

Console Type

MML-AP0074NH1-E
MML-AP0094NH1-E
MML-AP0124NH1-E
MML-AP0154NH1-E
MML-AP0184NH1-E



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1. Specifications



Model name		MML-	AP0074NH1-E	AP0094NH1-E	AP0124NH1-E	AP0154NH1-E	AP0184NH1-E	
Cooling / Heating capacity (*1)		kW	2.2 / 2.5	2.8 / 3.2	3.6 / 4.0	4.5 / 5.0	5.6 / 6.3	
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	0.20	0.20	0.23	0.29	0.42
		60 Hz		0.17	0.17	0.19	0.25	0.36
	Power consumption	kW	0.021	0.021	0.025	0.034	0.052	
	Starting current	A	0.26 / 0.22	0.26 / 0.22	0.30 / 0.25	0.38 / 0.33	0.55 / 0.47	
Appearance	Air intake grille and side panel		Moon white					
	Discharge-grille		Moon white					
	Bottom surface		Moon white					
Outer dimension	Height	mm	600					
	Width	mm	700					
	Depth	mm	220					
Total weight		kg	17					
Heat exchanger			Finned tube					
Soundproof / Heat-insulating material			Foamed polystyrene, Polyethylene					
Fan unit	Fan		Turbo fan					
	Standard air flow (High/Mid./Low)	m ³ /h	510 / 366 / 282	510 / 366 / 282	552 / 408 / 324	624 / 468 / 384	726 / 528 / 426	
	Motor output	W	41					
Air filter			Standard filter attached					
Controller			Wireless remote controller (packed with indoor unit)					
Connecting pipe	Gas side	mm	Ø9.5			Ø12.7		
	Liquid side	mm	Ø6.4					
	Drain port (Nominal dia.)	mm	16 (Polypropylene tube)					
Sound pressure level (High/Mid./Low)		dB(A)	38 / 32 / 26	38 / 32 / 26	40 / 34 / 29	43 / 37 / 31	47 / 40 / 34	

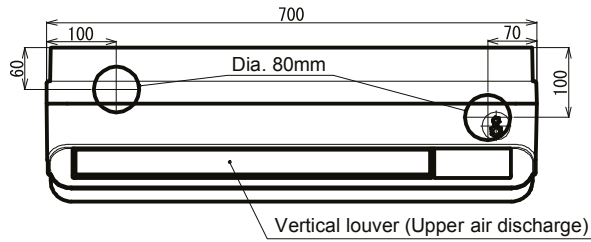
Note

(*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

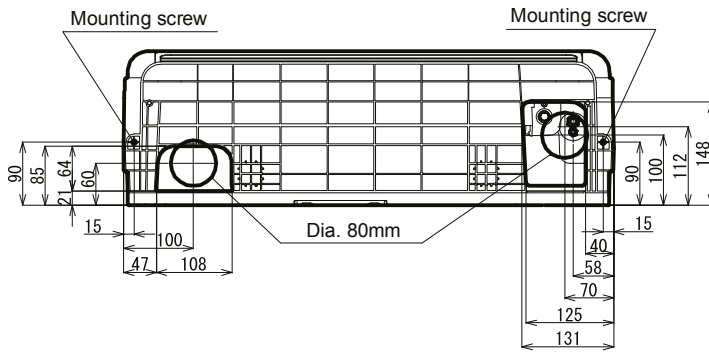
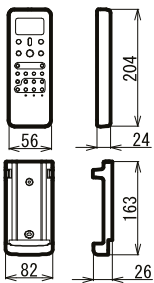
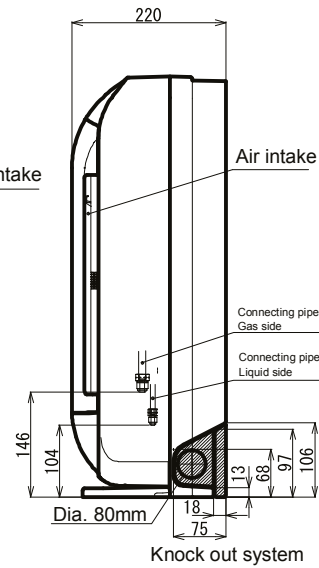
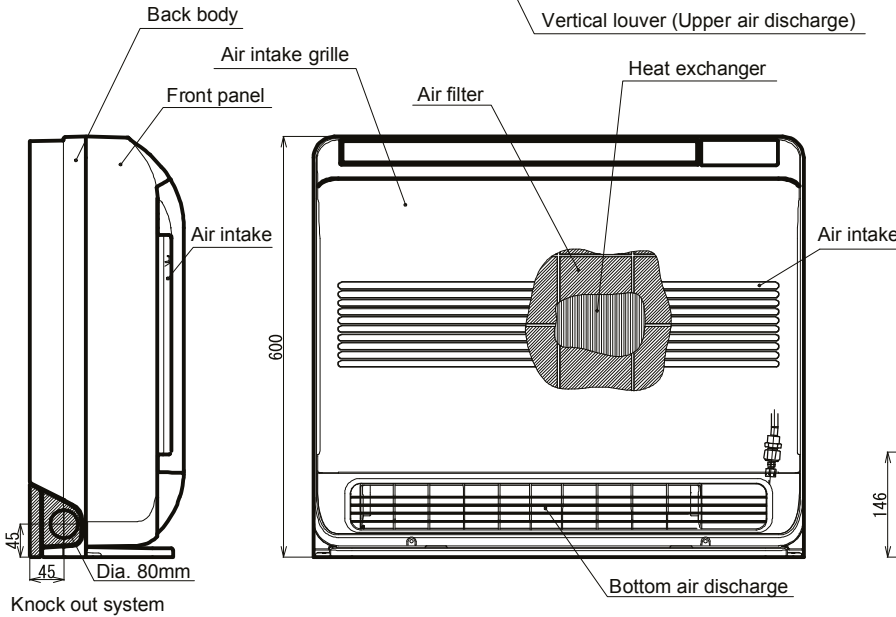
MML-AP0074NH1-E, AP0094NH1-E, AP0124NH1-E, AP0154NH1-E, AP0184NH1-E

unit:mm

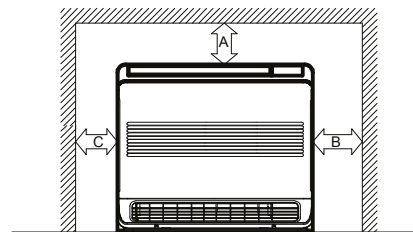


Connecting pipe

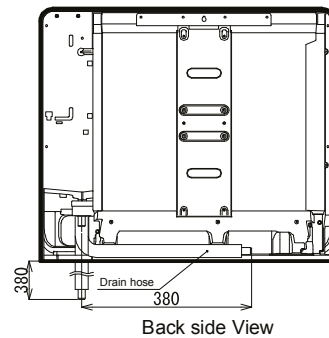
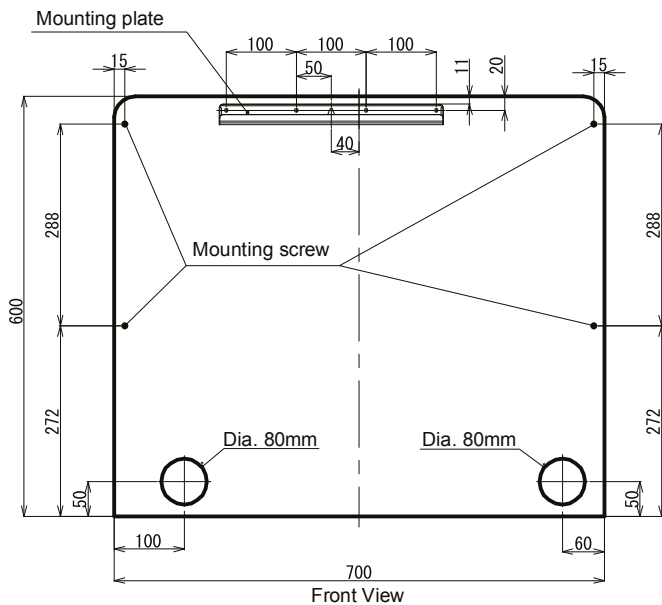
MML-	AP0074 to AP0124 type	AP0154 to AP0184 type
Liquid side	dia. 6.35	dia. 6.35
Gas side	dia. 9.52	dia. 12.7



Space required for installation and servicing



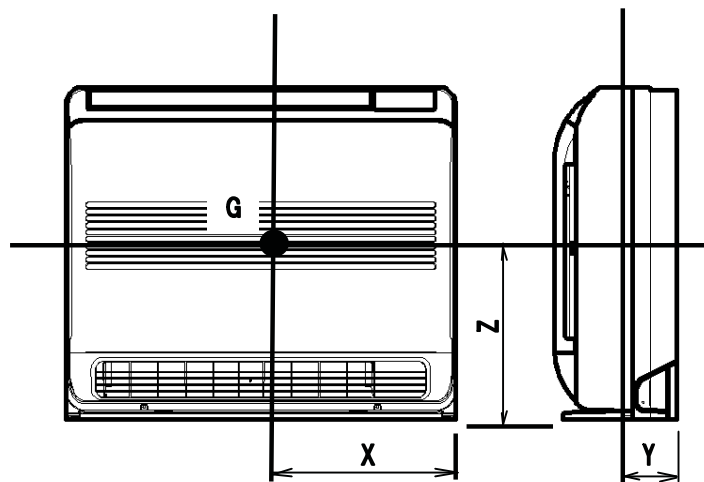
Distance
A 300 or more
B 300 or more
C 300 or more



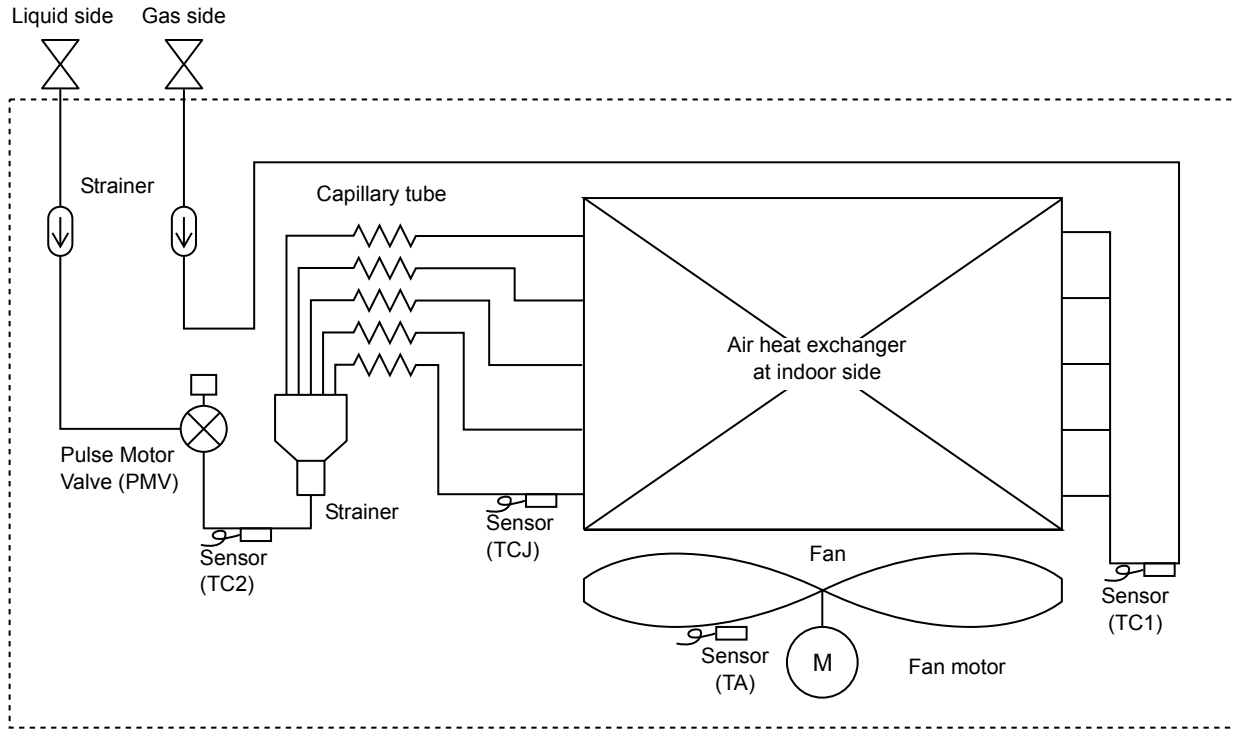
3. Center of gravity

MML-AP0074NH1-E, AP0094NH1-E, AP0124NH1-E, AP0154NH1-E, AP0184NH1-E

Model name	X(mm)	Y(mm)	Z(mm)	Total weight(kg)
MML-AP0074NH1-E	320	150	310	17
MML-AP0094NH1-E				
MML-AP0124NH1-E				
MML-AP0154NH1-E				
MML-AP0184NH1-E				



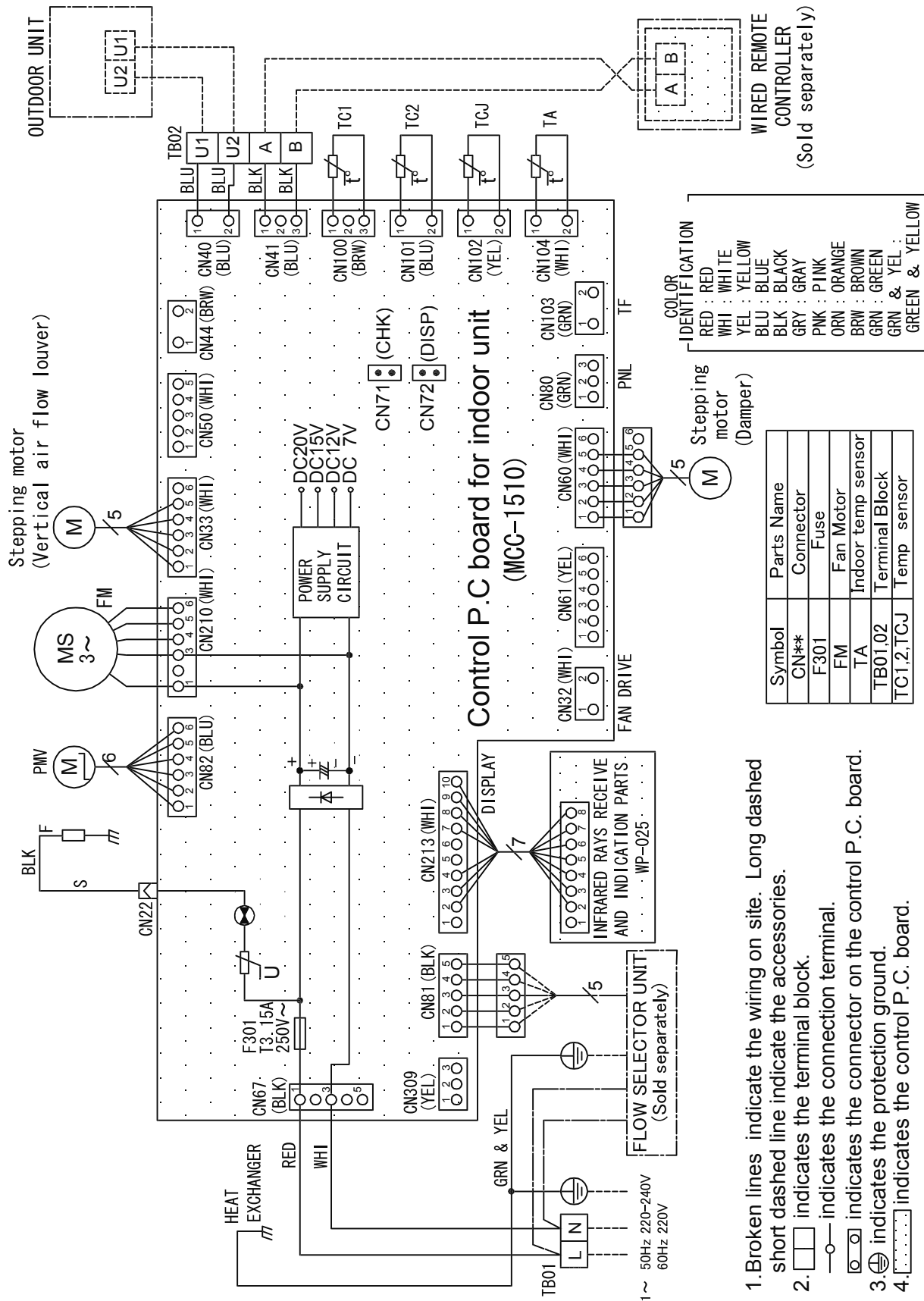
4. Piping diagram



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

MML-AP0074NH1-E, AP0094NH1-E, AP0124NH1-E, AP0154NH1-E, AP0184NH1-E



1. Broken lines indicate the wiring on site. Long dashed short dashed line indicate the accessories.
2. □ indicates the terminal block.
3. —○— indicates the connection terminal.
4. □ indicates the connector on the control P.C. board. ⊕ indicates the protection ground. [] indicates the control P.C. board.

6. Electrical characteristics

1.50Hz

Type	Model	Nominal Voltage (V-Ph-Hz)	Voltage Range		Fan Motor		Power supply	
			Min	Max	kW	FLA	MCA	MOCP
Console Type	MML-AP0074NH1-E	230-1-50	198	264	0.041	0.21	0.26	15
	MML-AP0094NH1-E	230-1-50	198	264	0.041	0.21	0.26	15
	MML-AP0124NH1-E	230-1-50	198	264	0.041	0.25	0.31	15
	MML-AP0154NH1-E	230-1-50	198	264	0.041	0.32	0.40	15
	MML-AP0184NH1-E	230-1-50	198	264	0.041	0.46	0.58	15

MCA : Minimum Circuit Amps

FLA : Full Load Amps

MOCP : Maximum Overcurrent Protection (Amps)

kW : Fan Motor Rated Output (kW)

2.60Hz

Type	Model	Nominal Voltage (V-Ph-Hz)	Voltage Range		Fan Motor		Power supply	
			Min	Max	kW	FLA	MCA	MOCP
Console Type	MML-AP0074NH1-E	220-1-60	198	242	0.041	0.18	0.23	15
	MML-AP0094NH1-E	220-1-60	198	242	0.041	0.18	0.23	15
	MML-AP0124NH1-E	220-1-60	198	242	0.041	0.21	0.26	15
	MML-AP0154NH1-E	220-1-60	198	242	0.041	0.27	0.34	15
	MML-AP0184NH1-E	220-1-60	198	242	0.041	0.38	0.48	15

MCA : Minimum Circuit Amps

FLA : Full Load Amps

MOCP : Maximum Overcurrent Protection (Amps)

kW : Fan Motor Rated Output (kW)

7. Sensible capacity table

Console Type (MML-AP__4NH1-E)

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
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	
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	
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 capacity [kW]

Console Type (MML-AP__4NH1-E)

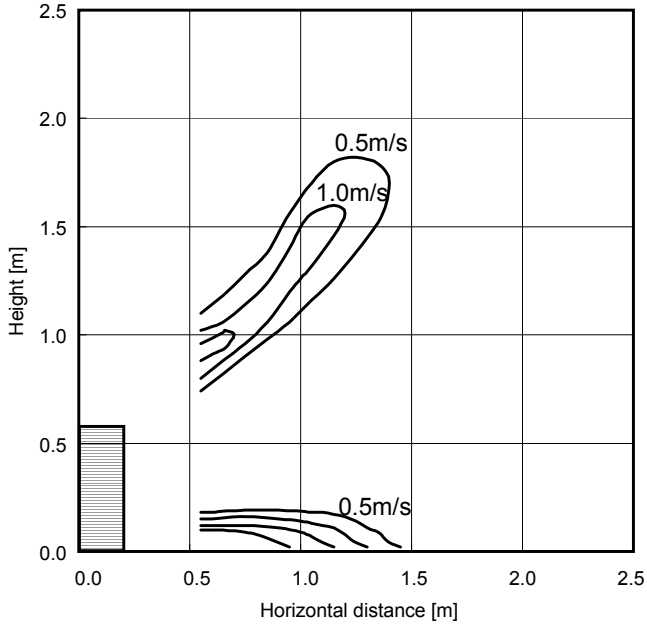
Unit size	Outdoor air temp. CDB	Indoor air temp.													
		14.0CWB		16.0CWB		18.0CWB		19.0CWB		20.0CWB		22.0CWB		24.0CWB	
		20CDB		23CDB		26CDB		27CDB		28CDB		30CDB		32CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
015	10.0	3.7	2.7	4.1	2.9	4.4	3.1	4.5	3.1	4.6	3.1	4.9	3.1	5.1	3.0
	12.0	3.7	2.7	4.1	2.9	4.4	3.1	4.5	3.1	4.6	3.1	4.9	3.1	5.1	3.0
	14.0	3.7	2.7	4.1	2.9	4.4	3.1	4.5	3.1	4.6	3.1	4.9	3.1	5.1	3.0
	16.0	3.7	2.7	4.1	2.9	4.4	3.1	4.5	3.1	4.6	3.1	4.9	3.1	5.1	3.0
	18.0	3.7	2.7	4.1	2.9	4.4	3.1	4.5	3.1	4.6	3.1	4.9	3.1	5.1	3.0
	20.0	3.7	2.7	4.1	2.9	4.4	3.1	4.5	3.1	4.6	3.1	4.9	3.1	5.1	3.0
	21.0	3.7	2.7	4.1	2.9	4.4	3.1	4.5	3.1	4.6	3.1	4.9	3.1	5.1	3.0
	23.0	3.7	2.7	4.1	2.9	4.4	3.1	4.5	3.1	4.6	3.1	4.9	3.1	5.1	3.0
	25.0	3.7	2.7	4.1	2.9	4.4	3.1	4.5	3.1	4.6	3.1	4.9	3.1	5.1	3.0
	27.0	3.7	2.7	4.1	2.9	4.4	3.1	4.5	3.1	4.6	3.1	4.9	3.1	5.1	3.0
	29.0	3.7	2.7	4.1	2.9	4.4	3.1	4.5	3.1	4.6	3.1	4.9	3.1	5.1	3.0
	31.0	3.7	2.7	4.1	2.9	4.4	3.1	4.5	3.1	4.6	3.1	4.9	3.1	5.1	3.0
	33.0	3.7	2.7	4.1	2.9	4.4	3.1	4.5	3.1	4.6	3.1	4.9	3.1	5.1	3.0
	35.0	3.7	2.7	4.1	2.9	4.4	3.1	4.5	3.1	4.6	3.1	4.9	3.1	5.1	3.0
37.0	3.6	2.7	4.0	2.8	4.2	3.0	4.4	3.0	4.5	3.0	4.7	3.0	5.0	2.9	
39.0	3.5	2.6	3.8	2.8	4.1	2.9	4.2	2.9	4.4	2.9	4.6	2.9	4.8	2.8	
018	10.0	4.6	3.4	5.1	3.6	5.4	3.8	5.6	3.8	5.8	3.8	6.1	3.8	6.4	3.7
	12.0	4.6	3.4	5.1	3.6	5.4	3.8	5.6	3.8	5.8	3.8	6.1	3.8	6.4	3.7
	14.0	4.6	3.4	5.1	3.6	5.4	3.8	5.6	3.8	5.8	3.8	6.1	3.8	6.4	3.7
	16.0	4.6	3.4	5.1	3.6	5.4	3.8	5.6	3.8	5.8	3.8	6.1	3.8	6.4	3.7
	18.0	4.6	3.4	5.1	3.6	5.4	3.8	5.6	3.8	5.8	3.8	6.1	3.8	6.4	3.7
	20.0	4.6	3.4	5.1	3.6	5.4	3.8	5.6	3.8	5.8	3.8	6.1	3.8	6.4	3.7
	21.0	4.6	3.4	5.1	3.6	5.4	3.8	5.6	3.8	5.8	3.8	6.1	3.8	6.4	3.7
	23.0	4.6	3.4	5.1	3.6	5.4	3.8	5.6	3.8	5.8	3.8	6.1	3.8	6.4	3.7
	25.0	4.6	3.4	5.1	3.6	5.4	3.8	5.6	3.8	5.8	3.8	6.1	3.8	6.4	3.7
	27.0	4.6	3.4	5.1	3.6	5.4	3.8	5.6	3.8	5.8	3.8	6.1	3.8	6.4	3.7
	29.0	4.6	3.4	5.1	3.6	5.4	3.8	5.6	3.8	5.8	3.8	6.1	3.8	6.4	3.7
	31.0	4.6	3.4	5.1	3.6	5.4	3.8	5.6	3.8	5.8	3.8	6.1	3.8	6.4	3.7
	33.0	4.6	3.4	5.1	3.6	5.4	3.8	5.6	3.8	5.8	3.8	6.1	3.8	6.4	3.7
	35.0	4.6	3.4	5.1	3.6	5.4	3.8	5.6	3.8	5.8	3.8	6.1	3.8	6.4	3.7
37.0	4.5	3.3	4.9	3.5	5.3	3.7	5.4	3.7	5.6	3.7	5.9	3.6	6.2	3.6	
39.0	4.3	3.2	4.8	3.4	5.1	3.6	5.3	3.6	5.4	3.6	5.7	3.5	6.0	3.5	

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

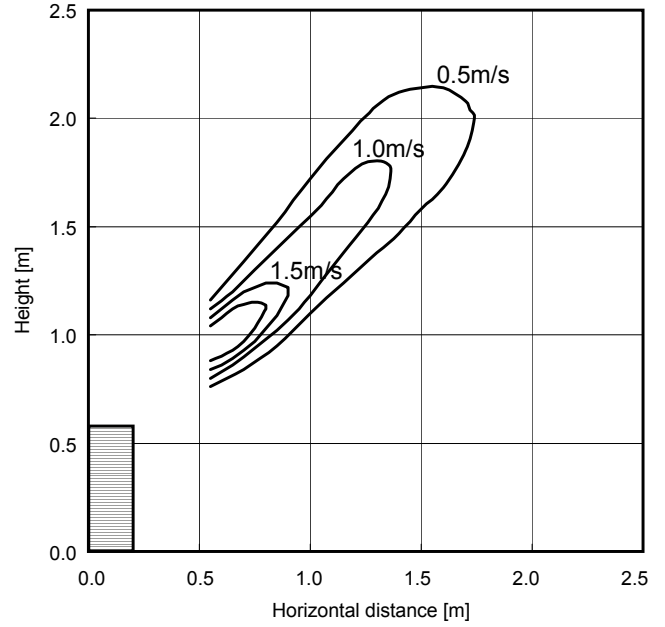
8. Air flow distance chart

MML-AP0074NH1-E, AP0094NH1-E

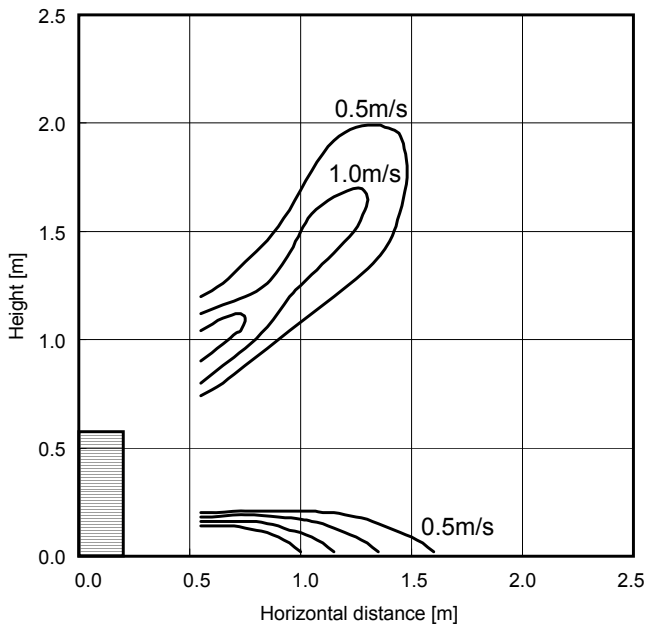
Cooling - Upper & Lower



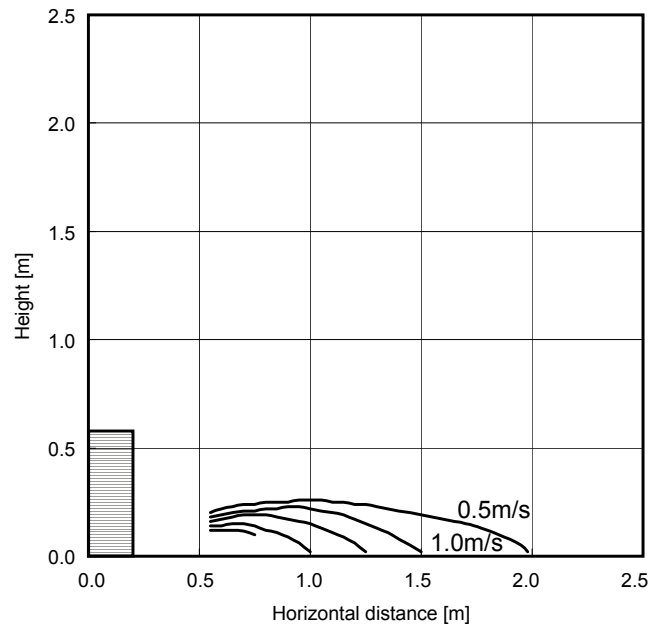
Cooling - Upper



Heating - Upper & Lower

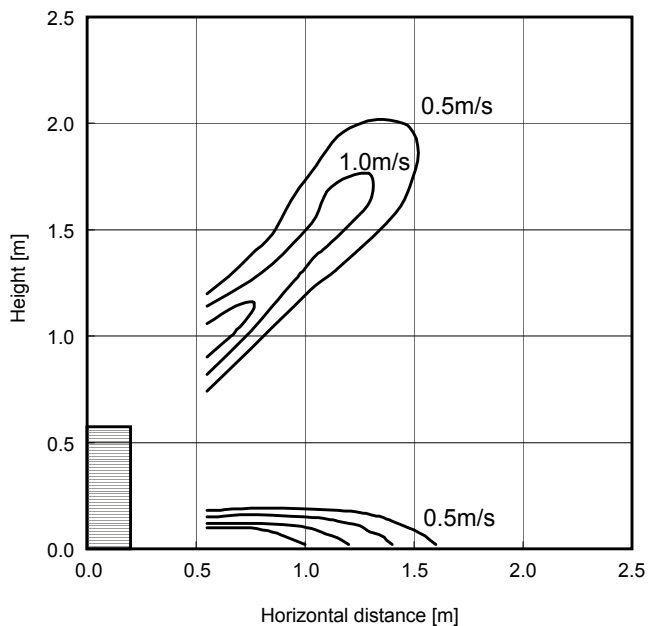


Heating - Lower

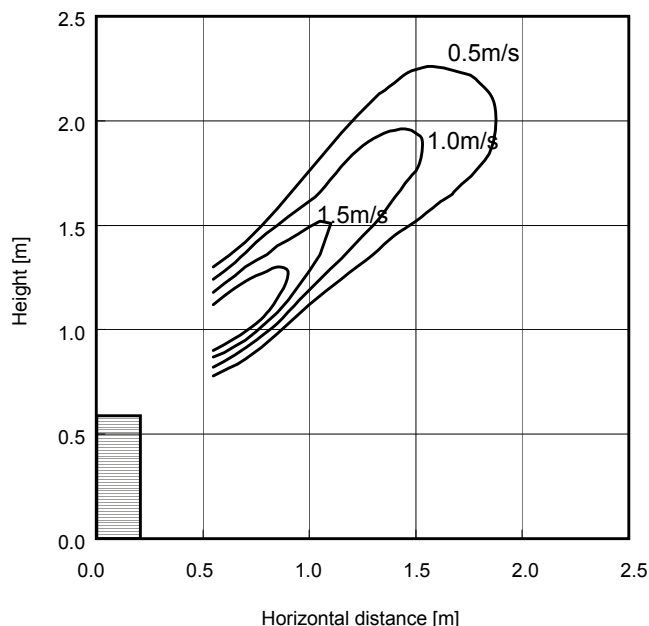


MML-AP0124NH1-E

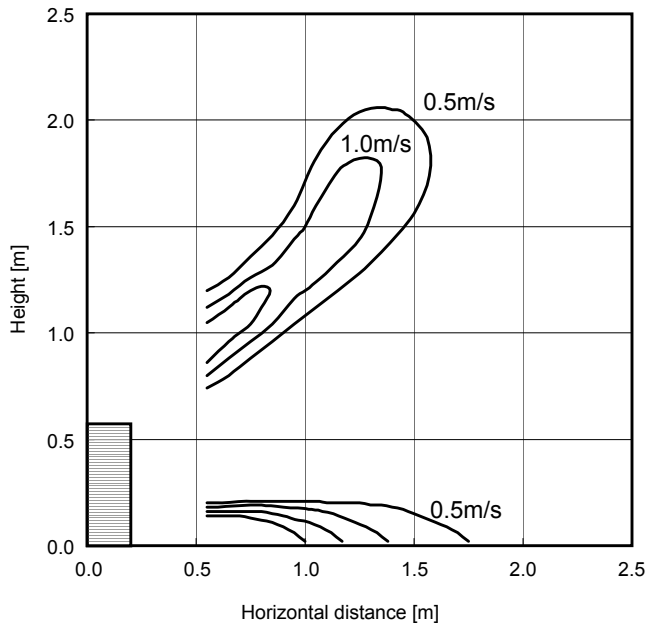
Cooling - Upper & Lower



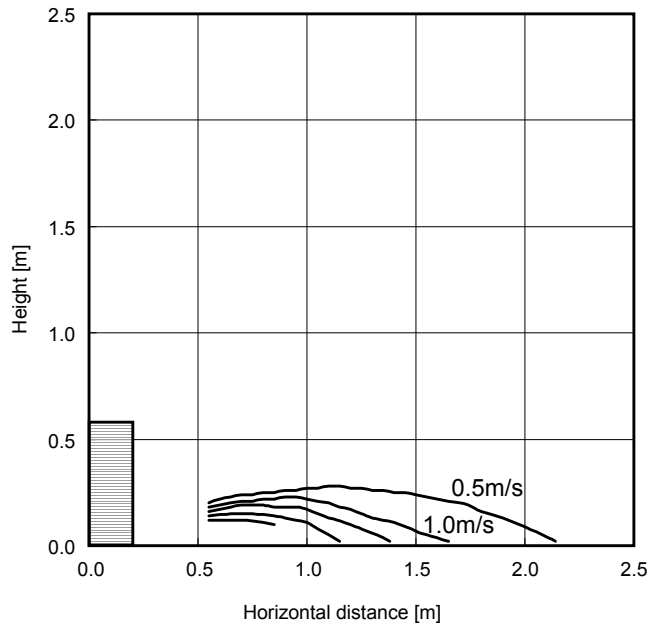
Cooling - Upper



Heating - Upper & Lower

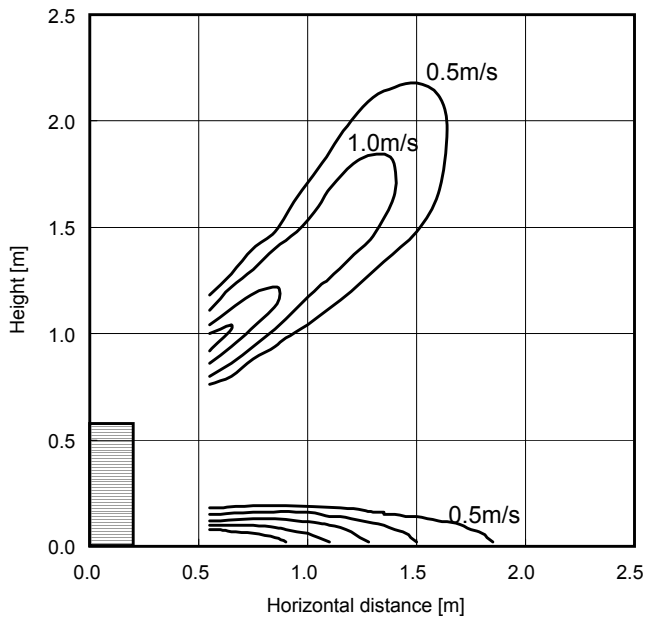


Heating - Lower

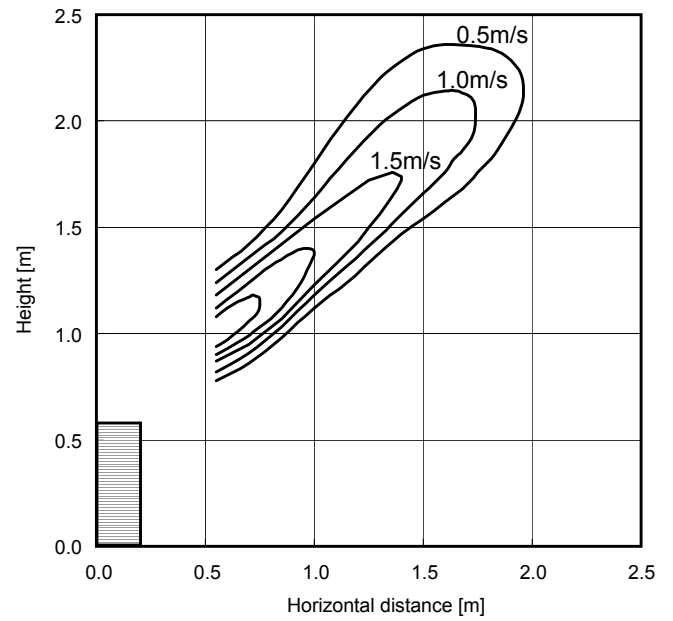


MML-AP0154NH1-E

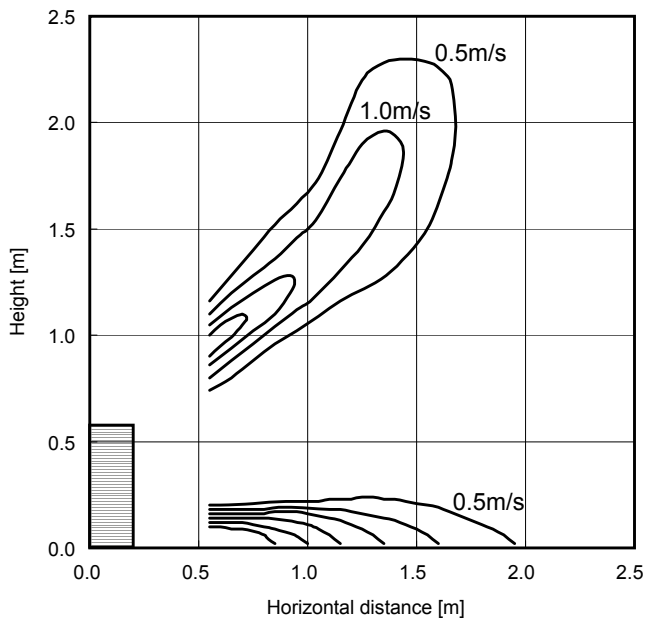
Cooling - Upper & Lower



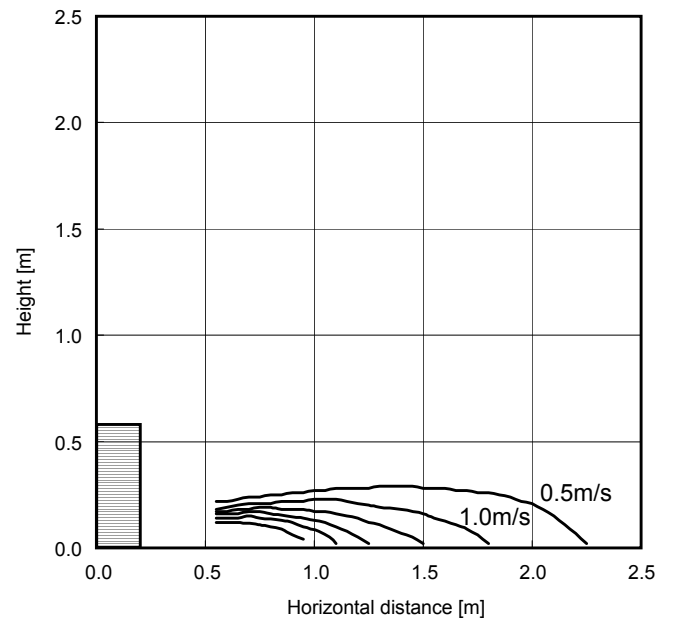
Cooling - Upper



Heating - Upper & Lower

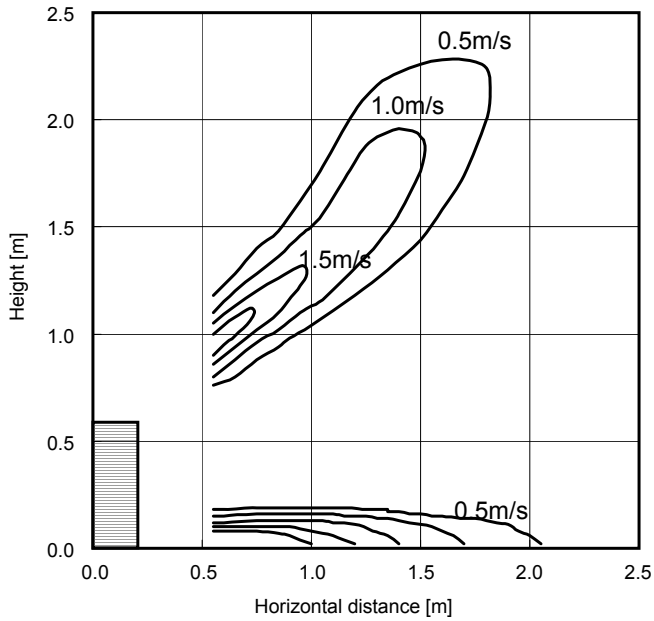


Heating - Lower

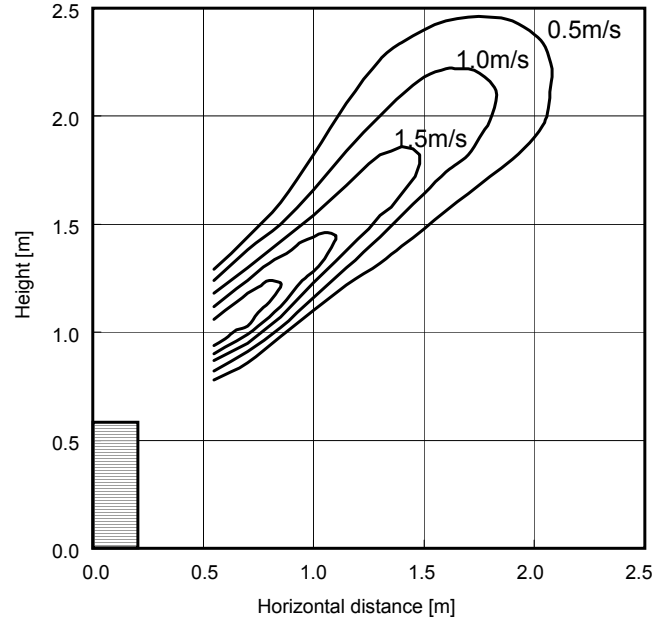


MML-AP0184NH1-E

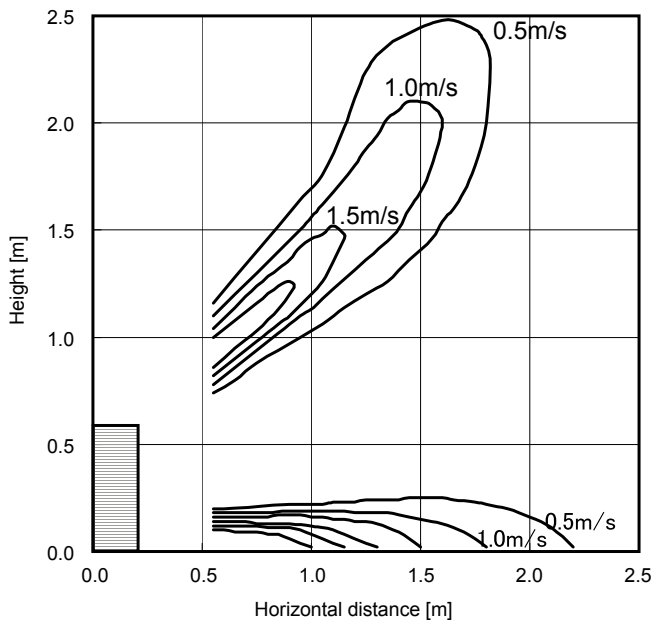
Cooling - Upper & Lower



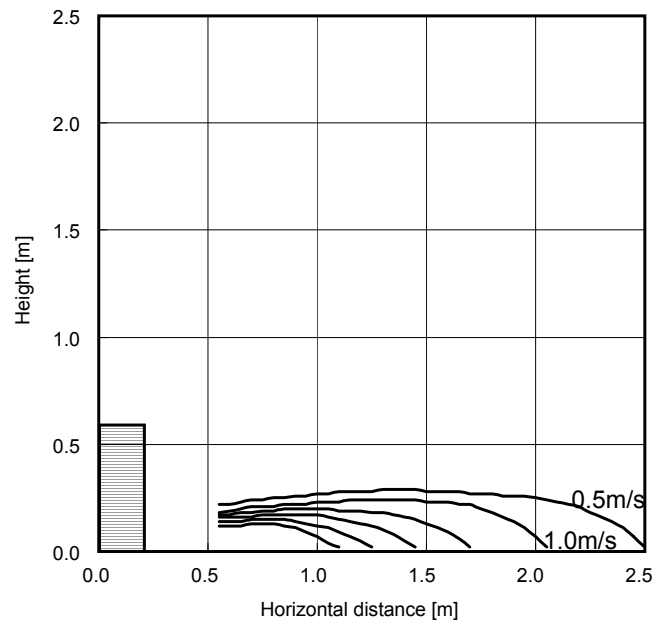
Cooling - Upper



Heating - Upper & Lower

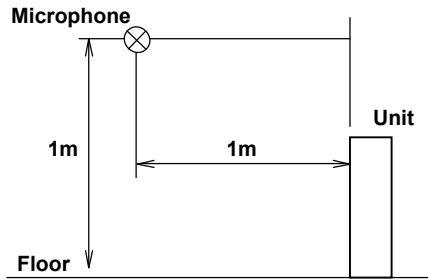


Heating - Lower



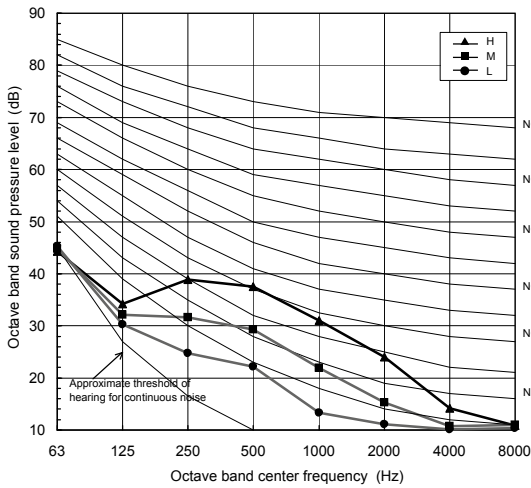
9. Sound data

Sound pressure spectrum



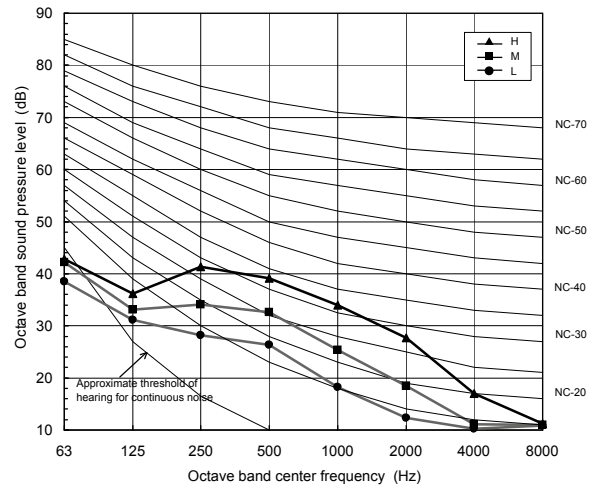
MML-AP0074NH1-E/AP0094NH1-E

Fan tap	H	M	L
Sound pressure level (dB(A))	38	32	26



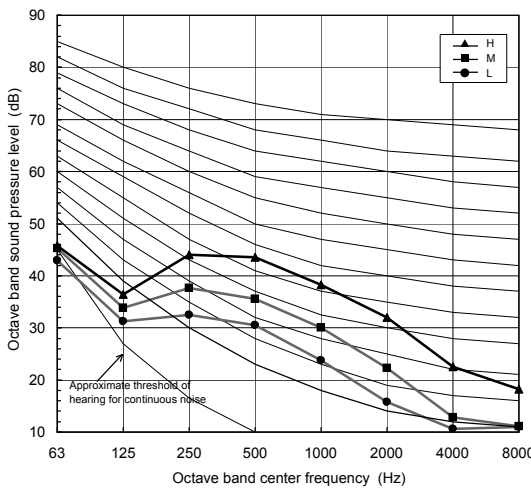
MML-AP0124NH1-E

Fan tap	H	M	L
Sound pressure level (dB(A))	40	34	29



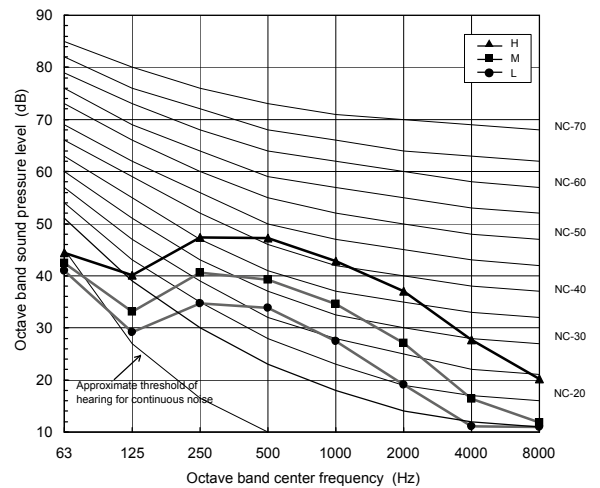
MML-AP0154NH1-E

Fan tap	H	M	L
Sound pressure level (dB(A))	43	37	31



MML-AP0184NH1-E



Fan tap	H	M	L
Sound pressure level (dB(A))	47	40	34



10. Accessories

Remote controller

Packed with the indoor unit

Name	Model name	Appearance	Application	Function
Wireless remote controller	WH-L11SE			<ul style="list-style-type: none"> • Start / Stop • Changing mode • Temperature setting • Air flow changing (5 steps) • Louver setting • Clock • Timer function <ul style="list-style-type: none"> - ON/OFF timer (10 min. step) - Everyday timer - Sleep timer - COMFORT SLEEP timer • High power mode • QUIET mode • One-touch pre-set memory • One-touch Auto (*1)

(*1) SMMS-i cannot accept "AUTO" mode, SHRM-i can accept "AUTO" mode.

Console Type Engineering Data Book

Model name:

MML-AP__4NH1-E

February, 2017

TOSHIBA CARRIER CORPORATION