

TOSHIBA



TOSHIBA AIR CONDITIONING INDOOR UNITS



 *Better Air Solutions*

WIDE CHOICE INDOOR UNITS

> LARGE INDOOR UNIT LINE-UP

The wide choice of indoor unit models increases design flexibility and reduces costs to the building's owner by ensuring the most appropriate system is installed.

- 18 different types of indoor units
- Capacity from 0.8 HP to 20 HP
- For heating, cooling and fresh air production



4-WAY CASSETTE



DUCTED



WALL/CEILING



CONSOLE



1-WAY CASSETTE



FRESH AIR SOLUTIONS

> SUPERIOR AIR COMFORT

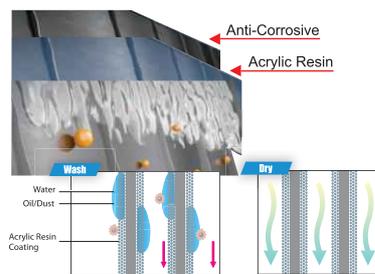
Cool comfort with soft cooling mode

The development of the soft cooling mode provides a new level for cool to personalize the air flow intensity, angle and direct directly from the remote control and enjoy the indoor environment at the right temperature without being directly exposed to the cold draft.



Special coated for FCU heat exchanger

The Toshiba FCU provide odorless and fresh air always, thanks to special coated heat exchanger. This special coating is able to release dust which is attached on heat exchanger with condensed water.



Optimised heating operations

The Toshiba VRF allows continuous heating, even during external defrost operations, thanks to the Kobetsu and Renkei functions integrated in SMMS-u. Indoor units will now operate continually, with only a minimal reduction in capacity output. This results in an uninterrupted flow of warm air, ensuring maximum comfort to the end user.



Low consumption for low operation cost

Premium comfort doesn't mean high power consumption. By using DC motor, large air discharge surface and resin coating system, Toshiba reduces the indoor unit power consumption drastically.

No compromise on air quality



All indoor units are equipped with air suction filters. A symbol on the remote warns the user when filters need to be cleaned.

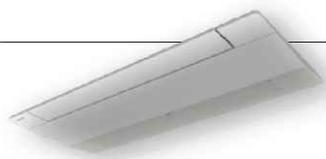
Example for Compact 4-Way Cassette (0.8HP)



	PCB	FAN	DRAIN	TOTAL
Low fan speed	4 W	6 W	3 W	13 W
Medium fan speed	4 W	7 W	3 W	14 W
High fan speed	4 W	9 W	3 W	16 W

CHOOSE YOUR ADAPTED SYSTEM SOLUTION

2021
NEW
indoor
units



1-Way Cassette

Compact chassis
Smart operation
Advanced filtration



Fresh Air Intake Duct

Light and compact chassis
Wide air flow range



Hi Wall

Expanding capacity
Up to 4HP big air flow volume
Low noise

↑ IDU

Model	(HP)	0.8	1.0	1.25	1.7	2.0	2.5	3.0	3.2	4.0	5.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0
	(kW)	2.2	2.8	3.6	4.5	5.6	7.1	8.0	9.0	11.2	14.0	16.0	22.4	28.0	34.0	40.0	45.0	50.4	56.0
4-way Cassette MMU-UP_1HP-E		[Bar chart showing capacity range from 0.8 to 6.0 HP]																	
Compact 4-way Cassette MMU-UP_1MH-E		[Bar chart showing capacity range from 0.8 to 2.0 HP]																	
2-way Cassette MMU-UP_1WH-E		[Bar chart showing capacity range from 0.8 to 6.0 HP]																	
1-way Cassette MMU-UP_1YHP-E		[Bar chart showing capacity range from 0.8 to 3.2 HP]																	
Slim Duct MMD-UP_1SPHY-E		[Bar chart showing capacity range from 0.8 to 4.0 HP]																	
Concealed Duct MMD-UP_1BHP-E		[Bar chart showing capacity range from 0.8 to 6.0 HP]																	
HSP Concealed Duct MMD-UP_1HP-E		[Bar chart showing capacity range from 2.0 to 10.0 HP]																	
Fresh Air Intake Duct MMD-UP_1HFP-E		[Bar chart showing capacity range from 4.0 to 10.0 HP]																	
Ceiling MMC-UP_1HP-E		[Bar chart showing capacity range from 1.7 to 4.0 HP]																	
Hi Wall MMK-UP_1HP-E		[Bar chart showing capacity range from 0.8 to 4.0 HP]																	
Console MML-UP_1NHP-E		[Bar chart showing capacity range from 0.8 to 3.0 HP]																	
Floor Standing Concealed MML-UP_1BH-E		[Bar chart showing capacity range from 0.8 to 2.0 HP]																	
Floor Standing Cabinet MML-UP_1H-E		[Bar chart showing capacity range from 0.8 to 3.0 HP]																	
Floor Standing MMF-UP_1H-E		[Bar chart showing capacity range from 1.7 to 6.0 HP]																	
Dx-coil controller & Dx-valve kit TCB-IFD_1E & RBM-A_1VAE		[Bar chart showing capacity range from 8.0 to 16.0 HP]																	

Model	Air flow in m3/h	500	600	700	800	900	1000	1100	1200	1300
Air-to-Air Heat Exchanger with DX-coil ^{*1} MMD-VN_2HEX1E		[Bar chart showing capacity range from 500 to 1000 m3/h]								

MMU-UP_1HP-E 4-WAY CASSETTE



The 4-Way Cassette is designed to provide uniform air distribution and total user comfort making this unit the ideal solution for small commercial applications.

CAPACITY



1 HP ~ 6 HP

SOUND PRESSURE LEVEL



27 dB(A)

LOCAL CONTROLS



RBC-AXU31-E
RBC-AXU31U-E



RBC-AMSU51-EN/ES



RBC-AMTU31-E



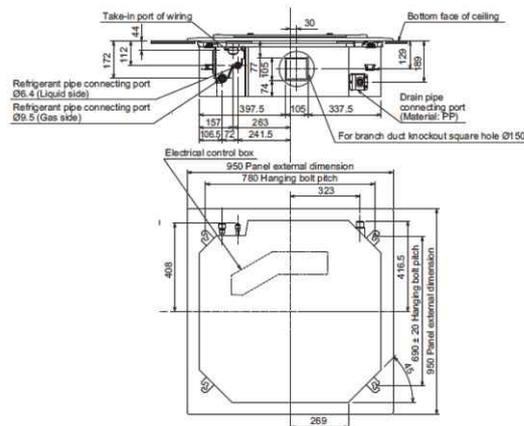
RBC-ASCU11-E

Features

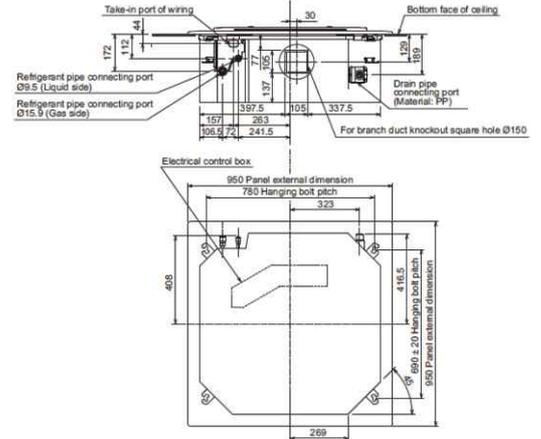
Model name	MMU-	UP0091HP-E	UP0121HP-E	UP0151HP-E	UP0181HP-E	UP0241HP-E	UP0271HP-E	UP0301HP-E	UP0361HP-E	UP0481HP-E	UP0561HP-E	
Cooling code	HP	1.0	1.25	1.7	2.0	2.5	3.0	3.2	4.0	5.0	6.0	
Cooling capacity	kW	2.8	3.6	4.5	5.6	7.1	8.0	9.0	11.2	14.0	16.0	
Heating capacity	kW	3.2	4.0	5.0	6.3	8.0	9.0	10.0	12.5	16.0	18.0	
Electrical characteristics	Power supply	1-phase 230V (220-240V) 50Hz / 1-phase 220V (208-230V) 60Hz										
	Running current (50Hz)	A	0.23		0.28	0.29	0.38	0.38	0.43	0.73		0.88
	Power consumption (50Hz)	kW	0.021		0.023	0.026	0.036	0.036	0.043	0.088		0.112
Appearance	Main unit	Heat-insulating material attached - Zinc hot dipping steel plate										
	Ceiling panel name	RBC-U32PGP-E										
	Panel color	White (Munsell: 2.5GY9.0/0.5)										
Outer dimensions	Main unit (HxWxD)	mm	256x840x840						319x840x840			
	Ceiling panel (HxWxD)	mm	30x950x950									
Total weight	Main unit	kg	18				20			25		
	Ceiling panel	kg	4									
Heat exchanger		Finned tube										
Soundproof / Heat-insulating material		Non-flammable insulation										
Fan unit	Fan	Turbo fan										
	Standard air flow (H/M/L)	m ³ /h	800/730/680		930/830/790	1050/920/800	1290/920/800	1320/1100/850	1970/1430/1070	2130/1430/1130	2130/1520/1230	
	Motor output	W	14			20			68	72		
Sound pressure level (H/M/L)	dB(A)	30/29/27		31/29/27	32/29/27	35/31/28	38/33/30	43/38/32	46/38/33	46/40/33		
Air filter		Standard filter supplied (Long life filter)										
Controller (Optional)		Wired or infrared remote controller										
Connecting pipe	Gas side	mm	9.5	9.5	12.7	12.7	15.9	15.9	15.9	15.9	15.9	
	Liquid side	mm	6.4	6.4	6.4	6.4	9.5	9.5	9.5	9.5	9.5	
	Drain port (nominal dia)	mm	25 (Polyvinyl chloride tube)									

Drawings

MMU-UP0091HP-E to MMU-UP0301HP-E



MMU-UP0361HP-E to MMU-UP0561HP-E

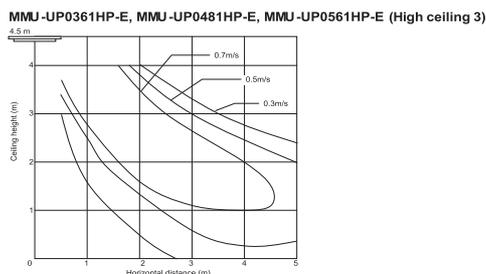
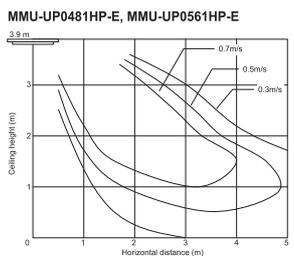
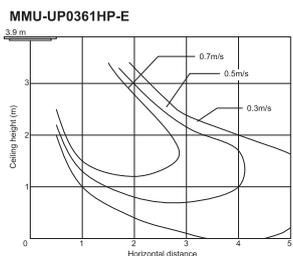
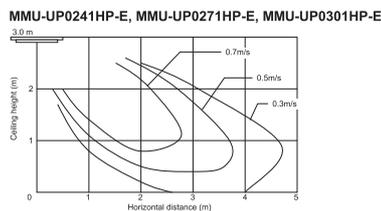
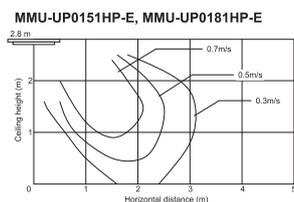
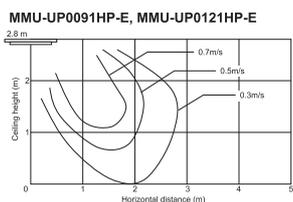


Unit : mm

4-WAY CASSETTE

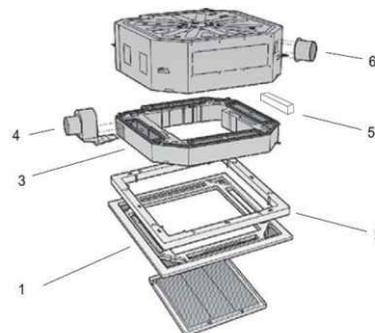
Air diffusion

Unit : m/s



Accessories

No.	Part name	Model name	Remarks
1	Ceiling Panel (Wide-flow louver)	RBC-U32PGP-E	White (Munsell: 2.5GY9.0/0.5)
2	Spacer for height adjustment	TCB-SP1602UE	50 mm
3	Fresh air chamber	TCB-GFC1602UE	Use with TCB-GB1602U
4	Fresh air intake box	TCB-GB1602UE	Connection=Dia.100 mm fresh air intake ratio: Up to 20%
5	Air discharge direction kit	TCB-BC1602UE	6-direction patterns
6	Auxiliary fresh air flange	TCB-FF101URE2	Connection=Dia.100 mm fresh air intake ratio: Up to 5%



MMU-UP_1MH-E COMPACT 4-WAY CASSETTE



The Compact 4-Way Cassette is especially designed for business office applications, where a compact and efficient solution is required.

CAPACITY



0.8 HP ~ 2 HP

SOUND PRESSURE LEVEL



29 dB(A)

LOCAL CONTROLS



RBC-AXU31-E
RBC-AXU31UM-E



RBC-AMSU51-EN/ES



RBC-AMTU31-E



RBC-ASCU11-E

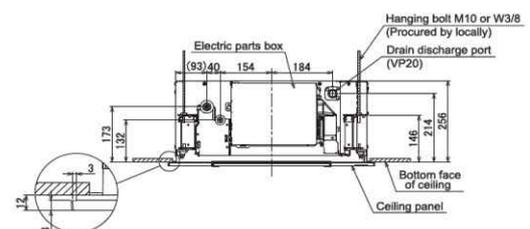
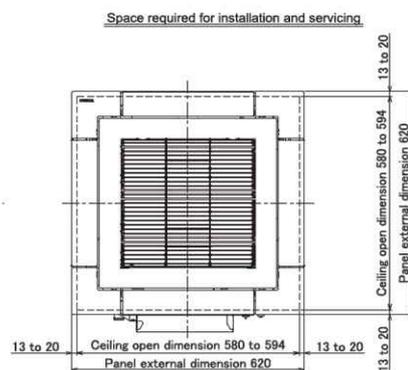
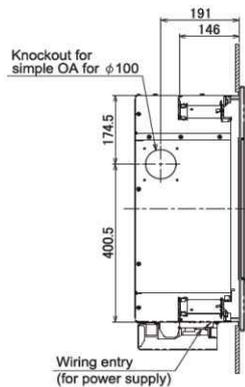
Features

Model name	MMU-	UP0071MH-E	UP0091MH-E	UP0121MH-E	UP0151MH-E	UP0181MH-E	
Cooling code	HP	0.8	1.0	1.25	1.7	2.0	
Cooling capacity	kW	2.2	2.8	3.6	4.5	5.6	
Heating capacity	kW	2.5	3.2	4.0	5.0	6.3	
Electrical characteristics	Power supply	1-phase 230V (220-240V) 50Hz / 1-phase 220V (208-230V) 60Hz					
	Running current (50Hz)	A	0.23	0.24	0.25	0.28	0.4
	Power consumption (50Hz)	kW	0.023	0.025	0.027	0.030	0.052
Appearance	Main unit	Zinc hot dipping steel plate (Heat-insulating material attached only to upper plate)					
	Ceiling panel name	RBC-UM21PG(W)-E					
	Panel color	Gran White (Mansell 5PB9/1)					
Outer dimensions	Main unit (HxWxD)	mm 256x575x575					
	Ceiling panel (HxWxD)	mm 12x620x620					
Total weight	Main unit	kg 15					
	Ceiling panel	kg 2.5					
Heat exchanger	Finned tube						
Soundproof / Heat-insulating material	Non-flammable insulation						
Fan unit	Fan	Turbo fan					
	Standard air flow (H/M/L)	m³/h	552/462/378	570/468/378	594/504/402	660/552/468	840/642/522
	Motor output	W	60				
Sound pressure level (H/M/L)	dB(A)	37/33/29	38/33/29	38/34/30	40/35/31	47/39/34	
Air filter	Standard filter supplied (Long life filter)						
Controller (Optional)	Wired or infrared remote controller						
Connecting pipe	Gas side	mm	9.5	9.5	9.5	12.7	12.7
	Liquid side	mm	6.4	6.4	6.4	6.4	6.4
	Drain port (nominal dia)	mm	VP20 (Polyvinyl chloride tube)				

Drawings

Unit : mm

All models

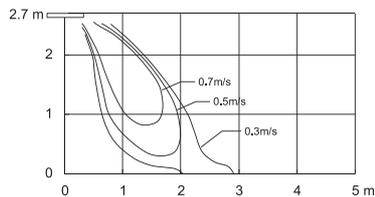


COMPACT 4-WAY CASSETTE

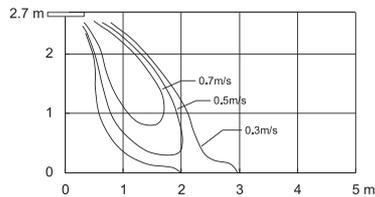
Air diffusion

Unit: m/s

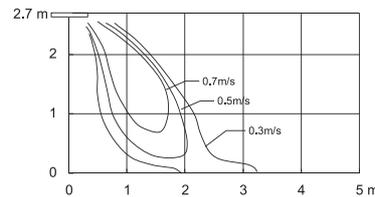
MMU-UP0071MH-E



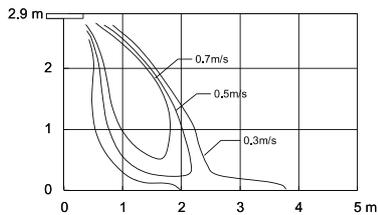
MMU-UP0091MH-E



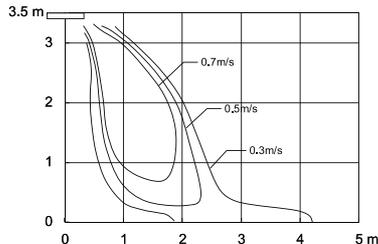
MMU-UP0121MH-E



MMU-UP0151MH-E

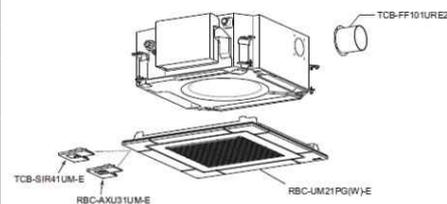


MMU-UP0181MH-E



Accessories

Part name	Model name	Applied model	Remarks
Ceiling panel	RBC-UM21PG(W)-E	MMU-UP_1MH-E	Required accessory
Auxiliary fresh air flange	TCB-FF101URE2		For easy fresh air intake by using the knockout hole of indoor unit (dia=100 mm)
Wireless Remote Control kit	RBC-AXU31UM-E		Wireless remote control kit and occupancy sensor cannot be used on the same indoor unit*
Occupancy sensor	TCB-SIR41UM-E		



MMU-UP_1WH-E 2-WAY CASSETTE



Slim, compact and lightweight, the 2-Way Cassette has been designed to fit easily and discreetly into any room interior.

CAPACITY



0.8 HP ~ 6 HP

SOUND PRESSURE LEVEL



30 dB(A)

LOCAL CONTROLS



RBC-AXU31UW-E
RBC-AXU31-E



RBC-AMSU51-EN/ES



RBC-AMTU31-E



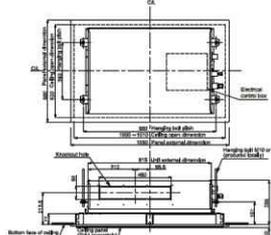
RBC-ASCU11-E

Features

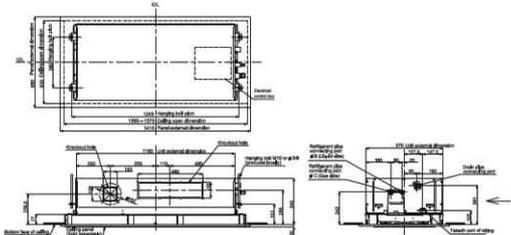
Model name	MMU-	UP0071WH-E	UP0091WH-E	UP0121WH-E	UP0151WH-E	UP0181WH-E	UP0241WH-E	UP0271WH-E	UP0301WH-E	UP0361WH-E	UP0481WH-E	UP0561WH-E		
Cooling code	HP	0.8	1.0	1.25	1.7	2.0	2.5	3.0	3.2	4.0	5.0	6.0		
Cooling capacity	kW	2.2	2.8	3.6	4.5	5.6	7.1	8.0	9.0	11.2	14.0	16.0		
Heating capacity	kW	2.5	3.2	4.0	5.0	6.3	8.0	9.0	10.0	12.5	16.0	18.0		
Electrical characteristics	Power supply	1-phase 230V (220-240V) 50Hz / 1-phase 220V (208-230V) 60Hz												
	Running current (50Hz)	A	0.21		0.21	0.28	0.37		0.43	0.50	0.57	0.77		
	Power consumption (50Hz)	kW	0.024		0.026	0.034	0.045		0.055	0.081	0.091	0.131		
Appearance	Main unit	Heat-insulating material attached - Zinc hot dipping steel plate												
	Ceiling panel name	RBC-UW283PG(W)-E				RBC-UW803PG(W)-E				RBC-UW1403PG(W)-E				
	Panel color	Moon white_(Munsell 2.5GY9.0/0.5)												
Outer dimensions	Main unit (HxWxD)	mm	295x815x570				345x1180x570				345x1600x570			
	Ceiling panel (HxWxD)	mm	20x1050x680				20x1415x680				20x1835x680			
Total weight	Main unit	kg	18				26				35			
	Ceiling panel	kg	10				14				14			
Heat exchanger	Finned tube													
Soundproof / Heat-insulating material	Non-flammable insulation													
Fan unit	Fan	Turbo fan					Centrifugal fan							
	Standard air flow (H/M/L)	m³/h	558/498/450		600/534/450	900/750/618	1050/840/738		1260/900/780	1740/1434/1182	1800/1482/1230	2040/1578/1320		
	Motor output	W	60				94				139			
Sound pressure level (H/M/L)	dB(A)	34/32/30			35/33/30		38/35/33		40/37/34	42/39/36	43/40/37	46/42/39		
Air filter	Standard filter supplied (Long life filter)													
Controller (Optional)	Wired or infrared remote controller													
Connecting pipe	Gas side	mm	9.5	9.5	9.5	12.7	12.7	15.9	15.9	15.9	15.9	15.9		
	Liquid side	mm	6.4	6.4	6.4	6.4	6.4	9.5	9.5	9.5	9.5	9.5		
	Drain port (nominal dia)	mm	25 (Polyvinyl chloride tube)											

Drawings

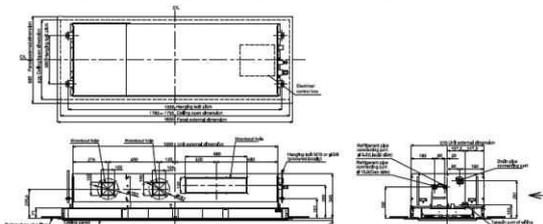
MMU-UP0071WH-E to MMU-UP0151WH-E



MMU-UP0181WH-E to MMU-UP0301WH-E



MMU-UP0361WH-E to MMU-UP0561WH-E



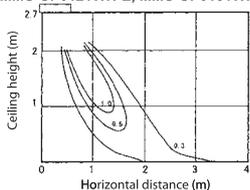
Unit : mm

2-WAY CASSETTE

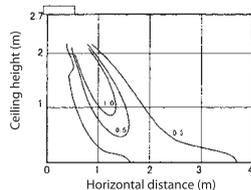
Air diffusion

Unit : m/s

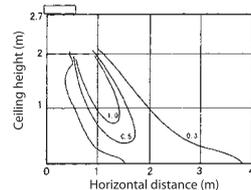
MMU-UP0071WH-E, MMU-UP0091WH-E,
MMU-UP0121WH-E, MMU-UP0151WH-E



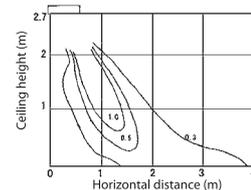
MMU-UP0181WH-E



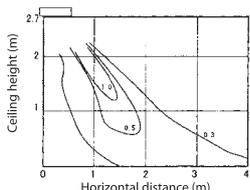
MMU-UP0241WH-E, MMU-UP0271WH-E



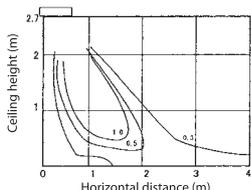
MMU-UP0301WH-E



MMU-UP0361WH-E, MMU-UP0481WH-E

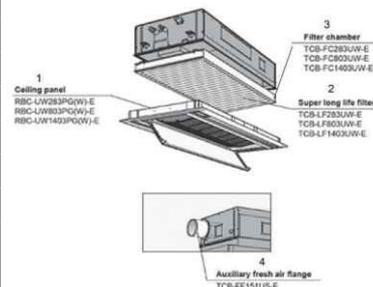


MMU-UP0561WH-E



Accessories

No.	Part name	Model name	Applied model	Notes	Remarks
1	Ceiling Panel	RBC-UW283PG(W)-E	MMU-UP0071 to 0151WH	Required accessory	
		RBC-UW803PG(W)-E	MMU-UP0181 to 0301WH		
		RBC-UW1403PG(W)-E	MMU-UP0361 to 0561WH		
2	Super long life filter	TBC-LF283UW-E	MMU-UP0071 to 0151WH	Dust collecting effect: 50% (Weight method)	Use with TBC-FC283UW-E
		TBC-LF803UW-E	MMU-UP0181 to 0301WH		Use with TBC-FC803UW-E
		TBC-LF1403UW-E	MMU-UP0361 to 0561WH		Use with TBC-FC1403UW-E
3	Filter chamber	TBC-FC283UW-E	MMU-UP0071 to 0151WH	For super long life filter	
		TBC-FC803UW-E	MMU-UP0181 to 0301WH		
		TBC-FC1403UW-E	MMU-UP0361 to 0561WH		
4	Auxiliary fresh air flange	TBC-FF151US-E	MMU-UP0071 to 0561WH	For fresh air intake by using the knockout hole of indoor unit.	

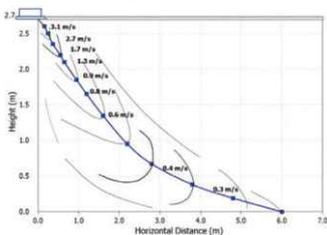


1-WAY CASSETTE

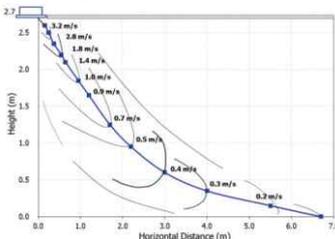
Air diffusion

Unit : m/s

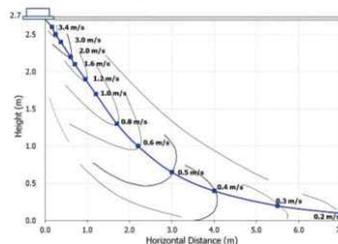
MMU-UP0071YHP-E



MMU-UP0091YHP-E

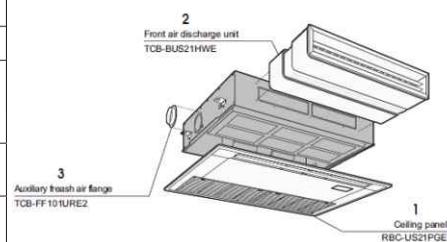


MMU-UP0121YHP-E



Accessories

No.	Part name	Model name	Applied model	Notes	Remarks
1	Ceiling Panel	RBC-UY32P-E	MMU-UP_1YHP-E	1-Way cassette panel without receiver	Required accessory
		RBC-UY42P-E			Required accessory
2	Air purifier kit	TCB-EAPC1UYHP-E	MMU-UP-1YHP-E	Set of Plasma Air Purifier, Dust sensor, Air quality indicator, Wireless receiver and Wireless RC	
3	Occupancy sensor	TCB-SIR41UYP-E	MMU-UP-1YHP-E	Occupancy sensor	Cannot match with Wireless receiver Kit
4	Wireless receiver kit	RBC-AX33UYP-E	MMU-UP-1YHP-E	Wireless RC kit	Cannot match with Occupancy sensor



MMD-UP_1SPHY-E SLIM DUCT



Whatever installed in a ceiling void or in a false ceiling, Toshiba Slim Duct offers the ultimate technology, with exceptional energy saving, high performance and easy installation.

CAPACITY



0.8 HP ~ 3 HP

SOUND PRESSURE LEVEL



26 dB(A)

LOCAL CONTROLS



RBC-AXU31-E



RBC-AMSU51-EN/ES



RBC-AMTU31-E



RBC-ASCU11-E

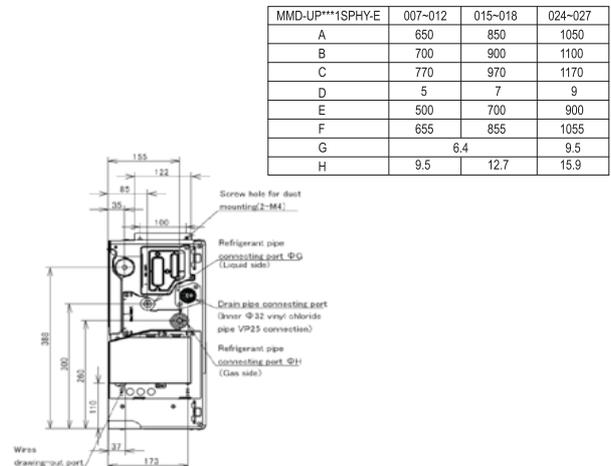
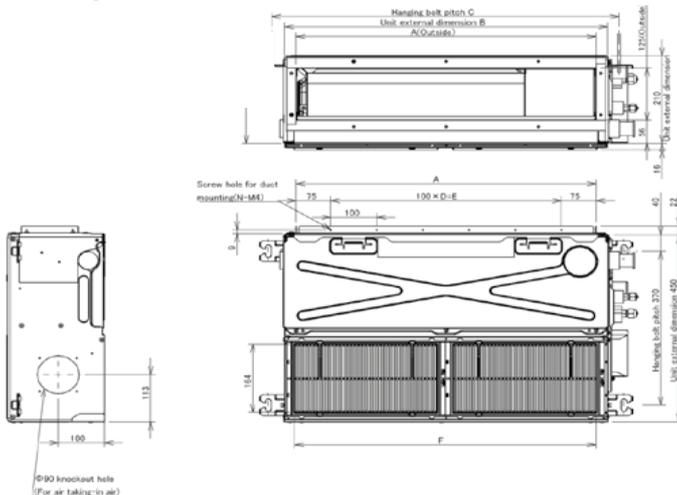
Features

Model name	MMD-	UP0071SPHY-E	UP0091SPHY-E	UP0121SPHY-E	UP0151SPHY-E	UP0181SPHY-E	UP0241SPHY-E	UP0271SPHY-E	
Cooling code	HP	0.8	1.0	1.25	1.7	2.0	2.5	3.0	
Cooling capacity	kW	2.2	2.8	3.6	4.5	5.6	7.1	8.0	
Heating capacity	kW	2.5	3.2	4.0	5.0	6.3	8.0	9.0	
Electrical characteristics	Power supply	1-phase 50Hz 220-240V / 1-phase 60Hz 208-230V							
	Running current (50Hz)	A	0.40	0.42	0.44	0.47	0.53	0.69	0.74
	Power consumption (50Hz)	kW	0.026	0.029	0.031	0.035	0.044	0.067	0.072
Appearance	Zinc hot dipping steel plate								
Outer dimensions (HxWxD)	mm	210x700x450			210x900x450		210x1110x450		
Total weight	kg	15			19		22		
Heat exchanger	Finned tube								
Soundproof / Heat-insulating material	Polyethylene foam + Polyurethane foam								
Fan unit	Fan	Centrifugal fan (sirocco fan)							
	Standard air flow (H/M/L)	m³/h	540/460/400	570/500/420	600/520/440	690/640/550	780/730/650	1080/950/860	1140/980/910
	Motor output	W	50			94			
	External static pressure (Factory setting)	Pa	10						
Sound pressure level (H/M/L)	Under air intake	dB(A)	41/39/35	42/40/36	44/40/37	42/39/37	44/42/39	47/44/41	48/45/43
	Back air intake	dB(A)	31/29/26	32/29/26	33/30/27	33/30/28	34/32/29	36/33/30	37/34/32
Air filter	Standard filter supplied (Long life filter)								
Controller (Optional)	Wired or infrared remote controller								
Connecting pipe	Gas side	mm	9.5	9.5	9.5	12.7	12.7	15.9	15.9
	Liquid side	mm	6.4	6.4	6.4	6.4	6.4	9.5	9.5
	Drain port (nominal dia)	mm	25 (Polyvinyl chloride tube : External dia.32 Internal dia.25)						

Drawings

MMD-UP0071SPHY-E to MMD-UP0271SPHY-E

Unit : mm



MMD-UP***1SPHY-E	007-012	015-018	024-027
A	650	850	1050
B	700	900	1100
C	770	970	1170
D	5	7	9
E	500	700	900
F	655	855	1055
G		6.4	9.5
H	9.5	12.7	15.9

SLIM DUCT

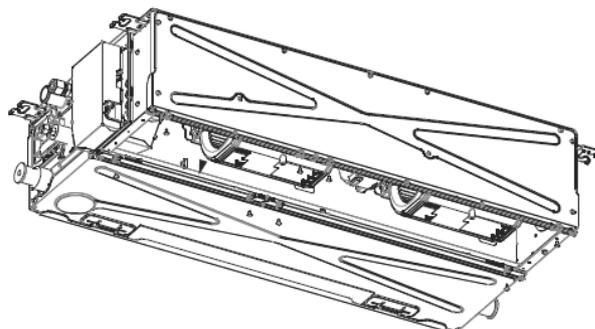
Accessories

Part name	Model name	Applied model	Remarks
Auxiliary fresh air flange	TCB-FF101URE2	MMD-UP_1SPHY-E	For fresh air intake by using the knockout hole of indoor unit (dia.=100 mm)

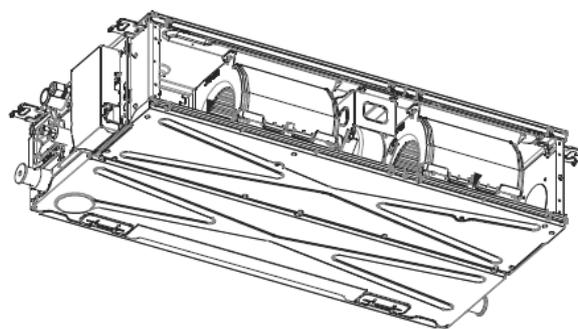
Installation flexibility

Change from under air intake to back air intake

Under air intake



Back air intake





MMD-UP_1BHP-E STANDARD DUCT



Whatever the shape of the room, this flexible model ensures a uniform temperature and air distribution for optimal end user comfort.

CAPACITY



0.8 HP ~ 6 HP

SOUND PRESSURE LEVEL



23 dB(A)

LOCAL CONTROLS



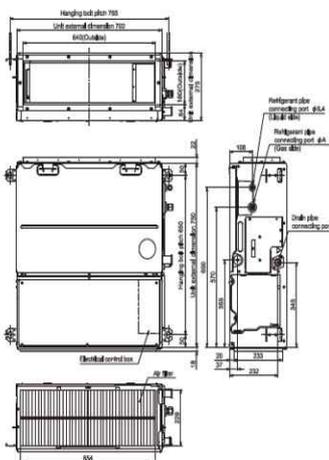
Features

Model name	MMD-	UP0071BHP-E	UP0091BHP-E	UP0121BHP-E	UP0151BHP-E	UP0181BHP-E	UP0241BHP-E	UP0271BHP-E	UP0301BHP-E	UP0361BHP-E	UP0481BHP-E	UP0561BHP-E		
Cooling code	HP	0.8	1.0	1.25	1.7	2.0	2.5	3.0	3.2	4.0	5.0	6.0		
Cooling capacity	kW	2.2	2.8	3.6	4.5	5.6	7.1	8.0	9.0	11.2	14.0	16.0		
Heating capacity	kW	2.5	3.2	4.0	5.0	6.3	8.0	9.0	10.0	12.5	16.0	18.0		
Electrical characteristics	Power supply	1-phase 50Hz 220-240V / 1-phase 60Hz 208-230V												
	Running current (50Hz)	A	0.35	0.38	0.70	0.80	0.95	1.29	1.70					
	Power consumption (50Hz)	kW	0.055	0.060	0.110	0.135	0.160	0.220	0.290					
Appearance	Zinc hot dipping steel plate													
Dimensions (HxWxD)	mm	275x700x750					275x1000x750			275x1400x750				
Total weight	kg	23					30			40				
Heat exchanger	Finned tube													
Soundproof / Heat-insulating material	Polyethylene foam													
Fan unit	Fan	Centrifugal fan												
	Standard air flow (H/M/L)	m ³ /h	540/450/360	570/480/390	920/660/540	1320/1090/870	1450/1200/960	1920/1620/1380	2350/1920/1500	2350/1090/1500				
	Motor output	W	150					250						
	External static pressure (Factory setting)	Pa	30					40			50			
	External static pressure	Pa	30-40-50-65-80-100-150 (7 Steps)											
Sound pressure level (H/M/L)	dB(A)	29/26/23	30/26/23	30/26/23	33/29/25	33/29/25	33/30/27	33/30/27	36/31/27	36/34/31	40/36/33	40/36/33		
Air filter	Standard filter supplied (Long life filter)													
Controller (Optional)	Wired or infrared remote controller													
Connecting pipe	Gas side	mm	9.5	9.5	9.5	12.7	12.7	15.9	15.9	15.9	15.9	15.9		
	Liquid side	mm	6.4	6.4	6.4	6.4	6.4	9.5	9.5	9.5	9.5	9.5		
	Drain port (nominal dia)	mm	25 (Polyvinyl chloride tube)											

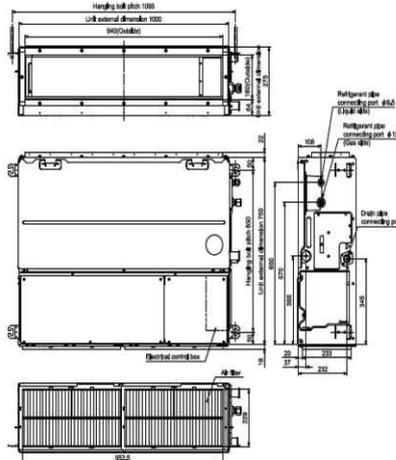
Drawings

Unit : mm

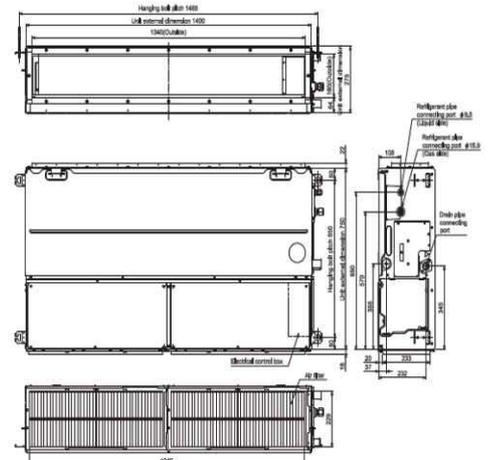
MMD-UP0071BHP-E to MMD-UP0181BHP-E



MMD-UP0241BHP-E to MMD-UP0301BHP-E



MMD-UP0361BHP-E to MMD-UP0561BHP-E



STANDARD DUCT

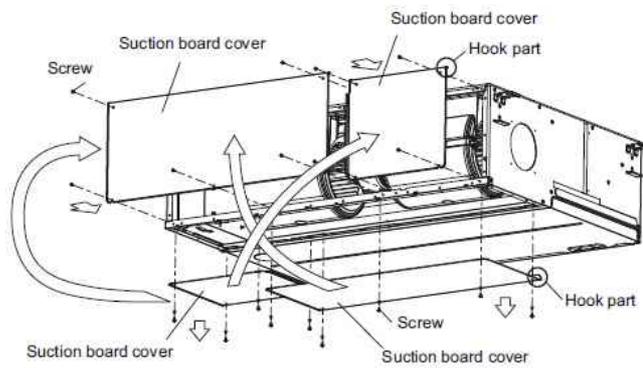
Accessories

Part name	Model name	Applied model	Appearance	Remarks
Spigot shaped flange	TCB-SF56C6BE	MMD-UP0071/0091/0121/0151/0181BHP-E		263x694x175mm / Spigot diameter 200mm
	TCB-SF80C6BE	MMD-UP0241/0271/0301BHP-E		263x994x175mm / Spigot diameter 200mm
	TCB-SF160C6BE	MMD-UP0361/0481/0561BHP-E		263x1394x175mm / Spigot diameter 200mm

↑ IDU

Installation flexibility

Changing from back air intake to under air intake



MMD-UP_1HP-E HIGH STATIC PRESSURE DUCT



This is Toshiba's most powerful ducted unit delivering air flows up to 4,800 m³/h with an external static pressure up to 250 Pa.

CAPACITY



2 HP ~ 10 HP

SOUND PRESSURE LEVEL



31 dB(A)

LOCAL CONTROLS



RBC-AXU31-E



RBC-AMSU51-EN/ES



RBC-AMTU31-E



RBC-ASCU11-E

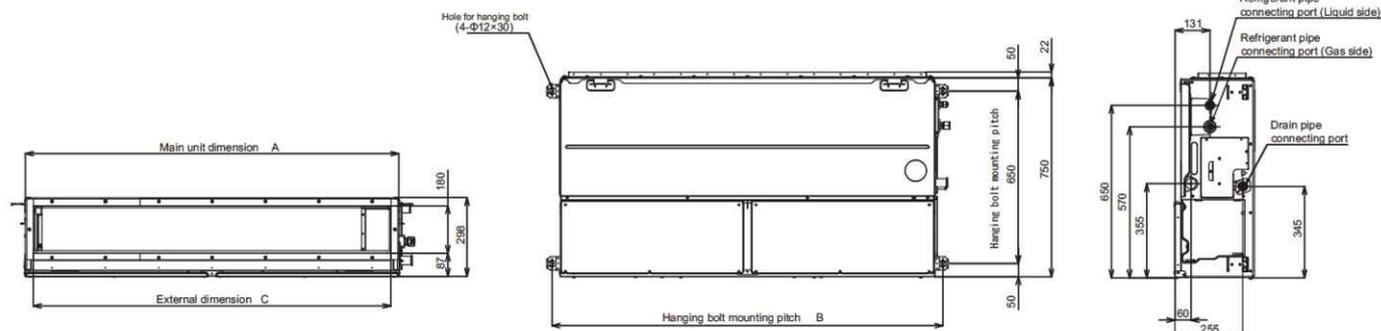
Features

Model name	MMD-	UP0181HP-E	UP0241HP-E	UP0271HP-E	UP0361HP-E	UP0481HP-E	UP0561HP-E	UP0721HP-E1	UP0961HP-E1		
Cooling code	HP	2.0	2.5	3.0	4.0	5.0	6.0	8.0	10.0		
Cooling capacity	kW	5.6	7.1	8.0	11.2	14.0	16.0	22.4	28.0		
Heating capacity	kW	6.3	8.0	9.0	12.5	16.0	18.0	25.0	31.5		
Electrical characteristics	Power supply	1-phase 50Hz 220-240V / 1-phase 60Hz 208-230V									
	Running current (50Hz)	A	0.82	0.92	1.16	1.39	1.81	2.48	2.83	3.77	
	Power consumption (50Hz)	kW	0.125	0.140	0.190	0.230	0.300	0.400	0.540	0.790	
Appearance	Zinc hot dipping steel plate										
Dimensions (HxWxD)	mm	298x1000x750			298x1400x750			448x1400x900			
Total weight	kg	34			43			97			
Heat exchanger	Finned tube										
Soundproof / Heat-insulating material	Polyethylene foam										
Fan unit	Fan	Centrifugal fan									
	Standard air flow (H/M/L)	m ³ /h	1100/990/900	1200/1050/960	1500/1350/1200	1920/1560/1340	2340/1980/1695	2760/2340/1920	3800/3200/2500	4800/4200/3500	
	Motor output	W	250			350			250		
	External static pressure (Factory setting)	Pa	100						150		
External static pressure	Pa	50-75-125-100-150-175-200 (7steps)						50-83-117-150-183-217-250 (7steps)			
Sound pressure level (H/M/L)	dB(A)	37/33/31	38/34/31	43/41/38	41/37/34	44/44/38	46/44/41	44/40/36	46/42/38		
Air filter	Sold separately (TCB-LK801D-E)			Sold separately (TCB-LK1401D-E)			Sold separately (TCB-LK2801DP-E)				
Controller (Optional)	Wired or infrared remote controller										
Connecting pipe	Gas side	mm	12.7	15.9	15.9	15.9	15.9	15.9	22.2	22.2	
	Liquid side	mm	6.4	9.5	9.5	9.5	9.5	9.5	12.7	12.7	
	Drain port (nominal dia)	mm	25 (Polyvinyl chloride tube)								

Drawings

Unit : mm

MMD-UP0181HP-E to MMD-UP0561HP-E

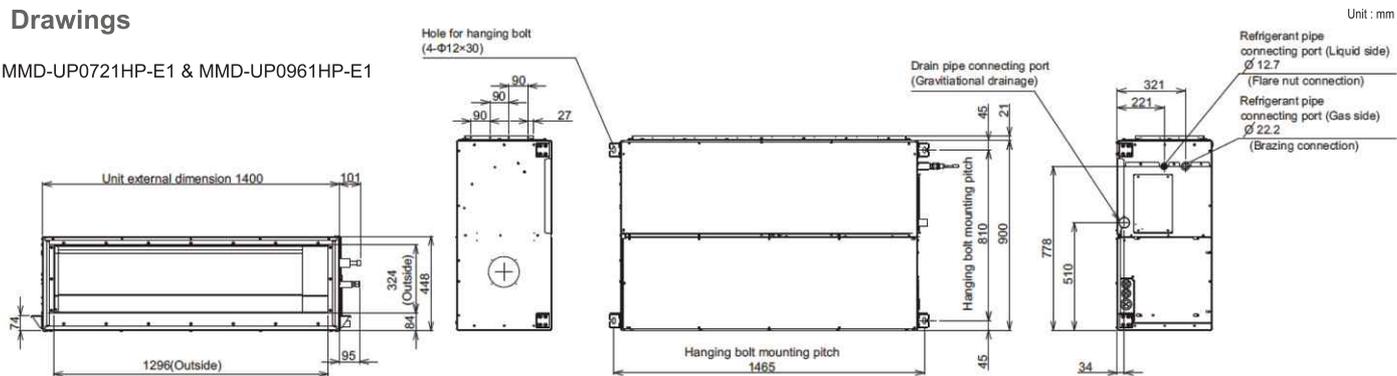


	A	B	C	D
MMD-AP0186-0276HP-E	1000	1065	940	500
MMD-AP0366-0566HP-E	1400	1465	1340	700

HIGH STATIC PRESSURE DUCT

Drawings

MMD-UP0721HP-E1 & MMD-UP0961HP-E1



Accessories

Part name	Model name	Applied model	Appearance	Remarks
Spigot shaped flange	TCB-SF80C6BE	MMD-UP0181/0241/0271HP-E		263x994x175mm / Spigot diameter 200mm
	TCB-SF160C6BE	MMD-UP0361/0481/0561HP-E		263x1394x175mm / Spigot diameter 200mm
Long life filter kit	TCB-LK801D-E	MMD-UP0181/0241/0271HP-E		Flange shaped Mount chassis directly Upside down mounting possible Left and right removable
	TCB-LK1401D-E	MMD-UP0361/0481/0581HP-E1		
	TCB-LK2801DP-E	MMD-UP0721/0961HP-E		
Auxiliary fresh air flange	TCB-FF151US-E	MMD-UP0181/0241/0271/0361/ 0481/0581HP-E		
Drain pump kit	TCB-DP40DPE	MMD-UP0721/0961HP-E1		





MMD-UP_1HFP-E FRESH AIR INTAKE



This indoor unit has been specifically designed to manage and treat fresh air before its distribution into the building.

CAPACITY



5 HP ~ 14 HP

AIR FLOW



Up to 1,080m³/h ~ 3,060m³/h

SOUND PRESSURE LEVEL



31 dB(A)

LOCAL CONTROLS



RBC-AXU31-E



RBC-AMSU51-EN/ES



RBC-AMTU31-E



RBC-ASCU11-E

Features

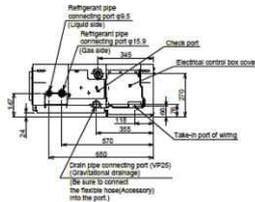
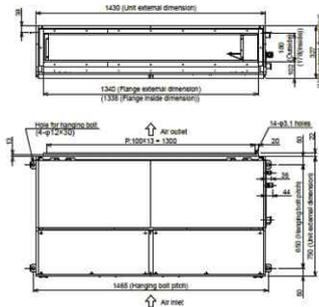
Model name		MMD-	UP0481HFP-E	UP0721HFP-E1	UP0961HFP-E1	
Cooling code		HP	5.0	8.0	10.0	
Cooling capacity (*) (Note 1)		kW	14.0	22.4	28.0	
Heating capacity (*) (Note 2)		kW	8.9	13.9	17.4	
Electrical characteristics	Power supply	1-phase 50Hz 220-240V / 1-phase 60Hz 208-230V				
	Running current (50Hz)	A	0.77	0.86	1.07	
	Power consumption (50Hz)	kW	0.108	0.153	0.198	
Dimensions (HxWxD)		mm	327x1430x750		477x1430x900	
Total weight		kg	44		99	
Heat exchanger		Finned tube				
Soundproof / Heat-insulating material		Non-flammable insulation				
Fan unit	Fan	Centrifugal fan				
	Standard air flow (H/M/L)	m ³ /h	1080/930/760	1680/1560/1440/1320/1200	2100/1950/1800/1620/1470	
	Motor output	W	350			1000
	External static pressure (Factory setting)	Pa	100			
	External static pressure	Pa	50-75-100-125-150-175-200 (7 Steps)			
	Air flow limit	Lower limit	m ³ /h	600	960	1320
Upper limit		m ³ /h	1320	2040	2520	
Sound pressure level (H/M/L)		dB(A)	38/35/31	38/37/36/35/33	39/38/36/35/33	
Air filter		Option or field supply				
Controller (Optional)		Wired or infrared remote controller				
Connecting pipe	Gas / Liquid side	mm	15.9 / 9.5		22.2 / 12.7	
	Drain port (nominal dia)	mm	25 (Polyvinyl chloride tube)			

* The setting temperature is 13 - 25°C (standard FCU, 18 - 30 °C).
* Height difference between Fresh Air Intake Indoor units must be within 5 m.

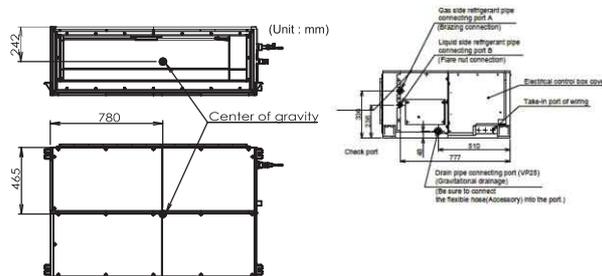
Note 1: Rated conditions
Cooling: Outdoor air temperature 33°C DB/28°C WB setting temperature 18°C
Heating: Outdoor air temperature 0°C DB/-2.9°C WB setting temperature 25°C
Note 2: When supply air temperature is "setting temperature + 3°C" or less, Fresh Air Intake unit operates as FAN mode
Note 3: When supply air temperature is "setting temperature - 3°C" or over, Fresh Air Intake unit operates as FAN mode
Note 4: 46-52°C is also available but temporary operable
In case of connecting with SMMS-e for all Fresh Air Intake unit, it can use down to -5°C in heating mode

Drawings

MMD-UP0481HFP-E

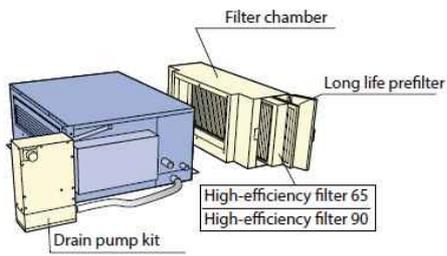


MMD-UP0721HFP-E1 to MMD-UP0961HFP-E1



FRESH AIR INTAKE

Accessories

Part name	Model name	Description	Applied model	Appearance
Air filtration	TCB-UFM0481D-E	High-efficiency filter 65	MMD-UP0481HF-E	
	TCB-UFM1281D-E	High-efficiency filter 65	MMD-UP0721HF-E1 to MMD-UP096HF-E1	
	TCB-UFH0481D-E	High-efficiency filter 90	MMD-UP0481HF-E	
	TCB-UFH1281D-E	High-efficiency filter 90	MMD-UP0721HF-E1 to MMD-UP096HF-E1	
	TCK-LK1401D-E	Stand alone long life prefilter	MMD-UP0481HF-E	
	TCK-LK2801DP-E	Stand alone long life prefilter	MMD-UP0721HF-E to MMD-UP1281HF-E	
	TCK-LK1401D-E (*2)	High efficiency long life prefilter	MMD-UP0481HF-E	
	TCK-PF1281DF-E	High efficiency long life prefilter	MMD-UP0721HF-E1 to MMD-UP096HF-E1	
	TCB-FC0481DF-E	Filter chamber	MMD-UP0481HF-E	
	TCB-FC1281DF-E	Filter chamber	MMD-UP0721HF-E1 to MMD-UP096HF-E1	
Drain pump kit	TCB-DP40DFP-E	Drain pump kit	All models	



MMC-UP_1HP-E UNDER CEILING

The simple yet elegant design helps to create a pleasant and relaxing environment, quickly conditioning the room air to the desired temperature.

CAPACITY



1.7 HP ~ 6 HP

SOUND PRESSURE LEVEL



28 dB(A)



LOCAL CONTROLS



RBC-AXU31-E
RBC-AXU31C-E



RBC-AMSU51-EN/ES



RBC-AMTU31-E



RBC-ASCU11-E

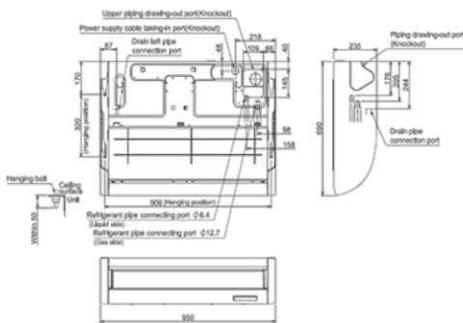
Features

Model name	MMC-	UP0151HP-E	UP0181HP-E	UP0241HP-E	UP0127HP-E	UP0361HP-E	UP0481HP-E	UP0561HP-E	
Cooling code	HP	1.7	2.0	2.5	3.0	4.0	5.0	6.0	
Cooling capacity	kW	4.5	5.6	7.1	8.0	11.2	14.0	16.0	
Heating capacity	kW	5.0	6.3	8.0	9.0	12.5	16.0	18.0	
Electrical characteristics	Power supply	1 phase 50Hz 230V (220-240V) / 1 phase 60Hz 220V							
	Running current (50Hz)	A	0.35	0.36	0.64	0.65	0.77	0.77	0.99
	Power consumption (50Hz)	kW	0.033	0.034	0.067	0.067	0.083	0.083	0.111
Appearance		Pure White (Munsell N9.1)							
Dimensions (HxWxD)	mm	235x950x690			235x1270x690		235x1586x690		
Total weight	kg	24			30		39		
Heat exchanger		Finned tube							
Soundproof / Heat-insulating material		Polyethylene foam							
Fan unit	Fan	Centrifugal fan (Sirocco fan)							
	Standard air flow (H/M/L)	m ³ /h	840/690/540	960/720/540	1440/1020/750	1440/1020/750	1860/1350/1020	1860/1530/1200	2040/1650/1260
	Motor output	W	94				139		
Sound pressure level (H/M/L)	dB(A)	36/34/28	37/35/28	41/36/29	41/36/29	44/38/32	44/41/35	46/42/36	
Air filter		Standard filter supplied (Long life filter)							
Controller (Optional)		Wired or infrared remote controller							
Connecting pipe	Gas side	mm	12.7	12.7	15.9	15.9	15.9	15.9	15.9
	Liquid side	mm	6.4	6.4	9.5	9.5	9.5	9.5	9.5
	Drain port (nominal dia)	mm	20 (Polyvinyl chloride tube)						

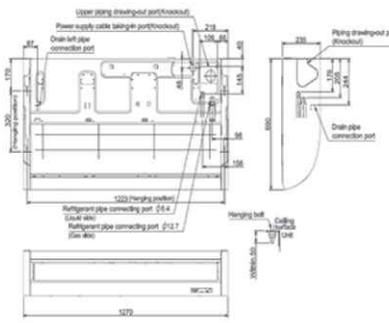
Drawings

Unit : mm

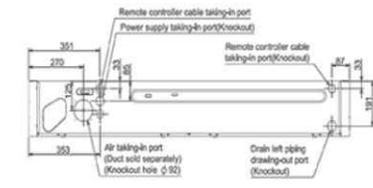
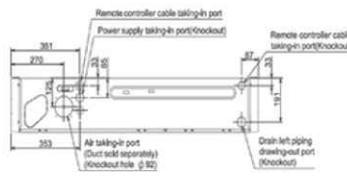
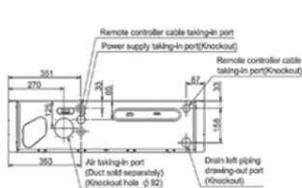
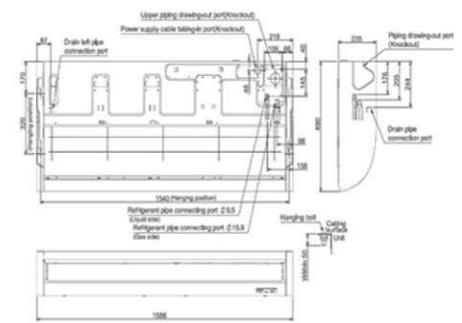
MMC-UP0151HP-E, MMC-UP0181HP-E



MMC-UP0241HP-E, MMC-UP0271HP-E



MMC-UP0361HP-E to MMC-UP0561HP-E



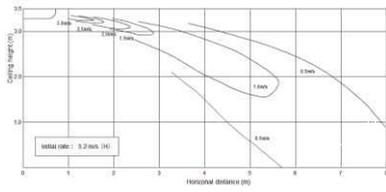
UNDER CEILING

Air diffusion

Unit : m/s

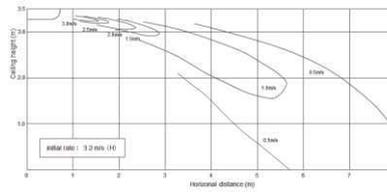
MMC-UP0151HP-E

Cooling



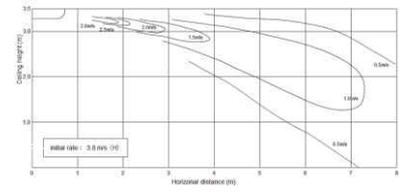
MMC-UP0181HP-E

Cooling



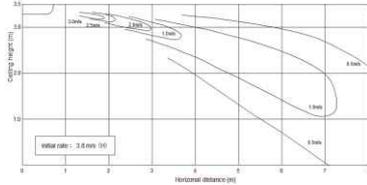
MMC-UP0241, 0271HP-E

Cooling



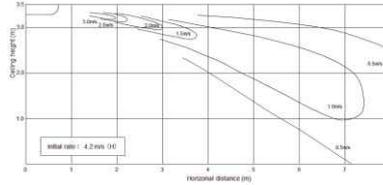
MMC-UP0361, 0481HP-E

Cooling



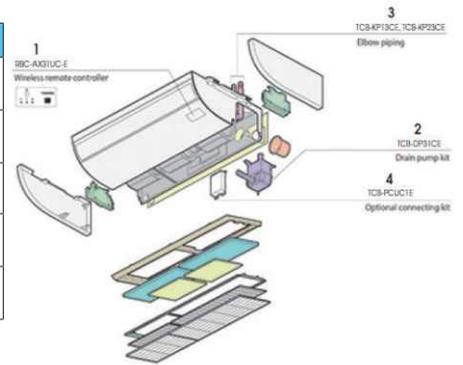
MMC-UP0561HP-E

Cooling



Accessories

No.	Part name	Model name	Applied model	Notes	Remarks
1	Wireless Remote Controller kit	RBC-AXU31C-E	MMC-UP_1HP-E		
2	Drain pump kit	TCB-DP31CE		Antibacterial glass is built into drain pump kit	
3	Elbow piping kit	TCB-KP14CPE		It is necessary for installation of drain pump kit	Use with TCB-DP31CE
		TCB-KP24CPE			
4	Option connecting kit	TCB-PCUC2E	For external I/O signal without local relay preparation		





Particularly compact, this hi-wall is perfect for limited spaces, such as offices or small shops.

CAPACITY



0.8 HP ~ 4 HP

SOUND PRESSURE LEVEL



25 dB(A)

LOCAL CONTROLS



Included



RBC-AMSU51-EN/ES



RBC-AMTU31-E



RBC-ASCU11-E

Features

Model name	MMK-	UP0071HP-E	UP0091HP-E	UP0121HP-E	UP0151HP-E	UP0181HP-E	UP0241HP-E	UP0271HP-E	UP0301HP-E	UP0361HP-E	
Cooling code	HP	0.8	1.0	1.25	1.7	2.0	2.5	3.0	3.2	4.0	
Cooling capacity	kW	2.2	2.8	3.6	4.5	5.6	7.1	8.0	9.0	11.2	
Heating capacity	kW	2.5	3.2	4.0	5.0	6.3	8.0	9.0	10.0	12.5	
Electrical characteristics	Power supply	1 phase 50Hz 230V (220-240V) / 1 phase 60Hz 220V									
	Running current (50Hz)	A	0.15	0.16	0.17	0.25	0.28	0.40	0.28	0.44	0.52
	Power consumption (50Hz)	kW	0.015	0.016	0.017	0.028	0.032	0.050	0.034	0.054	0.066
Dimensions (HxWxD)	mm	293x798x230			320x1050x250			348x1200x280			
Total weight	kg	11			16			21			
Heat exchanger	Finned tube										
Soundproof / Heat-insulating material	Non-flammable insulation										
Fan unit	Fan	Cross Flow Fan									
	Standard air flow (H/M/L)	m ³ /h	480/385/270	510/395/270	540/410/270	840/690/550	900/720/550	1200/900/600	1200/1000/800	1500/1300/1100	1650/1350/1250
Sound pressure level (H/M/L)	dB(A)	35/30/25	36/31/25	37/32/25	40/36/32	41/37/32	45/39/33	44/41/39	48/44/41	50/45/43	
Air filter	Standard filter supplied (Long life filter)										
Controller (Packed with unit)	Wireless remote controller										
Connecting pipe	Gas side	mm	12.7	12.7	12.7	12.7	12.7	15.9	15.9	15.9	15.9
	Liquid side	mm	6.4	6.4	6.4	6.4	6.4	9.5	9.5	9.5	9.5
	Drain port (nominal dia)	mm	16 (Polyvinyl chloride tube)								

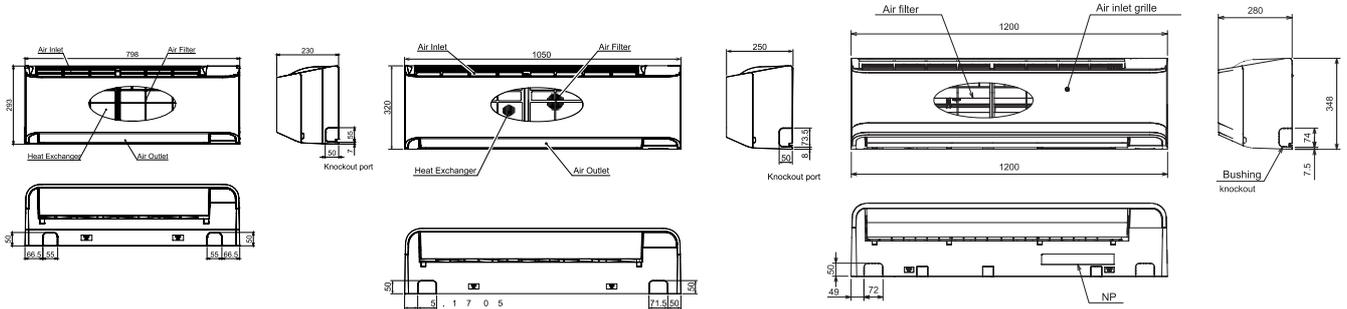
Drawings

Unit : mm

MMK-UP0071HP-E to MMK-UP0121HP-E

MMK-UP0151HP-E to MMU-UP0241HP-E

MMK-UP0271HP-E to MMU-UP0361HP-E

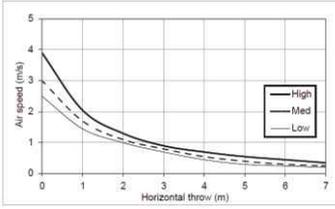


HI-WALL

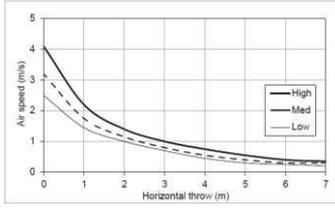
Air diffusion

Unit : m/s

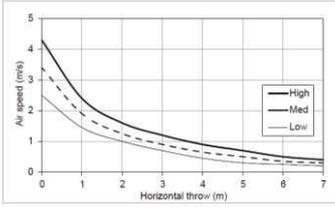
MMK-UP0071HP-E High wind: 3.9m/s
Mid wind: 3.0m/s
Low wind: 2.5m/s



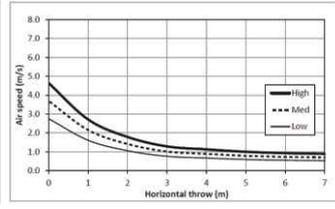
MMK-UP0091HP-E High wind: 4.1m/s
Mid wind: 3.2m/s
Low wind: 2.5m/s



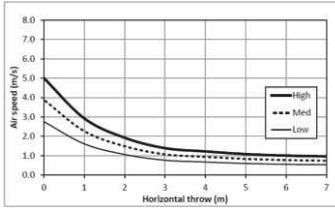
MMK-UP0121HP-E High wind: 4.3m/s
Mid wind: 3.4m/s
Low wind: 2.5m/s



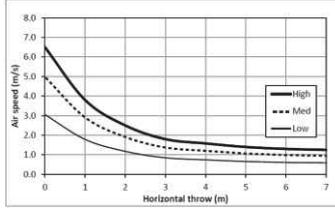
MMK-UP0151HP-E High wind: 4.6m/s
Mid wind: 3.7m/s
Low wind: 2.8m/s



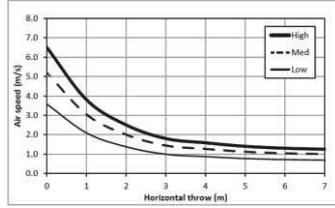
MMK-UP0181HP-E High wind: 5.0m/s
Mid wind: 3.9m/s
Low wind: 2.8m/s



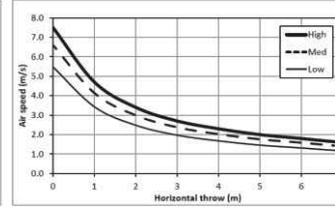
MMK-UP0241HP-E High wind: 6.5m/s
Mid wind: 5.0m/s
Low wind: 3.1m/s



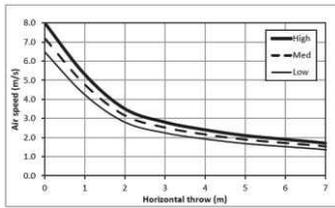
MMK-UP0271HP-E High wind: 6.5m/s
Mid wind: 5.2m/s
Low wind: 3.6m/s



MMK-UP0301HP-E High wind: 7.5m/s
Mid wind: 6.6m/s
Low wind: 5.5m/s



MMK-UP0361HP-E High wind: 8.0m/s
Mid wind: 7.2m/s
Low wind: 6.5m/s



MML-UP_1NHP-E BI-FLOW CONSOLE



Innovative and compact unit to be installed on the floor and in low wall applications, fits perfectly under the window sills or in a low ceiling attic.

CAPACITY



0.8 HP ~ 2 HP

SOUND PRESSURE LEVEL



26 dB(A)

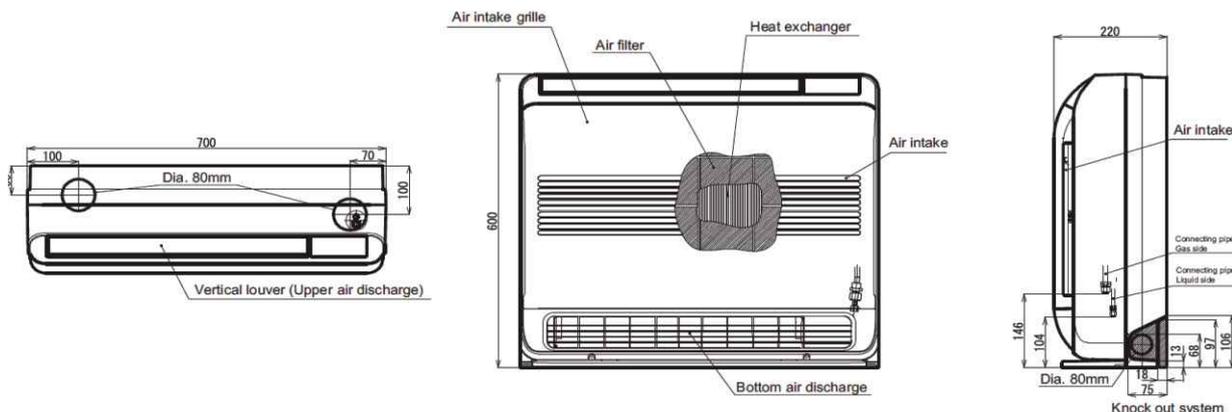
Features

Model name	MML-	UP0071NHP-E	UP0091NHP-E	UP0121NHP-E	UP0151NHP-E	UP0181NHP-E	
Cooling code	HP	0.8	1.0	1.25	1.7	2.0	
Cooling capacity	kW	2.2	2.8	3.6	4.5	5.6	
Heating capacity	kW	2.5	3.2	4.0	5.0	6.3	
Electrical characteristics	Power supply	1 phase 50Hz 230V (220-240V) / 1 phase 60Hz 220V					
	Running current (50Hz)	A	0.20	0.20	0.23	0.29	0.42
	Power consumption (50Hz)	kW	0.021	0.021	0.025	0.034	0.052
Appearance	Air intake grille and side panel	Moon white (Munsell : 2.5GY 9.0/0.5)					
	Discharge-grille	Moon white (Munsell : 2.5GY 9.0/0.5)					
	Bottom surface	Moon white (Munsell : 2.5GY 9.0/0.5)					
Dimensions (HxWxD)	mm	600x700x220					
Total weight	kg	17					
Heat exchanger		Finned tube					
Soundproof / Heat-insulating material		Foamed polystyrene / Polyethylene					
Fan unit	Fan	Turbo fan					
	Standard air flow (H/M/L)	m³/h	510/366/282	510/366/282	552/408/324	624/468/384	726/528/426
	Motor output	W	41				
Sound pressure level (H/M/L)	dB(A)	38/32/26	38/32/26	40/34/29	43/37/31	47/40/34	
Air filter		Standard filter supplied (Long life filter)					
Controller (Packed with indoor unit)		Wireless remote controller					
Connecting pipe	Gas side	mm	9.5	9.5	9.5	12.7	12.7
	Liquid side	mm	6.4	6.4	6.4	6.4	6.4
	Drain port (nominal dia)	mm	16 (Polypropylene tube)				

Drawings

Unit : mm

All models



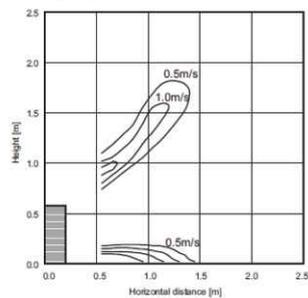
BI-FLOW CONSOLE

Air diffusion

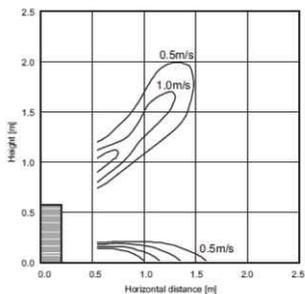
Unit : m/s

MML-UP0071NH-E, UP0091NH-E

Cooling - Upper & Lower

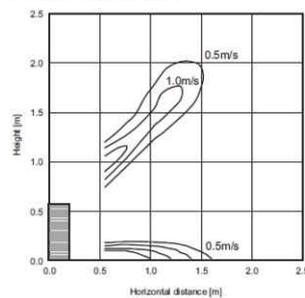


Heating - Upper & Lower

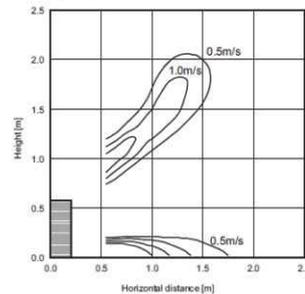


MML-UP0121NH-E

Cooling - Upper & Lower

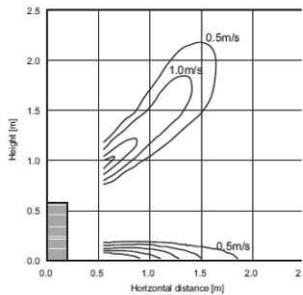


Heating - Upper & Lower

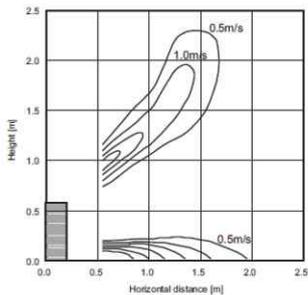


MML-UP0151NH-E

Cooling - Upper & Lower

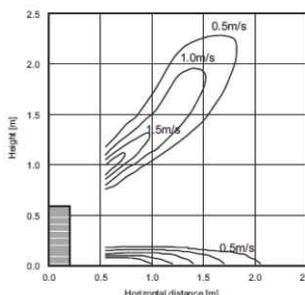


Heating - Upper & Lower

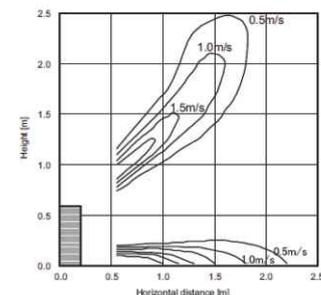


MML-UP0181NH-E

Cooling - Upper & Lower



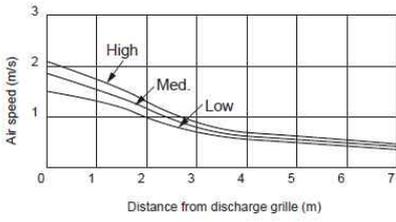
Heating - Upper & Lower



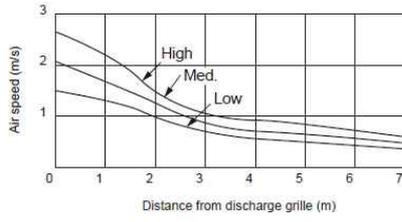
Air diffusion

Unit : m/s

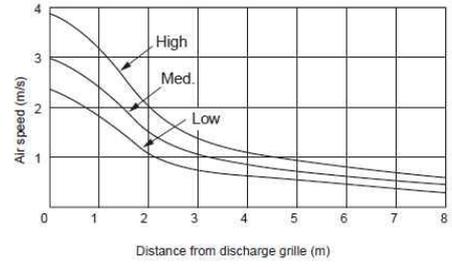
MML-UP0071H-E, MML-UP0091H-E



MML-UP0121H-E, MML-UP151H-E



MML-UP0181H-E, MML-UP241H-E



MMF-UP_1H-E
FLOOR STANDING



This system is particularly suitable for large rooms air condition like shops, showrooms, and with low ceiling rooms like restaurants.

CAPACITY



1.7 HP ~ 6 HP

SOUND PRESSURE LEVEL



38 dB(A)

LOCAL CONTROLS



RBC-AXU31-E



RBC-AMSU51-EN/ES



RBC-AMTU31-E



RBC-ASCU11-E

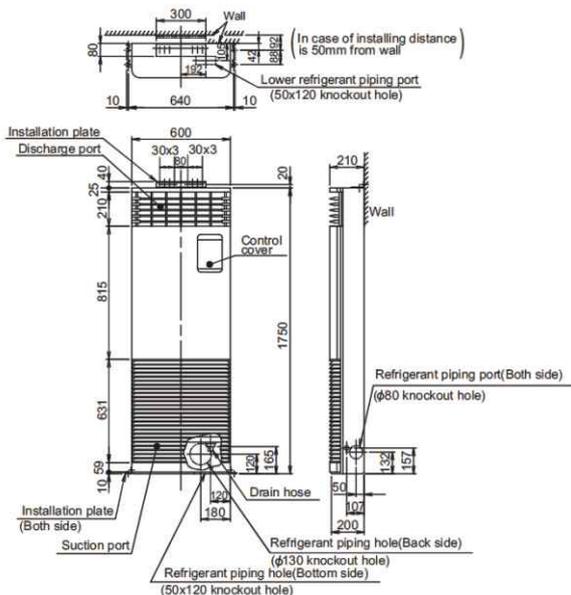
Features

Model name	MMF-	UP0151H-E	UP0181H-E	UP0241H-E	UP0271H-E	UP0361H-E	UP0481H-E	UP0561H-E	
Cooling code	HP	1.7	2.0	2.5	3.0	4.0	5.0	6.0	
Cooling capacity	kW	4.5	5.6	7.1	8.0	11.2	14.0	16.0	
Heating capacity	kW	5.0	6.3	8.0	9.0	12.5	16.0	18.0	
Electrical characteristics	Power supply	1 phase 50Hz 230V (220-240V) / 1 phase 60Hz 220V							
	Running current (50Hz)	A	0.37		0.55	0.82	0.97		
	Power consumption (50Hz)	kW	0.053		0.087	0.133	0.158		
Appearance		Silky shade (Munsell / 1Y 8.5 / 8.0)							
Dimensions (HxWxD)	mm	1750x600x210				1750x600x390			
Total weight	kg	46		47		61			
Heat exchanger		Finned tube							
Soundproof / Heat-insulating material		Non-flammable insulation							
Fan unit	Fan	Centrifugal fan							
	Standard air flow (H/M/L)	m ³ /h	820/700/600		930/770/640		1660/1420/1170	1760/1480/1350	
	Motor output	W	62				109		
Sound pressure level (H/M/L)	dB(A)	46/42/38		50/45/41		51/46/41	53/48/45		
Air filter		Standard filter supplied (Simple filter)							
Controller (Optional)		Wired or infrared remote controller							
Connecting pipe	Gas side	mm	12.7	12.7	12.7	12.7	12.7	12.7	
	Liquid side	mm	6.4	6.4	6.4	9.5	9.5	9.5	
	Drain port (nominal dia)	mm	20 (Polyvinyl chloride tube)						

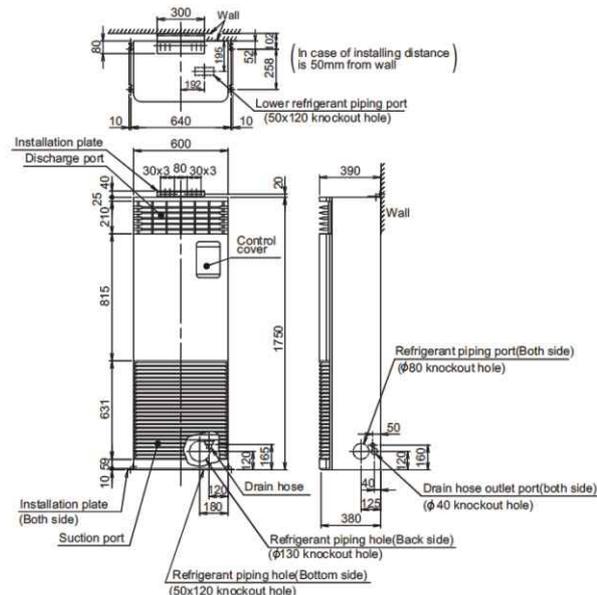
Drawings

Unit : mm

MMF-UP0151H-E to MMF-UP0271H-E



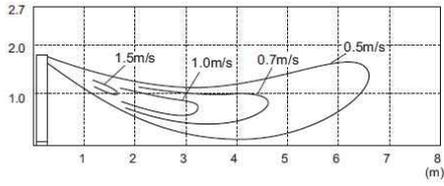
MMF-UP0361H-E to MMF-UP0561H-E



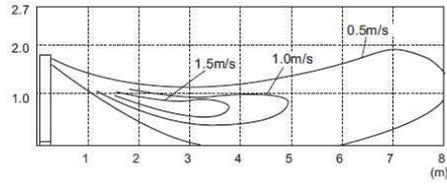
Air diffusion

Unit: m/s

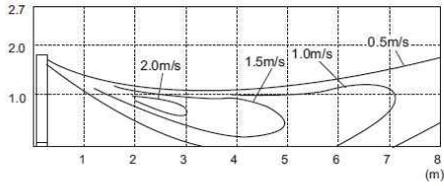
MMF-UP0151H-E, MMF-UP0181H-E



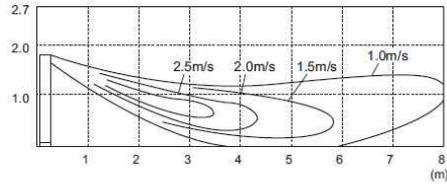
MML-UP0151BH-E, MML-UP0271BH-E



MMF-UP0361H-E



MML-UP0481BH-E, MML-UP0561BH-E





MMD-VN
AIR-TO-AIR HEAT EXCHANGER WITH DX COIL

MMD-VN ventilation products are using exhaust air + DX coil to pre-condition the incoming air, thus reducing the cooling or heating load and the overall size of the required air conditioning system.

LOCAL CONTROLS



NRC-01HE
RBC-AMTU31E

CAPACITY



4.1 kW ~ 8.25 kW

AIR FLOW



Up to 500m³/h ~ 950m³/h

SOUND PRESSURE LEVEL



34.5 dB(A)

Features

Model name		MMD-	Without humidifier			
			VN502HEX1E	VN802HEX1E	VN1002HEX1E	
Cooling capacity		kW	4.10(1.30)	6.56(2.06)	8.25(2.32)	
Heating capacity		kW	5.53(2.33)	8.61(3.61)	10.92(4.32)	
Power supply			1 phase 50Hz 230V (220-240V) / 1 phase 60Hz 220V		1 phase 50Hz 230V(220V-240V)	
Temperature exchange efficiency	Extra high/High/Low	%	70.5/71.5/72.0	70.5/72.5/73.0	65.5/67.5/68.0	
Enthalpy exchange efficiency (%)	Cooling (Extra high/High/Low)	%	56.5/57.5/58.0	56.0/59.0/59.5	52.0/54.0/55.0	
	Heating (Extra high/High/Low)	%	68.5/69.0/69.0	70.0/73.0/73.5	66.0/68.5/69.0	
Power input (Heat exchange mode)	Extra high	kw	0.300/0.365	0.505/0.595	0.550	
	High	kw	0.280/0.350	0.465/0.555	0.545	
	Low	kw	0.235/0.250	0.335/0.390	0.485	
Running current	Extra high	A	1.30/1.65	2.25/2.77	2.46	
	High	A	1.21/1.62	2.07/2.59	2.43	
	Low	A	1.01/1.14	1.46/1.79	2.16	
Fan unit	Standard air flow	Extra high	m³/h	500/-	800/-	950
		High	m³/h	500/-	800/-	950
		Low	m³/h	440/410	640/600	820
	External static pressure	Extra high	Pa	120/200	120/190	135
		High	Pa	105/170	100/155	120
		Low	Pa	15/150	100/130	105
Air flow limit	Lower limit	m³/h	330	480	640	
	Upper limit	m³/h	600	960	140	
Humidifier	System		-	-	-	
	Amount		-	-	-	
	Feed water pressure		-	-	-	
Sound pressure level	Extra high	dB(A)	37.5/40	41/43	43	
	High	dB(A)	36.5/38	40/42	42	
	Low	dB(A)	34.5/36.5	38/37	40	
Appearance			Zinc hot dipping steel plate			
Dimensions (HxWxD)	mm		1400/690	1800/789	1800/789	
Weight	kg		84	100	101	
Heat exchanger / Heat-insulating material			Finned tube / Flexible urethane foam			
Air filter			Standard filter & High efficiency		filter	
Controller			Remote controller (Separately sold parts)			
Connecting pipe	Gas side / Liquid side	mm	9.5 / 6.4	12.7 / 6.4	12.7 / 6.4	
	Drain port (nominal dia)	mm	25 (Polyvinyl chloride tube)			

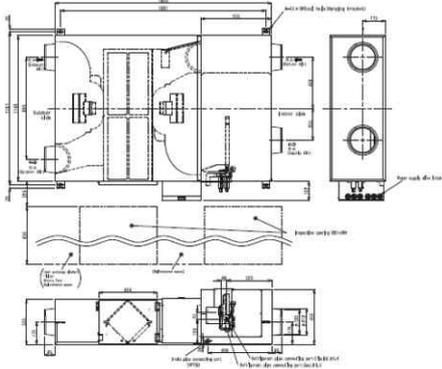
Cooling and heating capacities are based on the following conditions:
Cooling capacities are based on: Indoor temperature: 27°C DB/19°C WB, Outdoor temperature: 35°C DB
Heating capacities are based on: Indoor temperature: 20°C DB, Outdoor temperature: 7 ° C DB/6°C WB.
The figures in () indicate the heat reclaimed from the heat recovery ventilator.

AIR-TO-AIR HEAT EXCHANGER WITH DX COIL

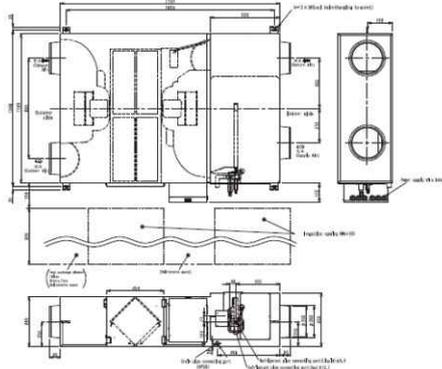
Drawings

Unit : mm

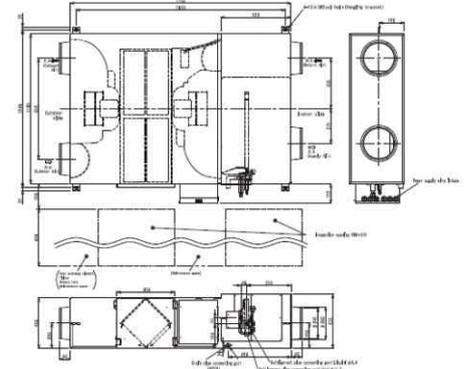
MMD-VN502HEX1E



MMD-VN802HEX1E



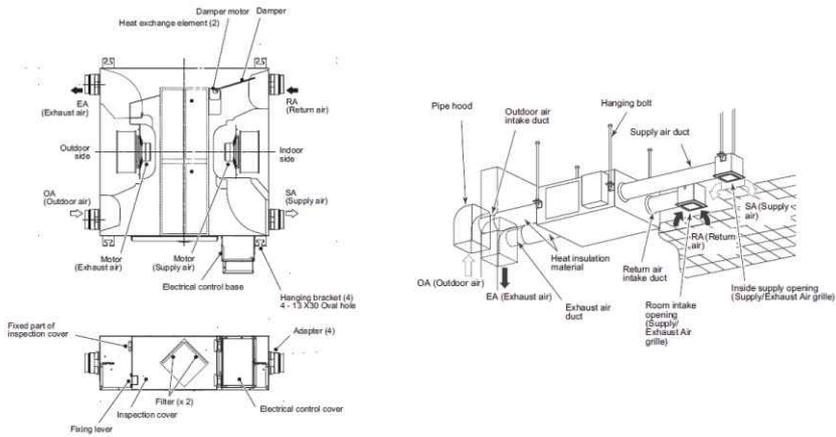
MMD-VN1002HEX1E



Accessories

Part name	Model name	Description	Appearance	Remarks
Control	NRC-01HE	Dedicated remote controller for air-to-air heat exchanger		Integrated functions : fan speed, freecooling, air balance volume rate, temperature management and timer.
	NRB-1HE	On/off optional PCB for air-to-air heat exchanger		
Condensates	TCB-DP31HEXE	Drain pump kit		

Other information



VN-M_HE
AIR-TO-AIR HEAT EXCHANGER



Toshiba's VN model uses exhaust air to pre-condition the incoming air, thus reducing the cooling or heating load on the system. This allows the overall capacity size of the system to be reduced.

AIR FLOW



150m³/h ~ 2,000m³/h

SOUND PRESSURE LEVEL



20 dB(A)

LOCAL CONTROLS



NRC-01HE
RBC-AMTU31E

Features

Model name			VN-M150HE	VN-M250HE	VN-M350HE	VN-M500HE	VN-M650HE	VN-M800HE	VN-M1000HE1	VN-M1500HE1	VN-M2000HE1
Air volume (Extra high/High/Low)		m ³ /h	150/150/110	250/250/155	350/350/210	500/500/390	650/650/520	800/800/700	1000/1000/700	1500/1500/1200	2000/2000/1400
Power consumption	Extra high	W	68-78	123-138	165-182	214-238	262-290	360-383	390	640	780
	High	W	59-67	99-111	135-145	176-192	240-258	339-353	340	570	680
	Low	W	42-47	52-69	82-88	128-142	178-191	286-300	190	320	380
External static pressure	Extra high	Pa	82-102	80-98	114-125	134-150	91-107	142-158	105	140	105
	High	Pa	52-78	34-65	56-83	69-99	58-82	102-132	80	110	80
	Low	Pa	47-64	28-40	65-94	62-92	61-96	76-112	70	80	70
Sound pressure level	Extra high	dB(A)	26-28	29.5-30	34-35	32.5-34	34-36	37-38.5	38.0	41.0	41.5
	High	dB(A)	24-25.5	25-27	30-32	29.5-31	33-34	35.5-37	37.0	40.0	40.5
	Low	dB(A)	20-22	21-22	27-29	26-29	31-32.5	33.5-35	33.0	36.0	36.5
Sound power level (Extra high)		dB(A)	41-43	44.5-45	49-50	47.5-49	49-51	52-53.5	53.0	56.0	56.5
Temperature exchange efficiency (%)	Extra high		81.5	78	74.5	76.5	75	76.5	73.5	76.5	73.5
	High		81.5	78	74.5	76.5	75	76.5	73.5	76.5	73.5
	Low		83	81.5	79.5	78	76.5	77.5	77.0	79.0	77.5
Enthalpy exchange efficiency (%)	Extra high	Heating	74.5	70	65	72	69.5	71	68.5	71.0	68.5
	High	Heating	74.5	70	65	72	69.5	71	68.5	71.0	68.5
	Low	Heating	76	74	71.5	73.5	71.5	71.5	71.5	73.5	72.0
	Extra high	Cooling	69.5	65	60.5	64.5	61.5	64	60.5	64.0	60.5
	High	Cooling	69.5	65	60.5	64.5	61.5	64	60.5	64.0	60.5
Low	Cooling	71	69	67	66.5	64	65.5	64.5	67.0	65.5	
Power supply			220V-240V / 50Hz								
Dimensions (HxWxD)		mm	900x900x290			1140x1140x350		1189x1189x400		1189x1189x810	
Weight		kg	36	36	38	53	53	70	70	126	126

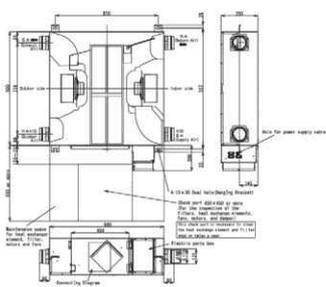
* Air volume can be changed over to high (Extra high) mode or low mode at both heat exchange and normal ventilation modes.
* Sound pressure level is measured 1.5 m below the center of the unit, and the value which was measured at the acoustic room.
* Sound pressure levels usually become higher than above values by the influence of actual installation condition such as reflected sound and peripheral noise.

* Sound power level is the value of casing.
*1) When the temperature of the outdoor air is below -10°C, the unit runs cold operation mode (intermittent operation of the ventilation for air supply). The unit cannot be used at -15°C or less. The ventilator for air supply stops, and the ventilator for air exhaust also can be stopped by the setting.

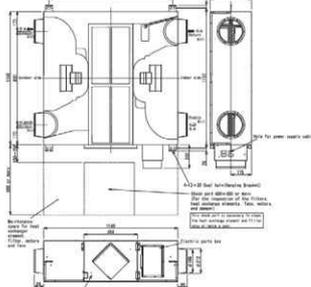
Drawings

Unit : mm

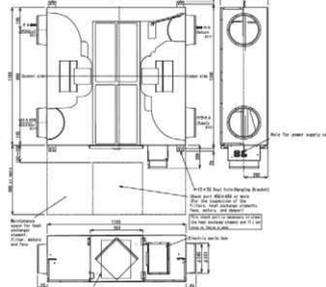
VN-M150HE to VN-M350HE



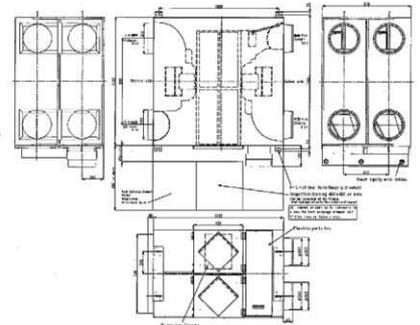
VN-M500HE to VN-M650HE



VN-M800HE to VN-M1000HE1



VN-M1500HE1 to VN-M2000HE1

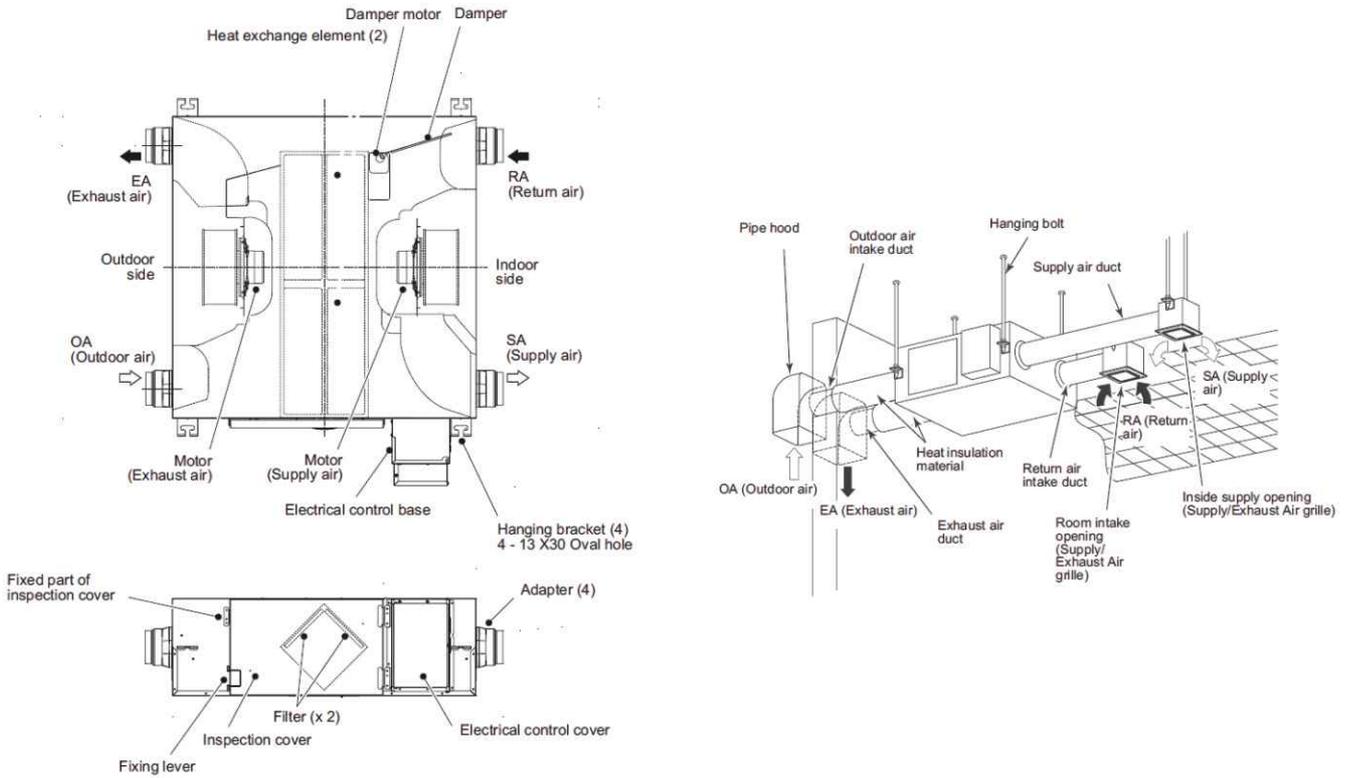


AIR-TO-AIR HEAT EXCHANGER

Accessories

Part name	Model name	Description	Appearance	Remarks
Control	NRC-01HE	All air-to-air heat exchangers Dedicated remote control		Integrated functions: fan speed, freecooling, air balance volume rate, temperature management and timer.
	NRB-1HE	All air-to-air heat exchangers On/Off additional PCB		On/off optional PCB for air-to-air heat exchanger

Other information



**WIRELESS
SOLUTIONS
KEEP
CONTROL**

WIRELESS SOLUTIONS KEEP CONTROL



In addition to the high quality of the air conditioners, the controls also play a significant part in the ease-of-use and efficiency of the units. Optimized settings create the perfect climate. Along with local control options, Toshiba also offers a broad selection of central control systems or the option to integrate these in the building control system.

> ONE CONTROL FOR EVERY USAGE



Local controls

Cable remote controls (max. cable length 500 m) or wireless infrared remote controls are used to control individual units or groups of up to 8 indoor units. Additional modules allow units to be controlled from any location via apps or the Internet.



Central controls

VRF systems can be controlled from a preferred central location, such as the reception or plant room. Cable lengths can be max. 2,000 m and up to 512 indoor units can be controlled.



Building control systems

Toshiba air conditioners can be interlinked with all conventional building control systems. This makes air conditioning an integral part of the central control of a building.

> WHEREVER YOU ARE



On the cloud with Toshiba AC control app WebBrowser

Locally with standard remote control

Using Toshiba WebBrowser for all your facilities

> TRUST TOSHIBA TU2C LINK

All control devices are connected to the air conditioner side using Toshiba's dedicated central control network, also called the TU2C LINK. It can be used to directly connect all equipment.

Wiring: 2-core, non-polarity
Type: Shield wire
Size/length:
•1 to 1.5 mm² / Up to 1,000 m
•2 mm² / Up to 2,000 m

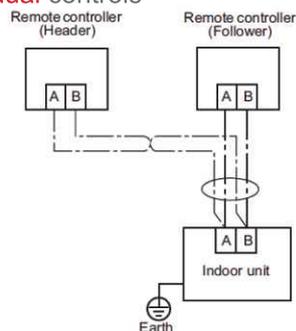
INDIVIDUAL REMOTE CONTROLLER

* : Available

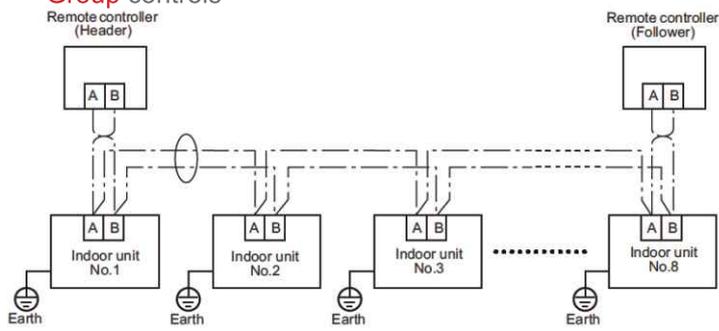
TYPE		INFRARED							WIRED			
Part number		RBC-AXU31-E	RBC-AXU41U-E	RBC-AXU31U-E	RBC-AXU31UM-E	RBC-AXU31UW-E	RBC-AXU31C-E	RBC-AX33UYP-E	RBC-ASCU11-E	RBC-AMTU31-E	RBC-AMSU52-E	NRC-01HE
Picture												
Dimensions (HxWxD) in mm	Remote	157x56x19	157x56x19	157x56x19	157x56x19	157x56x19	157x56x19	157x56x19	86x86x16	120x120x16	120x120x20	120x120x16
	Infrared receiver	120x70x18	204x204x24	163x163x24	163x163x24	71x162x39	130x65	140x113x12				
Compatibility		All indoor units	Smart 4 way cassette	4 way cassette	Compact 4 way cassette	2 way cassette	Ceiling, 1 way cassette (SH)	1 way cassette (YHP)	All indoor units	All indoor units	All indoor units	Air to air heat exchanger
Connectivity		1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:16	1:16	1:16	1:8
Standard functions	On/Off	•	•	•	•	•	•	•	•	•	•	•
	Mode (heat, cool, ventilation, dry, auto)	•	•	•	•	•	•	•	•	•	•	•
	Temperature setting	• / 17°C-30°C	• / 17°C-30°C	• / 17°C-30°C	• / 17°C-30°C	• / 17°C-30°C	• / 17°C-30°C	• / 17°C-30°C	• / 18°C-29°C	• / 18°C-29°C	• / 18°C-29°C	• / 18°C-29°C
	Fan speed (auto, manual 5 speed)	•	•	•	•	•	•	•	•	•	•	•
	Air direction (swing mode or manual orientation)	•	•	•	•	•	•	•	•	•	•	•
Scheduling	Timer function	•	•	•	•	•	•	•				•
	Schedule function								•		•	
	Return back										•	
Advanced functions	Dual set point										•	
	Soft cooling										•	
	Night operation										•	
	Energy save function									•	•	•
	Frost protection									•	•	•
	Lock function										•	
	Summer time										•	
	Room naming										•	
Installation & maintenance	Filter dirty indication								•	•	•	
	Error display	•	•	•	•	•	•	•	•	•	•	•
	System settings								•	•	•	
	Indoor unit serial number										•	
Outputs	Error output								•	•	•	•
	External ventilation control									•	•	
Display & Interface	Interface	Icon	Icon	Icon	Icon	Icon	Icon	Icon	Icon	Icon	Menu	Icon
	Multilanguage										•	
	Luminous buttons										•	
	Backlight display										•	
Other	Temperature sensor								•	•	•	•
Communication protocol									TU2C link	TU2C link	TU2C link	TCC link

Installation drawings

Individual controls

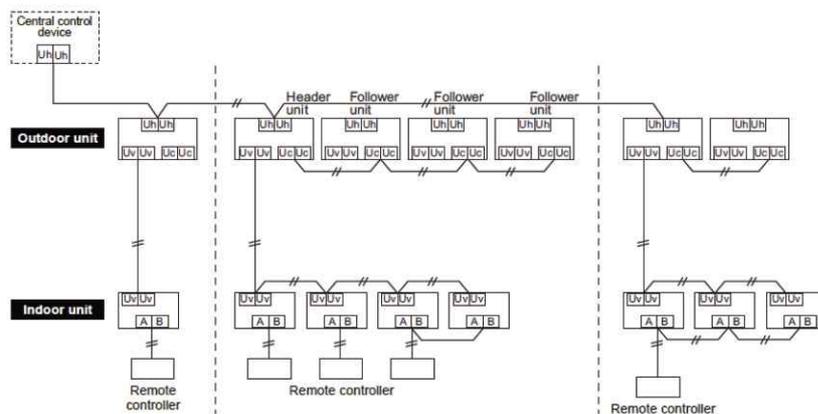


Group controls



TYPE		WIRED	
Part number		TCB-SC640U-E	BMS-SM1281ETLE - Smart Manager
Picture			
Dimensions (HxWxD) in mm		120x120x16	180x120x90
Compatibility		all systems	all systems
Connectivity		1:64	1:128
Standard functions	On/Off	•	•
	Mode (heat, cool, ventilation, dry, auto)	•	•
	Temperature setting	•	•
	Fan speed (auto, manual 5 speed)	•	•
	Air direction (swing mode or manual orientation)	•	•
Scheduling	Timer function	•	•
	Schedule function	•	•
	Return back	•	•
Advanced functions	Dual set point	•	•
	Soft cooling	•	•
	Energy save function	•	•
	Energy monitoring	•	• (If power meter, BMS-IFWH5E interface relay needed)
Central control	Permit/prohibit function	•	•
	Group control	•	•
Installation & maintenance	Filter dirty indication	•	•
	Error display	•	•
	Error transfer by Email	•	•
	System settings	•	V
Display & Interface	Interface	Menu	Icon
	Multilanguage	•	•
	Luminous buttons	•	•
	Backlight display	•	•
Other	Digital Input/output	•	• (BMS-IFDD03E interface needed)
	Web connection	•	•
Communication protocol		TU2C Link	TCC Link

Drawings



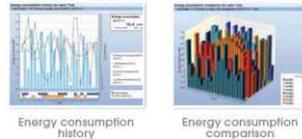
Focus on Web Browser

The Smart Manager can be remotely connected via a computer and all functions can be controlled via web browser:
 Standard operation - Advanced scheduling - Dual set point management - Up to 64 zones - Permit/Prohibit function - Energy saving - Return back



Focus on Data Analyzer

With or without power meter, the Data Analyzer software allows facility manager to manage system energy consumption. Through graphics on different periods, different indoor units, different energy consumption zones can be compared to optimize global efficiency. Set point, ambient temperature and outdoor temperature are monitored.

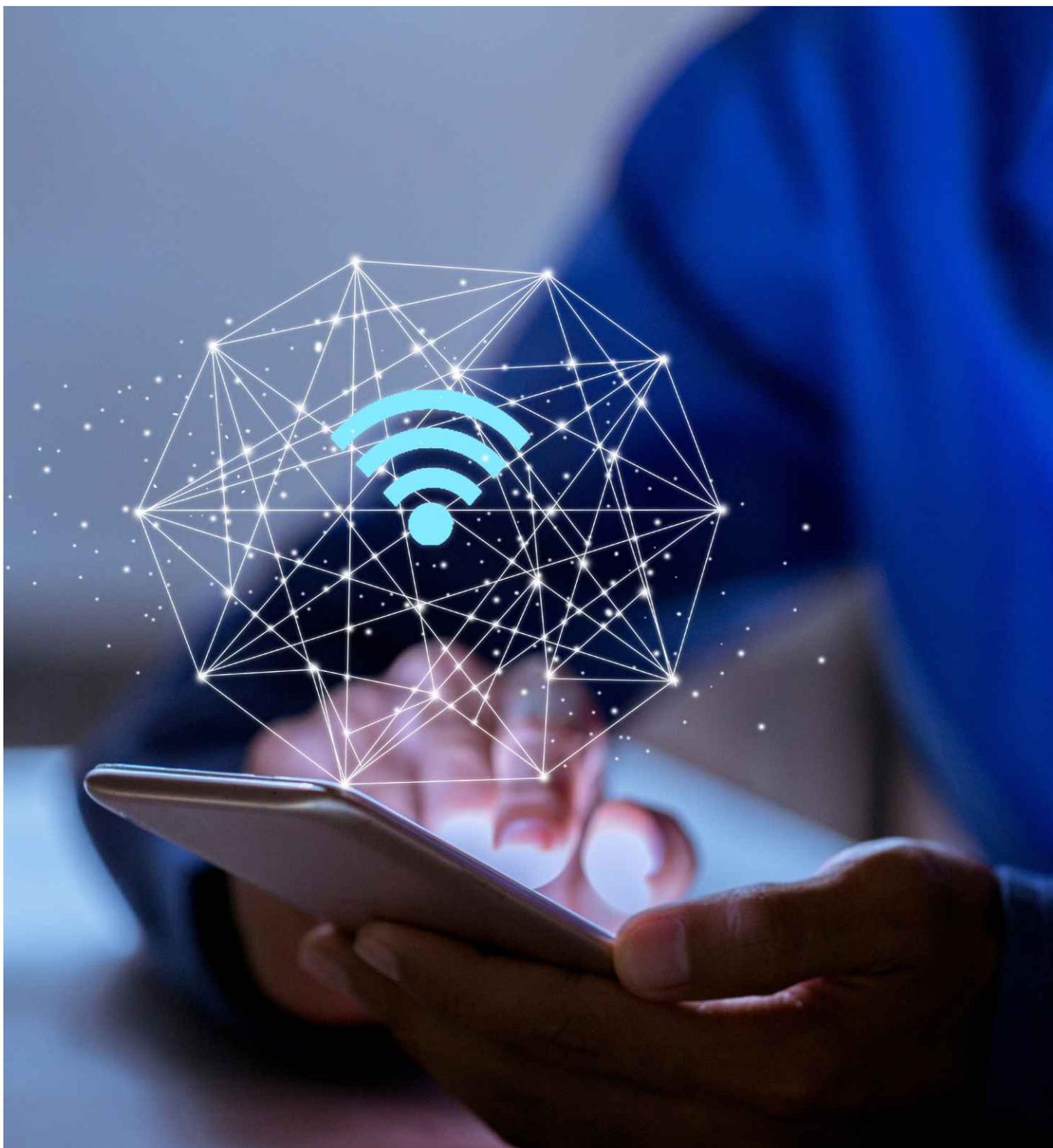


CLOUD SOLUTION

Toshiba AC control



Designed for commercial applications, the Toshiba AC Control App is your one-stop solution for managing up to 32 indoor units via an Android or iOS smartphone, with all main functions accessible in a single touch.



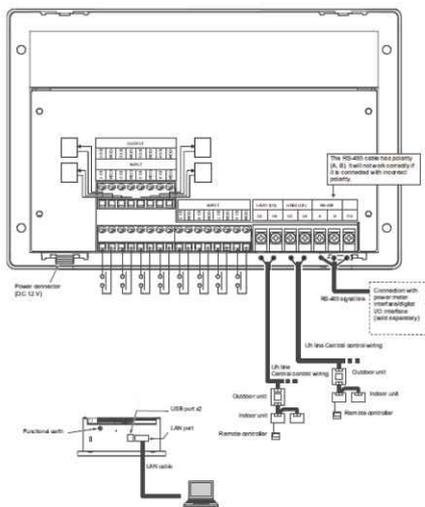
> CONTROL

TOUCH SCREEN SOLUTIONS

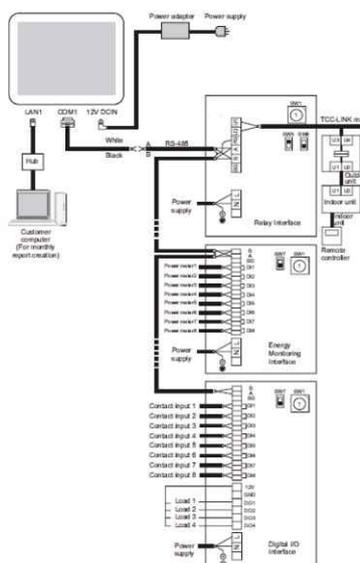
Part number	Touch Screen Smart Manager	BMS-CT2560U-E	BMS-CT5121E
Picture			
Dimensions (HxWxD) in mm		205x136x90	255x323x49
Compatibility		All indoor units (except hot water module, DX kit, fresh air, A2A heat exchanger)	All indoor units. TCS-NET relay interface needed (BMS-IFLSV4E)
Connectivity		1:256	1:512
Screen	Type / Dimension	Capacitive color touch screen / 7"	
Standard functions	On/Off	•	•
	Mode (heat, cool, ventilation, dry, auto)	•	•
	Temperature setting	•	•
	Fan speed (auto, manual 5 speed)	•	•
	Air direction (swing mode or manual orientation)	•	•
Scheduling	Timer function	•	•
	Schedule function	•	•
	Return back	•	•
Advanced functions	Dual set point	•	•
	Soft cooling	•	•
	Energy save function	•	•
	Energy monitoring	•	• (If power meter, BMS-IFWH5E interface relay needed)
	Rooms naming		
Central control	Permit/prohibit function		
	Group control	•	•
Installation & maintenance	Filter dirty indication	•	•
	Error display	•	•
	Error transfer by Email	•	•
	System settings	•	•
Outputs	Digital Input/output	•	• (Digital I/O BMS-IFDD03E needed)
	Web connection	•	•
Display & Interface	Interface	Menu	Menu
	Multilanguage	•	•
	Backlight display	•	•
Communication protocol		TU2C Link	TCC Link

Installation drawings

BMS-CT2560U-E



BMS-CT5121E



ADDITIONAL PCB

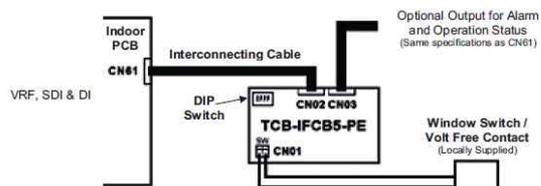
Additional PCB for outdoor units

Model name	Power peak-cut control board			External master ON/OFF control board			Output control board		
									
	TCB-PCDM4E			TCB-PCMO4E			TCB-PCIN4E		
System	SMM S6S MM Su	SHRMe	MiNi SMMSe	SMM S6S MM Su	SHRMe	MiNi SMMSe	SMM S6S MM Su	SHRMe	MiNi SMMSe
Power peak cut control	•	•	•						
Power peak cut extend	•	•	•						
Snowfall fan control				•	•				
External master ON/OFF control				•	•	•			
Night operation (Sound reduction) control				•	•	•			
Operation mode selection control				•	•	•			
Error/Operation output control							•	•	•
Compressor operation output							•	•	•
Operation rate display							•	•	•
Max number installed	1	1	1	4	4	2	2	2	1
Kind of digital input / output	2/1			6/-			-/8		

Additional PCB for Indoor units

Windows switch sensor TCB-IFCB5PE

Function	Mode / Description	Dip Switch setting
Remote On/Off control application	Remote On-Off signal has full priority	All Bits OFF
	Priority is given to the remote ON signal	Bit 1 ON
	Priority is given to the remote OFF signal	Bit 2 ON
	Last touch priority	Bit 1 & 2 ON
Window switch application	With return back to previous operation	Bit 3 ON
	With no return back function	Bit 4 ON

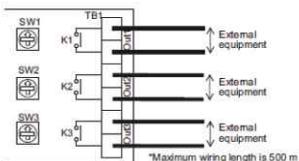


Optional connection kit TCB-PCUC2-E

SIGNAL

OUTPUT TERMINAL TB1

Signal outputs (Mode, fans status, alarm, defrost,...) are extracted from "OUT1", "OUT2", and "OUT3".

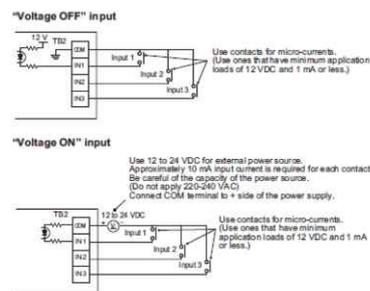


~Connectable load~
30 VDC/1 A or less
277 VAC/1 A or less

EXTERNAL

DIGITAL INPUT TERMINAL TB2

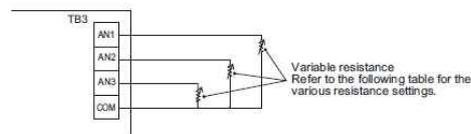
Stop air conditioner or lock local remote by inputting signal.



EXTERNAL

ANALOG INPUT TERMINAL TB3

Change the indoor unit's operation mode (AN1), set temperature (AN2), and blower setting (AN3) by connecting a variable resistor to the analog input terminal.



Features

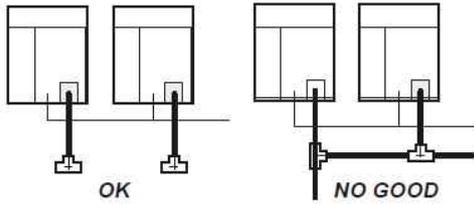
Part number		BMS-IFMB0TLR-E	BMS-IFMB1280U-E	BMS-IFKX0TLR-E	TCB-IFLN642TLE	BMS-IFBN1281U-E	TCB-IFCB640TLE
Langage		Modbus		KNX	LonWorks	Bacnet	Analogue and digital inputs
Picture							
Dimensions (HxWxD) in mm		53x86	170x200x66	92x82x33	193x246x66	90x140x45	66x170x200
Compatibility		All indoor units	All indoor units (HWM, A2A heat exchanger excluded)	All indoor units (HWM, A2A heat exchanger excluded)	All indoor units (HWM, A2A heat exchanger excluded)	All indoor units (HWM excluded)	All indoor units
Connectivity	Max number of indoor units	8	64	8	64	64	64
	Max number of outdoor units		16		16		
	Max number of gateways	63	15		10	1	
Command	On/Off	R/W	R/W	R/W	R/W	R/W	R/W
	Accumulated operation time		R/W				
	Mode (heat, cool, ventilation, dry, auto)	R/W	R/W	R/W	R/W	R/W	R/W
	Temperature setting	R/W (Dual set point supported)	R/W	R/W (Dual set point supported)	R/W	R/W	R/W
	Fan speed (auto, manual 5 speed)	R/W	R/W	R/W	R/W	R/W	R/W
	Air direction (swing mode or manual orientation)	R/W	R/W	R/W	R/W	R/W	R/W
	Soft cooling	R/W					
	Save operation	R/W					
	Filter dirty indication	R/W	R/W	R/W	R/W	R/W	
	Room temperature	R	R	R	R	R	
	Permit/Prohibit local operation	R/W	R/W	R/W	R/W	R/W	
	Temperature setting range limitation		R/W				
	Error status	R	R	R	R	R	R
	Error code	R	R	R	R		
	Error address	R		R			
	Model name		R				
	Serial number		R				
Indoor unit capacity		R					
Indoor unit type		R					
Protocol		Modbus RTU	Modbus RTU	EIB bus	Lontalk communication	Bacnet IP	Voltage signal
Infrastructure		RS-485	RS-485	KNX TP1	Twisted pair shield cable	LAN cable (higher than Category 5, UTP)	
Requirements (Locally supplied)			Modbus master device	KNX power unit	Lonworks control system		
			Modbus master device	ETS4 or ETS5 tool	Lonworks Network Card for PC Control		
Toshiba communication protocol		TCC Link	TCC Link	TCC Link	TCC Link	TCC Link	TCC Link

Refrigerant accessories

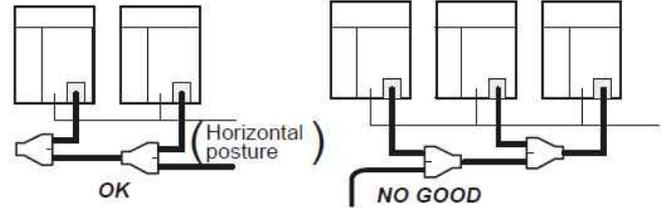
Model name	Specification	Picture	Total capacity codes
Compatible SMMSu			
RB-Y55	Branching joint		under 6.4 HP
RB-Y105			from 6.4 to 14.2 HP
RB-Y205			from 14.2 to 25.2 HP
RB-Y305			from 25.2 to 60HP
RBM-HY1043E	Headers branching four-way		< 14.2 HP
RBM-HY2043E			< 14.2 - 25.2 HP
RBM-HY1083E	Headers branching eight-way		< 14.2 HP
RBM-HY2083E			< 14.2 - 25.2 HP
RBM-BT14E	Joints for connection of outdoor units		< 26 HP system capacity
RBM-BT24E			> 26 < 62 HP system capacity
RBM-BT34E			> 62 HP system capacity

SYSTEM RESTRICTION

T-shape branching joint for liquid pipe

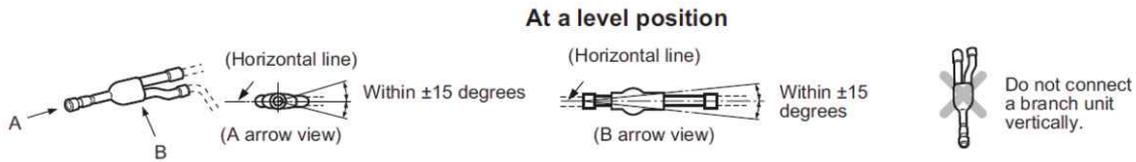


Y-shape branching joint for gas pipe



CAUTION FOR INSTALLATION

Be careful of the connecting arrangement of the header unit and follower units. Set the outdoor units in order of capacity from the one with the largest capacity.



FREE BRANCHING SYSTEM

Line branching system	
Header branching system	
Header branching system after line branching	
Line branching system after header branching	
Header branching system after header branching	



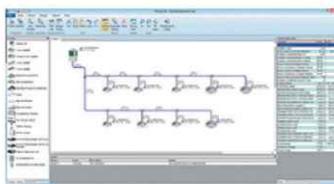
SOFTWARE

SELECTION TOOL

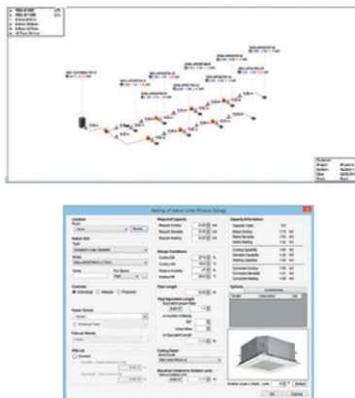


Software main screen

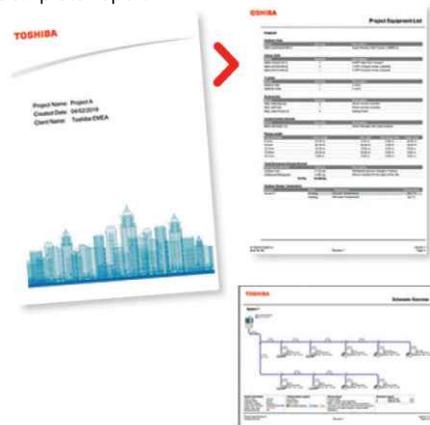
Toshiba Selection software has been fully designed, with a user-friendly interface allowing novice and expert users alike to create simple yet detailed VRF system schematics. It is highly versatile, allowing the level of detail to be tailored to suit customer requirements. The software also allows the user to specify pricing strategy and create additional interim reports including any diagrams and schematics required. Final detailed reports can then be produced and sent to customers in PDF format or in more complex files such as AutoCAD DXF, allowing simple integration into their existing software packages.



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ISO 9001
Quality Management

ISO 14001
Environmental Management

OHSAS 18001
Occupational Health & Safety Management



Notice : Toshiba is committed to continuously improving its products to ensure the highest quality and reliability standards, and to meet local regulations and market requirements. All features and specifications are subject to change without prior notice.