

Floor Standing type

MMF-AP0156H1-E / MMF-AP0186H1-E
MMF-AP0246H1-E / MMF-AP0276H1-E
MMF-AP0366H1-E / MMF-AP0486H1-E
MMF-AP0566H1-E



Contents

1. Specifications
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

1. Specifications



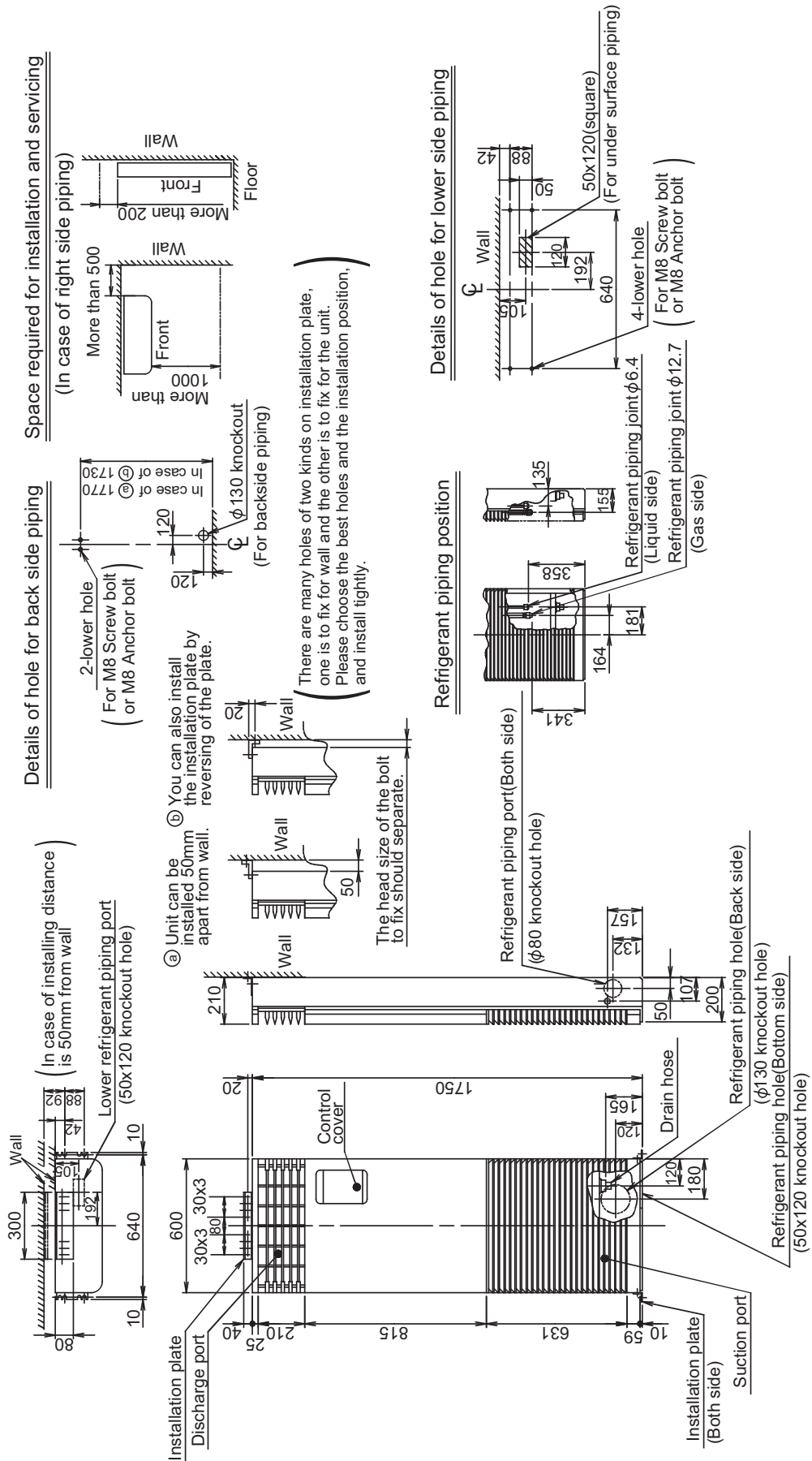
Model name		MMF-	AP0156H1-E	AP0186H1-E	AP0246H1-E	AP0276H1-E	AP0366H1-E	AP0486H1-E	AP0566H1-E	
Cooling/Heating capacity (*1)		kW	4.5 / 5.0	5.6 / 6.3	7.1 / 8.0	8.0 / 9.0	11.2 / 12.5	14.0 / 16.0	16.0 / 18.0	
Electrical characteristics	Power supply		1 phase 50Hz 220-240V / 1 phase 60Hz 220V (Separate power supply for indoor units is required.)							
	Running current	50 Hz	A	0.38		0.60		0.90		1.10
		60 Hz		0.40		0.63		0.94		1.15
	Power consumption		kW	0.055		0.089		0.135		0.160
	Starting current	50 Hz	A	0.53		0.84		1.26		1.54
60 Hz		0.56		0.88		1.32		1.61		
Appearance			Silky shade (Munsell / 1Y 8.5 / 8.0)							
Outer dimension	Height	mm	1,750				1,750			
	Width	mm	600				600			
	Depth	mm	210				390			
Total weight		kg	46		47		62			
Heat exchanger			Finned tube							
Soundproof/Heat-insulating material			Non-flammable insulation							
Fan unit	Fan		Centrifugal fan							
	Standard air flow (High/Mid./Low)		m ³ /h	900 / 780 / 660		1,200 / 990 / 840		1,920 / 1,620 / 1,380		2,160 / 1,730 / 1,560
	Motor		W	62		62		109		109
Air filter			Standard filter (Simple filter)							
Controller			Remote controller							
Connecting pipe	Gas side		mm	Ø12.7		Ø15.9				
	Liquid side		mm	Ø6.4		Ø9.5				
	Drain port (Nominal dia.)		mm	20 (One side of male screw)						
Sound pressure level (High/Mid./Low)		dB(A)	46 / 42 / 37		49 / 45 / 39		51 / 46 / 41		54 / 49 / 44	

Note

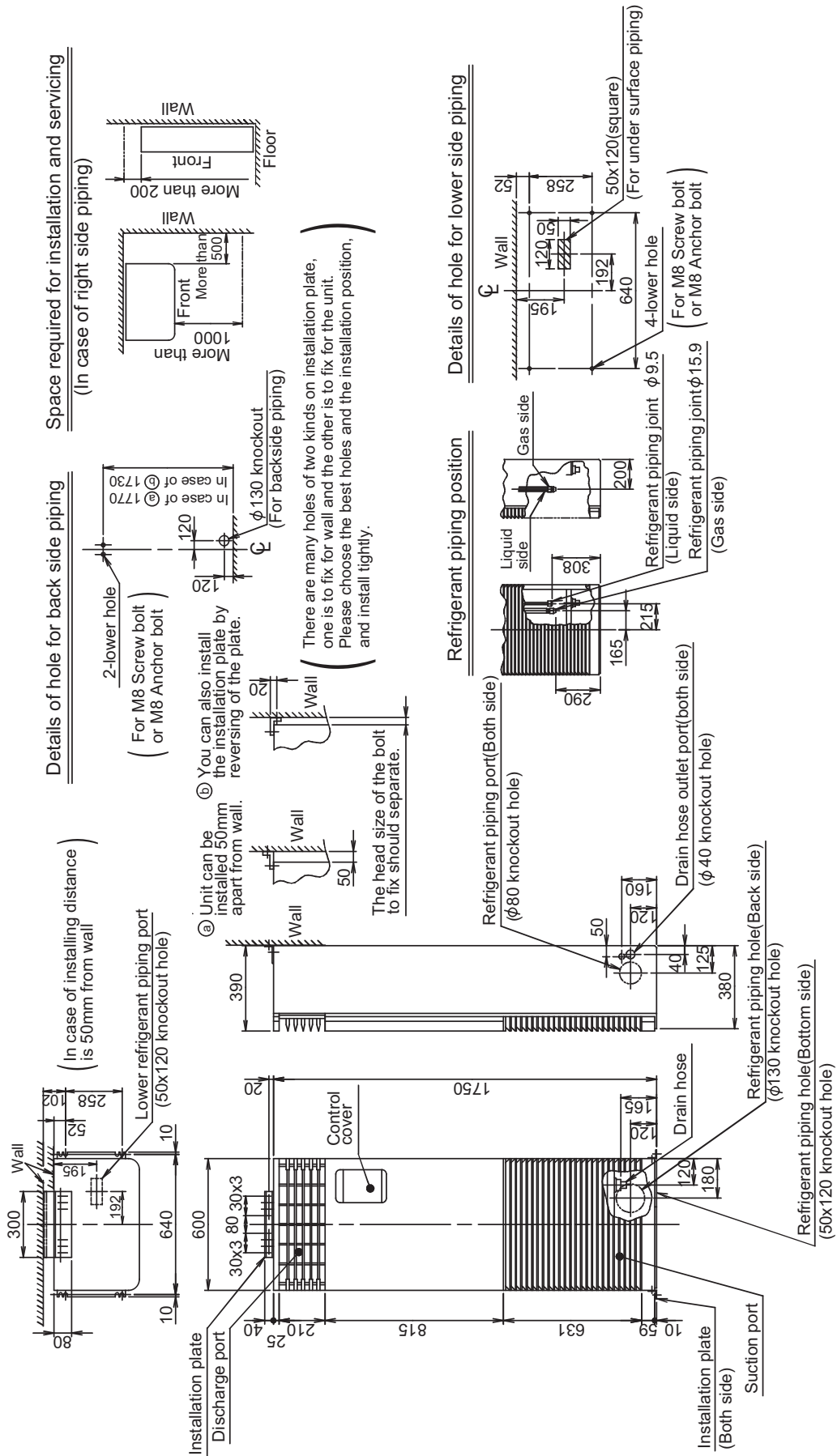
(*1) Rated conditions Cooling : Indoor 27 degC Dry Bulb / 19 degC Wet Bulb, Outdoor 35 degC Dry Bulb.
 Heating : Indoor 20 degC Dry Bulb, Outdoor 7 degC Dry Bulb / 6 degC Wet Bulb.
 Based on equivalent piping length of 7.5 m and piping height difference of 0 m.

2. Dimensions

MMF-AP0156H1-E, MMF-AP0186H1-E



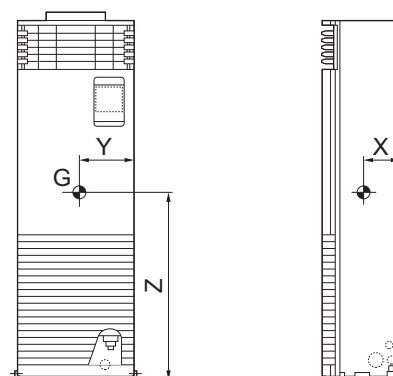
MMF-AP0366H1-E, MMF-AP0486H1-E, MMF-AP0566H1-E



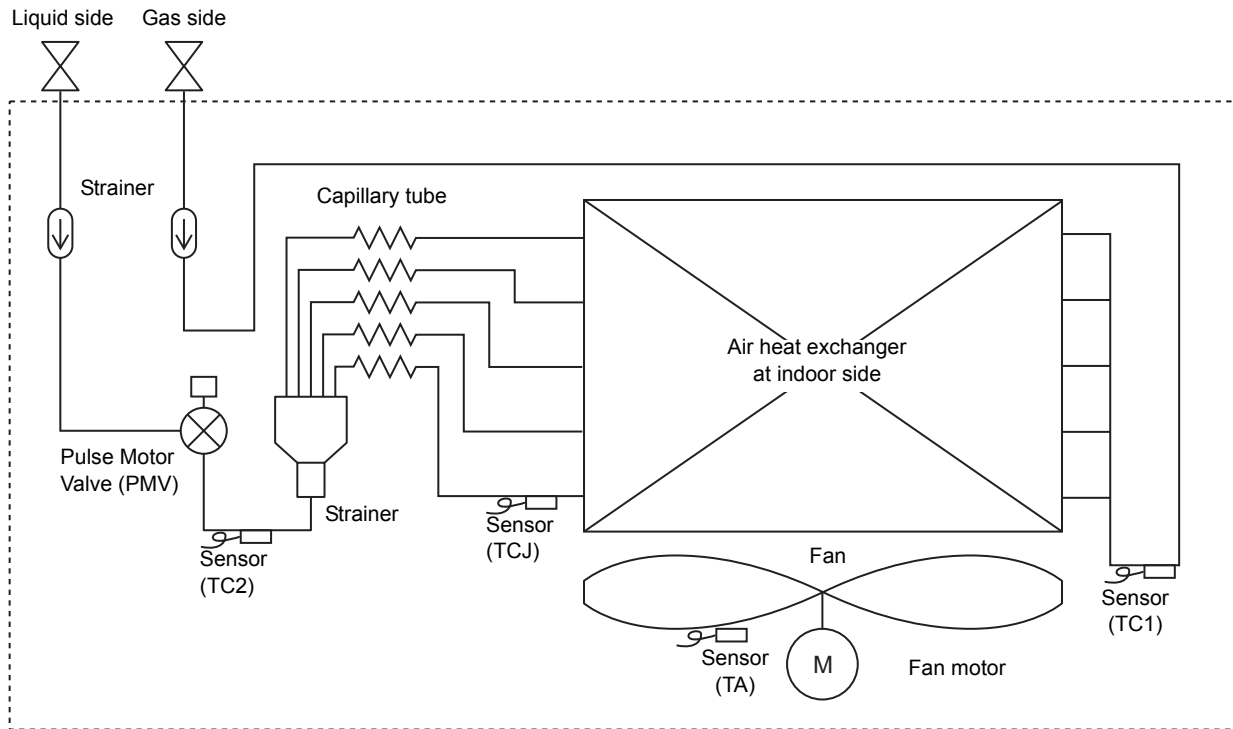
3. Center of gravity

(Unit: mm)

Model name	X(mm)	Y(mm)	Z(mm)	Total weight (kg)
MMF-AP0156H1-E	90	290	830	46
MMF-AP0186H1-E				47
MMF-AP0246H1-E				
MMF-AP0276H1-E				
MMF-AP0366H1-E	180	295	860	62
MMF-AP0486H1-E				
MMF-AP0566H1-E				



4. Piping diagram

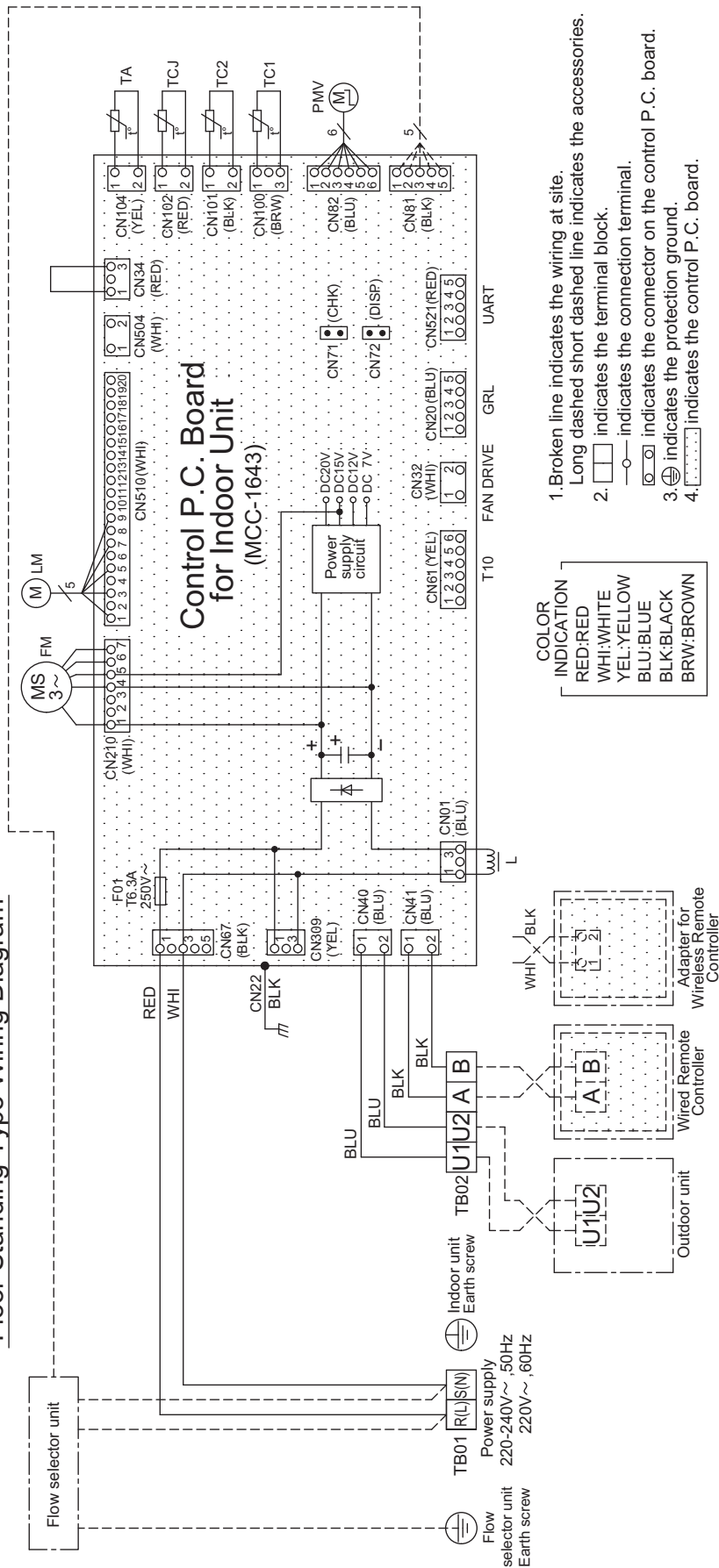


Functional part name		Functional outline
Pulse Motor Valve	PMV	(Connector CN082 (6P): Blue) 1) Controls super heat in cooling operation 2) Controls sub cool in heating operation 3) Recovers refrigerant oil in cooling operation 4) Recovers refrigerant oil in heating operation
Temp. sensor	1. TA	(Connector 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

MMF-AP0156H1-E, AP0186H1-E, AP0246H1-E, AP0276H1-E, AP0366H1-E, AP0486H1-E, AP0566H1-E

Floor Standing Type Wiring Diagram



Symbol	Parts Name
CN**	Connector
F01	Fuse
FM	Fan Motor
L	Reactor
LM	Louver Motor
PMV	Pulse Motor Valve
TA	Indoor temp sensor
TB01,02	Terminal Block
TC1,2,TCJ	Temp sensor

6. Electrical characteristics

1.50 Hz

Type	Model	Nominal Voltage (V-Ph-Hz)	Voltage Range		Fan Motor		Power Supply	
			Min	Max	kW	FLA	MCA	MOCP
Floor Standing Type	MMF-AP0156H1-E	230-1-50	198	264	0.062	0.44	0.55	15
	MMF-AP0186H1-E	230-1-50	198	264	0.062	0.44	0.55	15
	MMF-AP0246H1-E	230-1-50	198	264	0.062	0.69	0.86	15
	MMF-AP0276H1-E	230-1-50	198	264	0.062	0.69	0.86	15
	MMF-AP0366H1-E	230-1-50	198	264	0.109	1.04	1.29	15
	MMF-AP0486H1-E	230-1-50	198	264	0.109	1.27	1.58	15
	MMF-AP0566H1-E	230-1-50	198	264	0.109	1.27	1.58	15

MCA : Minimum Circuit Amps

FLA : Full Load Amps

MOCP : Maximum Overcurrent Protection (Amps)

kW : Fan Motor Rated Output (kW)

2.60 Hz

Type	Model	Nominal Voltage (V-Ph-Hz)	Voltage Range		Fan Motor		Power Supply	
			Min	Max	kW	FLA	MCA	MOCP
Floor Standing Type	MMF-AP0156H1-E	220-1-60	198	242	0.062	0.46	0.57	15
	MMF-AP0186H1-E	220-1-60	198	242	0.062	0.46	0.57	15
	MMF-AP0246H1-E	220-1-60	198	242	0.062	0.72	0.90	15
	MMF-AP0276H1-E	220-1-60	198	242	0.062	0.72	0.90	15
	MMF-AP0366H1-E	220-1-60	198	242	0.109	1.08	1.35	15
	MMF-AP0486H1-E	220-1-60	198	242	0.109	1.32	1.65	15
	MMF-AP0566H1-E	220-1-60	198	242	0.109	1.32	1.65	15

MCA : Minimum Circuit Amps

FLA : Full Load Amps

MOCP : Maximum Overcurrent Protection (Amps)

kW : Fan Motor Rated Output (kW)

7. Sensible capacity table

Floor Standing type (MMF-AP__6H1-E)

TC : Total capacity [kW] SHC : Sensible capacity [kW]

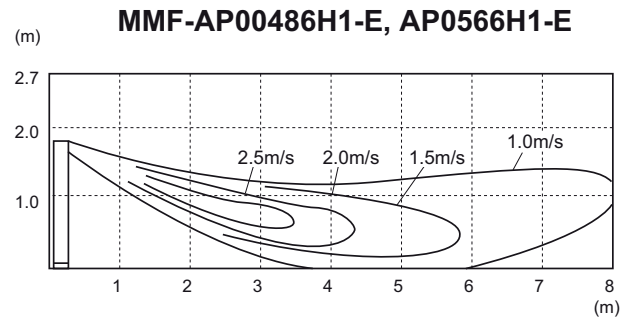
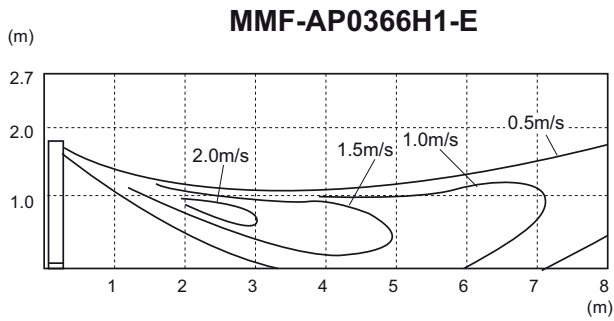
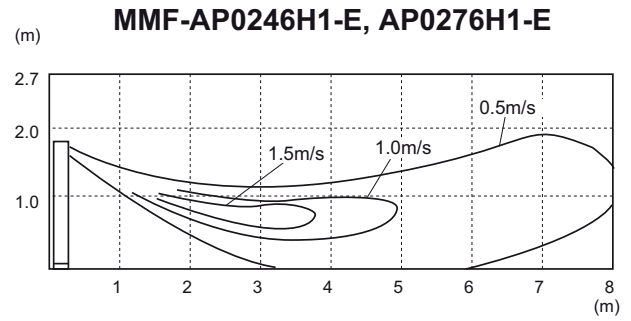
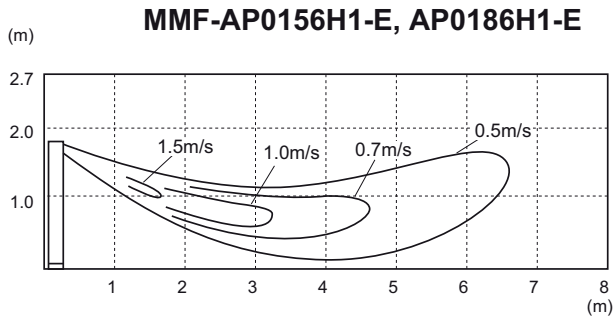
unit size	outdoor air temp. CDB	indoor air temp.													
		14.0CWB		16.0CWB		18.0CWB		19.0CWB		20.0CWB		22.0CWB		24.0CWB	
		20CDB		23CDB		26CDB		27CDB		28CDB		30CDB		32CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
015	10.0	4.6	3.6	5.1	3.9	5.4	4.1	5.6	4.1	5.8	4.1	6.1	4.1	6.4	4.0
	12.0	4.6	3.6	5.1	3.9	5.4	4.1	5.6	4.1	5.8	4.1	6.1	4.1	6.4	4.0
	14.0	4.6	3.6	5.1	3.9	5.4	4.1	5.6	4.1	5.8	4.1	6.1	4.1	6.4	4.0
	16.0	4.6	3.6	5.1	3.9	5.4	4.1	5.6	4.1	5.8	4.1	6.1	4.1	6.4	4.0
	18.0	4.6	3.6	5.1	3.9	5.4	4.1	5.6	4.1	5.8	4.1	6.1	4.1	6.4	4.0
	20.0	4.6	3.6	5.1	3.9	5.4	4.1	5.6	4.1	5.8	4.1	6.1	4.1	6.4	4.0
	21.0	4.6	3.6	5.1	3.9	5.4	4.1	5.6	4.1	5.8	4.1	6.1	4.1	6.4	4.0
	23.0	4.6	3.6	5.1	3.9	5.4	4.1	5.6	4.1	5.8	4.1	6.1	4.1	6.4	4.0
	25.0	4.6	3.6	5.1	3.9	5.4	4.1	5.6	4.1	5.8	4.1	6.1	4.1	6.4	4.0
	27.0	4.6	3.6	5.1	3.9	5.4	4.1	5.6	4.1	5.8	4.1	6.1	4.1	6.4	4.0
	29.0	4.6	3.6	5.1	3.9	5.4	4.1	5.6	4.1	5.8	4.1	6.1	4.1	6.4	4.0
	31.0	4.6	3.6	5.1	3.9	5.4	4.1	5.6	4.1	5.8	4.1	6.1	4.1	6.4	4.0
33.0	4.6	3.6	5.1	3.9	5.4	4.1	5.6	4.1	5.8	4.1	6.1	4.1	6.4	4.0	
35.0	3.7	3.0	4.1	3.2	4.4	3.4	4.5	3.4	4.6	3.4	4.9	3.4	5.1	3.3	
018	10.0	4.6	3.6	5.1	3.9	5.4	4.1	5.6	4.1	5.8	4.1	6.1	4.1	6.4	4.0
	12.0	4.6	3.6	5.1	3.9	5.4	4.1	5.6	4.1	5.8	4.1	6.1	4.1	6.4	4.0
	14.0	4.6	3.6	5.1	3.9	5.4	4.1	5.6	4.1	5.8	4.1	6.1	4.1	6.4	4.0
	16.0	4.6	3.6	5.1	3.9	5.4	4.1	5.6	4.1	5.8	4.1	6.1	4.1	6.4	4.0
	18.0	4.6	3.6	5.1	3.9	5.4	4.1	5.6	4.1	5.8	4.1	6.1	4.1	6.4	4.0
	20.0	4.6	3.6	5.1	3.9	5.4	4.1	5.6	4.1	5.8	4.1	6.1	4.1	6.4	4.0
	21.0	4.6	3.6	5.1	3.9	5.4	4.1	5.6	4.1	5.8	4.1	6.1	4.1	6.4	4.0
	23.0	4.6	3.6	5.1	3.9	5.4	4.1	5.6	4.1	5.8	4.1	6.1	4.1	6.4	4.0
	25.0	4.6	3.6	5.1	3.9	5.4	4.1	5.6	4.1	5.8	4.1	6.1	4.1	6.4	4.0
	27.0	4.6	3.6	5.1	3.9	5.4	4.1	5.6	4.1	5.8	4.1	6.1	4.1	6.4	4.0
	29.0	4.6	3.6	5.1	3.9	5.4	4.1	5.6	4.1	5.8	4.1	6.1	4.1	6.4	4.0
	31.0	4.6	3.6	5.1	3.9	5.4	4.1	5.6	4.1	5.8	4.1	6.1	4.1	6.4	4.0
33.0	4.6	3.6	5.1	3.9	5.4	4.1	5.6	4.1	5.8	4.1	6.1	4.1	6.4	4.0	
35.0	4.6	3.6	5.1	3.9	5.4	4.1	5.6	4.1	5.8	4.1	6.1	4.1	6.4	4.0	
024	10.0	5.8	4.7	6.4	5.0	6.9	5.3	7.1	5.3	7.3	5.3	7.7	5.3	8.1	5.1
	12.0	5.8	4.7	6.4	5.0	6.9	5.3	7.1	5.3	7.3	5.3	7.7	5.3	8.1	5.1
	14.0	5.8	4.7	6.4	5.0	6.9	5.3	7.1	5.3	7.3	5.3	7.7	5.3	8.1	5.1
	16.0	5.8	4.7	6.4	5.0	6.9	5.3	7.1	5.3	7.3	5.3	7.7	5.3	8.1	5.1
	18.0	5.8	4.7	6.4	5.0	6.9	5.3	7.1	5.3	7.3	5.3	7.7	5.3	8.1	5.1
	20.0	5.8	4.7	6.4	5.0	6.9	5.3	7.1	5.3	7.3	5.3	7.7	5.3	8.1	5.1
	21.0	5.8	4.7	6.4	5.0	6.9	5.3	7.1	5.3	7.3	5.3	7.7	5.3	8.1	5.1
	23.0	5.8	4.7	6.4	5.0	6.9	5.3	7.1	5.3	7.3	5.3	7.7	5.3	8.1	5.1
	25.0	5.8	4.7	6.4	5.0	6.9	5.3	7.1	5.3	7.3	5.3	7.7	5.3	8.1	5.1
	27.0	5.8	4.7	6.4	5.0	6.9	5.3	7.1	5.3	7.3	5.3	7.7	5.3	8.1	5.1
	29.0	5.8	4.7	6.4	5.0	6.9	5.3	7.1	5.3	7.3	5.3	7.7	5.3	8.1	5.1
	31.0	5.8	4.7	6.4	5.0	6.9	5.3	7.1	5.3	7.3	5.3	7.7	5.3	8.1	5.1
33.0	5.8	4.7	6.4	5.0	6.9	5.3	7.1	5.3	7.3	5.3	7.7	5.3	8.1	5.1	
35.0	5.8	4.7	6.4	5.0	6.9	5.3	7.1	5.3	7.3	5.3	7.7	5.3	8.1	5.1	
027	10.0	6.6	5.2	7.3	5.6	7.8	5.9	8.0	5.9	8.2	5.9	8.7	5.8	9.1	5.7
	12.0	6.6	5.2	7.3	5.6	7.8	5.9	8.0	5.9	8.2	5.9	8.7	5.8	9.1	5.7
	14.0	6.6	5.2	7.3	5.6	7.8	5.9	8.0	5.9	8.2	5.9	8.7	5.8	9.1	5.7
	16.0	6.6	5.2	7.3	5.6	7.8	5.9	8.0	5.9	8.2	5.9	8.7	5.8	9.1	5.7
	18.0	6.6	5.2	7.3	5.6	7.8	5.9	8.0	5.9	8.2	5.9	8.7	5.8	9.1	5.7
	20.0	6.6	5.2	7.3	5.6	7.8	5.9	8.0	5.9	8.2	5.9	8.7	5.8	9.1	5.7
	21.0	6.6	5.2	7.3	5.6	7.8	5.9	8.0	5.9	8.2	5.9	8.7	5.8	9.1	5.7
	23.0	6.6	5.2	7.3	5.6	7.8	5.9	8.0	5.9	8.2	5.9	8.7	5.8	9.1	5.7
	25.0	6.6	5.2	7.3	5.6	7.8	5.9	8.0	5.9	8.2	5.9	8.7	5.8	9.1	5.7
	27.0	6.6	5.2	7.3	5.6	7.8	5.9	8.0	5.9	8.2	5.9	8.7	5.8	9.1	5.7
	29.0	6.6	5.2	7.3	5.6	7.8	5.9	8.0	5.9	8.2	5.9	8.7	5.8	9.1	5.7
	31.0	6.6	5.2	7.3	5.6	7.8	5.9	8.0	5.9	8.2	5.9	8.7	5.8	9.1	5.7
33.0	6.6	5.2	7.3	5.6	7.8	5.9	8.0	5.9	8.2	5.9	8.7	5.8	9.1	5.7	
35.0	6.6	5.2	7.3	5.6	7.8	5.9	8.0	5.9	8.2	5.9	8.7	5.8	9.1	5.7	

Floor Standing type (MMF-AP__6H1-E)

TC : Total capacity [kW] SHC : Sensible capacity [kW]

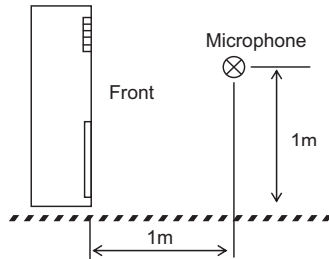
unit size	outdoor air temp. CDB	indoor air temp.													
		14.0CWB		16.0CWB		18.0CWB		19.0CWB		20.0CWB		22.0CWB		24.0CWB	
		20CDB		23CDB		26CDB		27CDB		28CDB		30CDB		32CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
036	10.0	9.2	7.3	10.2	7.8	10.9	8.3	11.2	8.3	11.5	8.3	12.2	8.2	12.8	8.0
	12.0	9.2	7.3	10.2	7.8	10.9	8.3	11.2	8.3	11.5	8.3	12.2	8.2	12.8	8.0
	14.0	9.2	7.3	10.2	7.8	10.9	8.3	11.2	8.3	11.5	8.3	12.2	8.2	12.8	8.0
	16.0	9.2	7.3	10.2	7.8	10.9	8.3	11.2	8.3	11.5	8.3	12.2	8.2	12.8	8.0
	18.0	9.2	7.3	10.2	7.8	10.9	8.3	11.2	8.3	11.5	8.3	12.2	8.2	12.8	8.0
	20.0	9.2	7.3	10.2	7.8	10.9	8.3	11.2	8.3	11.5	8.3	12.2	8.2	12.8	8.0
	21.0	9.2	7.3	10.2	7.8	10.9	8.3	11.2	8.3	11.5	8.3	12.2	8.2	12.8	8.0
	23.0	9.2	7.3	10.2	7.8	10.9	8.3	11.2	8.3	11.5	8.3	12.2	8.2	12.8	8.0
	25.0	9.2	7.3	10.2	7.8	10.9	8.3	11.2	8.3	11.5	8.3	12.2	8.2	12.8	8.0
	27.0	9.2	7.3	10.2	7.8	10.9	8.3	11.2	8.3	11.5	8.3	12.2	8.2	12.8	8.0
	29.0	9.2	7.3	10.2	7.8	10.9	8.3	11.2	8.3	11.5	8.3	12.2	8.2	12.8	8.0
	31.0	9.2	7.3	10.2	7.8	10.9	8.3	11.2	8.3	11.5	8.3	12.2	8.2	12.8	8.0
33.0	9.2	7.3	10.2	7.8	10.9	8.3	11.2	8.3	11.5	8.3	12.2	8.2	12.8	8.0	
35.0	9.2	7.3	10.2	7.8	10.9	8.3	11.2	8.3	11.5	8.3	12.2	8.2	12.8	8.0	
048	10.0	11.5	8.9	12.7	9.5	13.6	10.1	14.0	10.1	14.4	10.1	15.3	10.0	16.0	9.8
	12.0	11.5	8.9	12.7	9.5	13.6	10.1	14.0	10.1	14.4	10.1	15.3	10.0	16.0	9.8
	14.0	11.5	8.9	12.7	9.5	13.6	10.1	14.0	10.1	14.4	10.1	15.3	10.0	16.0	9.8
	16.0	11.5	8.9	12.7	9.5	13.6	10.1	14.0	10.1	14.4	10.1	15.3	10.0	16.0	9.8
	18.0	11.5	8.9	12.7	9.5	13.6	10.1	14.0	10.1	14.4	10.1	15.3	10.0	16.0	9.8
	20.0	11.5	8.9	12.7	9.5	13.6	10.1	14.0	10.1	14.4	10.1	15.3	10.0	16.0	9.8
	21.0	11.5	8.9	12.7	9.5	13.6	10.1	14.0	10.1	14.4	10.1	15.3	10.0	16.0	9.8
	23.0	11.5	8.9	12.7	9.5	13.6	10.1	14.0	10.1	14.4	10.1	15.3	10.0	16.0	9.8
	25.0	11.5	8.9	12.7	9.5	13.6	10.1	14.0	10.1	14.4	10.1	15.3	10.0	16.0	9.8
	27.0	11.5	8.9	12.7	9.5	13.6	10.1	14.0	10.1	14.4	10.1	15.3	10.0	16.0	9.8
	29.0	11.5	8.9	12.7	9.5	13.6	10.1	14.0	10.1	14.4	10.1	15.3	10.0	16.0	9.8
	31.0	11.5	8.9	12.7	9.5	13.6	10.1	14.0	10.1	14.4	10.1	15.3	10.0	16.0	9.8
33.0	11.5	8.9	12.7	9.5	13.6	10.1	14.0	10.1	14.4	10.1	15.3	10.0	16.0	9.8	
35.0	11.5	8.9	12.7	9.5	13.6	10.1	14.0	10.1	14.4	10.1	15.3	10.0	16.0	9.8	
056	10.0	13.1	10.1	14.5	10.8	15.5	11.4	16.0	11.4	16.5	11.4	17.4	11.3	18.2	11.0
	12.0	13.1	10.1	14.5	10.8	15.5	11.4	16.0	11.4	16.5	11.4	17.4	11.3	18.2	11.0
	14.0	13.1	10.1	14.5	10.8	15.5	11.4	16.0	11.4	16.5	11.4	17.4	11.3	18.2	11.0
	16.0	13.1	10.1	14.5	10.8	15.5	11.4	16.0	11.4	16.5	11.4	17.4	11.3	18.2	11.0
	18.0	13.1	10.1	14.5	10.8	15.5	11.4	16.0	11.4	16.5	11.4	17.4	11.3	18.2	11.0
	20.0	13.1	10.1	14.5	10.8	15.5	11.4	16.0	11.4	16.5	11.4	17.4	11.3	18.2	11.0
	21.0	13.1	10.1	14.5	10.8	15.5	11.4	16.0	11.4	16.5	11.4	17.4	11.3	18.2	11.0
	23.0	13.1	10.1	14.5	10.8	15.5	11.4	16.0	11.4	16.5	11.4	17.4	11.3	18.2	11.0
	25.0	13.1	10.1	14.5	10.8	15.5	11.4	16.0	11.4	16.5	11.4	17.4	11.3	18.2	11.0
	27.0	13.1	10.1	14.5	10.8	15.5	11.4	16.0	11.4	16.5	11.4	17.4	11.3	18.2	11.0
	29.0	13.1	10.1	14.5	10.8	15.5	11.4	16.0	11.4	16.5	11.4	17.4	11.3	18.2	11.0
	31.0	13.1	10.1	14.5	10.8	15.5	11.4	16.0	11.4	16.5	11.4	17.4	11.3	18.2	11.0
33.0	13.1	10.1	14.5	10.8	15.5	11.4	16.0	11.4	16.5	11.4	17.4	11.3	18.2	11.0	
35.0	13.1	10.1	14.5	10.8	15.5	11.4	16.0	11.4	16.5	11.4	17.4	11.3	18.2	11.0	

8. Air flow distance chart



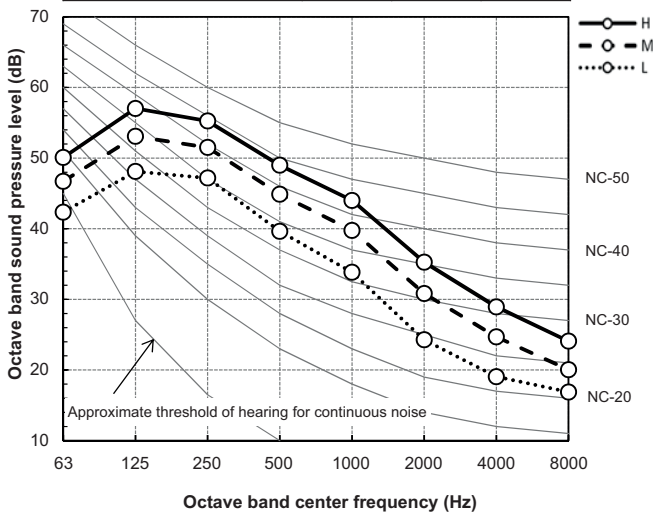
9. Sound data

Sound pressure spectrum



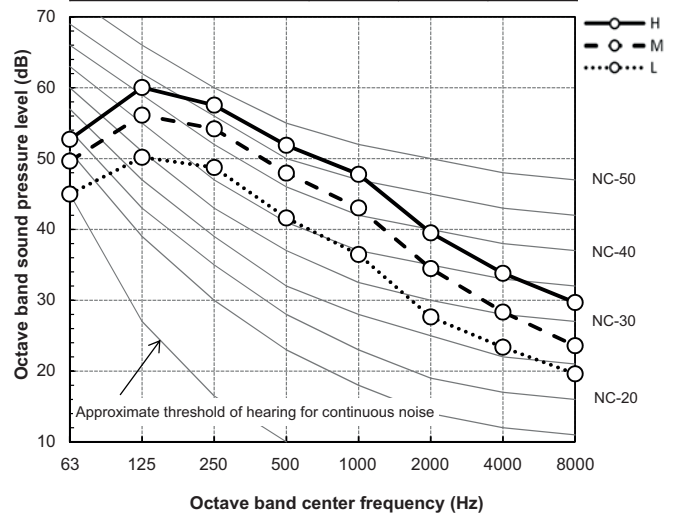
MMF-AP0156H1-E, -AP0186H1-E

Fan tap	H	M	L
Sound pressure level (dB(A))	46.0	42.0	37.0



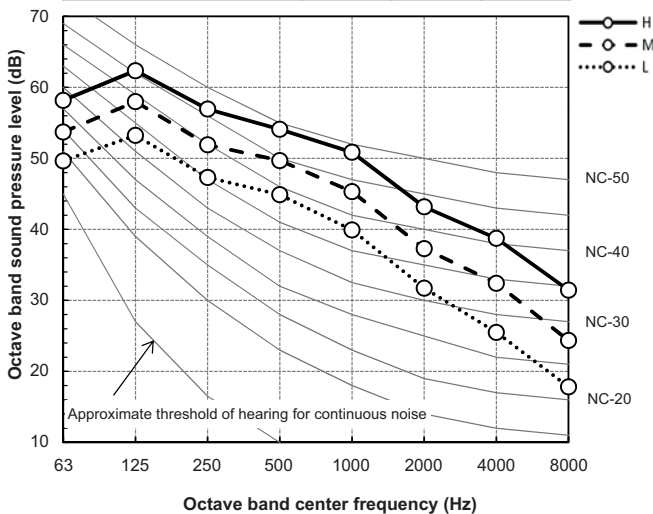
MMF-AP0246H1-E, -AP0276H1-E

Fan tap	H	M	L
Sound pressure level (dB(A))	49.0	45.0	39.0



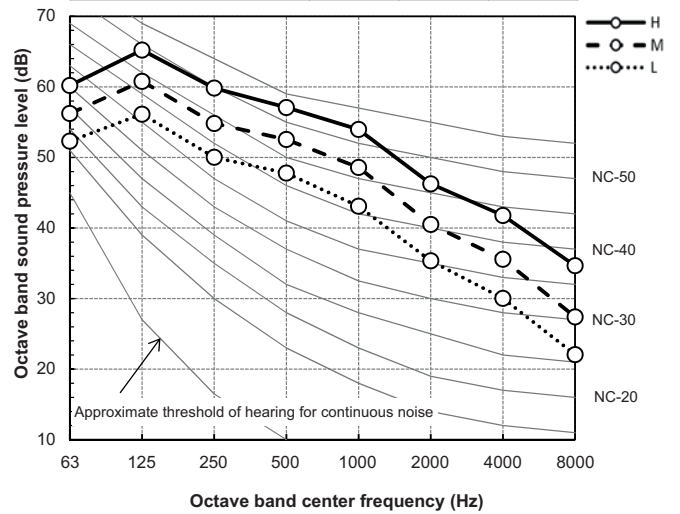
MMF-AP0366H1-E

Fan tap	H	M	L
Sound pressure level (dB(A))	51.0	46.0	41.0



MMF-AP0486H1-E, -AP0566H1-E

Fan tap	H	M	L
Sound pressure level (dB(A))	54.0	49.0	44.0



Floor Standing type Engineering Data Book

Model name:

MMF-AP__6H1-E

September, 2018 Second Edition

TOSHIBA CARRIER CORPORATION