

# Ceiling type

**MMC-AP0181H2UL**

**MMC-AP0241H2UL**

**MMC-AP0361H2UL**

**MMC-AP0421H2UL**



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1. Specifications



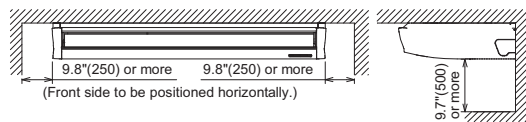
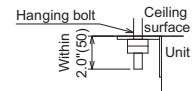
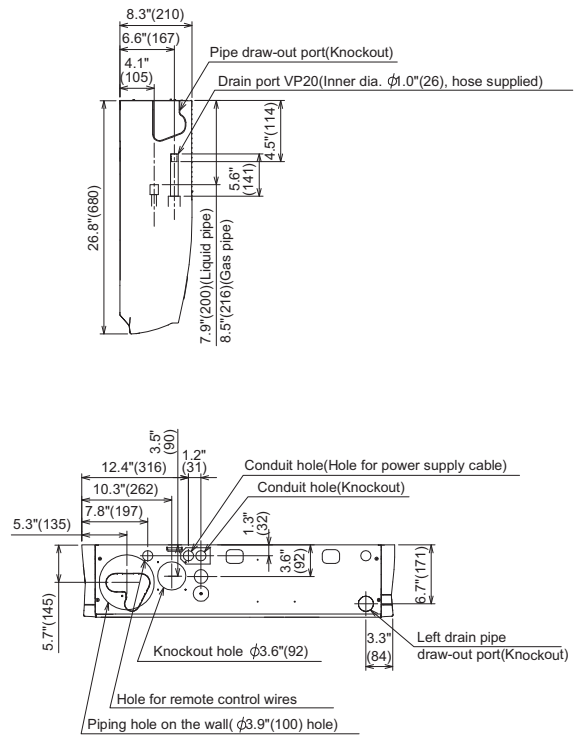
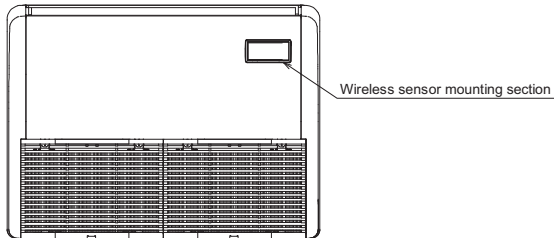
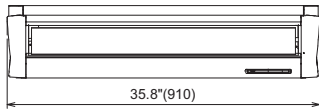
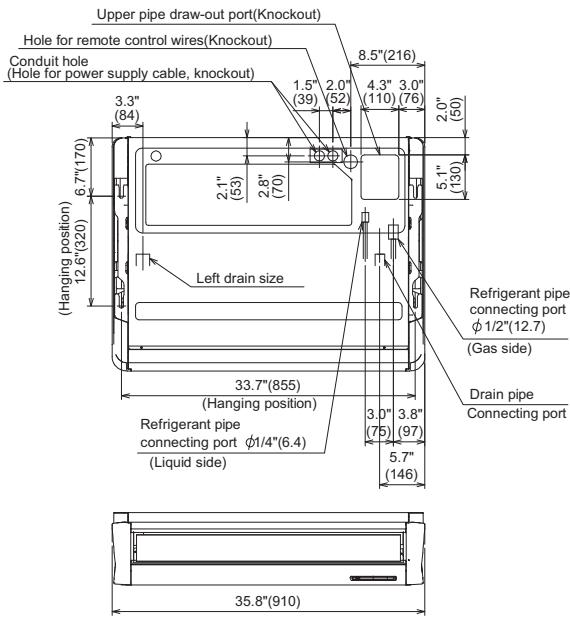
Ceiling type

Model name		MMC-	AP0181H2UL	AP0241H2UL	AP0361H2UL	AP0421H2UL	
Cooling Capacity		kBtu/h	18	24	36	42	
Heating Capacity		kBtu/h	20	27	40	47.5	
Electrical characteristics	Power supply		230 V (208/230 V) 1phase 60 Hz				
	Power consumption		kW	0.038	0.05	0.091	0.11
Appearance			White (Munsell 10Y 9.3/0.4)				
Dimension	Unit	Height	In	8.3	8.3	8.3	8.3
		Width	In	35.8	46.5	62.8	62.8
		Depth	In	26.8	26.8	26.8	26.8
	Packing	Height	In	12.4	12.4	12.4	12.4
		Width	In	39.1	50.0	66	66
		Depth	In	32.0	32.0	32.0	32.0
Total weight	Unit		lbs	46	57	75	75
	Packed unit		lbs	62	75	97	97
Heat exchanger			Finned tube				
Fan unit	Fan		Centrifugal fan				
	Standard air flow (High/Mid/Low)		cfm	410/360/320	590/530/470	880/770/680	950/820/730
	Motor		W	60	60	120	120
Air filter			Standard filter (Long life filter)				
Connecting pipe	Gas side		In	1/2"	5/8"	5/8"	5/8"
	Liquid side		In	1/4"	3/8"	3/8"	3/8"
	Drain port (Nominal dia.)		In	VP20(Polyvinyl chloride tube: External Dia.1 Internal Dia.0.79)			
Sound pressure level (High/Mid/Low)		(*1) dB(A)	38.5/35/32.5	40.5/38/35	44/41/37	46/42.5/39.5	
Option parts	Drain Pump Kit		TCB-DP22CUL				
	Elbow Piping Kit		TCB-KP12CUL				
			TCB-KP22CUL				

Note

(\*1) The actual values in an external operating environment are generally higher than the indicated values due to the contribution from ambient noise.

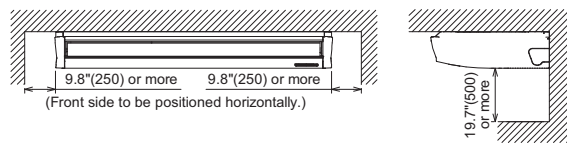
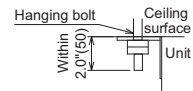
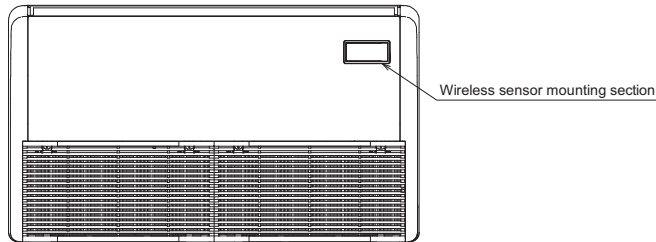
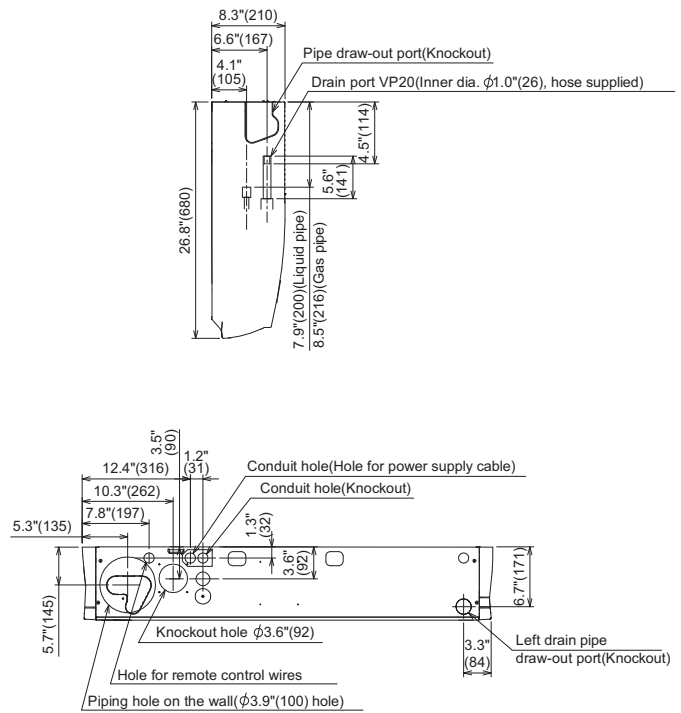
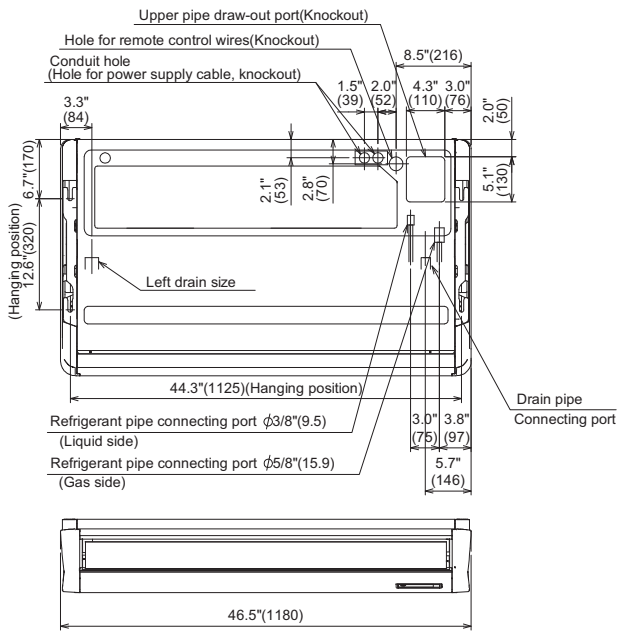
2. Dimensions  
MMC-AP0181H2UL



Space required for installation and servicing

Unit:in (mm)

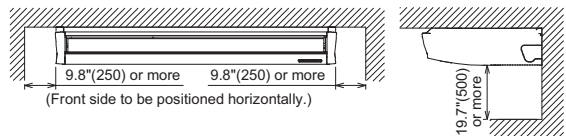
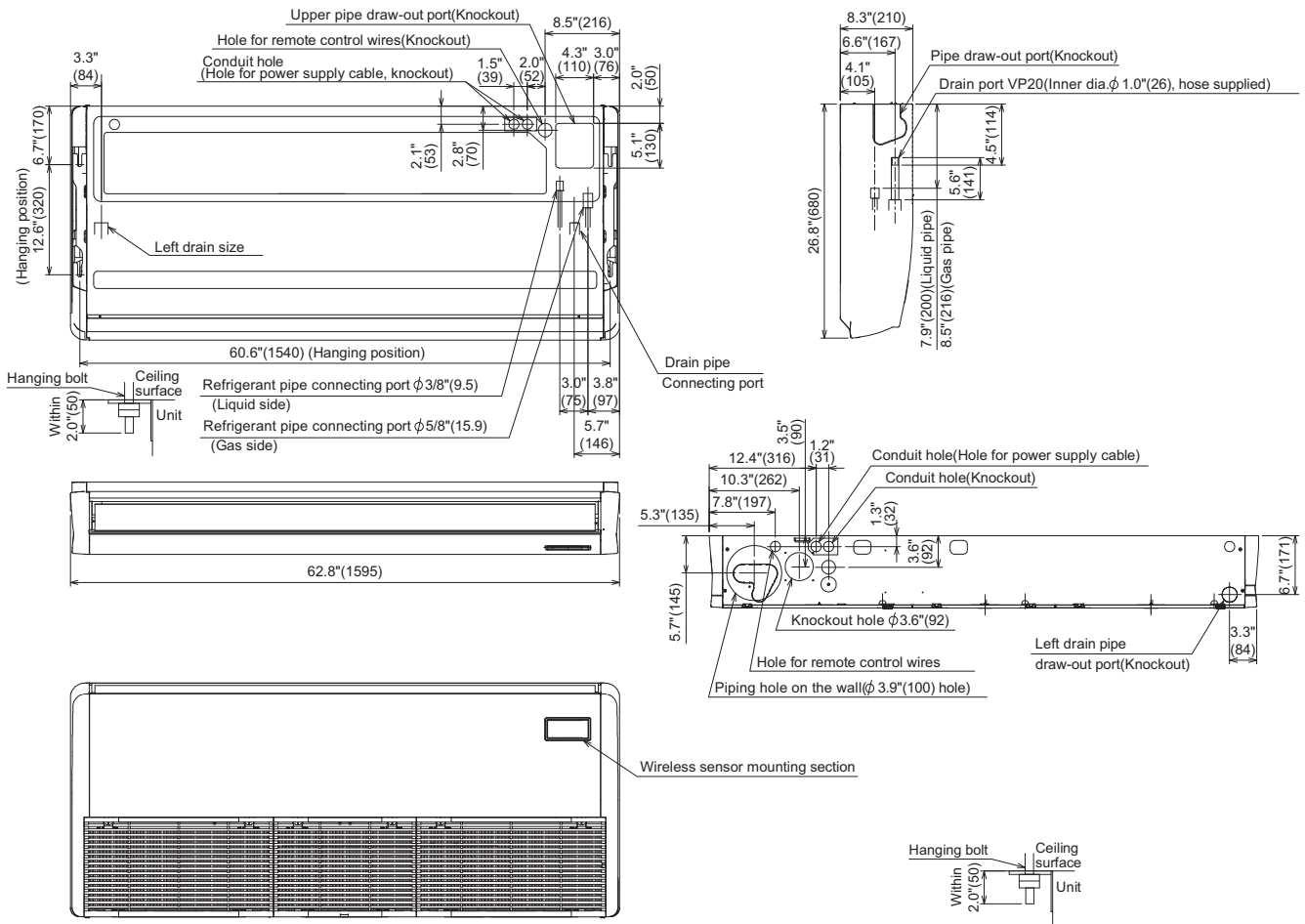
MMC-AP0241H2UL



Space required for installation and servicing

Unit:in (mm)

MMC-AP0361H2UL, AP0421H2UL

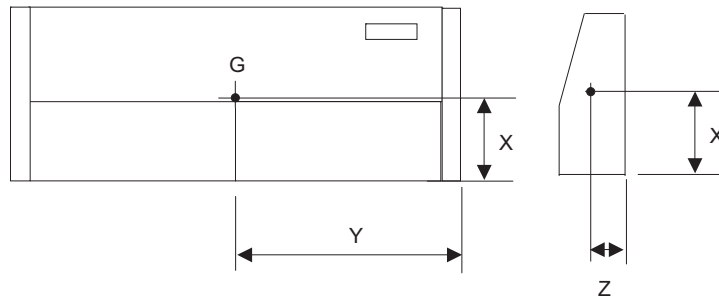


Space required for installation and servicing

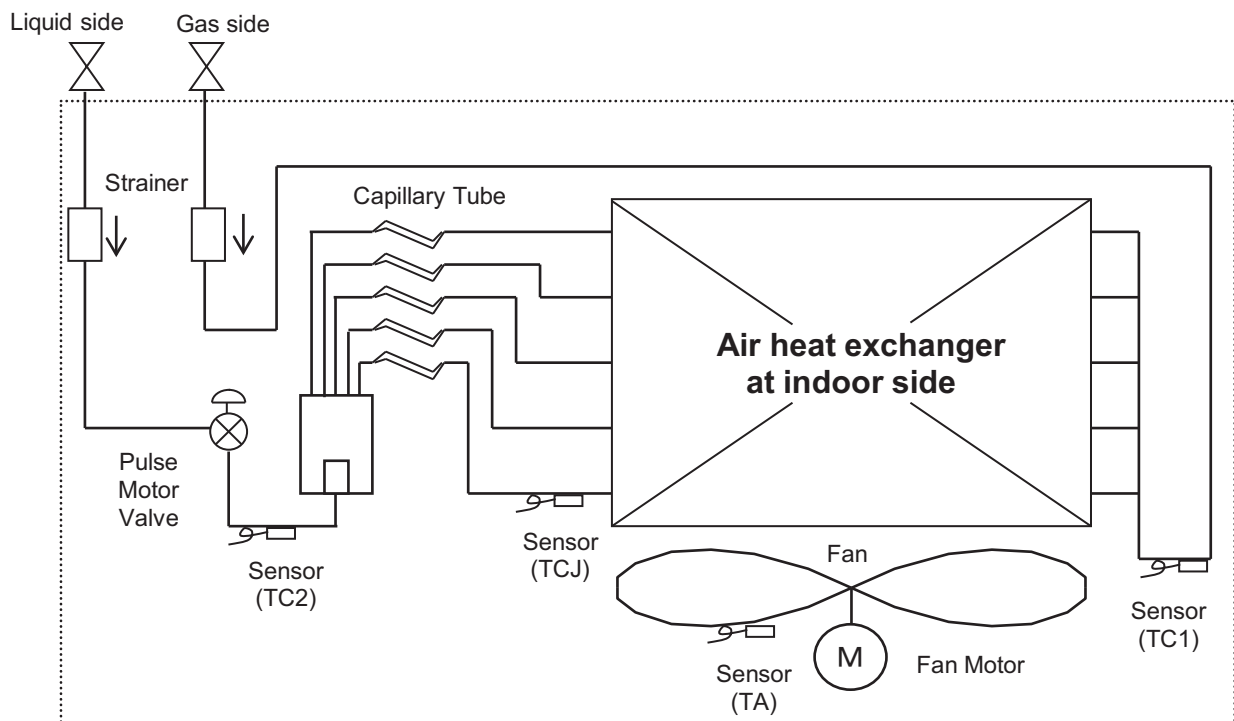
Unit:in(mm)

3. Center of gravity

Model name	X (In)	Y (In)	Z (In)	Total weight (lbs)
MMC-AP0181H2UL	12.6	18.1	3.55	46
MMC-AP0241H2UL		22.4		57
MMC-AP0361H2UL		30.3		75
MMC-AP0421H2UL				

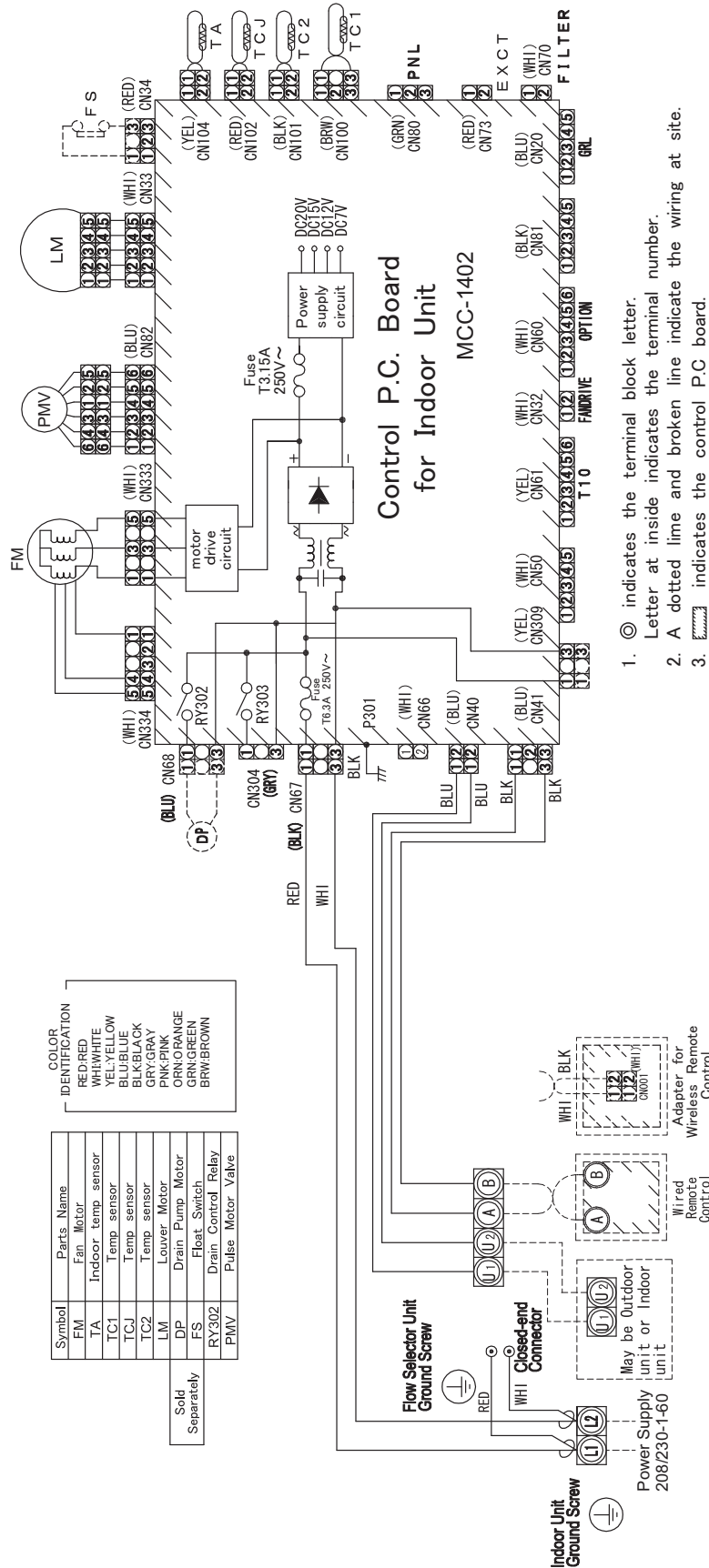


4. Piping diagram



5. Wiring diagram

MMC-AP0181H2UL, AP0241H2UL, AP0361H2UL, AP0421H2UL



Symbol	Parts Name	COLOR IDENTIFICATION
FM	Fan Motor	RED/RED
TA	Indoor temp sensor	WHI/WHITE
TC1	Temp sensor	YEL/YELLOW
TC2	Temp sensor	BLU/BLUE
LM	Louver Motor	BLK/BLACK
DP	Drain Pump Motor	GRY/GRAY
FS	Float Switch	PNK/PINK
RY302	Drain Control Relay	GRN/GREEN
PMV	Pulse Motor Valve	BRW/BROWN

Sold Separately

1. © indicates the terminal block letter.
2. Letter at inside indicates the terminal number.
3. A dotted line and broken line indicate the wiring at site.

**6. Electrical current characteristics**

Type	Model	Nominal Voltage (V-Ph-Hz)	Voltage Range (V)		Power consumption kW	FLA A	MCA A	MOCP A
			Min	Max				
Ceiling type	MMC-AP0181H2UL	208/230-1-60	187	253	0.038	0.4	0.5	15
	MMC-AP0241H2UL	208/230-1-60	187	253	0.05	0.5	0.7	15
	MMC-AP0361H2UL	208/230-1-60	187	253	0.091	0.8	1.0	15
	MMC-AP0421H2UL	208/230-1-60	187	253	0.11	0.9	1.2	15

MCA: Minimum Circuit Amps

FLA: Full Load Amps

MOCP: Maximum Overcurrent Protection (Amps)



7. Sensible capacity table

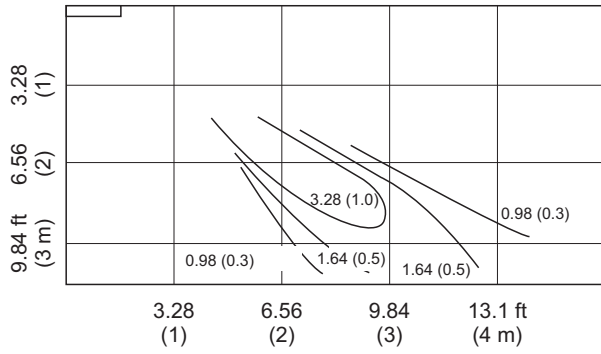
Ceiling type (MMC-AP\_\_1H2UL)

TC: Total capacity [Btu/h] SHC: Sensible capacity [Btu/h]

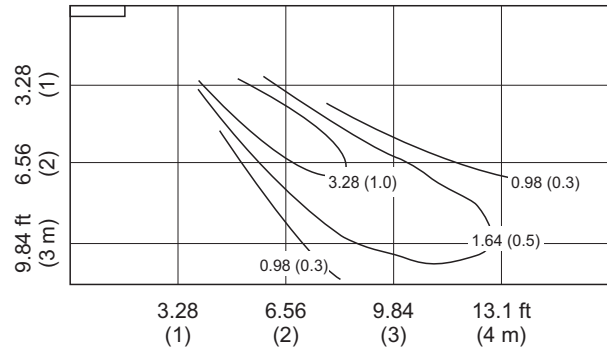
unit size	outdoor air temp. °FDB	indoor air temp.													
		59 °FWB		61 °FWB		64 °FWB		67 °FWB		68 °FWB		72 °FWB		75 °FWB	
		71 °FDB	73 °FDB	77 °FDB	80 °FDB	82 °FDB	86 °FDB	90 °FDB	TC	SHC	TC	SHC	TC	SHC	TC
018	50	15320	11370	16030	11680	17040	12150	18000	12540	18310	12580	19470	12420	20270	11950
	54	15320	11370	16030	11680	17040	12150	18000	12540	18310	12580	19470	12420	20270	11950
	57	15320	11370	16030	11680	17040	12150	18000	12540	18310	12580	19470	12420	20270	11950
	61	15320	11370	16030	11680	17040	12150	18000	12540	18310	12580	19470	12420	20270	11950
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	73	15320	11370	16030	11680	17040	12150	18000	12540	18310	12580	19470	12420	20270	11950
	77	15320	11370	16030	11680	17040	12150	18000	12540	18310	12580	19470	12420	20270	11950
	81	15320	11370	16030	11680	17040	12150	18000	12540	18310	12580	19470	12420	20270	11950
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99	14880	11040	15570	11340	16550	11800	17480	12180	17780	12220	18910	12060	19680	11600	
102	14520	10780	15200	11070	16150	11520	17060	11890	17360	11930	18460	11770	19220	11330	
024	50	20430	15630	21370	16060	22730	16720	24000	17240	24410	17290	25960	17070	27020	16430
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99	19840	15180	20750	15590	22070	16240	23300	16740	23700	16790	25210	16570	26240	15950	
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99	34710	25890	36320	26590	38620	27670	40780	28550	41480	28630	44100	28260	45920	27210	
102	33890	25270	35460	25960	37700	27020	39820	27870	40500	27950	43060	27590	44830	26560	

8. Air throw distance chart

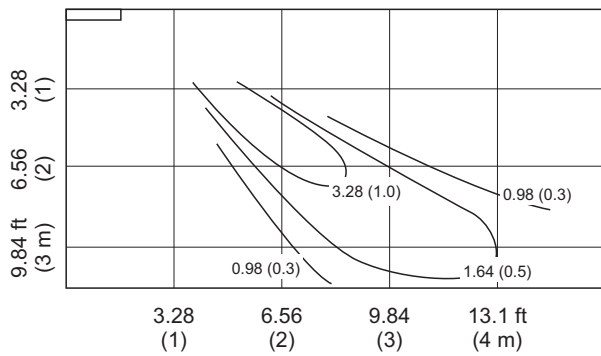
MMC-AP0181H2UL/AP0421H2UL



MMC-AP0361H2UL

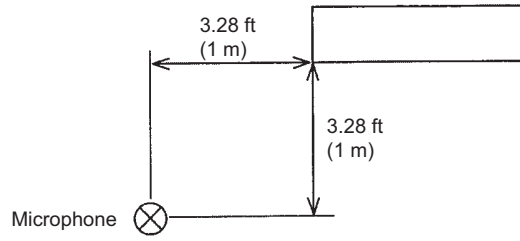


MMC-AP0241H2UL



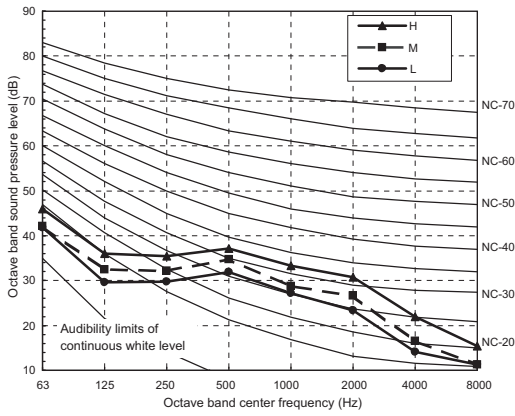
unit : [ft/s (m/s)]

9. Sound data



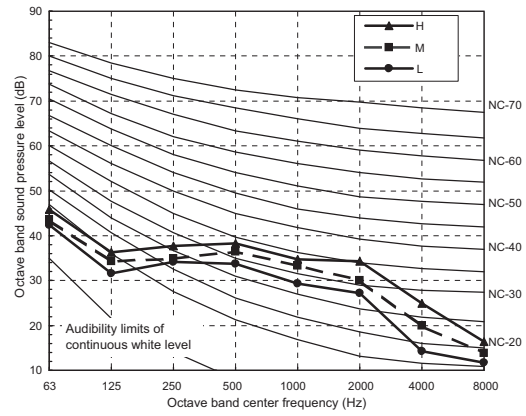
MMC-AP0181H2UL

Sound pressure level (dB (A))	H - M - L
	38.5-35-32.5



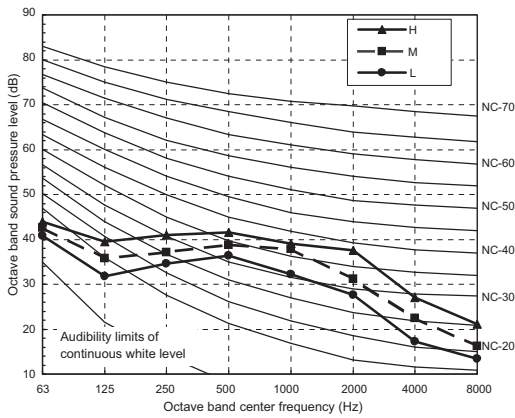
MMC-AP0241H2UL

Sound pressure level (dB (A))	H - M - L
	40.5-38-35



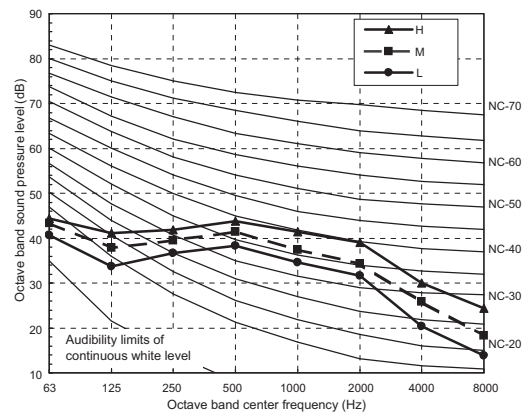
MMC-AP0361H2UL

Sound pressure level (dB (A))	H - M - L
	44-41-37

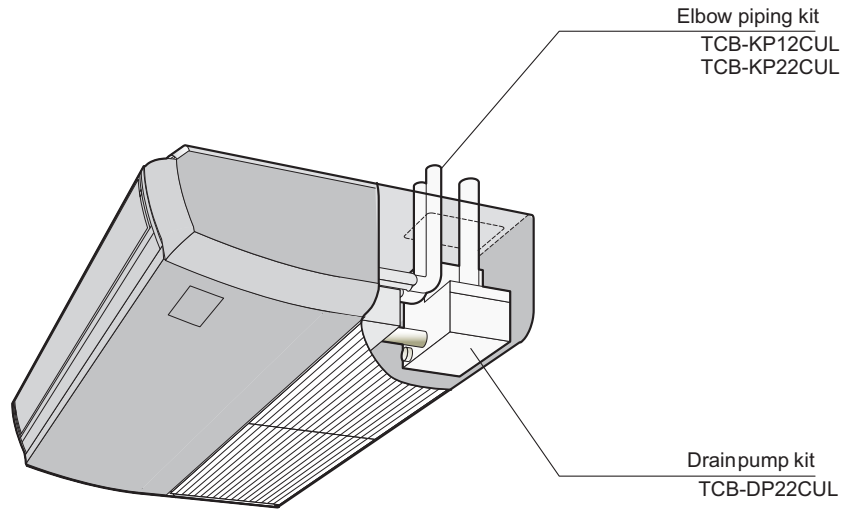


MMC-AP0421H2UL

Sound pressure level (dB (A))	H - M - L
	46-42.5-39.5



10. Accessories



Parts Name	Model name	Applied Model	Notes	Remarks
Drain pump kit	TCB-DP22CUL	MMC-AP__1H2UL	Stand-up 600 or less (from bottom face of ceiling)	Use with TCB-KP12CUL and TCB-KP22CUL
Elbow piping kit	TCB-KP12CUL	MMC-AP0181H2UL	Needed when drain pump kit is used	
	TCB-KP22CUL	MMC-AP0241H2UL to 0421H2UL		







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## **Ceiling type Engineering Data Book**

**Model name:**

**MMC-AP\_\_1H2UL**

**March, 2016 First Edition**

**TOSHIBA CARRIER CORPORATION**