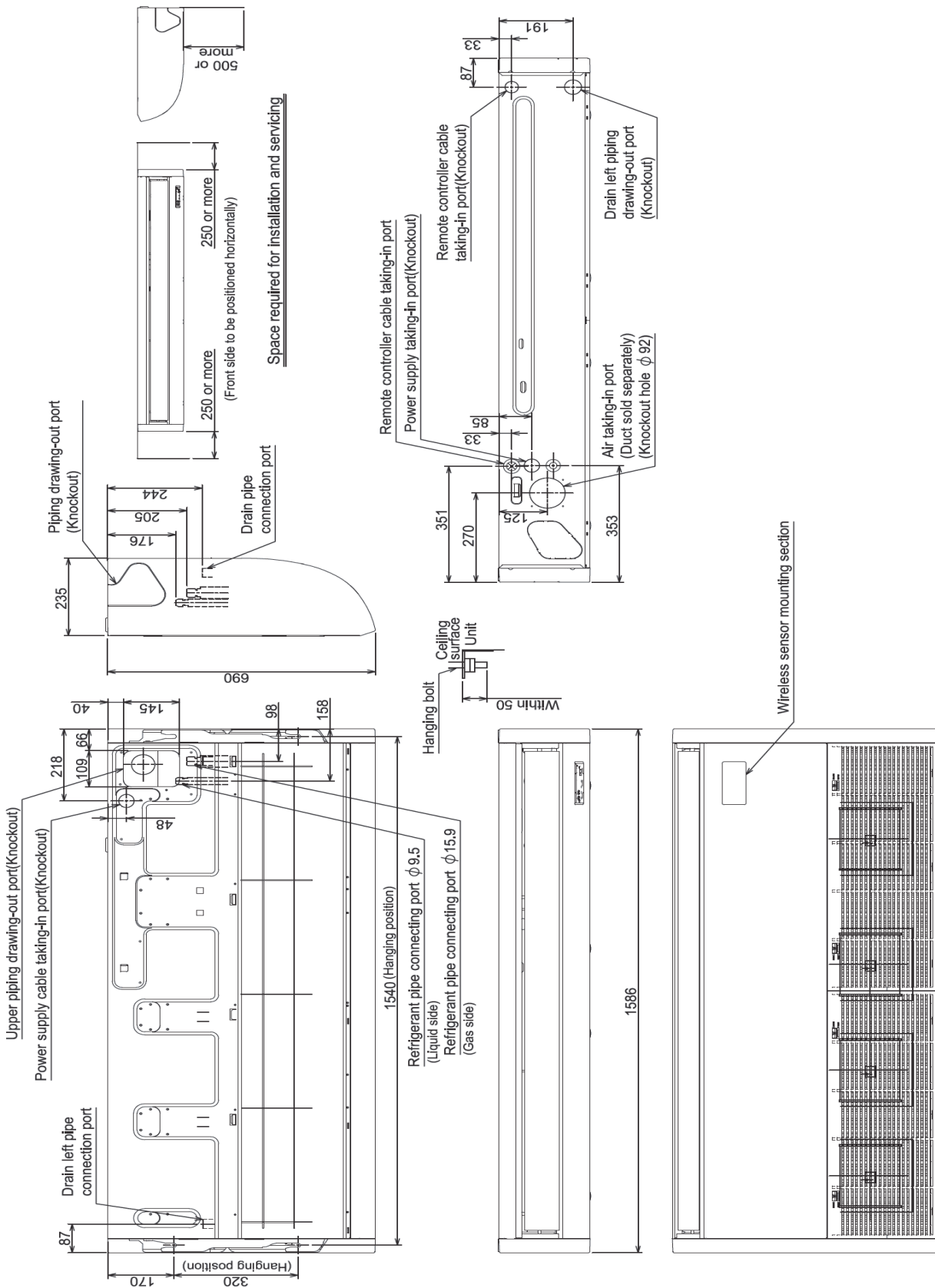
(Unit:mm)

MMC-UP0241HP* / MMC-UP0271HP*



(Unit:mm)

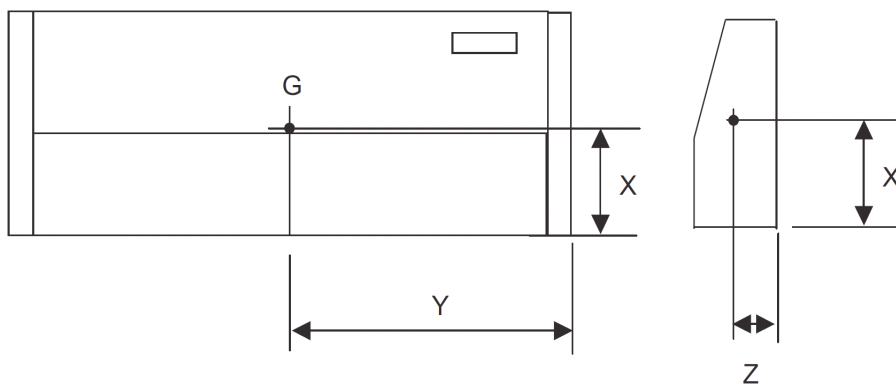
MMC-UP0361HP* / MMC-UP0481HP* / MMC-UP0561HP*



(Unit:mm)

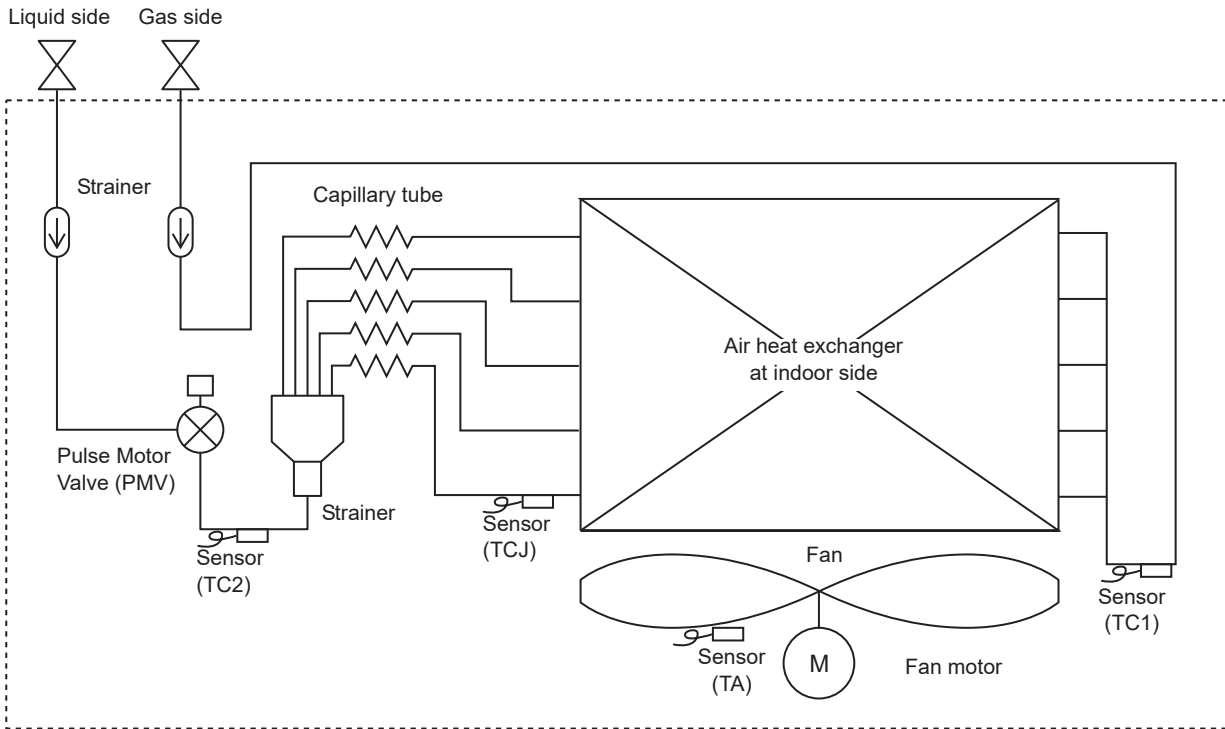
3. Center of gravity

Model name	X (mm)	Y (mm)	Z (mm)	Total weight (kg)
MMC-UP0151HP-E / TR	375	480	100	24
MMC-UP0181HP-E / TR				
MMC-UP0241HP-E / TR	375	620	100	30
MMC-UP0271HP-E / TR				
MMC-UP0361HP-E / TR	375	760	100	39
MMC-UP0481HP-E / TR				
MMC-UP0561HP-E / TR				



4. Piping diagram

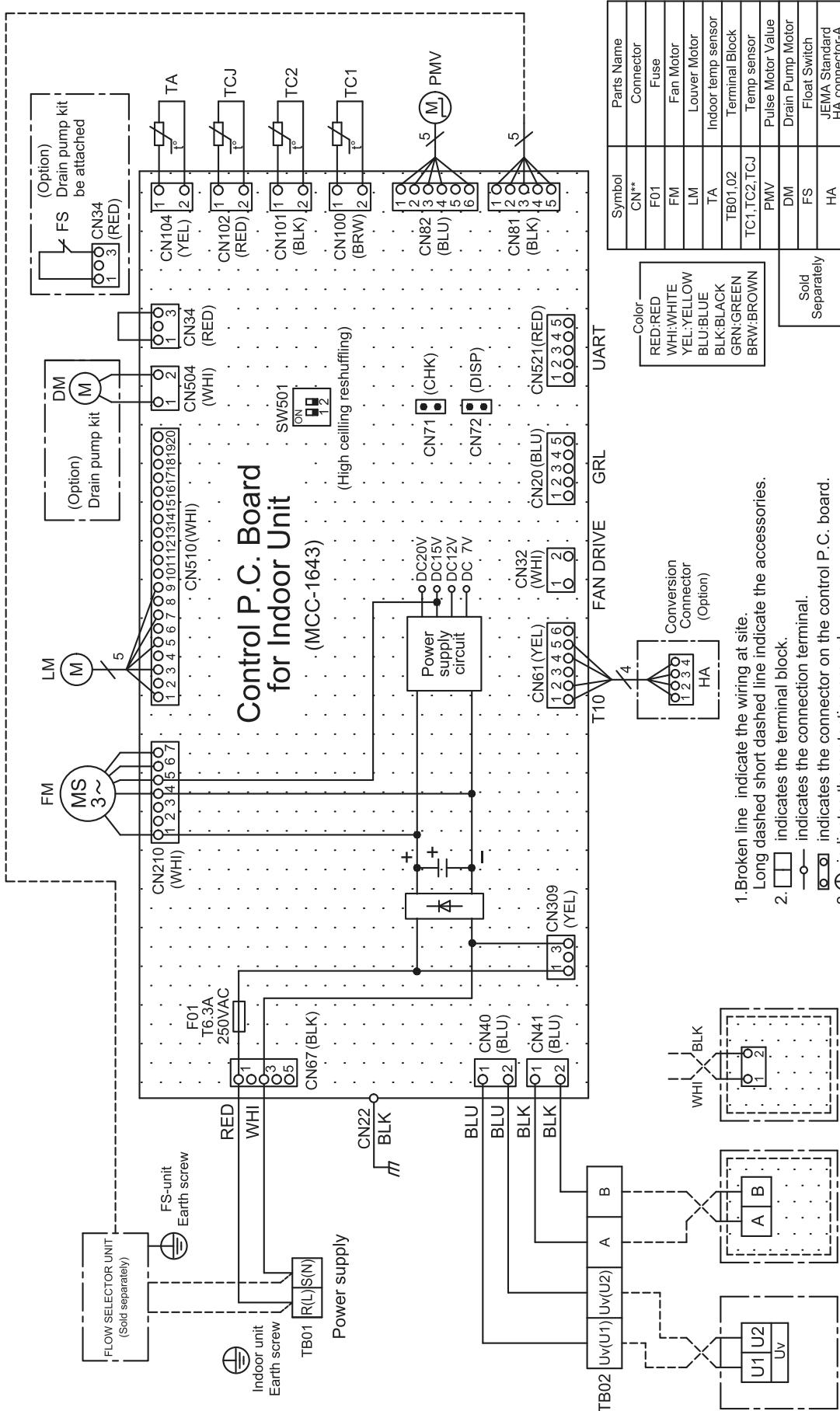
MMC-UP0151HP*, MMC-UP0181HP*, MMC-UP0241HP*, MMC-UP0271HP*, MMC-UP0361HP*,
 MMC-UP0481HP*, MMC-UP0561HP*



Functional part name		Functional outline
Pulse Motor Valve	PMV	(Connector CN082 (6P): Blue) 1) Controls super heat in cooling operation 2) Controls sub cool in heating operation 3) Recovers refrigerant oil in cooling operation 4) Recovers refrigerant oil in heating operation
Temp. sensor	1. TA	(Connector CN104 (2P): Yellow) 1) Detects indoor suction temperature
	2. TC1	(Connector CN100 (3P): Brown) 1) Controls PMV super heat in cooling operation
	3. TC2	(Connector CN101 (2P): Black) 1) Controls PMV sub cool in heating operation
	4. TCJ	(Connector CN102 (2P): Red) 1) Controls PMV super heat in cooling operation

5. Wiring diagram

MMC-UP0151HP*, MMC-UP0181HP*, MMC-UP0241HP*, MMC-UP0271HP*, MMC-UP0361HP*,
 MMC-UP0481HP*, MMC-UP0561HP*



6. Electrical characteristics

50 Hz

Model	Nominal Voltage	Voltage Range		Fan Motor		Power Supply	
	(V-Ph-Hz)	Min	Max	kW	FLA	MCA	MOCP
MMC-UP0151HP-E / TR	230-1-50	198	242	0.094	0.41	0.52	15
MMC-UP0181HP-E / TR	230-1-50	198	242	0.094	0.42	0.53	15
MMC-UP0241HP-E / TR	230-1-50	198	242	0.094	0.75	0.93	15
MMC-UP0271HP-E / TR	230-1-50	198	242	0.094	0.75	0.93	15
MMC-UP0361HP-E / TR	230-1-50	198	242	0.139	0.89	1.11	15
MMC-UP0481HP-E / TR	230-1-50	198	242	0.139	0.89	1.11	15
MMC-UP0561HP-E / TR	230-1-50	198	242	0.139	1.14	1.43	15

MCA : Minimum Circuit Amps

FLA : Full Load Amps

MOCP : Maximum Overcurrent Protection (Amps)

kW : Fan Motor Rated Output (kW)

60 Hz

Model	Nominal Voltage	Voltage Range		Fan Motor		Power Supply	
	(V-Ph-Hz)	Min	Max	kW	FLA	MCA	MOCP
MMC-UP0151HP-E / TR	220-1-60	198	242	0.094	0.42	0.53	15
MMC-UP0181HP-E / TR	220-1-60	198	242	0.094	0.42	0.53	15
MMC-UP0241HP-E / TR	220-1-60	198	242	0.094	0.75	0.94	15
MMC-UP0271HP-E / TR	220-1-60	198	242	0.094	0.75	0.94	15
MMC-UP0361HP-E / TR	220-1-60	198	242	0.139	0.89	1.11	15
MMC-UP0481HP-E / TR	220-1-60	198	242	0.139	0.89	1.11	15
MMC-UP0561HP-E / TR	220-1-60	198	242	0.139	0.89	1.11	15

MCA : Minimum Circuit Amps

FLA : Full Load Amps

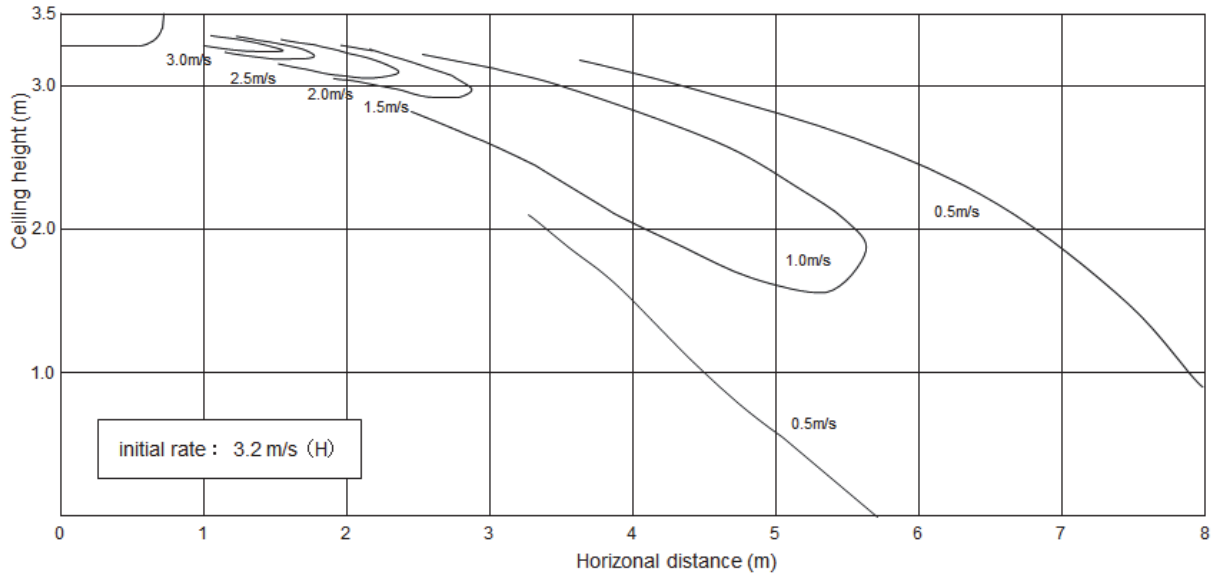
MOCP : Maximum Overcurrent Protection (Amps)

kW : Fan Motor Rated Output (kW)

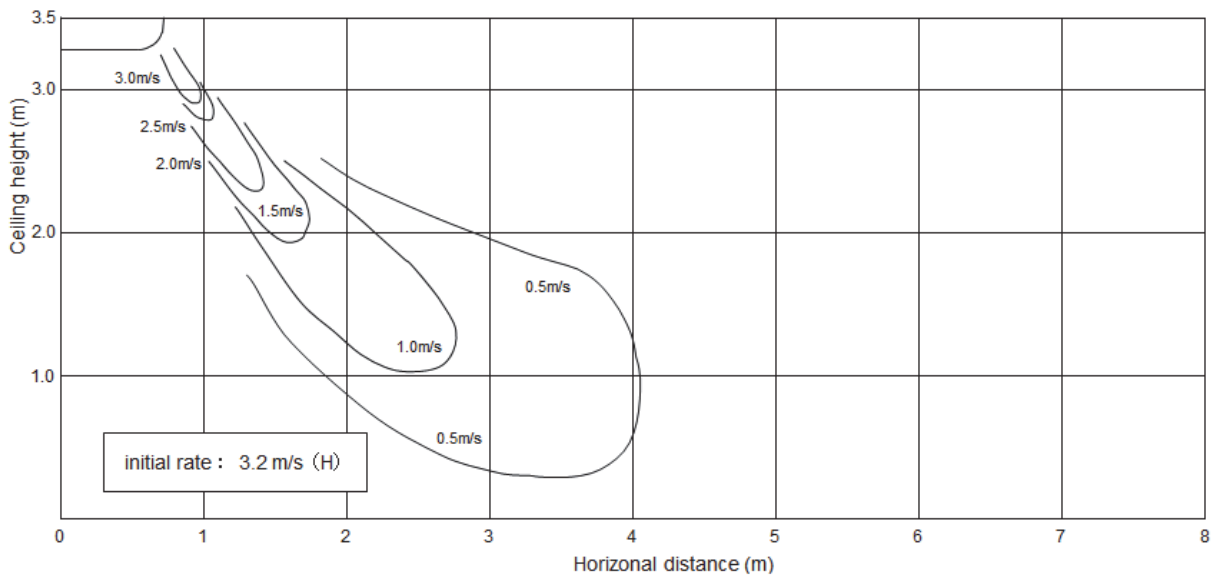
8. Air flow distance chart

MMC-UP0151HP*

Cooling

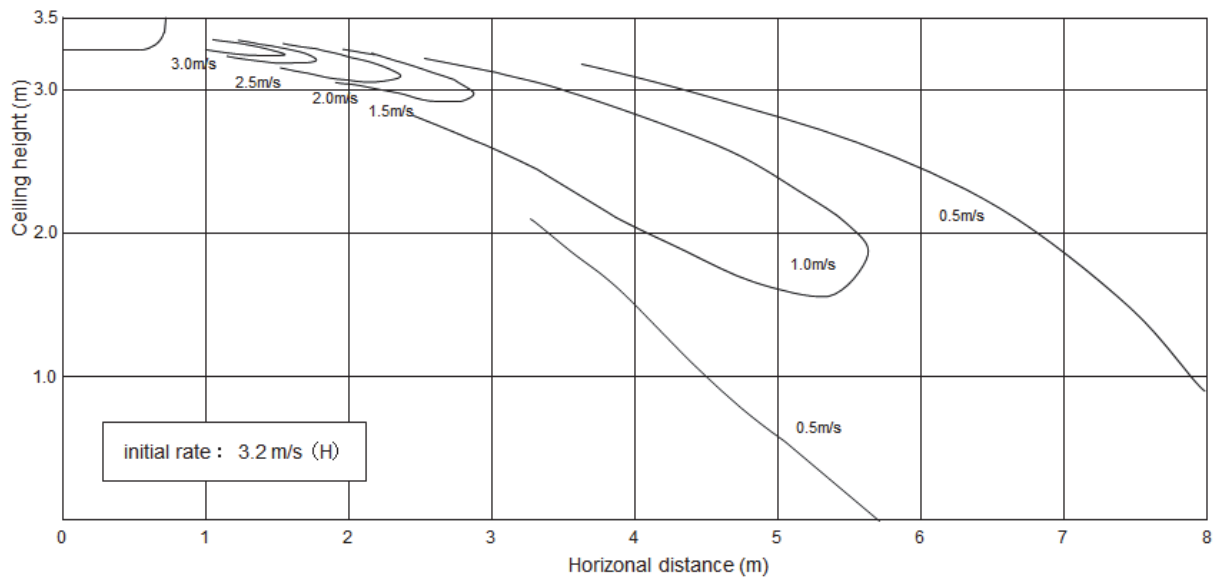


Heating

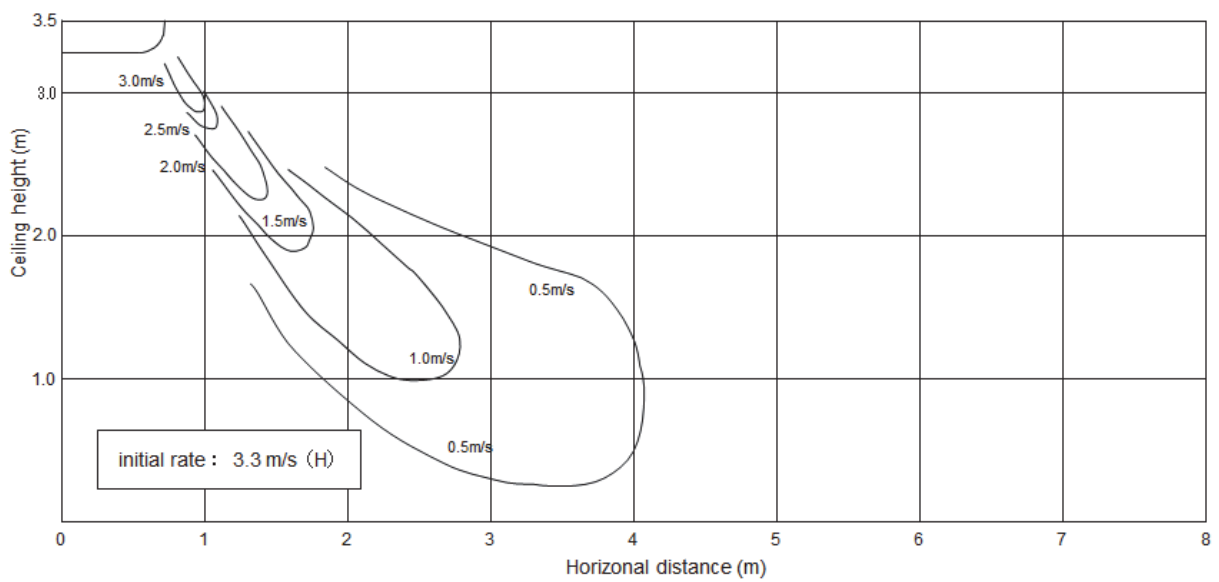


MMC-UP0181HP*

Cooling

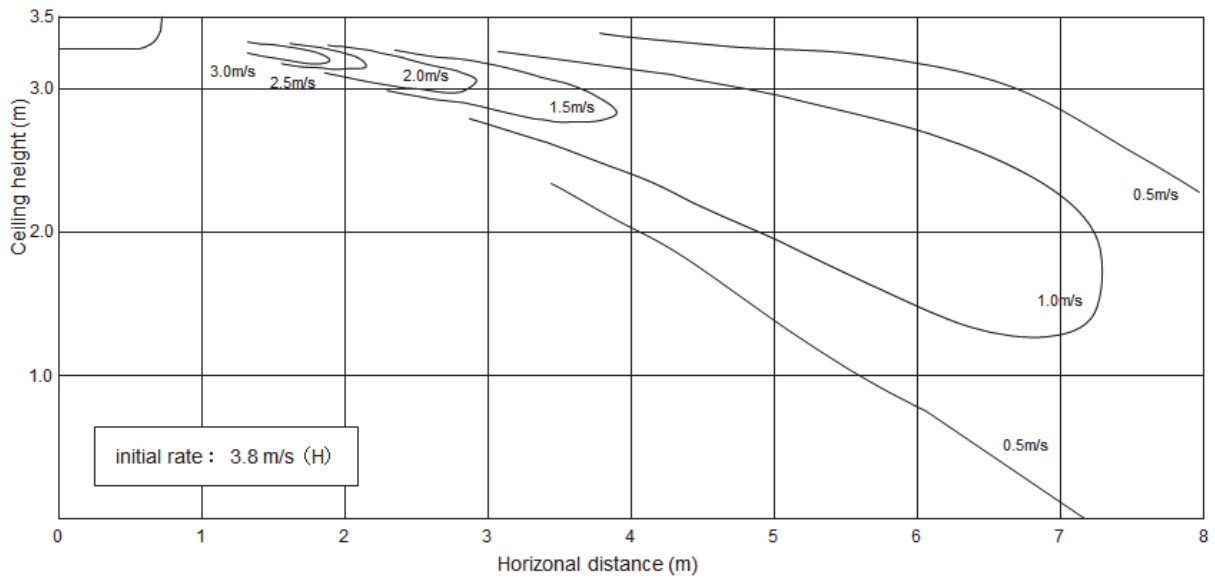


Heating

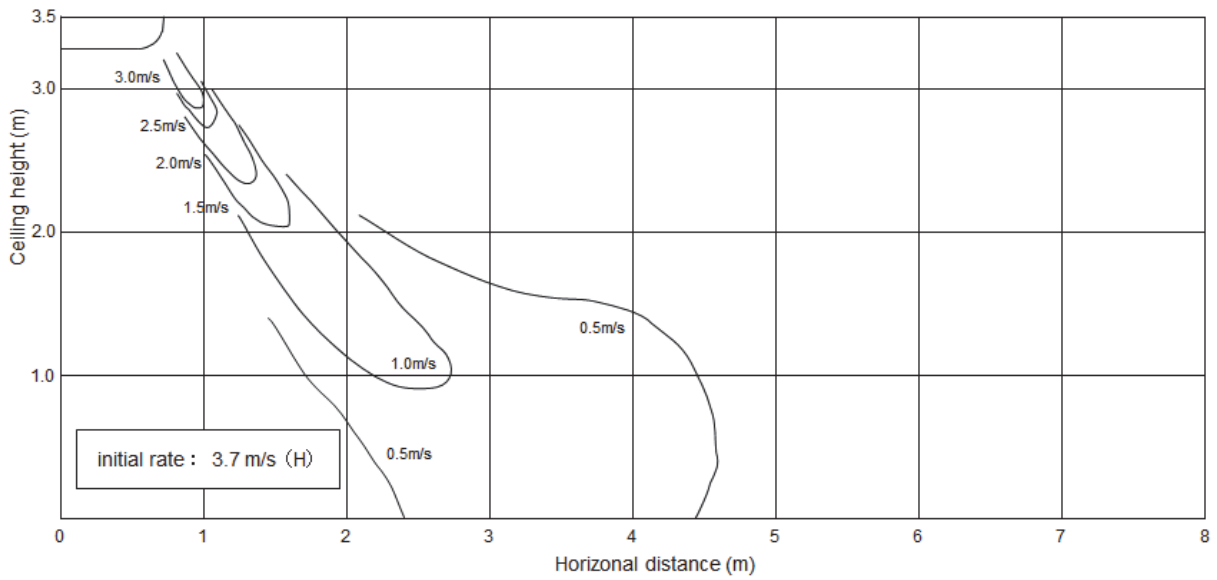


MMC-UP0241HP* / MMC-UP0271HP*

Cooling

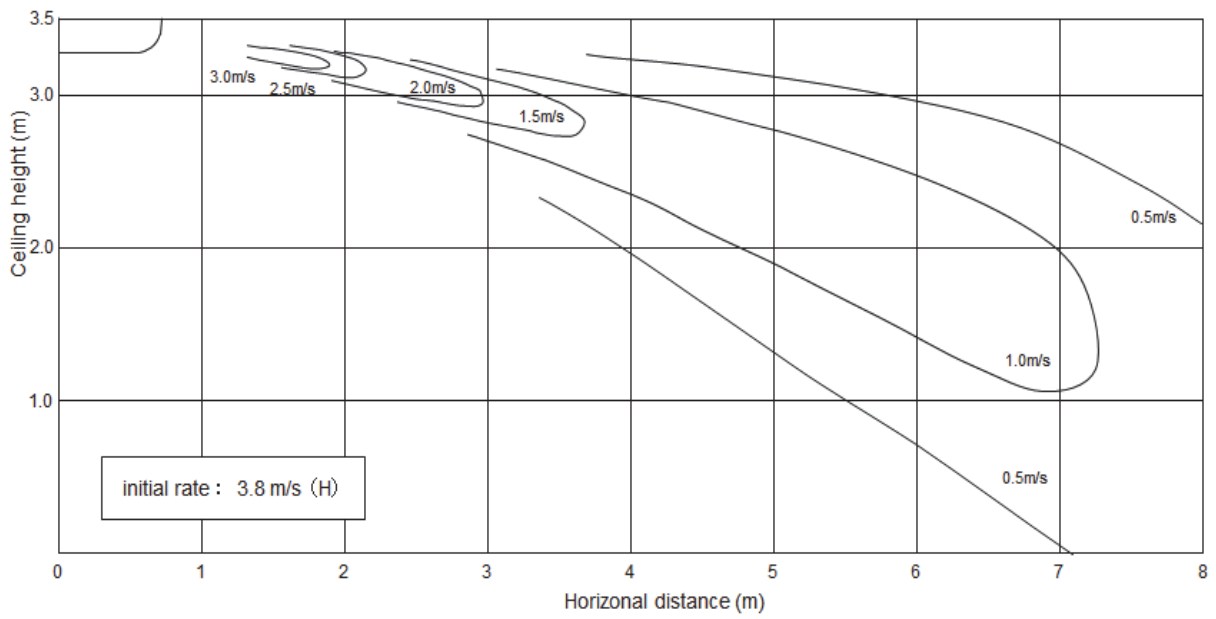


Heating

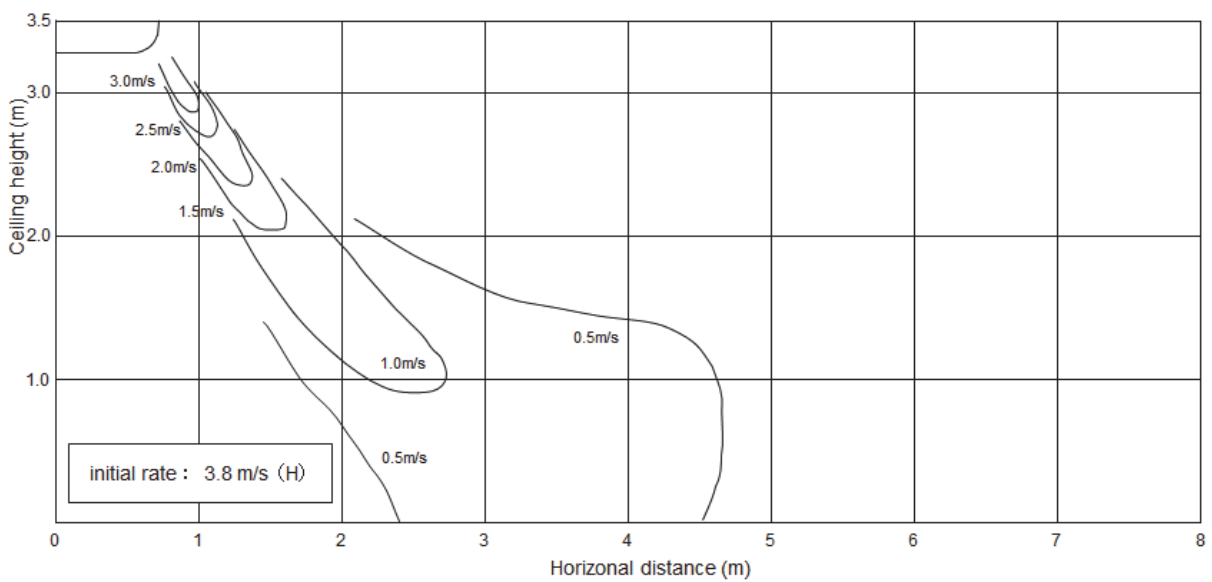


MMC-UP0361HP* / MMC-UP0481HP*

Cooling

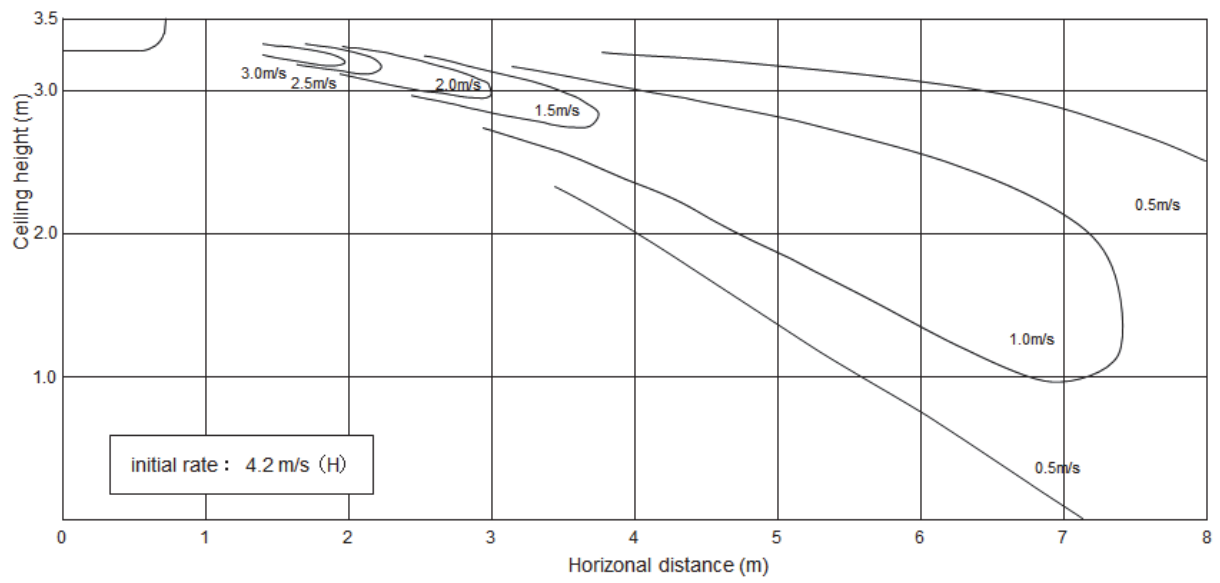


Heating

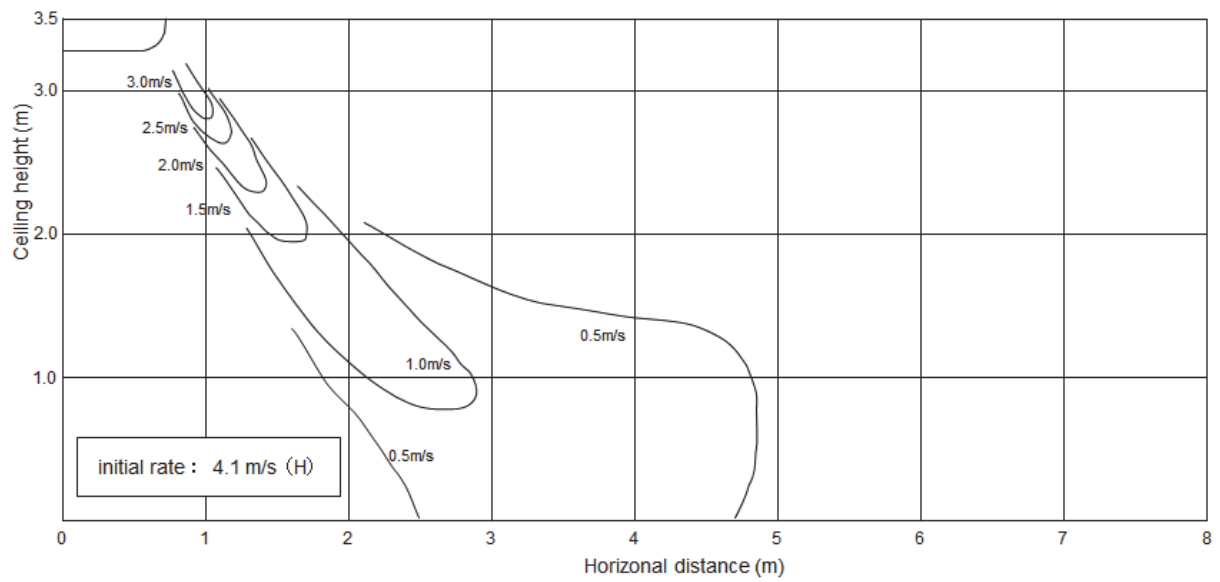


MMC-UP0561HP*

Cooling

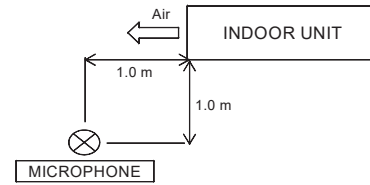


Heating



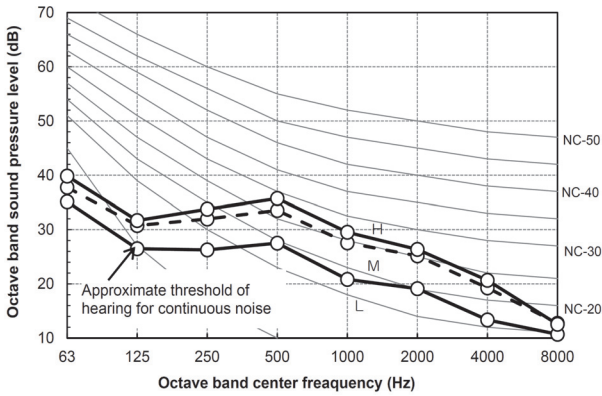
9. Sound data

Sound pressure spectrum



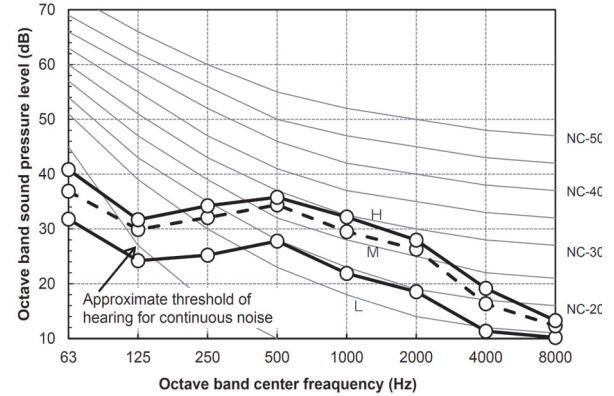
MMC-UP0151HP*

Fan tap	H	M	L
Sound pressure level (dB(A))	36.0	34.0	28.0



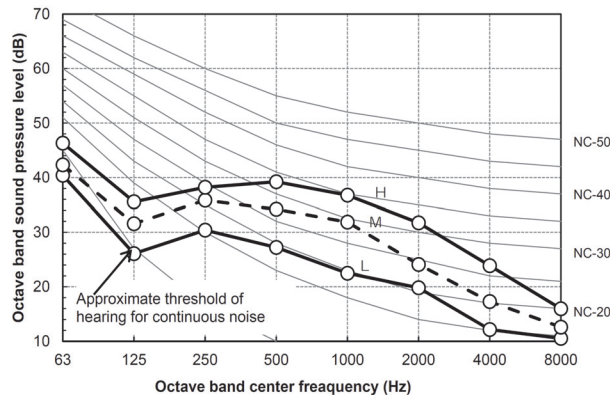
MMC-UP0181HP*

Fan tap	H	M	L
Sound pressure level (dB(A))	37.0	35.0	28.0



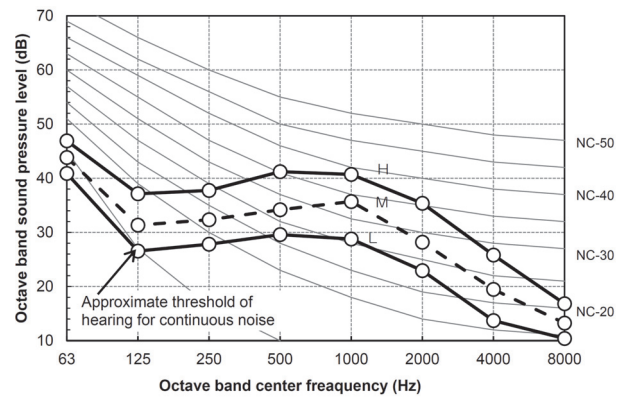
MMC-UP0241HP*, MMC-UP0271HP*

Fan tap	H	M	L
Sound pressure level (dB(A))	41.0	36.0	29.0



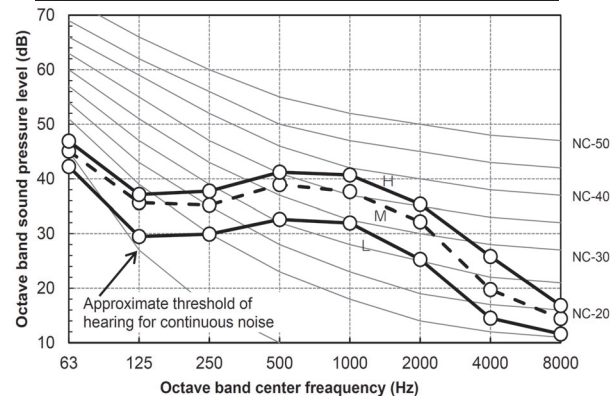
MMC-UP0361HP*

Fan tap	H	M	L
Sound pressure level (dB(A))	44.0	38.0	32.0



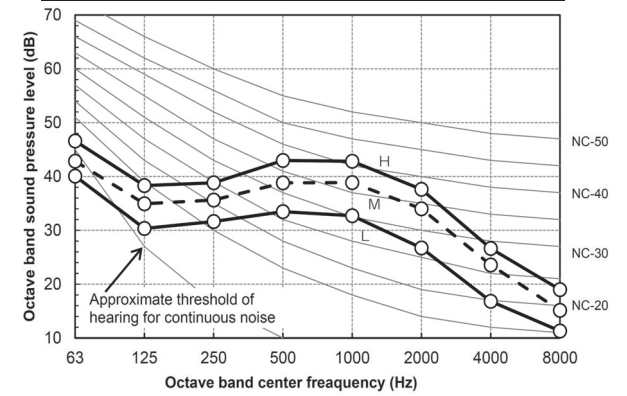
MMC-UP0481HP*

Fan tap	H	M	L
Sound pressure level (dB(A))	44.0	41.0	35.0



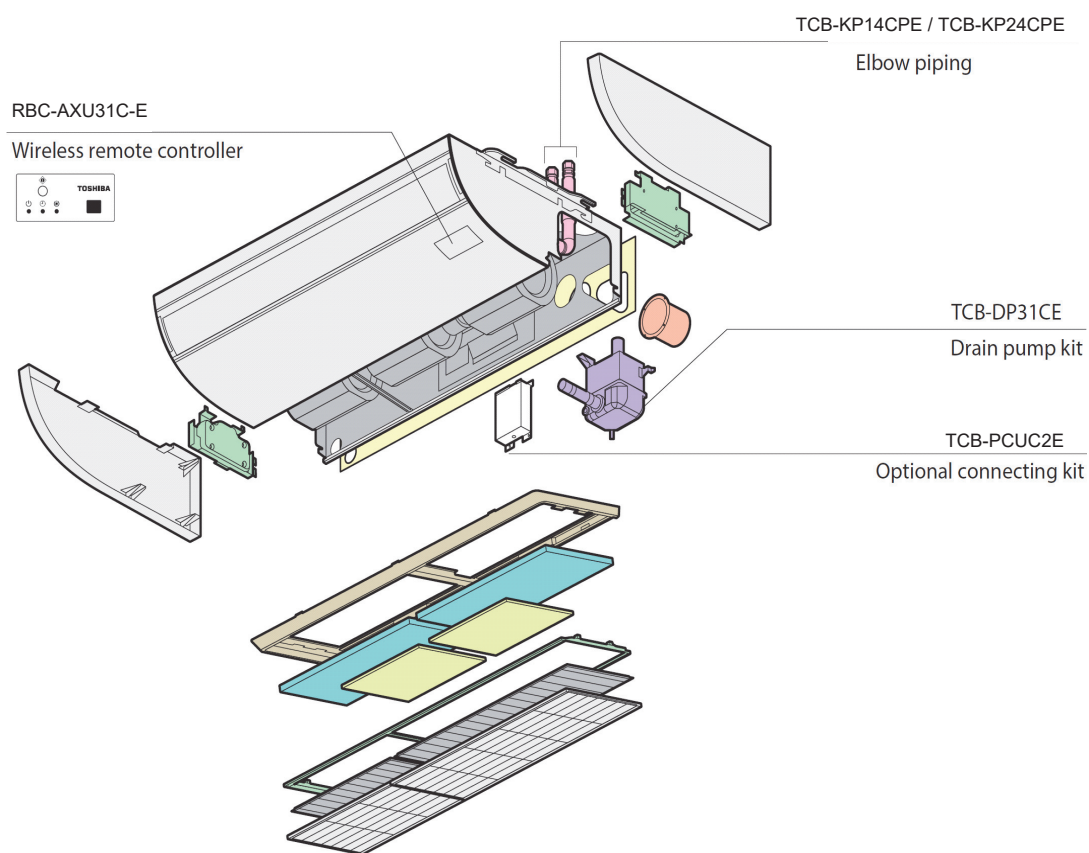
MMC-UP0561HP*

Fan tap	H	M	L
Sound pressure level (dB(A))	46.0	42.0	36.0



10. Accessories

Parts name	Model name	Applied Model	Feature	Remark
Wireless Remote Controller kit	RBC-AXU31C-E	MMC-UP0151HP to UP0561HP	-	
Drain pump kit	TCB-DP31CE	MMC-UP0151HP to UP0561HP	Antibacterial glass is built into Drain pump kit	
Elbow piping kit	TCB-KP14CPE	MMC-UP0151HP to UP0181HP	It is necessary for installation of Drain pump kit	Use with TCB-DP31CE
	TCB-KP24CPE	MMC-UP0241HP to UP0561HP	It is necessary for installation of Drain pump kit	
Option connecting kit	TCB-PCUC2E	MMC-UP0151HP to UP0561HP	For external I/O signal without local relay preparation	



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