

2-way Cassette Type

MMU-UP0071WH-E / MMU-UP0091WH-E
MMU-UP0121WH-E / MMU-UP0151WH-E
MMU-UP0181WH-E / MMU-UP0241WH-E
MMU-UP0271WH-E / MMU-UP0301WH-E
MMU-UP0361WH-E / MMU-UP0481WH-E
MMU-UP0561WH-E



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 - 11-1. Fresh air intake (Design guide)

Allocation standard of model name

M	M	U	-	U	P	*	*	*	*	W	H	-	E
MM		VRF FCU											
		Type of mounting											
		U	Cassette										
		-	Dash (or hyphen)										
		Communication											
		U	TU2C-link										
		Refrigerant											
		P	R410A/R407C										
		***	Capacity										
		Development series number											
		Type of mounting											
		W	2-way cassette										
		System											
		H	Cooling/Heating										
		-	Dash (or hyphen)···In case of no codes after #17, "-" will not be used When model name has over 18 characters, "-" will not be used.										
		Classification Code for Destination											
		E	Corresponding to European standard and energy saving certification										

1. Specifications



Model name			MMU-	UP0071WH-E	UP0091WH-E	UP0121WH-E	UP0151WH-E
Cooling capacity （*1）			kW	2.2	2.8	3.6	4.5
Heating capacity （*1）			kW	2.5	3.2	4.0	5.0
Electrical chara ^s taristics	Power supply		1 ph 50Hz 220-240V				
	Running current		A	0.21 / 0.22			0.21 / 0.22
	Power consumption		kW	0.024 / 0.024			0.026 / 0.026
	Starting current		A	0.31 / 0.32			0.33 / 0.35
	Power supply		1 ph 60Hz 208-230V				
	Running current		A	0.21 / 0.22			0.21 / 0.22
	Power consumption		kW	0.024 / 0.024			0.026 / 0.026
	Starting current		A	0.31 / 0.32			0.33 / 0.35
Appearance	Main Unit		Heat-insulating material attached Zinc hot dipping steel plate				
	Ceiling Panel	Model Name		RBC-UW283PG(W)-E			
		Panel Color		Moon White (Munsell 2.5GY9.0 / 0.5)			
Outer dimension	Main Unit	Height	mm	295			
		Width	mm	815			
		Depth	mm	570			
	Ceiling Panel	Height	mm	20			
		Width	mm	1050			
		Depth	mm	680			
Total weight	Main Unit		kg	18			
	Ceiling Panel		kg	10			
Heat exchanger				Finned tube			
Soundproof / Heat-insulating material				Non-flammable insulation			
Fan unit	Fan		Turbo fan				
	Standard air flow (H / M+ / M / L+ / L)		m³/h	558 / 516 / 498 / 468 / 450			600 / 552 / 534 / 480 / 450
	Motor		W	60			
Air filter				Standard filter (Long life filter)			
Controller				Remote controller			
Connecting pipe	Gas side		mm	Ø 9.5			Ø 12.7
	Liquid side		mm	Ø 6.4			
Drain port (Nominal dia. mm)				25 (Polyvinyl chloride tube)			
Sound pressure level (H / M+ / M / L+ / L)			dB(A)	34 / 33 / 32 / 31 / 30			35 / 34 / 33 / 31 / 30
Sound power level (H / M+ / M / L+ / L)			dB(A)	49 / 48 / 47 / 46 / 45			50 / 49 / 48 / 46 / 45

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.

Model name			MMU-	UP0181WH-E	UP0241WH-E	UP0271WH-E	UP0301WH-E
Cooling / Heating capacity (*1)			kW	5.6 / 6.3	7.1 / 8.0	8.0 / 9.0	9.0 / 10.0
Electrical charastaristics	Power supply		1phase 220-240V~50Hz / 1phase 208-230V~60Hz				
	Running current	50Hz/60Hz	A	0.28 / 0.29	0.37 / 0.39		0.43 / 0.46
	Power consumption	50Hz/60Hz	kW	0.034 / 0.034	0.045 / 0.045		0.055 / 0.055
	Starting current	50Hz/60Hz	A	0.42 / 0.44	0.57 / 0.60		0.65 / 0.68
Appearance	Main Unit		Heat-insulating material attached Zinc hot dipping steel plate				
	Ceiling Panel	Model Name	RBC-UW803PG(W)-E				
		Panel Color	Moon White (Munsell 2.5GY9.0 / 0.5)				
Outer dimension	Main Unit	Height	mm	345			
		Width	mm	1180			
		Depth	mm	570			
	Ceiling Panel	Height	mm	20			
		Width	mm	1415			
		Depth	mm	680			
Total weight	Main Unit		kg	26			
	Ceiling Panel		kg	14			
Heat exchanger				Finned tube			
Soundproof / Heat-insulating material				Non-flammable insulation			
Fan unit	Fan		Centrifugal fan				
	Standard air flow (H / M+ / M / L+ / L)		m³/h	900 / 810 / 750 / 678 / 618	1050 / 942 / 840 / 780 / 738		1260 / 1062 / 900 / 840 / 780
	Motor		W	94			
Air filter				Standard filter (Long life filter)			
Controller				Remote controller			
Connecting pipe	Gas side		mm	Ø 12.7	Ø 15.9		
	Liquid side		mm	Ø 6.4	Ø 9.5		
Drain port (Nominal dia. mm)				25 (Polyvinyl chloride tube)			
Sound pressure level (H / M+ / M / L+ / L)			dB(A)	35 / 34 / 33 / 31 / 30	38 / 37 / 35 / 34 / 33		40 / 38 / 37 / 35 / 34
Sound power level (H / M+ / M / L+ / L)			dB(A)	50 / 49 / 48 / 47 / 45	53 / 52 / 50 / 49 / 48		55 / 53 / 52 / 50 / 49

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.

Model name				MMU-	UP0361WH-E	UP0481WH-E	UP0561WH-E
Cooling / Heating capacity （*1）				kW	11.2 / 12.5	14.0 / 16.0	16.0 / 18.0
Electrical charastaristics	Power supply			1phase 220-240V~50Hz / 1phase 208-230V~60Hz			
	Running current	50Hz/60Hz		A	0.50 / 0.53	0.57 / 0.59	0.77 / 0.81
	Power consumption	50Hz/60Hz		kW	0.081 / 0.081	0.091 / 0.091	0.131 / 0.131
	Starting current	50Hz/60Hz		A	0.76 / 0.79	0.85 / 0.89	1.17 / 1.22
Appearance	Main Unit			Heat-instulating material attached Zinc hot dipping steel plate			
	Ceiling Panel	Model Name		RBC-UW1403PG(W)-E			
		Panel Color		Moon White (Munsell 2.5GY9.0 / 0.5)			
Outer dimension	Main Unit	Height	mm	345			
		Width	mm	1600			
		Depth	mm	570			
	Ceiling Panel	Height	mm	20			
		Width	mm	1835			
		Depth	mm	680			
Total weight	Main Unit		kg	35			
	Ceiling Panel		kg	14			
Heat exchanger					Finned tube		
Soundproof / Heat-insulating material					Non-flammable insulation		
Fan unit	Fan			Centrifugal fan			
	Standard air flow (H / M+ / M / L+ / L)		m³/h	1740 / 1530 / 1434 1260 / 1182	1800 / 1608 / 1482 1320 / 1230	2040 / 1770 / 1578 1410 / 1320	
	Motor		W	139			
Air filter					Standard filter (Long life filter)		
Controller					Remote controller		
Connecting pipe	Gas side		mm	Ø 15.9			
	Liquid side		mm	Ø 9.5			
Drain port (Nominal dia. mm)					25 (Polyvinyl chloride tube)		
Sound pressure level (H / M+ / M / L+ / L)			dB(A)	42 / 41 / 39 / 37 / 36	43 / 42 / 40 / 38 / 37	46 / 44 / 42 / 40 / 39	
Sound power level (H / M+ / M / L+ / L)			dB(A)	57 / 55 / 54 / 52 / 51	58 / 56 / 55 / 53 / 52	61 / 58 / 57 / 55 / 54	

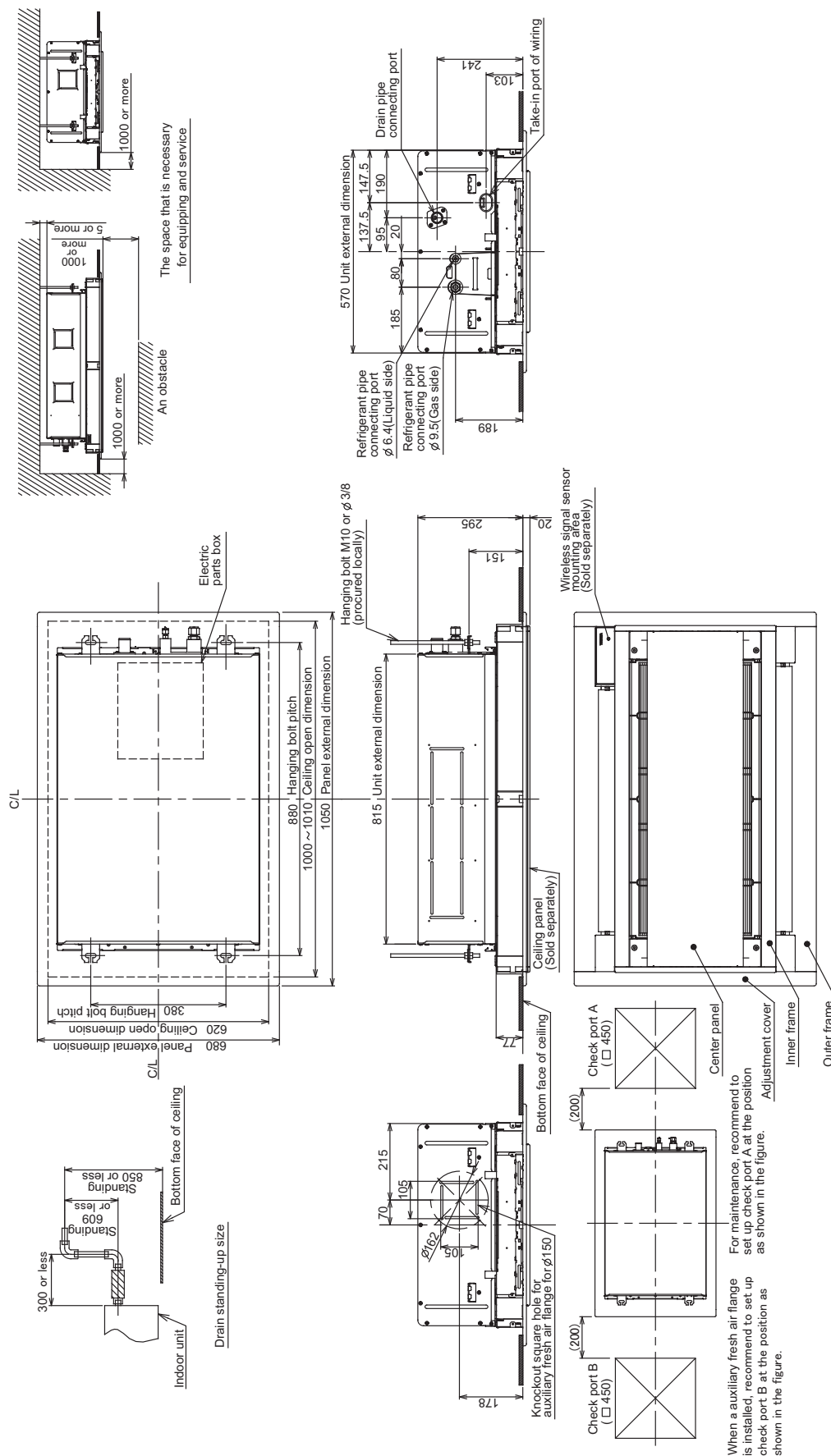
Note

(*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

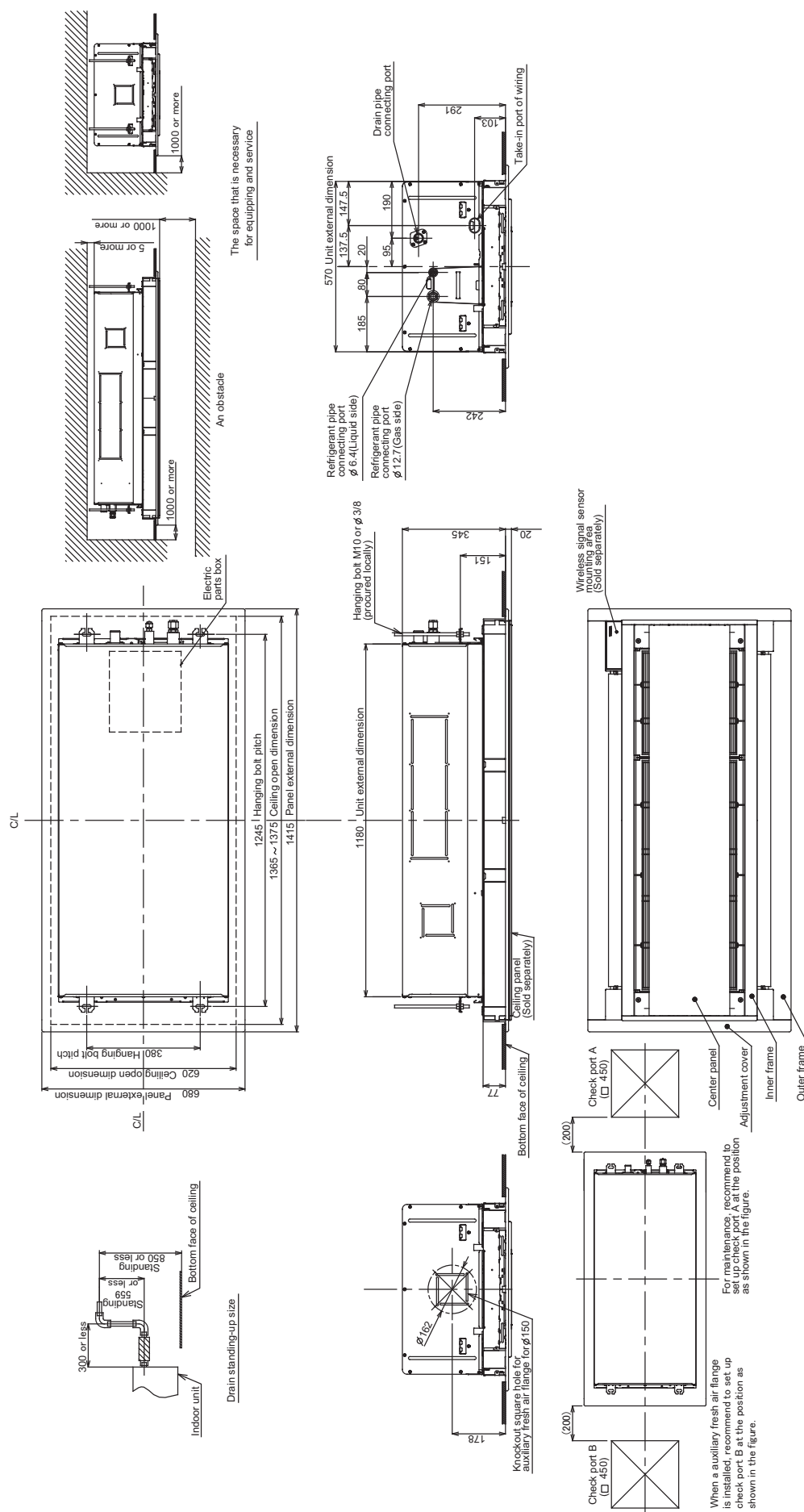
MMU-UP0071WH-E, MMU-UP0091WH-E, MMU-UP0121WH-E

(Unit:mm)



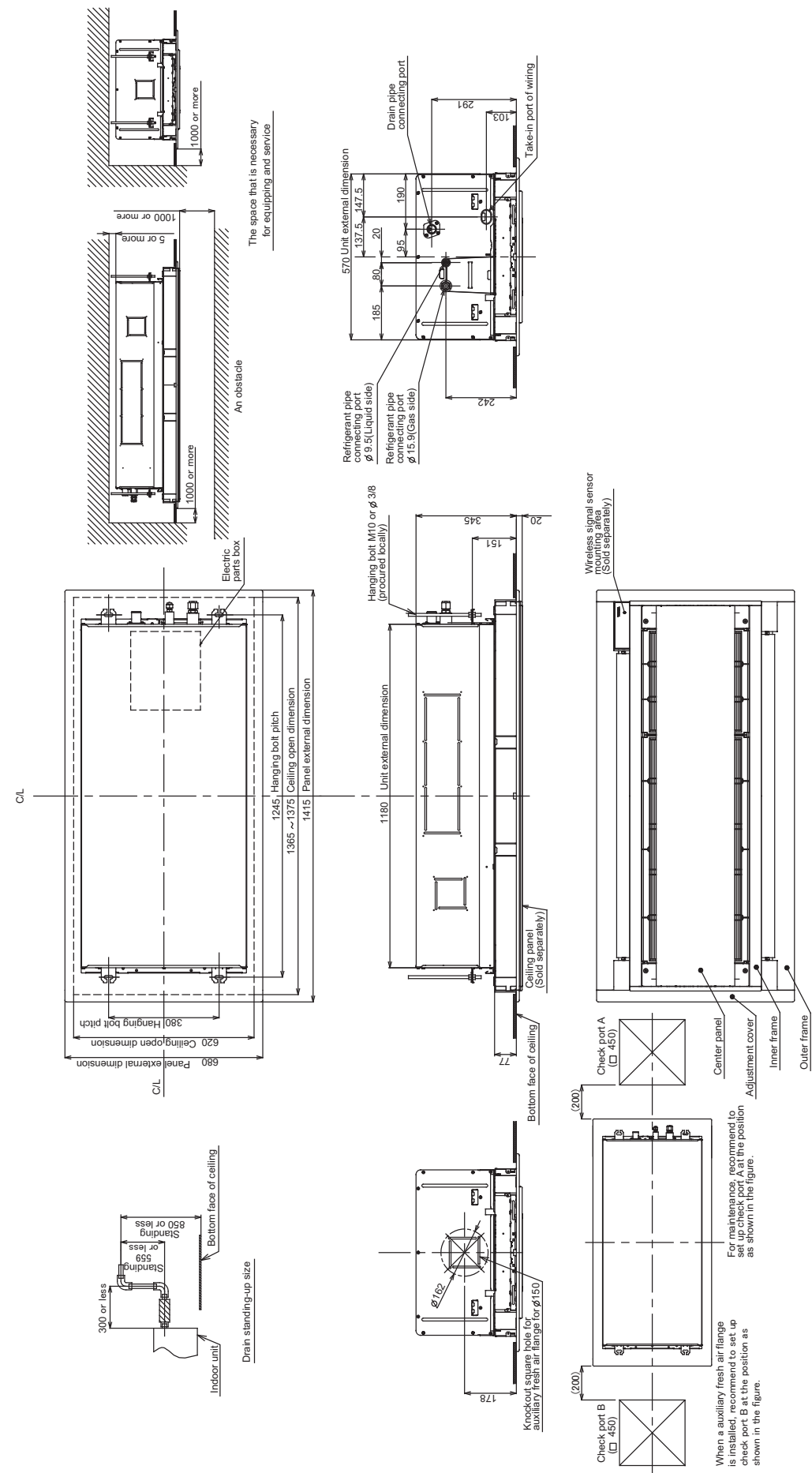
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(Unit:mm)

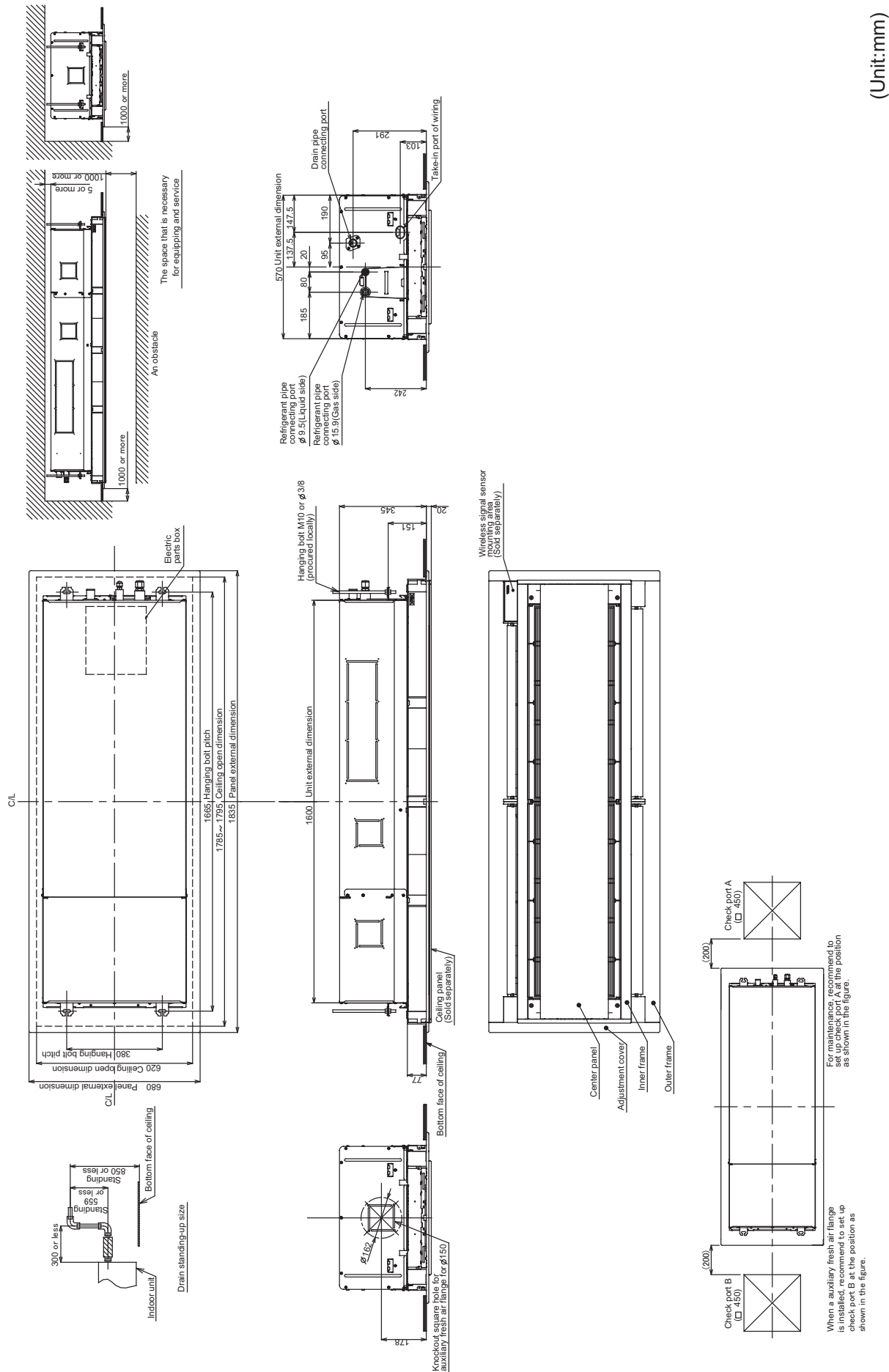


MMU-UP0241WH-E, MMU-UP0271WH-E, MMU-UP0301WH-E

(Unit:mm)

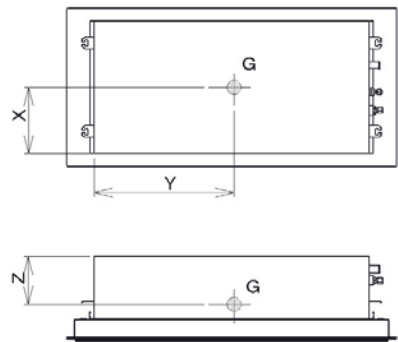


MMU-UP0361WH-E, MMU-UP0481WH-E, MMU-UP0561WH-E

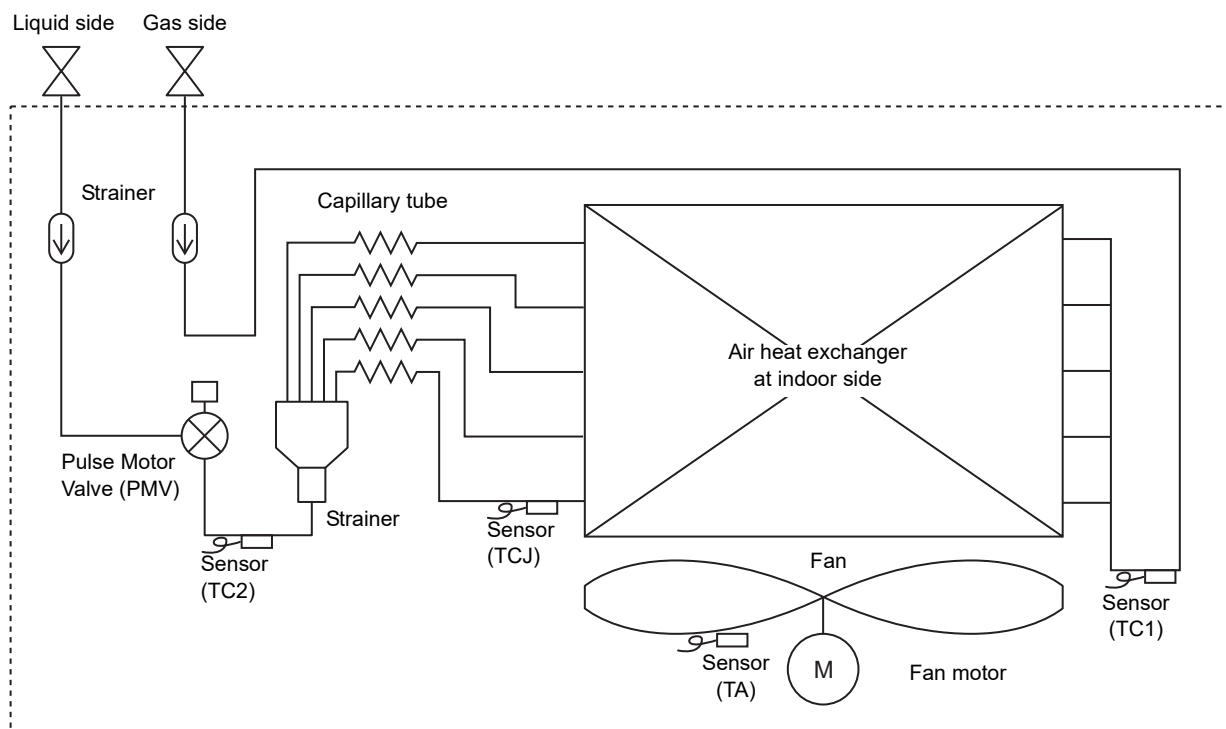


3. Center of gravity

Model name	X(mm)	Y(mm)	Z(mm)	Total weight(kg)		
				Main unit	Ceiling panel	
MMU-UP0071WH-E	280	435	162	18	10	
MMU-UP0091WH-E						
MMU-UP0121WH-E						
MMU-UP0151WH-E						
MMU-UP0181WH-E	285	600	205	26	14	
MMU-UP0241WH-E						
MMU-UP0271WH-E						
MMU-UP0301WH-E		835	175	36		
MMU-UP0361WH-E						
MMU-UP0481WH-E						
MMU-UP0561WH-E						



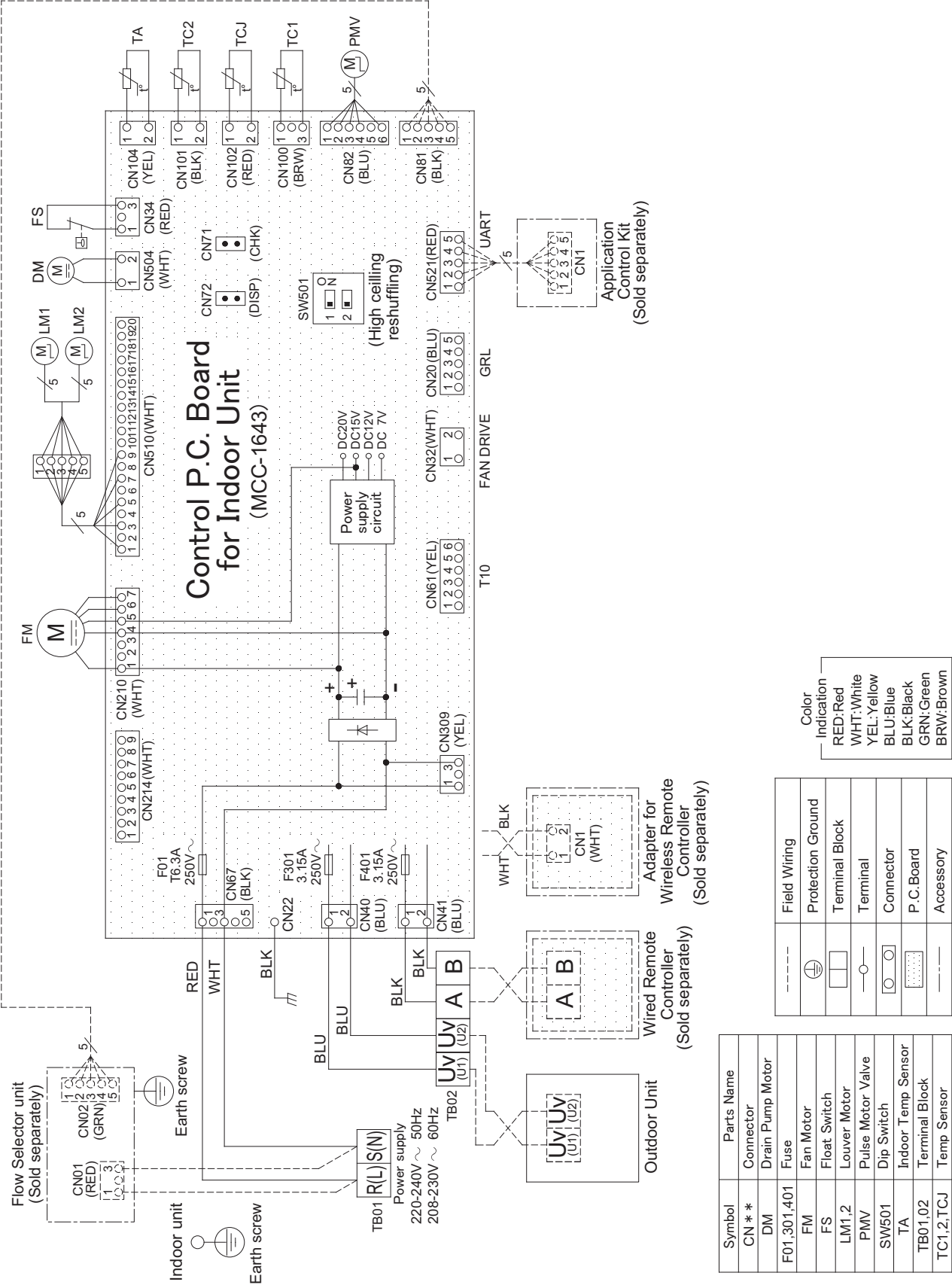
4. Piping diagram



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): White) 1) Detects indoor suction temperature
	2. TC1	(Connector CN100 (3P): Brown) 1) Controls PMV super heat in cooling operation
	3. TC2	(Connector CN101 (2P): Blue) 1) Controls PMV sub cool in heating operation
	4. TCJ	(Connector CN102 (2P): Yellow) 1) Controls PMV super heat in cooling operation

5. Wiring diagram

MMU-UP0071WH-E, MMU-UP0091WH-E, MMU-UP0121WH-E, MMU-UP0151WH-E,
MMU-UP0181WH-E, MMU-UP0241WH-E, MMU-UP0271WH-E, MMU-UP0301WH-E,
MMU-UP0361WH-E, MMU-UP0481WH-E, MMU-UP0561WH-E



6. Electrical characteristics

50Hz

Model	Nominal Voltage (V-Ph-Hz)	Voltage Range		Fan Motor		Power Supply	
		Min	Max	kW	FLA	MCA	MOCP
MMU-UP0071WH-E	230-1-50	198	264	0.060	0.24	0.30	15
MMU-UP0091WH-E	230-1-50	198	264	0.060	0.24	0.30	15
MMU-UP0121WH-E	230-1-50	198	264	0.060	0.24	0.30	15
MMU-UP0151WH-E	230-1-50	198	264	0.060	0.25	0.31	15
MMU-UP0181WH-E	230-1-50	198	264	0.094	0.32	0.40	15
MMU-UP0241WH-E	230-1-50	198	264	0.094	0.43	0.54	15
MMU-UP0271WH-E	230-1-50	198	264	0.094	0.43	0.54	15
MMU-UP0301WH-E	230-1-50	198	264	0.094	0.50	0.63	15
MMU-UP0361WH-E	230-1-50	198	264	0.139	0.58	0.73	15
MMU-UP0481WH-E	230-1-50	198	264	0.139	0.65	0.81	15
MMU-UP0561WH-E	230-1-50	198	264	0.139	0.89	1.11	15

60Hz

Model	Nominal Voltage (V-Ph-Hz)	Voltage Range		Fan Motor		Power Supply	
		Min	Max	kW	FLA	MCA	MOCP
MMU-UP0071WH-E	220-1-60	198	242	0.060	0.25	0.32	15
MMU-UP0091WH-E	220-1-60	198	242	0.060	0.25	0.32	15
MMU-UP0121WH-E	220-1-60	198	242	0.060	0.25	0.32	15
MMU-UP0151WH-E	220-1-60	198	242	0.060	0.26	0.33	15
MMU-UP0181WH-E	220-1-60	198	242	0.094	0.34	0.42	15
MMU-UP0241WH-E	220-1-60	198	242	0.094	0.45	0.56	15
MMU-UP0271WH-E	220-1-60	198	242	0.094	0.45	0.56	15
MMU-UP0301WH-E	220-1-60	198	242	0.094	0.53	0.66	15
MMU-UP0361WH-E	220-1-60	198	242	0.139	0.61	0.76	15
MMU-UP0481WH-E	220-1-60	198	242	0.139	0.68	0.85	15
MMU-UP0561WH-E	220-1-60	198	242	0.139	0.93	1.17	15

MCA : Minimum Circuit Amps

MOCP : Maximum Overcurrent Protection (Amps)

FLA : Full Load Amps

kW : Fan Motor Rated Output (kW)

7. Sensible capacity table

2-way cassette type (MMU-UP_1WH-E)

unit size	outdoor air temp. °CDB	indoor air temp.													
		14.0°CWB		16.0°CWB		18.0°CWB		19.0°CWB		20.0°CWB		22.0°CWB		24.0°CWB	
		20°CDB		23°CDB		26°CDB		27°CDB		28°CDB		30°CDB		32°CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
007	10.0	1.8	1.4	2.0	1.5	2.1	1.6	2.2	1.6	2.3	1.6	2.4	1.6	2.5	1.6
	12.0	1.8	1.4	2.0	1.5	2.1	1.6	2.2	1.6	2.3	1.6	2.4	1.6	2.5	1.6
	14.0	1.8	1.4	2.0	1.5	2.1	1.6	2.2	1.6	2.3	1.6	2.4	1.6	2.5	1.6
	16.0	1.8	1.4	2.0	1.5	2.1	1.6	2.2	1.6	2.3	1.6	2.4	1.6	2.5	1.6
	18.0	1.8	1.4	2.0	1.5	2.1	1.6	2.2	1.6	2.3	1.6	2.4	1.6	2.5	1.6
	20.0	1.8	1.4	2.0	1.5	2.1	1.6	2.2	1.6	2.3	1.6	2.4	1.6	2.5	1.6
	21.0	1.8	1.4	2.0	1.5	2.1	1.6	2.2	1.6	2.3	1.6	2.4	1.6	2.5	1.6
	23.0	1.8	1.4	2.0	1.5	2.1	1.6	2.2	1.6	2.3	1.6	2.4	1.6	2.5	1.6
	25.0	1.8	1.4	2.0	1.5	2.1	1.6	2.2	1.6	2.3	1.6	2.4	1.6	2.5	1.6
	27.0	1.8	1.4	2.0	1.5	2.1	1.6	2.2	1.6	2.3	1.6	2.4	1.6	2.5	1.6
	29.0	1.8	1.4	2.0	1.5	2.1	1.6	2.2	1.6	2.3	1.6	2.4	1.6	2.5	1.6
	31.0	1.8	1.4	2.0	1.5	2.1	1.6	2.2	1.6	2.3	1.6	2.4	1.6	2.5	1.6
	33.0	1.8	1.4	2.0	1.5	2.1	1.6	2.2	1.6	2.3	1.6	2.4	1.6	2.5	1.6
	35.0	1.8	1.4	2.0	1.5	2.1	1.6	2.2	1.6	2.3	1.6	2.4	1.6	2.5	1.6
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	2.0
	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	2.0
	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	2.0
	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	2.0
	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	2.0
	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	2.0
	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	2.0
	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	2.0
	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	2.0
	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	2.0
	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	2.0
	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	2.0
	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	2.0
	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	2.0
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
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	3.0	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	3.0	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	3.0	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	3.0	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	3.0	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	3.0	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	3.0	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	3.0	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	3.0	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	3.0	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	3.0	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	3.0	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	3.0	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	3.0	5.1	3.0

TC : Total capacity [kW]

SHC : Sensible capacity [kW]

2-way cassette type (MMU-UP_1WH-E)

unit size	outdoor air temp. °CDB	indoor air temp.													
		14.0°CWB		16.0°CWB		18.0°CWB		19.0°CWB		20.0°CWB		22.0°CWB		24.0°CWB	
		20°CDB		23°CDB		26°CDB		27°CDB		28°CDB		30°CDB		32°CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
018	10.0	4.6	3.5	5.1	3.7	5.4	3.9	5.6	3.9	5.8	3.9	6.1	3.9	6.4	3.8
	12.0	4.6	3.5	5.1	3.7	5.4	3.9	5.6	3.9	5.8	3.9	6.1	3.9	6.4	3.8
	14.0	4.6	3.5	5.1	3.7	5.4	3.9	5.6	3.9	5.8	3.9	6.1	3.9	6.4	3.8
	16.0	4.6	3.5	5.1	3.7	5.4	3.9	5.6	3.9	5.8	3.9	6.1	3.9	6.4	3.8
	18.0	4.6	3.5	5.1	3.7	5.4	3.9	5.6	3.9	5.8	3.9	6.1	3.9	6.4	3.8
	20.0	4.6	3.5	5.1	3.7	5.4	3.9	5.6	3.9	5.8	3.9	6.1	3.9	6.4	3.8
	21.0	4.6	3.5	5.1	3.7	5.4	3.9	5.6	3.9	5.8	3.9	6.1	3.9	6.4	3.8
	23.0	4.6	3.5	5.1	3.7	5.4	3.9	5.6	3.9	5.8	3.9	6.1	3.9	6.4	3.8
	25.0	4.6	3.5	5.1	3.7	5.4	3.9	5.6	3.9	5.8	3.9	6.1	3.9	6.4	3.8
	27.0	4.6	3.5	5.1	3.7	5.4	3.9	5.6	3.9	5.8	3.9	6.1	3.9	6.4	3.8
	29.0	4.6	3.5	5.1	3.7	5.4	3.9	5.6	3.9	5.8	3.9	6.1	3.9	6.4	3.8
	31.0	4.6	3.5	5.1	3.7	5.4	3.9	5.6	3.9	5.8	3.9	6.1	3.9	6.4	3.8
	33.0	4.6	3.5	5.1	3.7	5.4	3.9	5.6	3.9	5.8	3.9	6.1	3.9	6.4	3.8
	35.0	4.6	3.5	5.1	3.7	5.4	3.9	5.6	3.9	5.8	3.9	6.1	3.9	6.4	3.8
024	10.0	5.8	4.3	6.4	4.6	6.9	4.8	7.1	4.8	7.3	4.8	7.7	4.8	8.1	4.7
	12.0	5.8	4.3	6.4	4.6	6.9	4.8	7.1	4.8	7.3	4.8	7.7	4.8	8.1	4.7
	14.0	5.8	4.3	6.4	4.6	6.9	4.8	7.1	4.8	7.3	4.8	7.7	4.8	8.1	4.7
	16.0	5.8	4.3	6.4	4.6	6.9	4.8	7.1	4.8	7.3	4.8	7.7	4.8	8.1	4.7
	18.0	5.8	4.3	6.4	4.6	6.9	4.8	7.1	4.8	7.3	4.8	7.7	4.8	8.1	4.7
	20.0	5.8	4.3	6.4	4.6	6.9	4.8	7.1	4.8	7.3	4.8	7.7	4.8	8.1	4.7
	21.0	5.8	4.3	6.4	4.6	6.9	4.8	7.1	4.8	7.3	4.8	7.7	4.8	8.1	4.7
	23.0	5.8	4.3	6.4	4.6	6.9	4.8	7.1	4.8	7.3	4.8	7.7	4.8	8.1	4.7
	25.0	5.8	4.3	6.4	4.6	6.9	4.8	7.1	4.8	7.3	4.8	7.7	4.8	8.1	4.7
	27.0	5.8	4.3	6.4	4.6	6.9	4.8	7.1	4.8	7.3	4.8	7.7	4.8	8.1	4.7
	29.0	5.8	4.3	6.4	4.6	6.9	4.8	7.1	4.8	7.3	4.8	7.7	4.8	8.1	4.7
	31.0	5.8	4.3	6.4	4.6	6.9	4.8	7.1	4.8	7.3	4.8	7.7	4.8	8.1	4.7
	33.0	5.8	4.3	6.4	4.6	6.9	4.8	7.1	4.8	7.3	4.8	7.7	4.8	8.1	4.7
	35.0	5.8	4.3	6.4	4.6	6.9	4.8	7.1	4.8	7.3	4.8	7.7	4.8	8.1	4.7
027	10.0	6.6	4.7	7.3	5.0	7.8	5.3	8.0	5.3	8.2	5.3	8.7	5.2	9.1	5.1
	12.0	6.6	4.7	7.3	5.0	7.8	5.3	8.0	5.3	8.2	5.3	8.7	5.2	9.1	5.1
	14.0	6.6	4.7	7.3	5.0	7.8	5.3	8.0	5.3	8.2	5.3	8.7	5.2	9.1	5.1
	16.0	6.6	4.7	7.3	5.0	7.8	5.3	8.0	5.3	8.2	5.3	8.7	5.2	9.1	5.1
	18.0	6.6	4.7	7.3	5.0	7.8	5.3	8.0	5.3	8.2	5.3	8.7	5.2	9.1	5.1
	20.0	6.6	4.7	7.3	5.0	7.8	5.3	8.0	5.3	8.2	5.3	8.7	5.2	9.1	5.1
	21.0	6.6	4.7	7.3	5.0	7.8	5.3	8.0	5.3	8.2	5.3	8.7	5.2	9.1	5.1
	23.0	6.6	4.7	7.3	5.0	7.8	5.3	8.0	5.3	8.2	5.3	8.7	5.2	9.1	5.1
	25.0	6.6	4.7	7.3	5.0	7.8	5.3	8.0	5.3	8.2	5.3	8.7	5.2	9.1	5.1
	27.0	6.6	4.7	7.3	5.0	7.8	5.3	8.0	5.3	8.2	5.3	8.7	5.2	9.1	5.1
	29.0	6.6	4.7	7.3	5.0	7.8	5.3	8.0	5.3	8.2	5.3	8.7	5.2	9.1	5.1
	31.0	6.6	4.7	7.3	5.0	7.8	5.3	8.0	5.3	8.2	5.3	8.7	5.2	9.1	5.1
	33.0	6.6	4.7	7.3	5.0	7.8	5.3	8.0	5.3	8.2	5.3	8.7	5.2	9.1	5.1
	35.0	6.6	4.7	7.3	5.0	7.8	5.3	8.0	5.3	8.2	5.3	8.7	5.2	9.1	5.1
030	10.0	7.4	5.0	8.2	5.4	8.7	5.7	9.0	5.7	9.3	5.7	9.8	5.6	10.3	5.5
	12.0	7.4	5.0	8.2	5.4	8.7	5.7	9.0	5.7	9.3	5.7	9.8	5.6	10.3	5.5
	14.0	7.4	5.0	8.2	5.4	8.7	5.7	9.0	5.7	9.3	5.7	9.8	5.6	10.3	5.5
	16.0	7.4	5.0	8.2	5.4	8.7	5.7	9.0	5.7	9.3	5.7	9.8	5.6	10.3	5.5
	18.0	7.4	5.0	8.2	5.4	8.7	5.7	9.0	5.7	9.3	5.7	9.8	5.6	10.3	5.5
	20.0	7.4	5.0	8.2	5.4	8.7	5.7	9.0	5.7	9.3	5.7	9.8	5.6	10.3	5.5
	21.0	7.4	5.0	8.2	5.4	8.7	5.7	9.0	5.7	9.3	5.7	9.8	5.6	10.3	5.5
	23.0	7.4	5.0	8.2	5.4	8.7	5.7	9.0	5.7	9.3	5.7	9.8	5.6	10.3	5.5
	25.0	7.4	5.0	8.2	5.4	8.7	5.7	9.0	5.7	9.3	5.7	9.8	5.6	10.3	5.5
	27.0	7.4	5.0	8.2	5.4	8.7	5.7	9.0	5.7	9.3	5.7	9.8	5.6	10.3	5.5
	29.0	7.4	5.0	8.2	5.4	8.7	5.7	9.0	5.7	9.3	5.7	9.8	5.6	10.3	5.5
	31.0	7.4	5.0	8.2	5.4	8.7	5.7	9.0	5.7	9.3	5.7	9.8	5.6	10.3	5.5
	33.0	7.4	5.0	8.2	5.4	8.7	5.7	9.0	5.7	9.3	5.7	9.8	5.6	10.3	5.5
	35.0	7.4	5.0	8.2	5.4	8.7	5.7	9.0	5.7	9.3	5.7	9.8	5.6	10.3	5.5

TC : Total capacity [kW]

SHC : Sensible capacity [kW]

2-way cassette type (MMU-UP_1WH-E)

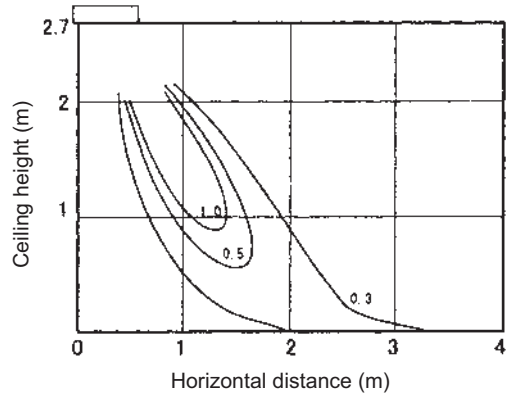
unit size	outdoor air temp. °CDB	indoor air temp.													
		14.0°CWB		16.0°CWB		18.0°CWB		19.0°CWB		20.0°CWB		22.0°CWB		24.0°CWB	
		20°CDB		23°CDB		26°CDB		27°CDB		28°CDB		30°CDB		32°CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
036	10.0	9.2	6.9	10.2	7.3	10.9	7.8	11.2	7.7	11.5	7.7	12.2	7.7	12.8	7.5
	12.0	9.2	6.9	10.2	7.3	10.9	7.8	11.2	7.7	11.5	7.7	12.2	7.7	12.8	7.5
	14.0	9.2	6.9	10.2	7.3	10.9	7.8	11.2	7.7	11.5	7.7	12.2	7.7	12.8	7.5
	16.0	9.2	6.9	10.2	7.3	10.9	7.8	11.2	7.7	11.5	7.7	12.2	7.7	12.8	7.5
	18.0	9.2	6.9	10.2	7.3	10.9	7.8	11.2	7.7	11.5	7.7	12.2	7.7	12.8	7.5
	20.0	9.2	6.9	10.2	7.3	10.9	7.8	11.2	7.7	11.5	7.7	12.2	7.7	12.8	7.5
	21.0	9.2	6.9	10.2	7.3	10.9	7.8	11.2	7.7	11.5	7.7	12.2	7.7	12.8	7.5
	23.0	9.2	6.9	10.2	7.3	10.9	7.8	11.2	7.7	11.5	7.7	12.2	7.7	12.8	7.5
	25.0	9.2	6.9	10.2	7.3	10.9	7.8	11.2	7.7	11.5	7.7	12.2	7.7	12.8	7.5
	27.0	9.2	6.9	10.2	7.3	10.9	7.8	11.2	7.7	11.5	7.7	12.2	7.7	12.8	7.5
	29.0	9.2	6.9	10.2	7.3	10.9	7.8	11.2	7.7	11.5	7.7	12.2	7.7	12.8	7.5
	31.0	9.2	6.9	10.2	7.3	10.9	7.8	11.2	7.7	11.5	7.7	12.2	7.7	12.8	7.5
	33.0	9.2	6.9	10.2	7.3	10.9	7.8	11.2	7.7	11.5	7.7	12.2	7.7	12.8	7.5
	35.0	9.2	6.9	10.2	7.3	10.9	7.8	11.2	7.7	11.5	7.7	12.2	7.7	12.8	7.5
048	10.0	11.5	7.9	12.7	8.5	13.6	9.0	14.0	9.0	14.4	9.0	15.3	8.9	16.0	8.7
	12.0	11.5	7.9	12.7	8.5	13.6	9.0	14.0	9.0	14.4	9.0	15.3	8.9	16.0	8.7
	14.0	11.5	7.9	12.7	8.5	13.6	9.0	14.0	9.0	14.4	9.0	15.3	8.9	16.0	8.7
	16.0	11.5	7.9	12.7	8.5	13.6	9.0	14.0	9.0	14.4	9.0	15.3	8.9	16.0	8.7
	18.0	11.5	7.9	12.7	8.5	13.6	9.0	14.0	9.0	14.4	9.0	15.3	8.9	16.0	8.7
	20.0	11.5	7.9	12.7	8.5	13.6	9.0	14.0	9.0	14.4	9.0	15.3	8.9	16.0	8.7
	21.0	11.5	7.9	12.7	8.5	13.6	9.0	14.0	9.0	14.4	9.0	15.3	8.9	16.0	8.7
	23.0	11.5	7.9	12.7	8.5	13.6	9.0	14.0	9.0	14.4	9.0	15.3	8.9	16.0	8.7
	25.0	11.5	7.9	12.7	8.5	13.6	9.0	14.0	9.0	14.4	9.0	15.3	8.9	16.0	8.7
	27.0	11.5	7.9	12.7	8.5	13.6	9.0	14.0	9.0	14.4	9.0	15.3	8.9	16.0	8.7
	29.0	11.5	7.9	12.7	8.5	13.6	9.0	14.0	9.0	14.4	9.0	15.3	8.9	16.0	8.7
	31.0	11.5	7.9	12.7	8.5	13.6	9.0	14.0	9.0	14.4	9.0	15.3	8.9	16.0	8.7
	33.0	11.5	7.9	12.7	8.5	13.6	9.0	14.0	9.0	14.4	9.0	15.3	8.9	16.0	8.7
	35.0	11.5	7.9	12.7	8.5	13.6	9.0	14.0	9.0	14.4	9.0	15.3	8.9	16.0	8.7
056	10.0	13.1	8.8	14.5	9.4	15.5	9.9	16.0	9.9	16.5	9.9	17.4	9.8	18.2	9.6
	12.0	13.1	8.8	14.5	9.4	15.5	9.9	16.0	9.9	16.5	9.9	17.4	9.8	18.2	9.6
	14.0	13.1	8.8	14.5	9.4	15.5	9.9	16.0	9.9	16.5	9.9	17.4	9.8	18.2	9.6
	16.0	13.1	8.8	14.5	9.4	15.5	9.9	16.0	9.9	16.5	9.9	17.4	9.8	18.2	9.6
	18.0	13.1	8.8	14.5	9.4	15.5	9.9	16.0	9.9	16.5	9.9	17.4	9.8	18.2	9.6
	20.0	13.1	8.8	14.5	9.4	15.5	9.9	16.0	9.9	16.5	9.9	17.4	9.8	18.2	9.6
	21.0	13.1	8.8	14.5	9.4	15.5	9.9	16.0	9.9	16.5	9.9	17.4	9.8	18.2	9.6
	23.0	13.1	8.8	14.5	9.4	15.5	9.9	16.0	9.9	16.5	9.9	17.4	9.8	18.2	9.6
	25.0	13.1	8.8	14.5	9.4	15.5	9.9	16.0	9.9	16.5	9.9	17.4	9.8	18.2	9.6
	27.0	13.1	8.8	14.5	9.4	15.5	9.9	16.0	9.9	16.5	9.9	17.4	9.8	18.2	9.6
	29.0	13.1	8.8	14.5	9.4	15.5	9.9	16.0	9.9	16.5	9.9	17.4	9.8	18.2	9.6
	31.0	13.1	8.8	14.5	9.4	15.5	9.9	16.0	9.9	16.5	9.9	17.4	9.8	18.2	9.6
	33.0	13.1	8.8	14.5	9.4	15.5	9.9	16.0	9.9	16.5	9.9	17.4	9.8	18.2	9.6
	35.0	13.1	8.8	14.5	9.4	15.5	9.9	16.0	9.9	16.5	9.9	17.4	9.8	18.2	9.6

TC : Total capacity [kW]

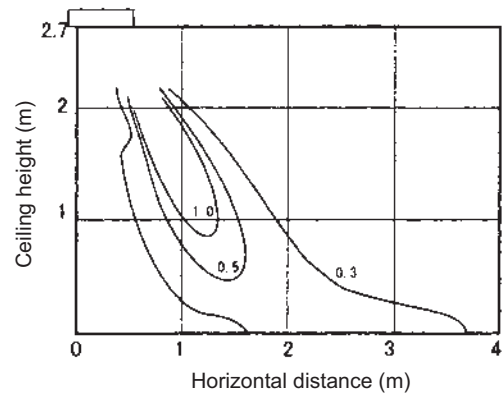
SHC : Sensible capacity [kW]

8. Air flow distance chart

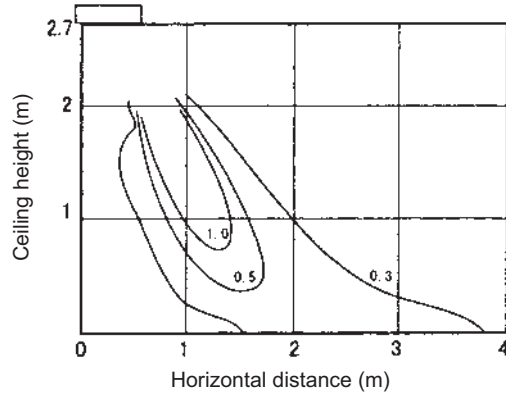
Unit: [m/s]

MMU-UP0071WH-E, MMU-UP0091WH-E,
MMU-UP0121WH-E, MMU-UP0151WH-E

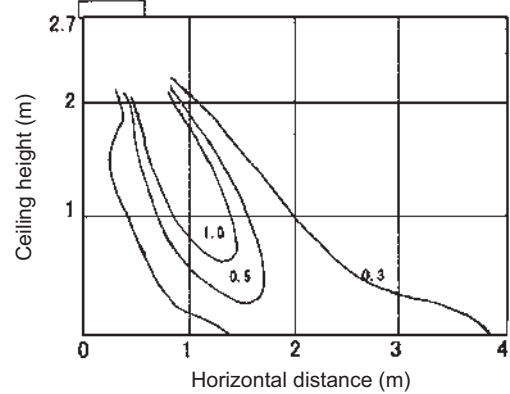
MMU-UP0181WH-E



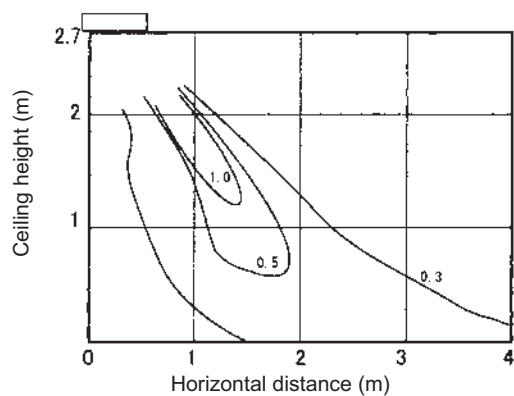
MMU-UP0241WH-E, MMU-UP0271WH-E



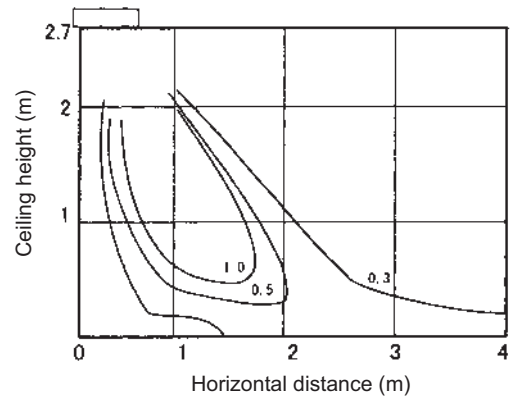
MMU-UP0301WH-E



MMU-UP0361WH-E, MMU-UP0481WH-E



MMU-UP0561WH-E

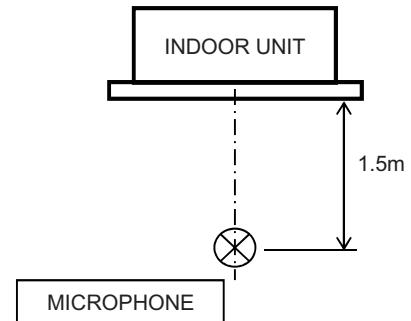
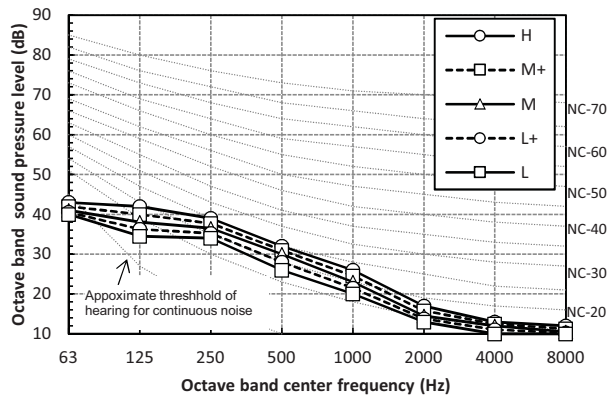


9. Sound data

Sound pressure (NC Curve)

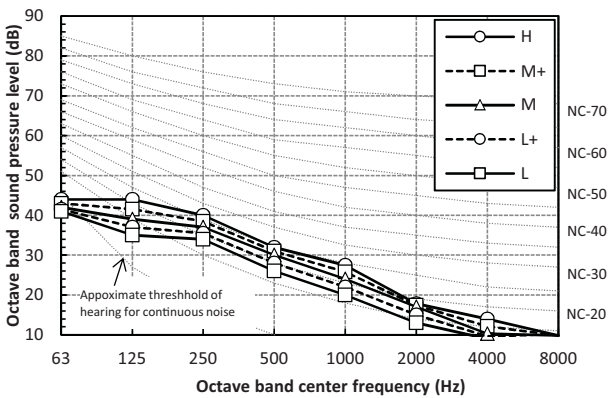
MMU-UP0071WH-E, MMU-UP0091WH-E, MMU-UP0121WH-E

Fan tap	H	M+	M	L+	L
Sound pressure level (dB(A))	34	33	32	31	30



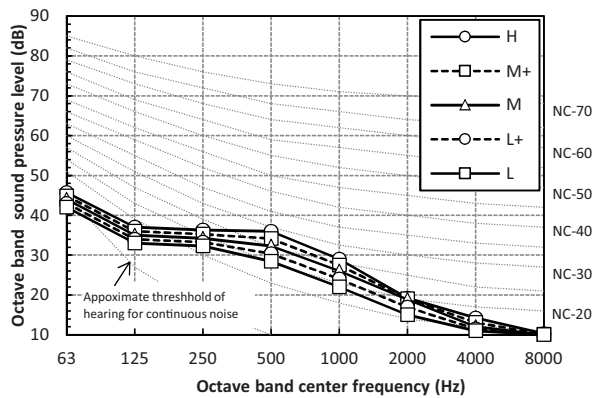
MMU-UP0151WH-E

Fan tap	H	M+	M	L+	L
Sound pressure level (dB(A))	35	34	33	31	30



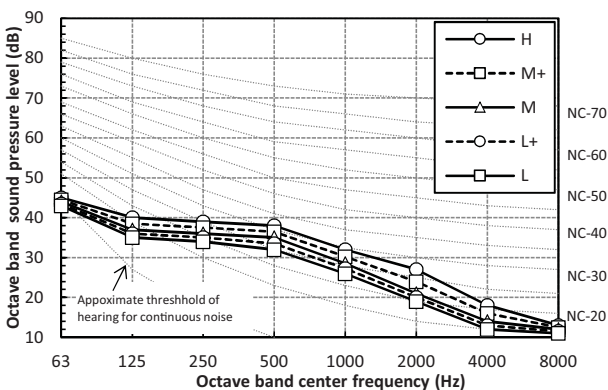
MMU-UP0181WH-E

Fan tap	H	M+	M	L+	L
Sound pressure level (dB(A))	35	34	33	31	30



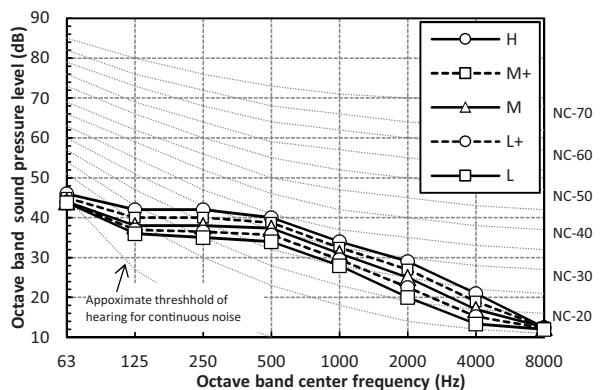
MMU-UP0241WH-E, MMU-UP0271WH-E

Fan tap	H	M+	M	L+	L
Sound pressure level (dB(A))	38	37	35	34	33



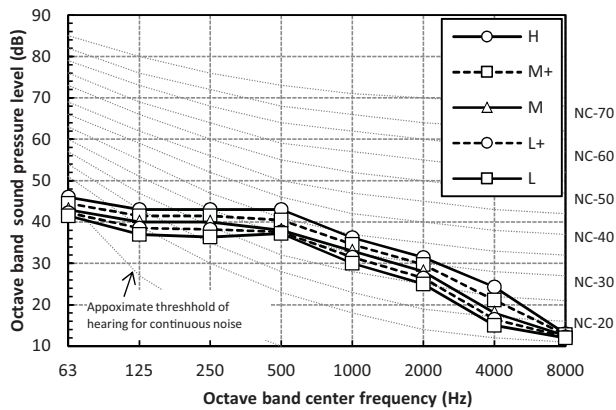
MMU-UP0301WH-E

Fan tap	H	M+	M	L+	L
Sound pressure level (dB(A))	40	38	37	35	34

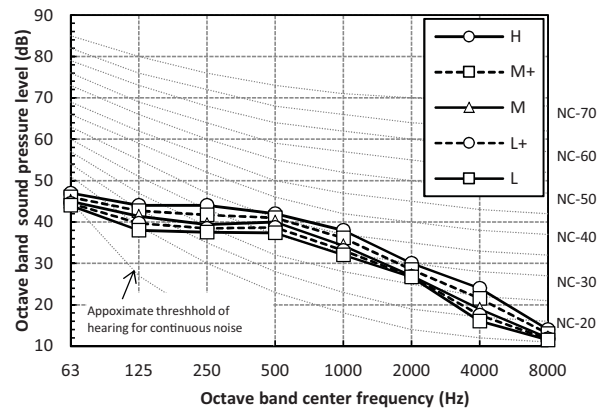


MMU-UP0361WH-E

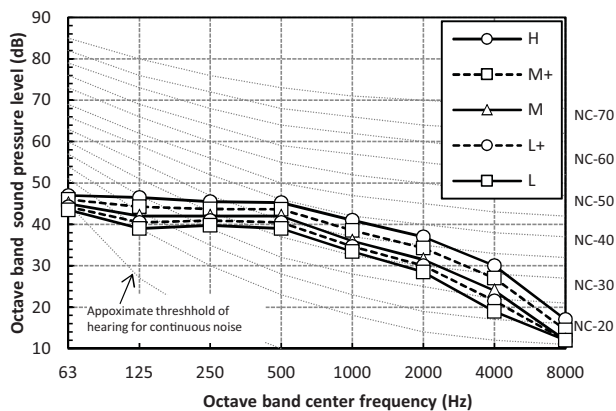
Fan tap	H	M+	M	L+	L
Sound pressure level (dB(A))	42	41	39	37	36

**MMU-UP0481WH-E**

Fan tap	H	M+	M	L+	L
Sound pressure level (dB(A))	43	42	40	38	37

**MMU-UP0561WH-E**

Fan tap	H	M+	M	L+	L
Sound pressure level (dB(A))	46	44	42	40	39

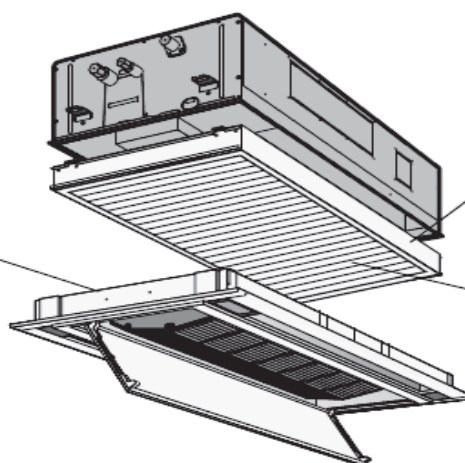


10. Accessories

Parts name	Model name	Applied model	Notes	Remarks
Ceiling panel	RBC-UW283PG(W)-E	MMU-UP0071WH-E to 0151WH-E	Required accessory	
	RBC-UW803PG(W)-E	MMU-UP0181WH-E to 0301WH-E		
	RBC-UW1403PG(W)-E	MMU-UP0361WH-E to 0561WH-E		
Super long life filter	TBC-LF283UW-E	MMU-UP0071WH-E to 0151WH-E	Dust collecting effect : 50% (Weight method)	Use with TBC-FC283UW-E
	TBC-LF803UW-E	MMU-UP0181WH-E to 0301WH-E		Use with TBC-FC803UW-E
	TBC-LF1403UW-E	MMU-UP0361WH-E to 0561WH-E		Use with TBC-FC1403UW-E
Filter chamber	TBC-FC283UW-E	MMU-UP0071WH-E to 0151WH-E	For super long life filter	
	TBC-FC803UW-E	MMU-UP0181WH-E to 0301WH-E		
	TBC-FC1403UW-E	MMU-UP0361WH-E to 0561WH-E		
Auxiliary fresh air flange	TBC-FF151US-E	MMU-UP0071WH-E to 0561WH-E	For fresh air intake by using the knockout hole of indoor unit.	

Ceiling panel

RBC-UW283PG(W)-E
RBC-UW803PG(W)-E
RBC-UW1403PG(W)-E

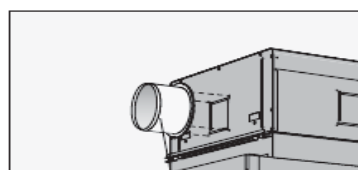


Filter chamber

TCB-FC283UW-E
TCB-FC803UW-E
TCB-FC1403UW-E

Super long life filter

TCB-LF283UW-E
TCB-LF803UW-E
TCB-LF1403UW-E



Auxiliary fresh air flange

TCB-FF151US-E

11. Reference

11-1.Fresh air intake (Design guide)

Usage

Fresh air intake by setting Auxiliary fresh air flange(TCB-FF151US-E) .

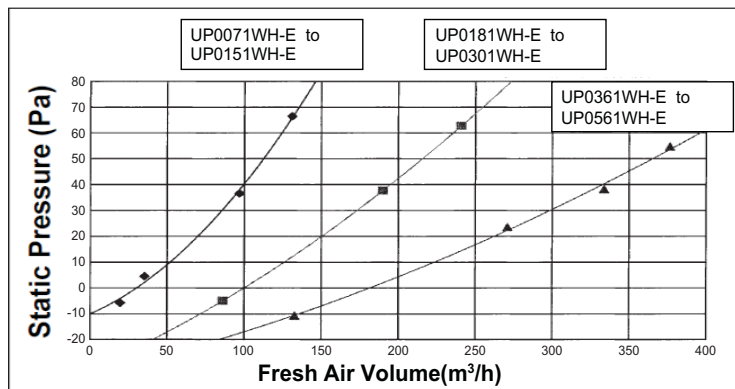
Caution

- 1.Be sure to provide air return.
- 2.The fresh air shall be treated by heat reclaim ventilator or the like.
- 3.Recommended treated air temperature is 12 °C to 30 °C.
- 4.Be sure to decide the fresh air volume so that mixed suction air with fresh air keep operating temperature.
Provide an air filter in fresh air way to prevent sucking dust.
- 5.Be sure to insulate the fresh air duct.
In order to accelerate starting up in heating mode, implement pre-heating operation by cutting off fresh air intake.
6. Be sure to connect wiring of inter-lock between Air to air heat exchanger unit and fan of indoor unit.

Characteristics between air volume of branching duct and static pressure

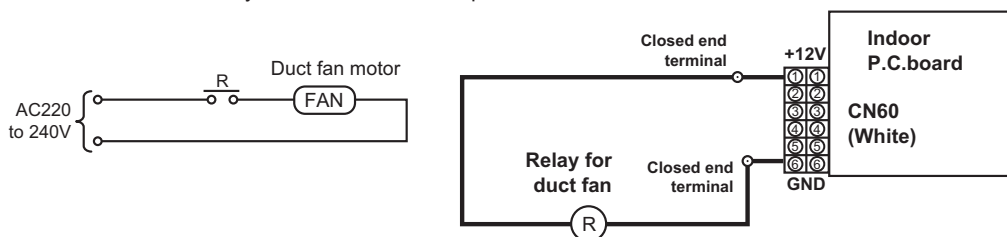
Following fresh air intake ratio is available by using the booster fan.

- UP0071WH-E to UP0151WH-E is up to 50 m³/h
- UP0181WH-E to UP0301WH-E is up to 70 m³/h
- UP0361WH-E to UP0561WH-E is up to 100 m³/h

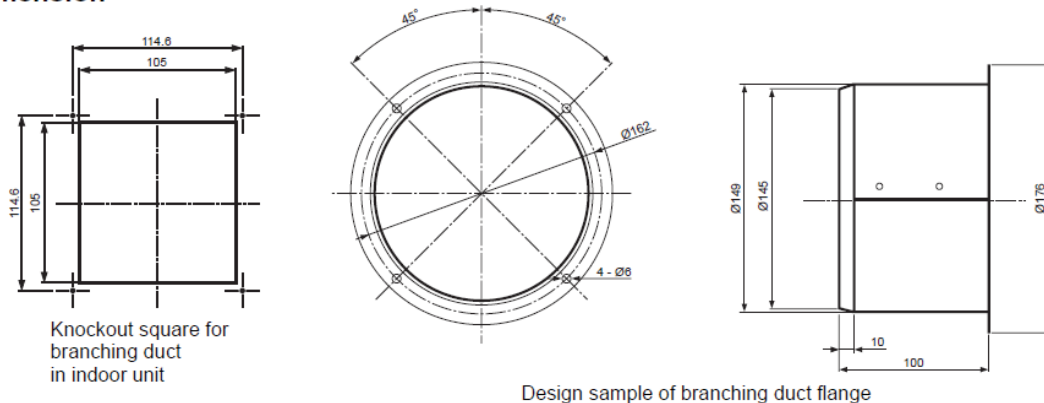


Inter - lock circuit

1. Connect the driving relay of the duct fan (DC 12 V) between 1 and 6 on the indoor P.C.board.
Part indicated with a bold line is the connecting circuit.
After installation, implement a test run to check that the duct fan of the indoor unit start / stop simultaneously.
(Implement the test run following to the installation manual of the indoor unit.)
Rated current of the relay for duct fan shall be up to 75 mA.



Dimension



2-way Cassette Type Engineering Data Book

Model name:

MMU-UP_1WH-E

November, 2020

Toshiba Carrier Corporation