

Compact 4-Way Cassette type

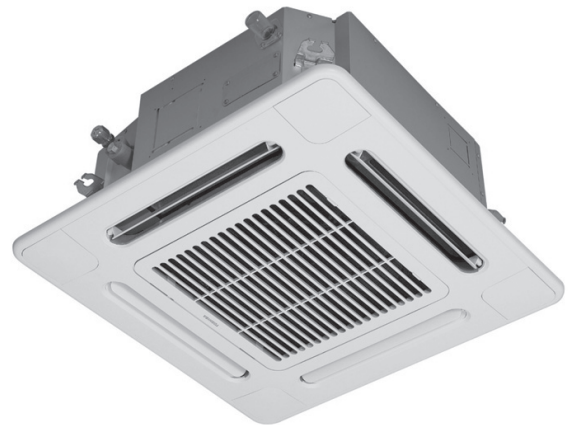
MMU-AP0071MH2UL

MMU-AP0091MH2UL

MMU-AP0121MH2UL

MMU-AP0151MH2UL

MMU-AP0181MH2UL



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1. Specifications



Compact 4-Way Cassette type

Model name			MMU-	AP0071MH2UL	AP0091MH2UL	AP0121MH2UL	AP0151MH2UL	AP0181MH2UL
Cooling Capacity			kBtu/h	7.5	9.5	12	15.4	18
Heating Capacity			kBtu/h	8.5	10.5	13.5	17	20
Electrical characteristics	Power supply			230 V (208/230 V) 1phase 60 Hz				
	Power consumption		kW	0.034	0.036	0.038	0.041	0.052
Appearance	Main unit			Zinc hot dipping steel plate Heat-insulating material attached to only upper plate				
	Ceiling panel	Model		RBC-U11PG(W)-UL				
		Panel color		White (2.5GY9.0/0.5)				
Dimension (Ceiling panel)*	Unit	Height	In	10.6(1.1)*	10.6(1.1)*	10.6(1.1)*	10.6(1.1)*	10.6(1.1)*
		Width	In	22.6(27.6)*	22.6(27.6)*	22.6(27.6)*	22.6(27.6)*	22.6(27.6)*
		Depth	In	22.6(27.6)*	22.6(27.6)*	22.6(27.6)*	22.6(27.6)*	22.6(27.6)*
	Packing	Height	In	12.7(3.9)*	12.7(3.9)*	12.7(3.9)*	12.7(3.9)*	12.7(3.9)*
		Width	In	25.1(30.9)*	25.1(30.9)*	25.1(30.9)*	25.1(30.9)*	25.1(30.9)*
		Depth	In	27.8(31.8)*	27.8(31.8)*	27.8(31.8)*	27.8(31.8)*	27.8(31.8)*
Total weight (Ceiling panel)*	Unit		lbs	35(7)*	35(7)*	35(7)*	35(7)*	35(7)*
	Packed unit		lbs	42(13)*	42(13)*	42(13)*	42(13)*	42(13)*
Heat exchanger				Finned tube				
Fan unit	Fan			Turbo fan				
	Standard air flow (High/Mid/Low)		cfm	320/270/220	330/280/220	330/300/240	390/330/280	450/380/310
	Motor		W	60	60	60	60	60
Air filter				Long life filter				
Connecting pipe	Gas side		In	3/8"	3/8"	3/8"	1/2"	1/2"
	Liquid side		In	1/4"	1/4"	1/4"	1/4"	1/4"
	Drain port (Nominal dia.)		In	VP25(Polyvinyl chloride tube: External Dia.1-1/4 Internal Dia.1)				
Sound pressure level (High/Mid/Low)			(*1) dB(A)	38.5/35/31	40/35.5/31	40/36/32	42.5/37.5/33	46.5/41.5/36

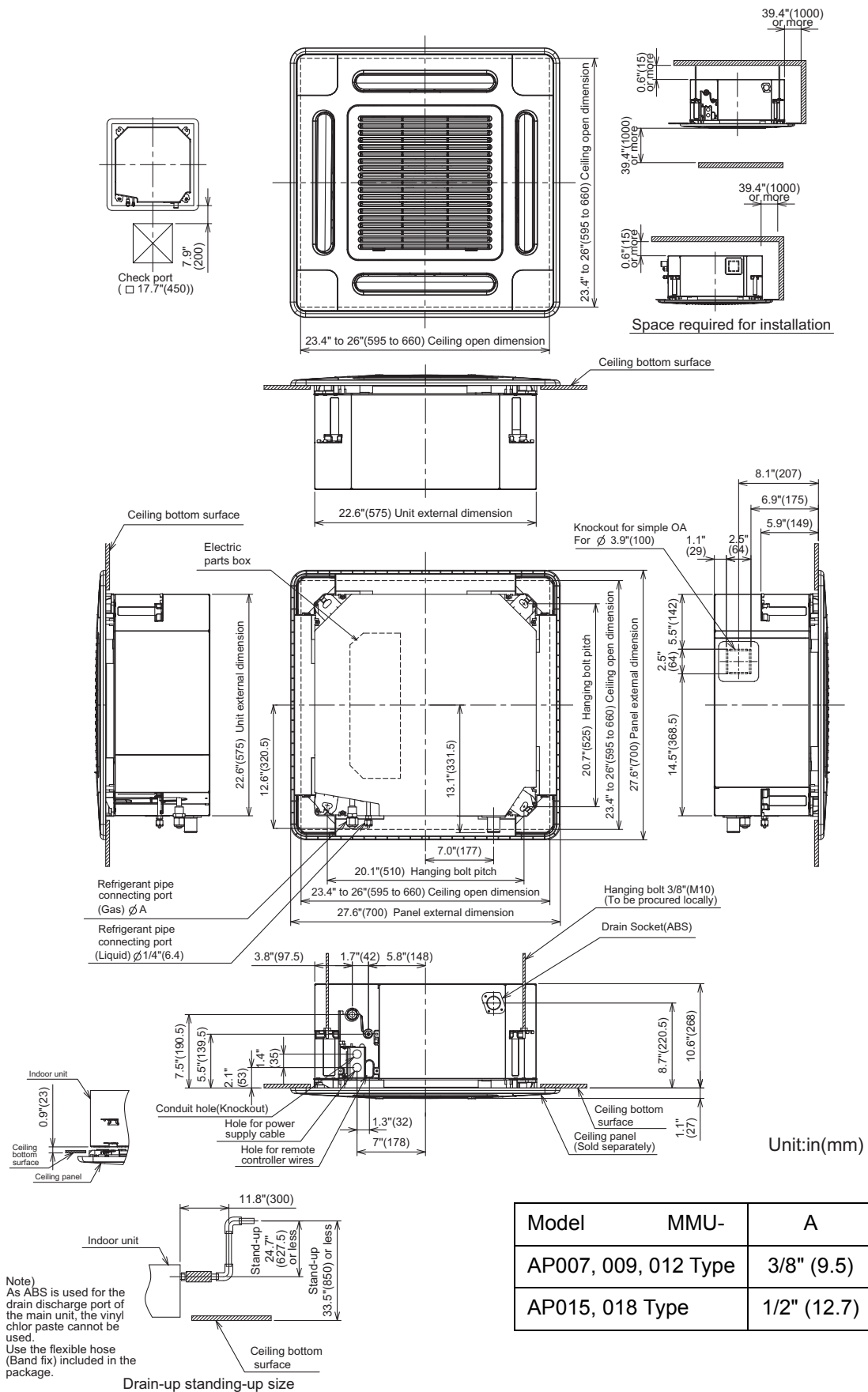
Note

* Figures in parentheses are for ceiling panels.

(*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

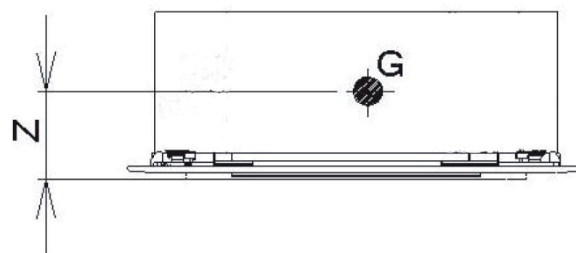
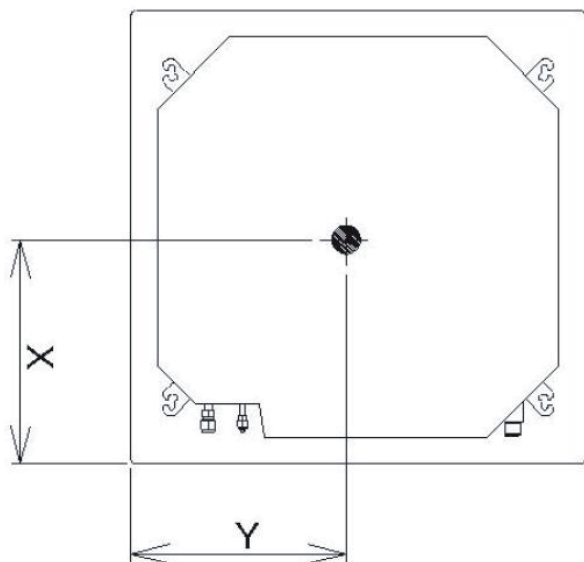
MMU-AP0071MH2UL, AP0091MH2UL, AP0121MH2UL, AP0151MH2UL, AP0181MH2UL



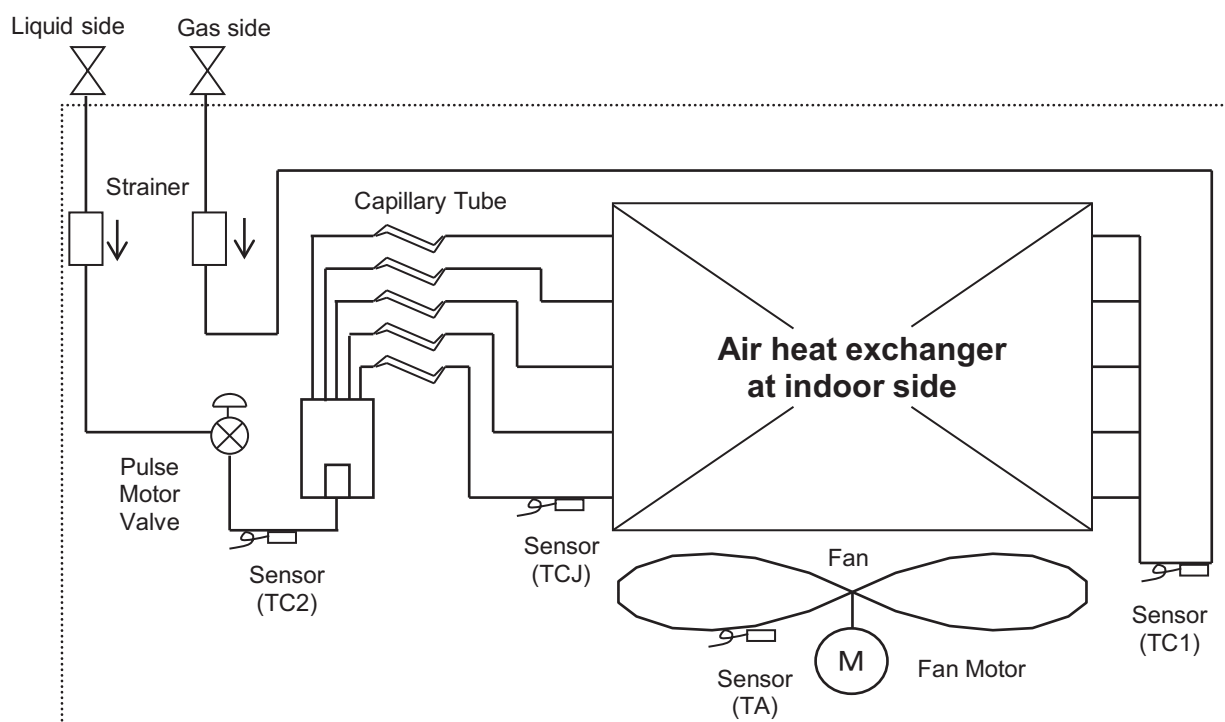
Model	MMU-	A
AP007, 009, 012 Type		3/8" (9.5)
AP015, 018 Type		1/2" (12.7)

3. Center of gravity

Model name	X (In)	Y (In)	Z (In)	Total weight	
				Main unit (lbs)	Ceiling panel (lbs)
MMU-AP0071MH2UL	12.46	13.25	6.85	35	6.6
MMU-AP0091MH2UL					
MMU-AP0121MH2UL					
MMU-AP0151MH2UL					
MMU-AP0181MH2UL					

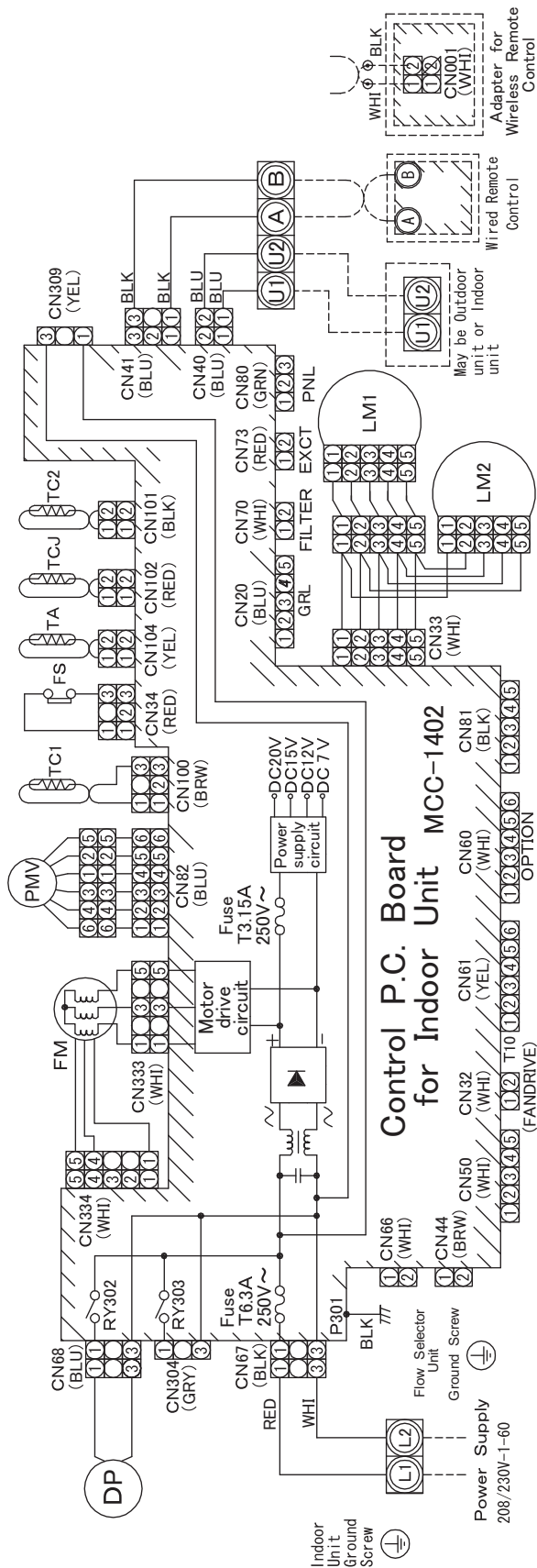


4. Piping diagram



5. Wiring diagram

MMU-AP0071MH2UL, AP0091MH2UL, AP0121MH2UL, AP0151MH2UL, AP0181MH2UL



COLOR IDENTIFICATION

RED: RED
WHI: WHITE
YEL: YELLOW
BLU: BLUE
BLK: BLACK
GRY: GRAY
PNK: PINK
ORN: ORANGE
GRN: GREEN
BRW: BROWN

Symbol	Parts Name
FM	Fan Motor
TA	Indoor temp sensor
TC1	Temp sensor
TCJ	Temp sensor
TC2	Temp sensor
LM1, LM2	Louver Motor
DP	Drain Pump Motor
FS	Float Switch
RY302	Drain Control Relay
PMV	Pulse Motor Valve

1. © indicates the terminal block letter.
Letter at inside indicates the terminal number.
2. A dotted line and broken line indicate the wiring at site.
3. [Hatched box symbol] indicates the control P.C board.

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				
Compact 4-Way Cassette type	MMU-AP0071MH2UL	208/230-1-60	187	253	0.034	0.4	0.5	15
	MMU-AP0091MH2UL	208/230-1-60	187	253	0.036	0.4	0.5	15
	MMU-AP0121MH2UL	208/230-1-60	187	253	0.038	0.4	0.5	15
	MMU-AP0151MH2UL	208/230-1-60	187	253	0.041	0.5	0.7	15
	MMU-AP0181MH2UL	208/230-1-60	187	253	0.052	0.5	0.7	15

MCA: Minimum Circuit Amps

FLA: Full Load Amps

MOCP: Maximum Overcurrent Protection (Amps)

7. Sensible capacity table

Compact 4-Way Cassette type (MMU-AP__1MH2UL)

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

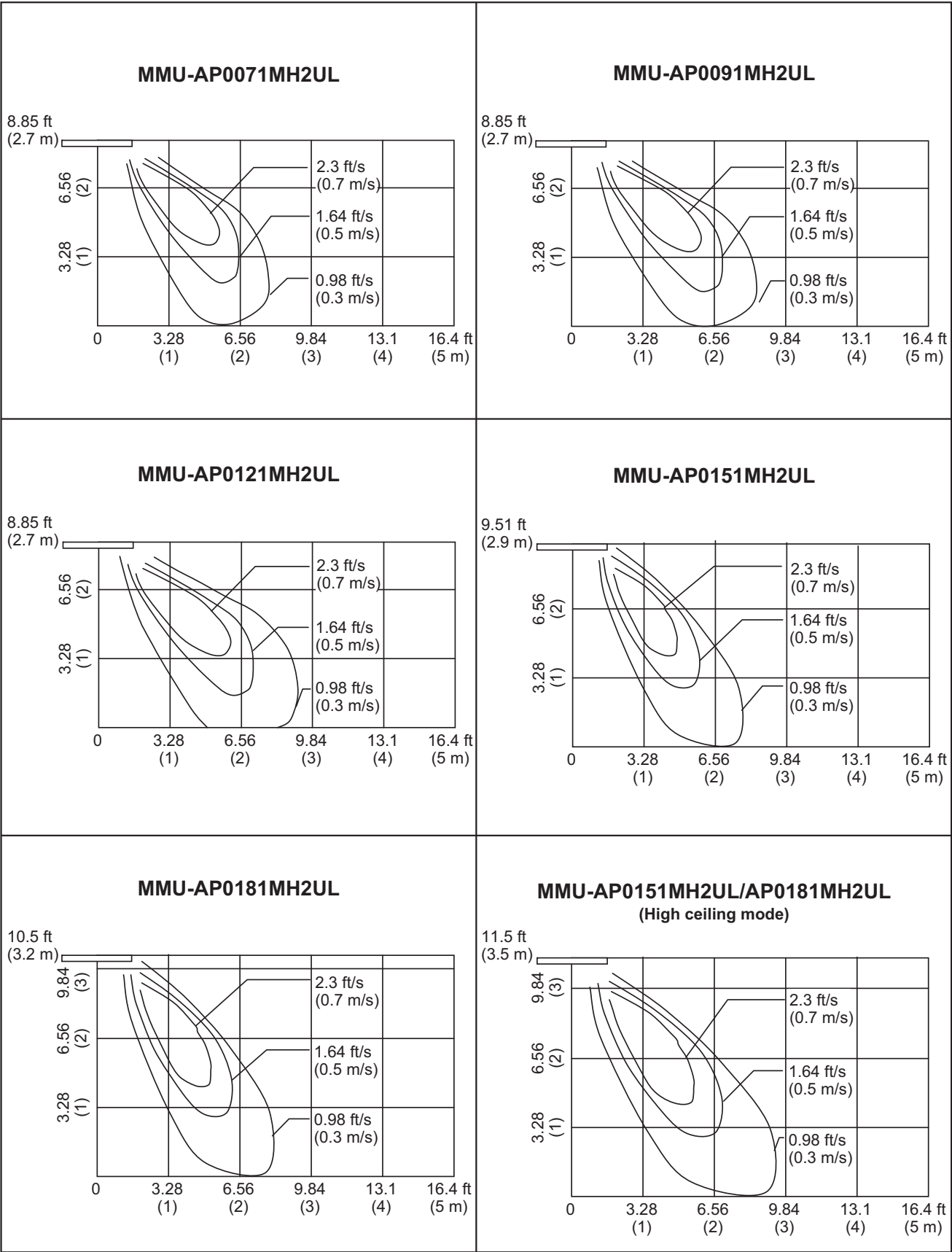
unit size	outdoor air temp. °FDB	indoor air temp.													
		59 °FWB		61 °FWB		64 °FWB		67 °FWB		68 °FWB		72 °FWB		75 °FWB	
		71 °FDB		73 °FDB		77 °FDB		80 °FDB		82 °FDB		86 °FDB		90 °FDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
007	50	6380	5260	6680	5400	7100	5620	7500	5800	7630	5820	8110	5740	8450	5530
	54	6380	5260	6680	5400	7100	5620	7500	5800	7630	5820	8110	5740	8450	5530
	57	6380	5260	6680	5400	7100	5620	7500	5800	7630	5820	8110	5740	8450	5530
	61	6380	5260	6680	5400	7100	5620	7500	5800	7630	5820	8110	5740	8450	5530
	64	6380	5260	6680	5400	7100	5620	7500	5800	7630	5820	8110	5740	8450	5530
	68	6380	5260	6680	5400	7100	5620	7500	5800	7630	5820	8110	5740	8450	5530
	70	6380	5260	6680	5400	7100	5620	7500	5800	7630	5820	8110	5740	8450	5530
	73	6380	5260	6680	5400	7100	5620	7500	5800	7630	5820	8110	5740	8450	5530
	77	6380	5260	6680	5400	7100	5620	7500	5800	7630	5820	8110	5740	8450	5530
	81	6380	5260	6680	5400	7100	5620	7500	5800	7630	5820	8110	5740	8450	5530
	84	6380	5260	6680	5400	7100	5620	7500	5800	7630	5820	8110	5740	8450	5530
	88	6380	5260	6680	5400	7100	5620	7500	5800	7630	5820	8110	5740	8450	5530
	91	6380	5260	6680	5400	7100	5620	7500	5800	7630	5820	8110	5740	8450	5530
	95	6380	5260	6680	5400	7100	5620	7500	5800	7630	5820	8110	5740	8450	5530
	99	6190	5110	6490	5240	6890	5460	7280	5630	7410	5650	7870	5570	8200	5370
	102	6050	4990	6330	5120	6730	5330	7110	5500	7230	5520	7690	5440	8010	5240
009	50	8090	6160	8460	6320	9000	6590	9500	6790	9660	6810	10270	6720	10700	6470
	54	8090	6160	8460	6320	9000	6590	9500	6790	9660	6810	10270	6720	10700	6470
	57	8090	6160	8460	6320	9000	6590	9500	6790	9660	6810	10270	6720	10700	6470
	61	8090	6160	8460	6320	9000	6590	9500	6790	9660	6810	10270	6720	10700	6470
	64	8090	6160	8460	6320	9000	6590	9500	6790	9660	6810	10270	6720	10700	6470
	68	8090	6160	8460	6320	9000	6590	9500	6790	9660	6810	10270	6720	10700	6470
	70	8090	6160	8460	6320	9000	6590	9500	6790	9660	6810	10270	6720	10700	6470
	73	8090	6160	8460	6320	9000	6590	9500	6790	9660	6810	10270	6720	10700	6470
	77	8090	6160	8460	6320	9000	6590	9500	6790	9660	6810	10270	6720	10700	6470
	81	8090	6160	8460	6320	9000	6590	9500	6790	9660	6810	10270	6720	10700	6470
	84	8090	6160	8460	6320	9000	6590	9500	6790	9660	6810	10270	6720	10700	6470
	88	8090	6160	8460	6320	9000	6590	9500	6790	9660	6810	10270	6720	10700	6470
	91	8090	6160	8460	6320	9000	6590	9500	6790	9660	6810	10270	6720	10700	6470
	95	8090	6160	8460	6320	9000	6590	9500	6790	9660	6810	10270	6720	10700	6470
	99	7860	5980	8210	6140	8740	6400	9220	6590	9380	6610	9970	6530	10390	6280
	102	7670	5840	8020	5990	8530	6250	9010	6440	9160	6460	9740	6370	10140	6130
012	50	10210	7550	10690	7760	11360	8070	12000	8330	12210	8360	12980	8250	13510	7940
	54	10210	7550	10690	7760	11360	8070	12000	8330	12210	8360	12980	8250	13510	7940
	57	10210	7550	10690	7760	11360	8070	12000	8330	12210	8360	12980	8250	13510	7940
	61	10210	7550	10690	7760	11360	8070	12000	8330	12210	8360	12980	8250	13510	7940
	64	10210	7550	10690	7760	11360	8070	12000	8330	12210	8360	12980	8250	13510	7940
	68	10210	7550	10690	7760	11360	8070	12000	8330	12210	8360	12980	8250	13510	7940
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	77	10210	7550	10690	7760	11360	8070	12000	8330	12210	8360	12980	8250	13510	7940
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	88	10210	7550	10690	7760	11360	8070	12000	8330	12210	8360	12980	8250	13510	7940
	91	10210	7550	10690	7760	11360	8070	12000	8330	12210	8360	12980	8250	13510	7940
	95	10210	7550	10690	7760	11360	8070	12000	8330	12210	8360	12980	8250	13510	7940
	99	9910	7330	10380	7530	11030	7840	11650	8090	11860	8120	12600	8010	13120	7710
	102	9680	7160	10130	7360	10770	7650	11380	7900	11580	7930	12310	7820	12810	7530

Compact 4-Way Cassette type (MMU-AP__1MH2UL)

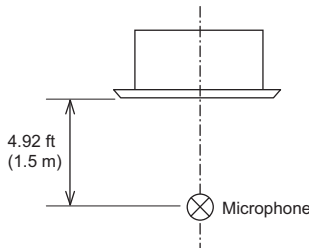
TC: Total capacity [Btu/h] SHC: Sensible capacity [Btu/h]

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	SHC	TC	SHC	TC	SHC	TC	SHC
015	50	13110	9620	13710	9880	14580	10290	15400	10610	15660	10640	16660	10510	17340	10110
	54	13110	9620	13710	9880	14580	10290	15400	10610	15660	10640	16660	10510	17340	10110
	57	13110	9620	13710	9880	14580	10290	15400	10610	15660	10640	16660	10510	17340	10110
	61	13110	9620	13710	9880	14580	10290	15400	10610	15660	10640	16660	10510	17340	10110
	64	13110	9620	13710	9880	14580	10290	15400	10610	15660	10640	16660	10510	17340	10110
	68	13110	9620	13710	9880	14580	10290	15400	10610	15660	10640	16660	10510	17340	10110
	70	13110	9620	13710	9880	14580	10290	15400	10610	15660	10640	16660	10510	17340	10110
	73	13110	9620	13710	9880	14580	10290	15400	10610	15660	10640	16660	10510	17340	10110
	77	13110	9620	13710	9880	14580	10290	15400	10610	15660	10640	16660	10510	17340	10110
	81	13110	9620	13710	9880	14580	10290	15400	10610	15660	10640	16660	10510	17340	10110
	84	13110	9620	13710	9880	14580	10290	15400	10610	15660	10640	16660	10510	17340	10110
	88	13110	9620	13710	9880	14580	10290	15400	10610	15660	10640	16660	10510	17340	10110
	91	13110	9620	13710	9880	14580	10290	15400	10610	15660	10640	16660	10510	17340	10110
	95	13110	9620	13710	9880	14580	10290	15400	10610	15660	10640	16660	10510	17340	10110
	99	12730	9340	13310	9590	14160	9990	14950	10300	15210	10330	16180	10210	16840	9820
	102	12430	9120	13000	9370	13820	9750	14600	10060	14850	10090	15790	9960	16440	9580
018	50	15320	10490	16030	10780	17040	11210	18000	11570	18310	11600	19470	11460	20270	11030
	54	15320	10490	16030	10780	17040	11210	18000	11570	18310	11600	19470	11460	20270	11030
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	70	15320	10490	16030	10780	17040	11210	18000	11570	18310	11600	19470	11460	20270	11030
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	77	15320	10490	16030	10780	17040	11210	18000	11570	18310	11600	19470	11460	20270	11030
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	88	15320	10490	16030	10780	17040	11210	18000	11570	18310	11600	19470	11460	20270	11030
	91	15320	10490	16030	10780	17040	11210	18000	11570	18310	11600	19470	11460	20270	11030
	95	15320	10490	16030	10780	17040	11210	18000	11570	18310	11600	19470	11460	20270	11030
	99	14880	10190	15570	10470	16550	10880	17480	11230	17780	11260	18910	11130	19680	10710
	102	14520	9940	15200	10220	16150	10630	17060	10970	17360	11000	18460	10860	19220	10460

8. Air throw distance chart

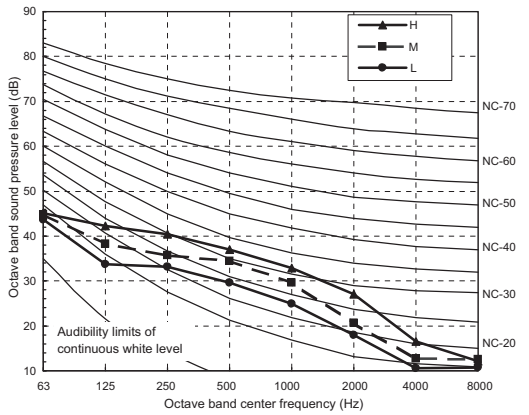


9. Sound data



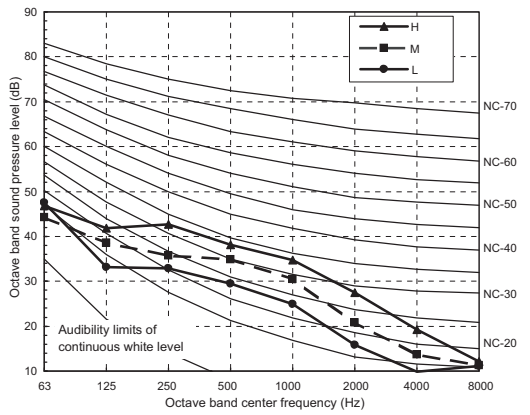
MMU-AP0071MH2UL

Sound pressure level (dB (A))	H - M - L
	38.5-35-31



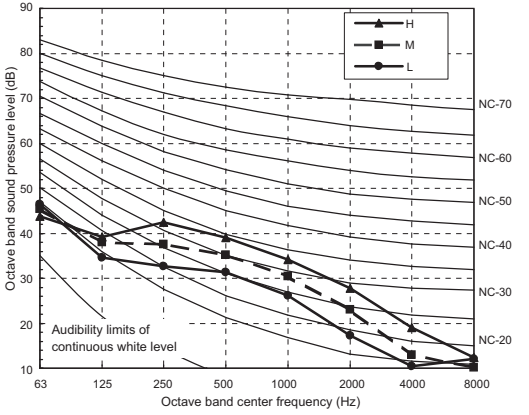
MMU-AP0091MH2UL

Sound pressure level (dB (A))	H - M - L
	40-35.5-31



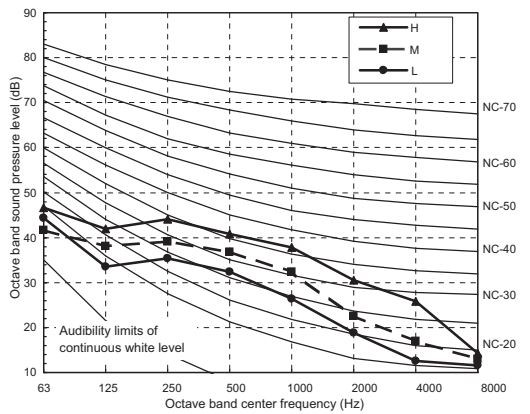
MMU-AP0121MH2UL

Sound pressure level (dB (A))	H - M - L
	40-36-32



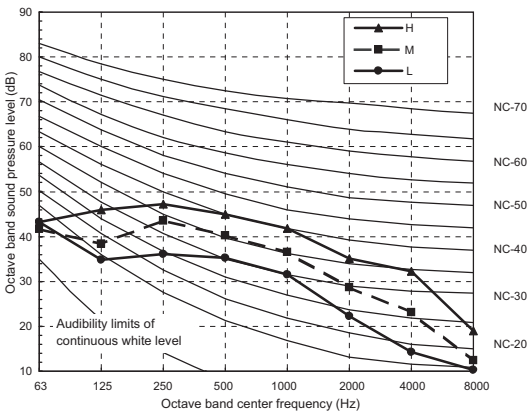
MMU-AP0151MH2UL

Sound pressure level (dB (A))	H - M - L
	42.5-37.5-33

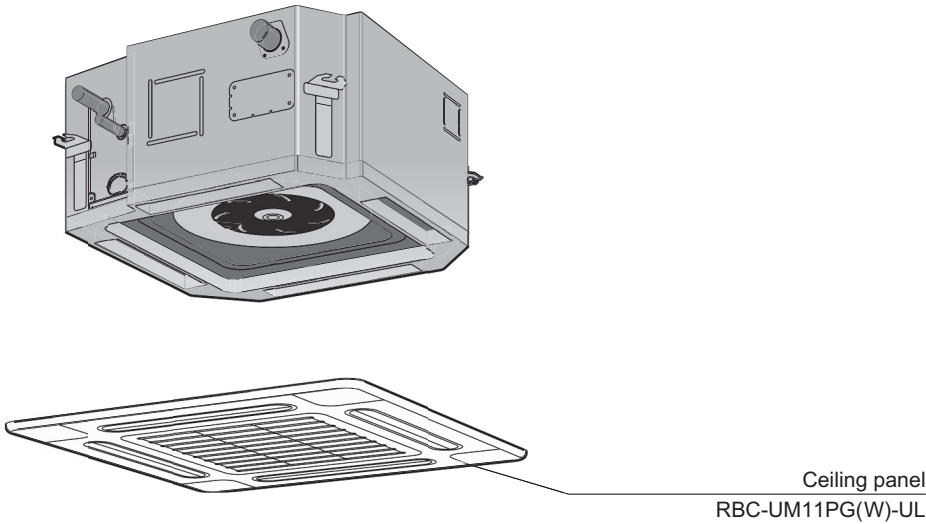


MMU-AP0181MH2UL

Sound pressure level (dB (A))	H - M - L
	46.5-41.5-36



10. Accessories
Optional part for Compact 4-Way Cassette type



Parts Name	Model name	Applied Model	Note
Ceiling panel	RBC-UM11PG(W)-UL	MMU-AP__1MH2UL	Required accessory

Compact 4-Way Cassette type Engineering Data Book

Model name:

MMU-AP__1MH2UL

March, 2016 First Edition

TOSHIBA CARRIER CORPORATION