TOSHIBA

SMMSu

SUPER MODULAR MULTI SYSTEM



TOSHIBA AIR CONDITIONING



Better Air Solutions

QUALITY RELIABILITY ENVIRONMENT PROFITABILITY SIMPLICITY

USABILITY

UNRIVALLED

SMMS-u

Air Conditioning for large buildings

QUALITY RELIABILITY ENVIRONMENT PROFITABILITY SIMPLICITY

UNIVERSAL



SMMSu
SUPER MODULAR MULTI SYSTEM

TOSHIBA
BUSINESS SOLUTIONS SMMS-u

CREATING BENEFITS AROUND COMFORT

Benefits for the consultant

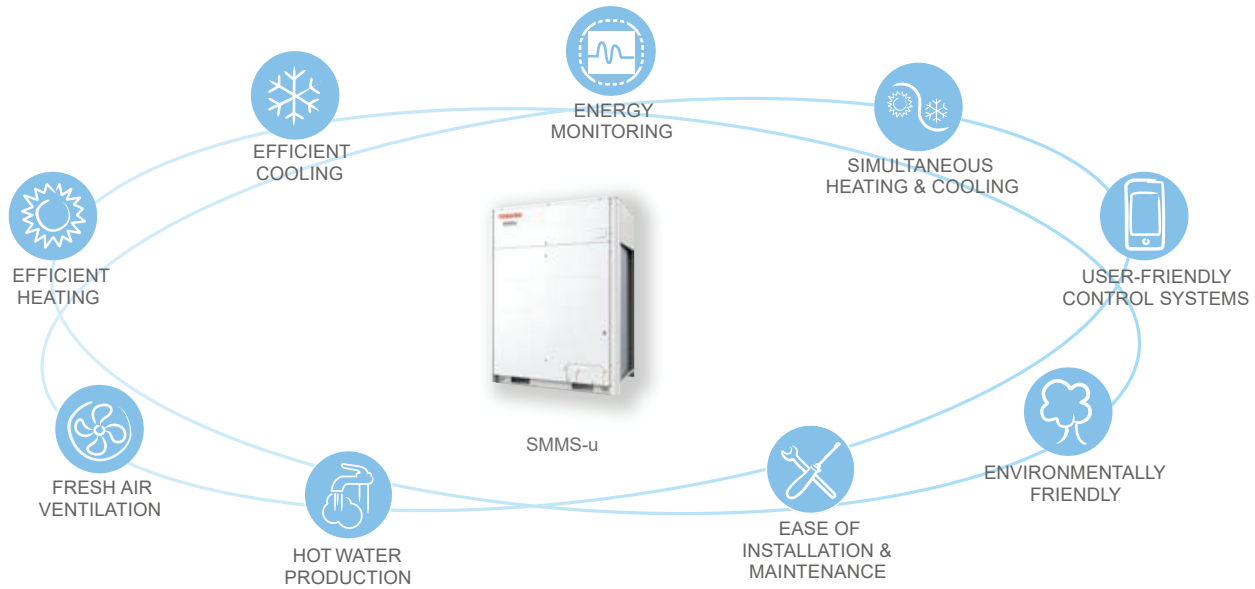
SMMS-u offers unlimited possibilities in terms of capacity, connectivity, indoor unit lineup and control solutions, providing the correct solution for your customers needs. Toshiba's intuitive selection tool will guide you through the selection process with minimal input from your side, ensuring trouble-free installation and operation.

Benefits for the user

There is nothing like a comfortable place to enjoy the present moment. Full of Toshiba innovations, the SMMS-u guarantees all year round comfort combined with superior energy management, advanced air filtration and full control solutions for maximized product usability.

Benefits for the installer

Brand new chassis of SMMS-u realized compact chassis and light weight.
By using benefits of this brand new chassis and technology, installer can enjoy shortening work time by simplified piping work, less additional refrigerant necessary amount and simplified test run setting. Therefore, installer is able to get profit greatly from SMMS-u design.



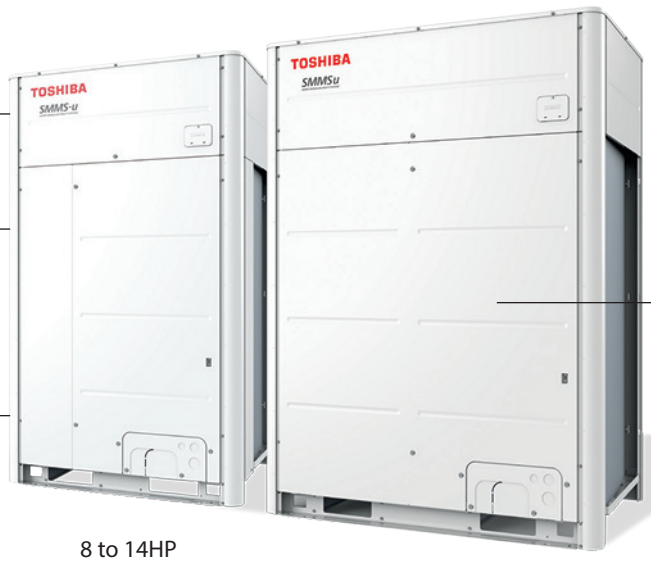
A BRAND NEW CHASSIS

Please take a look at this brand new chassis, which is the perfect mix of dimension, efficiency, capacity & sound level.
Engineered in Japan, SMMS-u integrates all the latest technological innovations from Toshiba to achieve top class efficiency and ensure unrivalled comfort levels.

Up to 24HP single module / 120HP combination

Simplified maintenance: Easy acces to main internal components

Earthquake and typhoon Durability chassis



8 to 14HP

14A to 24HP

Strong static pressure: Up to 80Pa avaiable

Compact chassis: Only 1,690mm height

Super-efficient: Full product height heat exchanger

UNIQUE ON THE MARKET: TRIPLE ROTARY COMPRESSOR

The exclusive Toshiba triple rotary compressor brings outstanding performances to SMMS-u without compromise on system reliability.

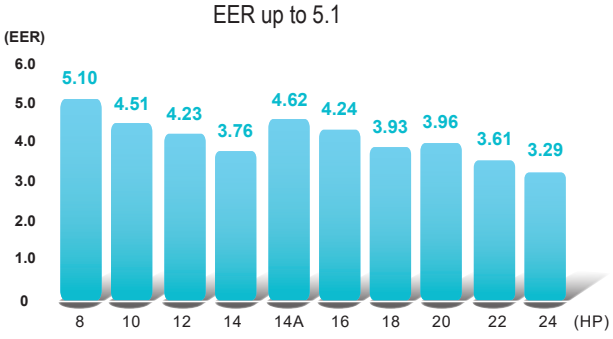


- Large capacity
- Wide operating range
- Low required refrigerant
- Low vibration
- DLC treatment

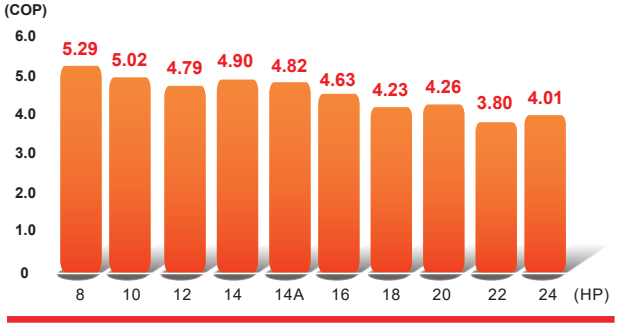
TOP CLASS EFFICIENCY

Utilizing the new highly efficient core technologies results in greater energy efficiency and performances.

EER up to 5.1



COP up to 5.2



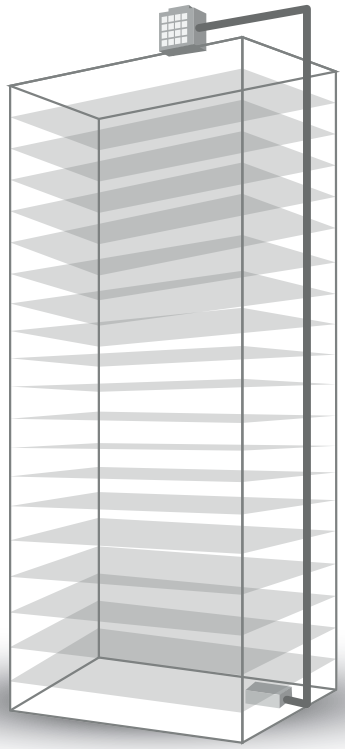
FLEXIBLE CONNECTIVITY

SMMS-u oversteps all the limits of VRF for maximized project coverage. Whatever the piping length, the height difference, the number of indoor units connected and operating… SMMS-u is always delivering the best.

3,000 combinations patterns
Free combination

1,200m max
Long piping length

110m max
High piping lift



Up to 128 indoor units
Large number of indoor units connection

Max 120HP by 5 units connection
Large system capacity

Max 200% connection
High diversity

FLEXIBLE FREE COMBINATION

Unit combination can be arranged to follow installation site requirement.

Total **3000** combination pattern is available

Combinations examples - SMMS-u 44HP
total 36 combinations

Standard (Space-saving)
Capacity Cooling: 123.0 kW
Heating: 132.0 kW
Efficiency Cooling: 3.56
Heating: 4.13
24HP 20HP
Width: **2,600 mm.**

Balance (Space-saving)
Capacity Cooling: 123.0 kW
Heating: 132.0 kW
Efficiency Cooling: 3.75
Heating: 4.43
24HP 10HP 10HP
Width: **3,310 mm.**

Increased heating capacity
Capacity Cooling: 123.0 kW
Heating: **138.0 kW**
Efficiency Cooling: 3.61
Heating: 3.80
22HP 22HP
Width: **2,600 mm.**

Balance (Moderate)
Capacity Cooling: 123.5 kW
Heating: 137.5 kW
Efficiency Cooling: **4.24**
Heating: **4.67**
16HP 16HP 12HP
Width: **3,610 mm.**

Max. Highest efficiency
Capacity Cooling: 123.1 kW
Heating: 137.5 kW
Efficiency Cooling: 4.83
Heating: **5.14**
12HP 8HP 8HP 8HP 8HP
Width: 5,030 mm.

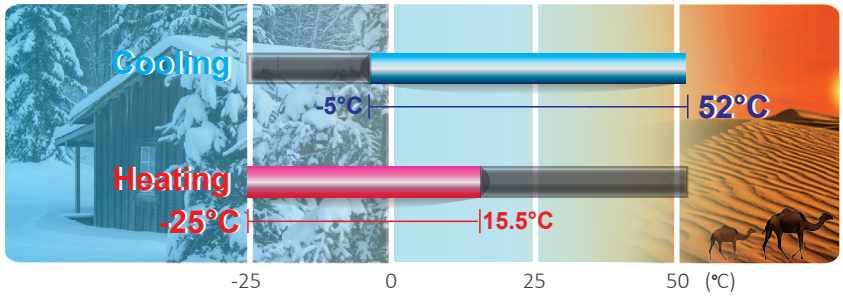
Balance efficiency
Capacity Cooling: 123.0 kW
Heating: 138.0 kW
Efficiency Cooling: **4.35**
Heating: **4.89**
12HP 12HP 10HP 10HP
Width: 4,020 mm.

Note: Outdoor unit still should align from larger to smaller HP

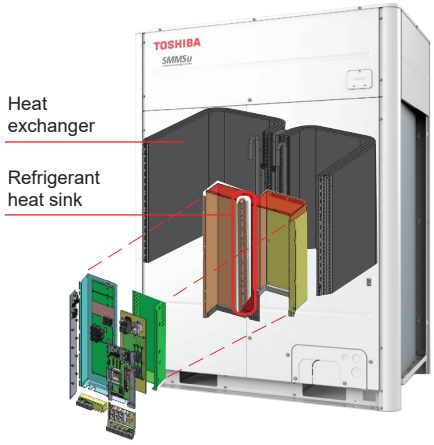
COMFORT ABOVE ALL

Providing end user high level of comfort is SMMS-u priority.
In addition to a wide range of indoor units adapted to any kind of room configuration. Toshiba is offering one of the most accurate refrigerant flow management system.

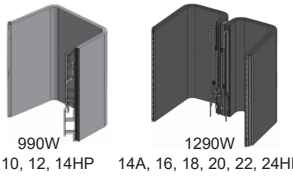
EXPANSION OPERATING TEMPERATURE RANGE

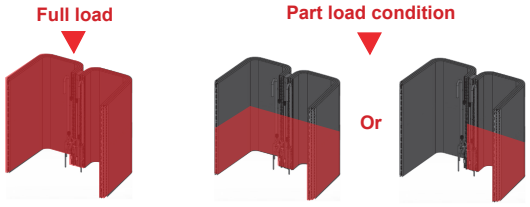


The refrigerant heat sink can bring down temperature of electric parts on inverter.
By using this new function, SMMS-u can operate in high ambient condition such as 52°C.



SMMS-u can select optimal heat exchanger size based on operating mode, outdoor temp and capacity load. By using this function, SMMS-u can realize high efficiency not only full load operation but also part load operation.





STRONG ADAPTABILITY

SMMS-u integrates new features to adapt operations to local constraints with a constant target: the alliance of comfort and energy savings.

Splitted heat exchanger
Heat exchanger usage area automatically varies depending on workload, maximizing energy savings and system reliability.

Demand control
Smart Grid ready with remote or dry contact demand control function.

Autobackup function
Automatic backup in case of combinations systems failure.

Rotation drive
Smart control to automatically equalize compressor operating hours.

Balance oil circuit free
No need to prepare oil balance pipe by new lubrication technology.

MMY-MUP_1HT8(J)P
SMMS-u

NEW



CAPACITY 8 HP ~ 120 HP

OPERATION -25°C ~ +52°C

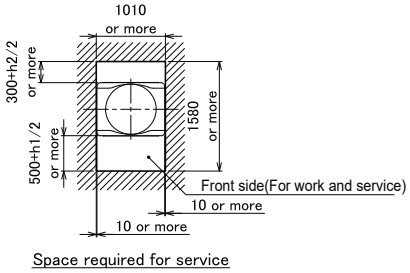
With new chassis, new compressor, new heat exchanger, the SMMS-u,latest generation of Toshiba VRF, is achiving unrivalled efficiency and comfort level.

Performances

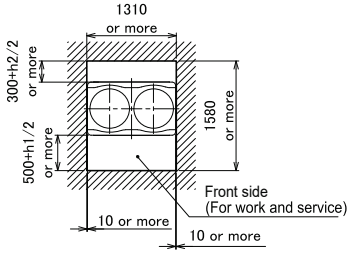
Outdoor unit	MMY-	MUP0801HT8P	MUP1001HT8P	MUP1201HT8P	MUP1401HT8P	MUP14A1HT8P	MUP1601HT8P	MUP1801HT8P	MUP2001HT8P	MUP2201HT8P	MUP2401HT8P
Outdoor unit (Anti-Corrosion)	MMY-	MUP0801HT8JP	MUP1001HT8JP	MUP1201HT8JP	MUP1401HT8JP	MUP14A1HT8JP	MUP1601HT8JP	MUP1801HT8JP	MUP2001HT8JP	MUP2201HT8JP	MUP2401HT8JP
		8 HP	10 HP	12 HP	14 HP	14 HP	16 HP	18 HP	20 HP	22 HP	24 HP
Cooling capacity	kW	**22.4**	**28.0**	**33.5**	**40.0**	**40.0**	**45.0**	**50.4**	**56.0**	**61.5**	**67.0**
Power input	kW C	4.39	6.21	7.92	10.64	8.65	10.61	12.82	14.15	17.04	20.37
EER	kW/kW	5.10	4.51	4.23	3.76	4.62	4.24	3.93	3.96	3.61	3.29
Running current	A C	7.12	9.96	12.3	16.5	13.4	16.3	19.7	21.7	26.2	31.3
Heating capacity	kW	**25.0**	**31.5**	**37.5**	**40.0**	**45.0**	**50.0**	**56.0**	**63.0**	**69.0**	**69.0**
Power input	kW H	4.73	6.28	7.83	8.17	9.34	10.80	13.25	14.78	18.17	17.22
COP	kW/kW	5.29	5.02	4.79	4.90	4.82	4.63	4.23	4.26	3.80	4.01
Running current	A H	7.67	10.1	12.2	12.7	14.5	16.6	20.3	22.7	27.9	26.4
Maximum overcurrent protection	A	20	32	32	40	40	40	50	50	63	80

Outdoor unit	MMY-	MUP0801HT8P	MUP1001HT8P	MUP1201HT8P	MUP1401HT8P	MUP14A1HT8P	MUP1601HT8P	MUP1801HT8P	MUP2001HT8P	MUP2201HT8P	MUP2401HT8P
Outdoor unit (Anti-Corrosion)	MMY-	MUP0801HT8JP	MUP1001HT8JP	MUP1201HT8JP	MUP1401HT8JP	MUP14A1HT8JP	MUP1601HT8JP	MUP1801HT8JP	MUP2001HT8JP	MUP2201HT8JP	MUP2401HT8JP
Air flow	m^3/h	9900	10500	11700	11880	13800	15300	16800	15900	16500	16500
Sound power level	dB(A) C	75.0	77.0	79.0	79.0	81.0	83.0	84.0	86.0	86.0	86.0
Sound pressure level	dB(A) C	53.0	55.0	58.0	58.0	58.0	60.0	61.0	63.0	63.0	63.0
Sound power level	dB(A) H	76.0	77.0	81.0	82.0	83.0	86.0	89.0	90.0	90.0	90.0
Sound pressure level	dB(A) H	56.0	58.0	62.0	62.0	62.0	63.0	67.0	67.0	67.0	67.0
External static pressure available	Pa	80	80	80	80	80	80	80	80	80	80
Dimensions (h x w x d)	mm	1690 x 990 x 780	1690 x 990 x 780	1690 x 990 x 780	1690 x 990 x 780	1690 x 1290 x 780	1690 x 1290 x 780	1690 x 1290 x 780	1690 x 1290 x 780	1690 x 1290 x 780	1690 x 1290 x 780
Weight	kg	228	228	228	228	312	312	312	334	356	356
Compressor type		Hermetic Twin Rotary	Hermetic Twin Rotary	Hermetic Twin Rotary	Hermetic Twin Rotary	Hermetic Triple Rotary	Hermetic Triple Rotary	Hermetic Triple Rotary	Hermetic Triple Rotary	Hermetic Twin Rotary	Hermetic Twin Rotary
Refrigerant charge R410A	kg	6.0	6.0	6.0	6.0	9.0	9.0	9.0	9.0	9.0	9.0
Gas line type - diameter		Brazed - 3/4"	Brazed - 7/8"	Brazed - 1-1/8"	Brazed - 1-1/8"	Brazed - 1-1/8"	Brazed - 1-1/8"	Brazed - 1-1/8"	Brazed - 1-1/8"	Brazed - 1-1/8"	Brazed - 1-3/8"
Liquid line type - diameter		Brazed - 1/2"	Brazed - 1/2"	Brazed - 1/2"	Brazed - 5/8"	Brazed - 5/8"	Brazed - 5/8"	Brazed - 5/8"	Brazed - 5/8"	Brazed - 3/4"	Brazed - 3/4"
Farthest piping equivalent length	m	210	210	210	210	210	210	210	210	210	210
Farthest piping real length	m	190	190	190	190	190	190	190	190	190	190
Maximum total extension of piping length	m	500	500	500	500	500	500	500	500	500	500
Maximum lift (indoor unit above/below)	m	40 / 110	40 / 110	40 / 110	40 / 110	40 / 110	40 / 110	40 / 110	40 / 110	40 / 110	40 / 110
Operating range - DB	°C C	-5/52	-5/52	-5/52	-5/52	-5/52	-5/52	-5/52	-5/52	-5/52	-5/52
Operating range - WB	°C H	-25/15.5	-25/15.5	-25/15.5	-25/15.5	-25/15.5	-25/15.5	-25/15.5	-25/15.5	-25/15.5	-25/15.5
Power supply	V-ph-Hz	400(380/415)-3-50	400(380/415)-3-50	400(380/415)-3-50	400(380/415)-3-50	400(380/415)-3-50	400(380/415)-3-50	400(380/415)-3-50	400(380/415)-3-50	400(380/415)-3-50	400(380/415)-3-50

Installation space



Space required for service



Leave space necessary for running, installation and servicing.
- If there is an obstacle above the outdoor unit, leave a space of 2000 mm or more to the top end of the outdoor unit.
- If there is a wall around the outdoor unit, make sure that its height does not exceed 800 mm.

Capacity table

Capacity		Combination	Model	EER	COP	Max Indoor connectivity	
HP	Cooling / Heating (kW)						
8	22.4 / 25.0	-	MMY-MUP0801HT8(J)P	5.10	5.29	18	
10	28.0 / 31.5	-	MMY-MUP1001HT8(J)P	4.51	5.02	22	
12	33.5 / 37.5	-	MMY-MUP1201HT8(J)P	4.23	4.79	27	
14	40.0 / 40.0	-	MMY-MUP1401HT8(J)P	3.76	4.90	31	
14	40.0 / 45.0	-	MMY-MUP14A1HT8(J)P	4.62	4.82	31	
16	45.0 / 50.0	-	MMY-MUP1601HT8(J)P	4.24	4.63	36	
18	50.4 / 56.0	-	MMY-MUP1801HT8(J)P	3.93	4.23	40	
20	56.0 / 63.0	-	MMY-MUP2001HT8(J)P	3.96	4.26	45	
22	61.5 / 69.0	-	MMY-MUP2201HT8(J)P	3.61	3.80	49	
24	67.0 / 69.0	-	MMY-MUP2401HT8(J)P	3.29	4.01	54	
26	73.5 / 77.5	14 + 12	MMY-UP2611HT8(J)P	3.96	4.84	58	
28	80.0 / 80.0	14 + 14	MMY-UP2811HT8(J)P	3.76	4.90	63	
30	83.9 / 93.5	18 + 12	MMY-UP3011HT8(J)P	4.05	4.44	64	
32	89.5 / 100.5	20 + 12	MMY-UP3211HT8(J)P	4.06	4.44	65	
34	96.0 / 103.0	20 + 14	MMY-UP3411HT8(J)P	3.87	4.49	66	
36	100.5 / 106.5	24 + 12	MMY-UP3611HT8(J)P	3.55	4.25	67	
38	107.0 / 109.0	24 + 14	MMY-UP3811HT8(J)P	3.45	4.29	68	
40	112.0 / 126.0	20 + 20	MMY-UP4011HT8(J)P	3.96	4.26	69	
42	117.4 / 125.0	24 + 18	MMY-UP4211HT8(J)P	3.54	4.10	70	
44	123.0 / 132.0	24 + 20	MMY-UP4411HT8(J)P	3.56	4.13	71	
46	128.5 / 138.0	24 + 22	MMY-UP4611HT8(J)P	3.43	3.90	72	
48	134.0 / 138.0	24 + 24	MMY-UP4811HT8(J)P	3.29	4.01	73	
50	140.5 / 146.5	24 + 14 + 12	MMY-UP5011HT8(J)P	3.61	4.41	74	
52	147.0 / 149.0	24 + 14 + 14	MMY-UP5211HT8(J)P	3.53	4.44	75	
54	152.0 / 166.0	20 + 20 + 14	MMY-UP5411HT8(J)P	3.90	4.40	76	
56	156.5 / 169.5	24 + 20 + 12	MMY-UP5611HT8(J)P	3.69	4.26	77	
58	163.0 / 172.0	24 + 20 + 14	MMY-UP5811HT8(J)P	3.61	4.28	78	
60	167.5 / 175.5	24 + 24 + 12	MMY-UP6011HT8(J)P	3.44	4.15	79	
62	174.0 / 178.0	24 + 24 + 14	MMY-UP6211HT8(J)P	3.39	4.18	80	
64	179.0 / 195.0	24 + 20 + 20	MMY-UP6411HT8(J)P	3.68	4.17	81	
66	184.5 / 201.0	24 + 22 + 20	MMY-UP6611HT8(J)P	3.58	4.01	82	
68	190.0 / 201.0	24 + 24 + 20	MMY-UP6811HT8(J)P	3.46	4.08	83	
70	195.5 / 207.0	24 + 24 + 22	MMY-UP7011HT8(J)P	3.38	3.93	84	
72	201.0 / 207.0	24 + 24 + 24	MMY-UP7211HT8(J)P	3.29	4.01	85	
74	207.5 / 215.5	24 + 24 + 14 +12	MMY-UP7411HT8(J)P	3.50	4.27	86	
76	214.0 / 218.0	24 + 24 + 14 + 14	MMY-UP7611HT8(J)P	3.45	4.29	87	
78	219.0 / 235.0	24 + 20 + 20 + 14	MMY-UP7811HT8(J)P	3.69	4.28	88	
80	223.5 / 238.5	24 + 24 + 20 + 12	MMY-UP8011HT8(J)P	3.56	4.18	90	
82	230.0 / 241.0	24 + 24 + 20 + 14	MMY-UP8211HT8(J)P	3.51	4.20	92	
84	234.5 / 244.5	24 + 24 + 24 + 12	MMY-UP8411HT8(J)P	3.40	4.11	94	
86	241.0 / 247.0	24 + 24 + 24 + 14	MMY-UP8611HT8(J)P	3.36	4.13	96	
88	246.0 / 264.0	24 + 24 + 20 + 20	MMY-UP8811HT8(J)P	3.56	4.13	98	
90	251.5 / 270.0	24 + 24 + 22 + 20	MMY-UP9011HT8(J)P	3.50	4.01	100	
92	257.0 / 270.0	24 + 24 + 24 + 20	MMY-UP9211HT8(J)P	3.41	4.06	102	
94	262.5 / 276.0	24 + 24 + 24 + 22	MMY-UP9411HT8(J)P	3.36	3.95	104	
96	268.0 / 276.0	24 + 24 + 24 + 24	MMY-UP9611HT8(J)P	3.29	4.01	106	
98	274.5 / 284.5	24 + 24 + 24 + 14 +12	MMY-UP9811HT8(J)P	3.45	4.20	108	
100	281.0 / 287.0	24 + 24 + 24 + 14 + 14	MMY-UP10011HT8(J)P	3.41	4.22	110	
102	286.0 / 304.0	24 + 24 + 20 + 20 + 14	MMY-UP10211HT8(J)P	3.59	4.21	112	
104	290.5 / 307.5	24 + 24 + 24 + 20 + 12	MMY-UP10411HT8(J)P	3.49	4.14	114	
106	297.0 / 310.0	24 + 24 + 24 + 20 + 14	MMY-UP10611HT8(J)P	3.46	4.15	116	
108	301.5 / 313.5	24 + 24 + 24 + 24 + 12	MMY-UP10811HT8(J)P	3.37	4.09	118	
110	308.0 / 316.0	24 + 24 + 24 + 24 + 14	MMY-UP11011HT8(J)P	3.34	4.10	120	
112	313.0 / 333.0	24 + 24 + 24 + 20 + 20	MMY-UP11211HT8(J)P	3.50	4.10	122	
114	318.5 / 339.0	24 + 24 + 24 + 22 + 20	MMY-UP11411HT8(J)P	3.45	4.01	124	
116	324.0 / 339.0	24 + 24 + 24 + 24 + 20	MMY-UP11611HT8(J)P	3.39	4.05	126	
118	329.5 / 345.0	24 + 24 + 24 + 24 + 22	MMY-UP11811HT8(J)P	3.34	3.96	128	
120	335.0 / 345.0	24 + 24 + 24 + 24 + 24	MMY-UP12011HT8(J)P	3.29	4.01	128	

MMY-MUP_1HT8(J)P
SMMS-u



Piping rules

			Allowable value	Piping section
Piping lenght	"Total extension of pipe (Liquide pipe, real lenght)"	Single ODU	500m	LA+LB+LC+La+Lb+Lc+Ld+Le+L1+L2+L3 +L4+L5+L6+L7+a+b+c+d+e+f+g+h+i+j
		Combination ODU	1200m (*6)	
	Fathest piping lenght (*1)	Equivalent lenght	250m	LA+LB+LC+Le+L1+L3+L4+L5+L6+j
		Real lenght	210m	
	Equivalent lenght of farthest piping form 1st branching (*1)		90m (*2)	L3 + L4 + L5 + L6 + j
	Equivalent lenght of farthest piping between outdoor units		40m	LA+LB+LC+Le(LA+LB+LC+Ld)
	Max. equivalent lenght of main piping	Equivalent lenght	120m (*3)	L1
		Real lenght	100m (*3)	
	Max. equivalent lenght of outdoor unit connecting piping		10m	Le(La, Lb, Lc, Ld)
	Max. real lenght of indoor unit connecting piping		30m	a, b, c, d, e, f, g, h, i, j
	Max. equivalent lenght between branches		50m	L2, L3, L4, L5, L6, L7
Difference in height	Height between indoor and outdoor units	Upper outdoor unit	70m (*4)(*7)	-
		Lower outdoor unit	40m (*5)(*8)	-
	Height between indoor units		50m (*9)	-
	Height between outdoor units		5m	-

(*1) : (e) is outdoor unit furthest from the 1st branch and (j) is the indoor unit furthest from the 1st branch.
(*2) : If the height difference (H1) between indoor and outdoor unit exceeds 3 m, set 65m or less.
(*3) : If the max. combined outdoor unit capacity is 54HP or more, then max. equivalent length is 70 m or less (real length is 50 m or less).
(*4) : If the height difference (H2) between indoor units exceeds 3 m, set 50 m or less.
(*5) : If the height difference (H2) between indoor units exceeds 3 m, set 30 m or less.
(*6) : Total charging refrigerant is 140kg or less.

(*7) : Extension up till 110m is possible with conditions below:
- Single outdoor unit system
- Connected ratio of indoor units to outdoor units is below 105%
- Liquid side is been increased 1 size from the standard size

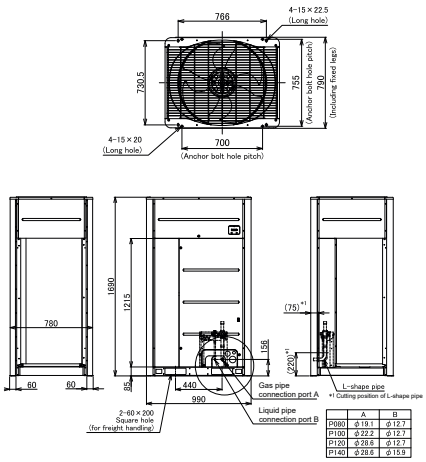
(*8) : Extension up till 110m is possible with conditions below :
- Multiple outdoor unit system
- Connected ratio of indoor units to outdoor units is below 105%
- Minimum capacity of connecting indoor unit is more than 3HP

(*9) : If the connected ratio of indoor units to outdoor units is more than 105%, set 15 m.

Drawings

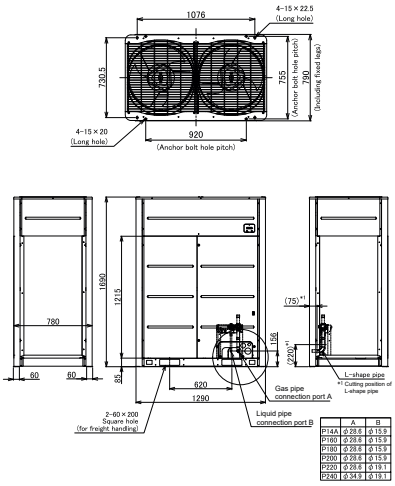
Unit : mm

MMY-MUP0801HT8(J)P, MMY-MUP1001HT8(J)P, MMY-MUP1201HT8(J)P, MMY-MUP1401HT8(J)P



	A	B
P080	ϕ19.1	ϕ12.7
P100	ϕ22.2	ϕ12.7
P120	ϕ28.6	ϕ12.7
P140	ϕ28.6	ϕ15.9

MMY-MUP14A1HT8(J)P, MMY-MUP1601HT8(J)P, MMY-MUP1801HT8(J)P, MMY-MUP2001HT8(J)P, MMY-MUP2201HT8(J)P, MMY-MUP2401HT8(J)P



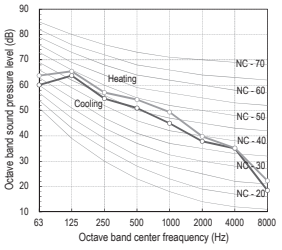
	A	B
P14A	ϕ28.6	ϕ15.9
P160	ϕ28.6	ϕ15.9
P180	ϕ28.6	ϕ15.9
P200	ϕ28.6	ϕ15.9
P220	ϕ28.6	ϕ19.1
P240	ϕ34.9	ϕ19.1

Sound pressure levels

Unit : dB(A)

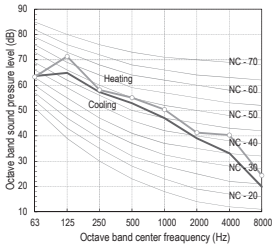
MMY-MUP0801HT8(J)P

Sound pressure Level (dB(A))	Cooling	Heating
	53.0	56.0



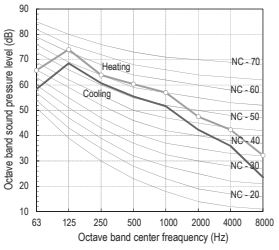
MMY-MUP1001HT8(J)P

Sound pressure Level (dB(A))	Cooling	Heating
	55.0	58.0



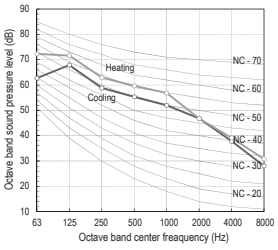
MMY-MUP1201HT8(J)P

Sound pressure Level (dB(A))	Cooling	Heating
	58.0	62.0



MMY-MUP1401HT8(J)P

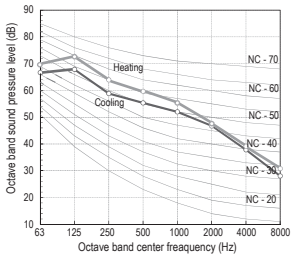
Sound pressure Level (dB(A))	Cooling	Heating
	58.0	62.0



Sound pressure levels

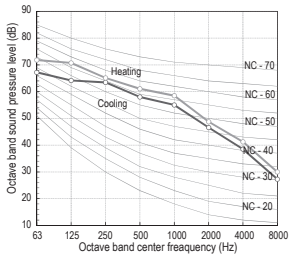
MMY-MUP14A1HT8(J)P

Sound pressure Level (dB(A))	Cooling	Heating
	58.0	62.0



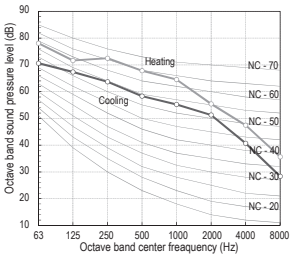
MMY-MUP1601HT8(J)P

Sound pressure Level (dB(A))	Cooling	Heating
	60.0	63.0



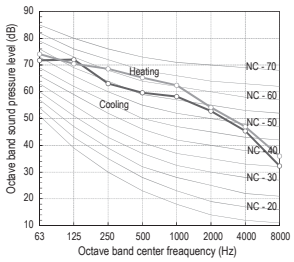
MMY-MUP1801HT8(J)P

Sound pressure Level (dB(A))	Cooling	Heating
	61.0	67.0



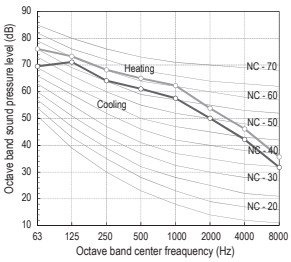
MMY-MUP2001HT8(J)P

Sound pressure Level (dB(A))	Cooling	Heating
	63.0	67.0



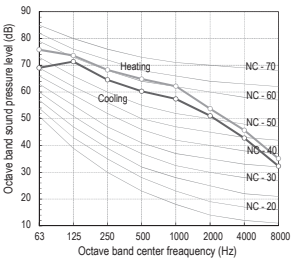
MMY-MUP2201HT8(J)P

Sound pressure Level (dB(A))	Cooling	Heating
	63.0	67.0



MMY-MUP2401HT8(J)P

Sound pressure Level (dB(A))	Cooling	Heating
	63.0	67.0



Night mode sound pressure levels

Sound reduction and approximation capacity (reference)

Type	"Night operation sound reduction dB (A)"	Capacity	
		Cooling	Heating
801	50	85%	80%
1001	50	70%	65%
1201	50	60%	55%
1401	50	60%	55%
14A1	53	70%	65%
1601	53	70%	70%
1801	54	65%	65%
2001	54	60%	60%
2201	54	55%	55%
2401	54	55%	55%

Condition: Cooling: (Indoor 27°DB, 19°WB) - (Outdoor temperature 25°DB)
Heating: (Indoor 20°DB) - (Outdoor temperature 7°DB, 6°WB)

	Name	Model name	Capacity	Appearance	Remarks
Branching joints and headers	Y-shape branching joint	RBM-BY55E	under 6.4HP		
		RBM-BY105E	from 6.4 to 14.2HP		
		RBM-BY205E	from 14.2 to 25.2HP		
		RBM-BY305E	from 25.2 to 61.2HP		
		RBM-BY405E	61.2HP or more		
	4-branching header	RBM-HY1043E	under 14.2HP		
		RBM-HY2043E	from 14.2 to 25.2HP		
	8-branching header	RBM-HY1083E	under 14.2HP		
		RBM-HY2083E	from 14.2 to 25.2HP		
	Branching joint for connection of outdoor units	RBM-BT14E	under 26HP		
		RBM-BT24E	from 26HP to 62HP		
		RBM-BT34E	62HP or more		
Optionnal PCB of outoor unit	Power peak-cut control board	TCB-PCDM4E			Limit capacity of the VRF outdoor unit at 85%, 75%, 70% or 60% load or stop it. Dry contact
	External master ON/OFF control board	TCB-PCMO4E			Dry contact
	Output control board	TCB-PCIN4E			Operation output : The operation indicator is on while any indoor unit in the system is operating. Error output : The error indicator is on when an error is occurred on even one of the indoor or outdoor units in the system. Dry contact

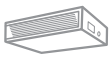
WIDE CHOICE INDOOR UNITS

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

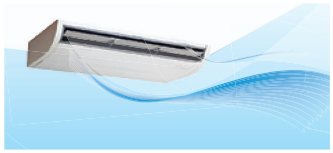

1-WAY CASSETTE


FRESH AIR SOLUTIONS

SUPERIOR AIR COMFORT

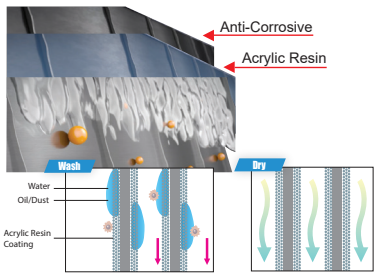
Cool comfort with soft cooling mode

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



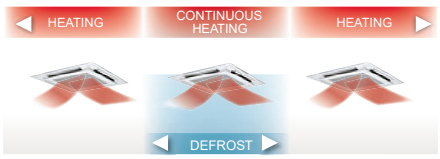
Special coated for FCU heat exchanger

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 allow continuous heating, even during external defrost operations, thanks to the Kobetsu and Renkei function 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 drastically the indoor unit power consumption.

No compromise on air quality

Every 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

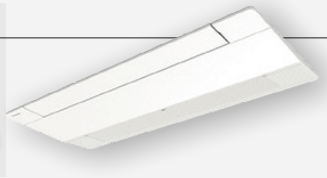
CHOOSE YOUR ADAPTED SYSTEM SOLUTION

2021 NEW indoor units



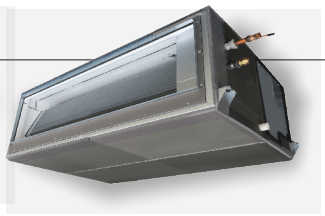
Smart Cassette

High performance
Smart operation



1-Way Cassette

Compact chassis
Smart operation
Advanced filtration



Fresh Air Intake Duct

Light and compact chassis
Wide air flow range



High Wall

Expanding capacity up to 4HP
Big air flow volume
Low noise

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
Smart 4-way Cassette MMU-UP_1H-E																			
4-way Cassette MMU-UP_1HP-E																			
Compact 4-way Cassette MMU-UP_1MH-E																			
2-way Cassette MMU-UP_1WH-E																			
1-way Cassette MMU-UP_1YHP-E																			
1-way Cassette MMU-UP_1SH-E																			
Slim Duct MMD-UP_1SPHY-E																			
Concealed Duct MMD-UP_1BHP-E																			
HSP Concealed Duct MMD-UP_1HP-E																			
Fresh Air Intake Duct MMD-UP_1HFP-E																			
Ceiling MMC-UP_1HP-E																			
High Wall MMK-UP_1HP-E																			
Console MML-UP_1NHP-E																			
Floor Standing Concealed MML-UP_1BH-E																			
Floor Standing Cabinet MML-UP_1H-E																			
Floor Standing MMF-UP_1H-E																			
Large Capacity Floor Standing *1 MMF-AP_5(D)HP-VA/VB																			
Dx-coil controller & Dx-valve kit TCB-IFD_1E & RBM-A_1VAE																			

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										

New chassis

*1: Because these models can support only old communication protocol, please communicate with local distributor if you want to connect these indoor units.

MMU-UP_1H-E
SMART 4-WAY CASSETTE



New high efficiency 4-Way Cassette, simple and elegant design fits various rooms. Also unique flap style for optimal air distribution.

CAPACITY

1 HP ~ 6 HP

SOUND PRESSURE LEVEL

26 dB(A)

LOCAL CONTROLS



RBC-AXU41U-E



RBC-ASCU11-E
RBC-AMTU31-E
RBC-AMSU51-EN/ES

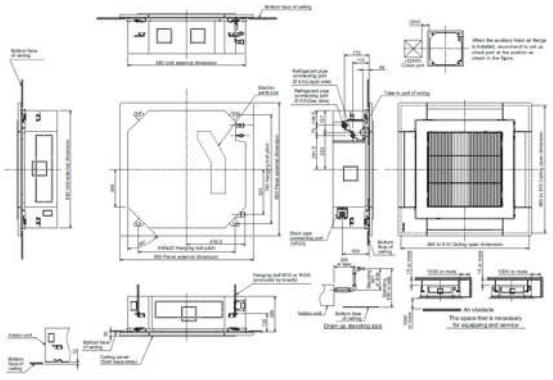
Features

Model name		MMU-	UP0091H-E	UP0121H-E	UP0151H-E	UP0181H-E	UP0241H-E	UP0271H-E	UP0301H-E	UP0361H-E	UP0481H-E	UP0561H-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/60Hz)	A	0.17/0.18		0.19/0.20	0.25/0.26	0.36/0.38	0.46/0.48	0.57/0.60	0.90/0.94	0.92/0.96	0.93/0.97
	Power consumption (50Hz/60Hz)	kW	0.020/0.020		0.018/0.018	0.026/0.026	0.042/0.042	0.054/0.054	0.068/0.068	0.125/0.125	0.135/0.135	0.137/0.137
	Starting current (50Hz/60Hz)	A	0.26/0.27		0.29/0.30	0.37/0.39	0.55/0.57	0.69/0.72	0.86/0.90	1.35/1.41	1.38/1.44	1.40/1.46
Appearance	Main unit		Heat-insulating material attached - Zinc hot dipping steel plate									
	Ceiling panel name		RBC-U41PG(W)-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		25							
	Ceiling panel	kg	5									
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	846/768/708		1060/ 920/800	1260/ 1100/940	1580/ 1300/1120	1770/ 1380/1250	1940/ 1520/1400	2184/ 1596/1260	2262/ 1740/1368	2262/ 1782/1404
	Motor output	W	60		130							
Sound pressure level (H/M/L)		dB(A)	30/28/26		32/30/28	36/33/31	41/37/35	42/37/35	44/39/37	45/38/32	46/39/33	46/40/35
Sound power level		dB(A)	45		46	50	55	56	58	60	61	61
Air filter			Standard filter supplied (Long life filter)									
Controller (Optional)			Wired or infrared remote controller									
Conecting pipe	Gas side	mm	9.5	9.5	12.7	12.7	15.9	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	9.5
	Drain port (nominal dia)	mm	25 (Polyvinyl chloride tube)									

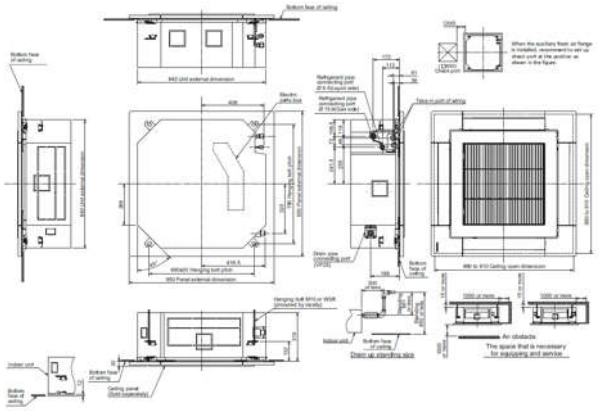
Drawings

Unit : mm

MMU-UP0091H-E to MMU-UP0121H-E



MMU-UP0151H-E to MMU-UP0561H-E

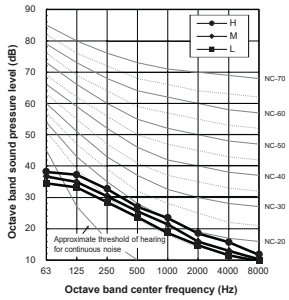


Sound pressure levels

Unit : dB(A)

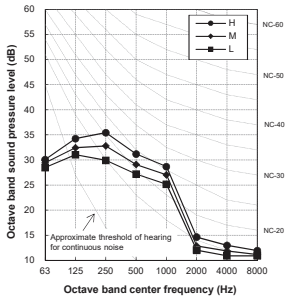
MMU-UP0091, 0121H-E

Fan tap	H	M	L
Sound pressure level (dB(A))	30	28	26



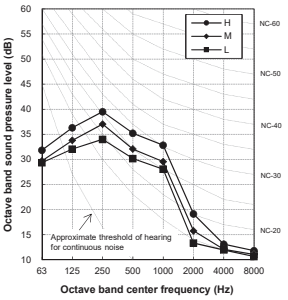
MMU-UP0151H-E

Fan tap	H	M	L
Sound pressure level (dB(A))	33	31	29



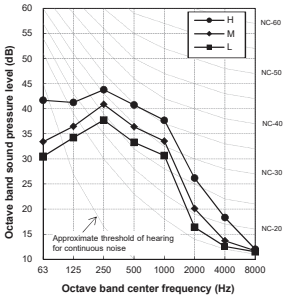
MMU-UP0181H-E

Fan tap	H	M	L
Sound pressure level (dB(A))	37	34	32



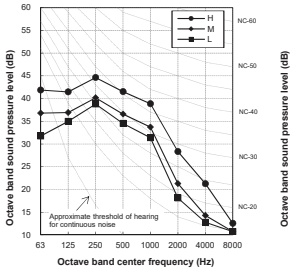
MMU-UP00241H-E

Fan tap	H	M	L
Sound pressure level (dB(A))	42	38	35



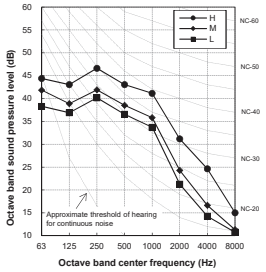
MMU-UP0271H-E

Fan tap	H	M	L
Sound pressure level (dB(A))	43	38	36



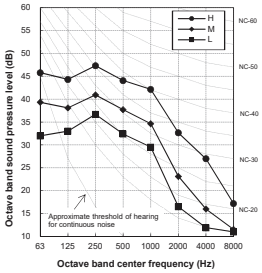
MMU-UP0301H-E

Fan tap	H	M	L
Sound pressure level (dB(A))	46	40	38



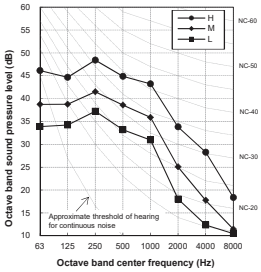
MMU-UP0361H-E

Fan tap	H	M	L
Sound pressure level (dB(A))	46	39	34



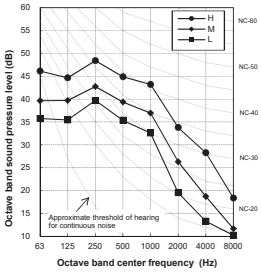
MMU-UP00481H-E

Fan tap	H	M	L
Sound pressure level (dB(A))	47	40	35



MMU-UP00561H-E

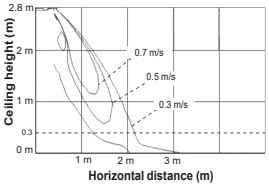
Fan tap	H	M	L
Sound pressure level (dB(A))	47	41	37



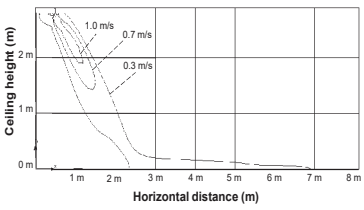
Air diffusion

Unit : m/s

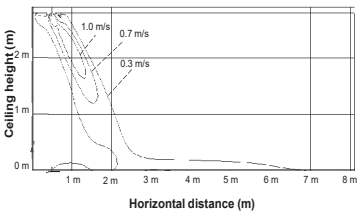
MMU-UP0091, 0121H-E



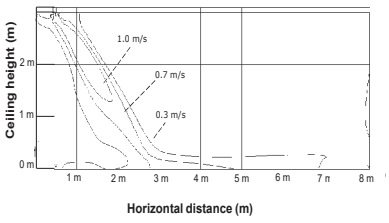
MMU-UP0151H-E



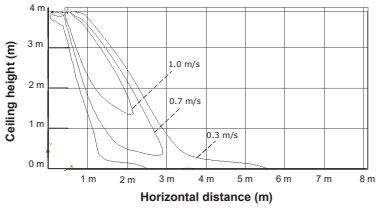
MMU-UP0181H-E



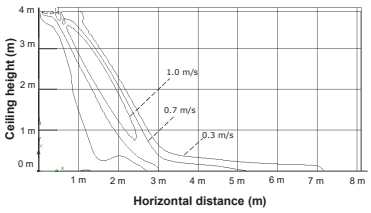
MMU-UP00241H-E



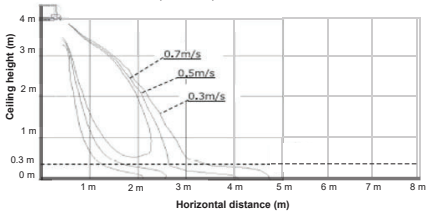
MMU-UP0271H-E



MMU-UP0301H-E



MMU-UP0361, 0481, 0561H-E



Accessories

No.	Part name	Model name	Remarks
1	Occupancy sensor	TCB-SIR41U-E	
2	Fresh air and filter chamber	TCB-GFC1603UE	
3	Spacer for height adjustment	TCB-SP1603UE	
4	Air discharge direction kit	TCB-BC1603UE	

Smart 4-way cassette connectors

• : Available

CN32	CN60	CN61	CN70	CN73	CN80
Additional ventilation control from remote control	Operation status signal output (Cooling, heating, fan, defrost, thermo-on)	External On/Off, operation output and alarm output	Warning symbol on remote control based on signal input.o off.	Forced IDU thermo-off based on signal input	Forced IDU thermo-off and IDU lock based on signal input
•	•	•	•	•	•

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-ASCU11-E
RBC-AMTU31-E
RBC-AMSU51-EN/ES

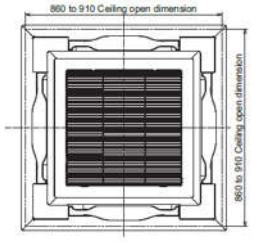
Features

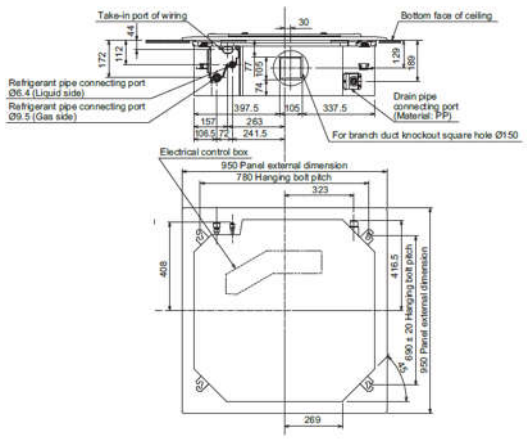
Model name		MMU-	UP0091HP-E	UP0121HP-E	UP0151HP-E	UP0181HP-E	UP0241HP-E	UP0271HP-E	UP0301HP-E	UP0361HP-E	UP0481HP-E	UP0561HP-E
Cooling code		HP	1.0	1.25	1.7	2.0	2.5	3.0	3.2	4.0	5.0	6.0
Cooling capacity		kW	2.8	3.6	4.5	5.6	7.1	8.0	9.0	11.2	14.0	16.0
Heating capacity		kW	3.2	4.0	5.0	6.3	8.0	9.0	10.0	12.5	16.0	18.0
Electrical characteristics	Power supply		1-phase 230V (220-240V) 50Hz / 1-phase 220V (208-230V) 60Hz									
	Running current (50Hz/60Hz)	A	0.23/0.24		0.28/0.29	0.29/0.30	0.38/0.40	0.38/0.39	0.43/0.45	0.73/0.76	0.88/0.92	
	Power consumption (50Hz/60Hz)	kW	0.021/0.021		0.023/0.023	0.026/0.026	0.036/0.036		0.043/0.043	0.088/0.088	0.112/0.112	
	Starting current (50Hz/60Hz)	A	0.30/0.30		0.33/0.33	0.36/0.36	0.42/0.42		0.59/0.59	0.87/0.87	1.23/1.23	1.26/1.26
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
Sound power level		dB(A)	45		46	47	50		53	58	61	61
Air filter			Standard filter supplied (Long life filter)									
Controller (Optional)			Wired or infrared remote controller									
Conecting pipe	Gas side	mm	9.5	9.5	12.7	12.7	15.9	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	9.5
	Drain port (nominal dia)	mm	25 (Polyvinyl chloride tube)									

Drawings

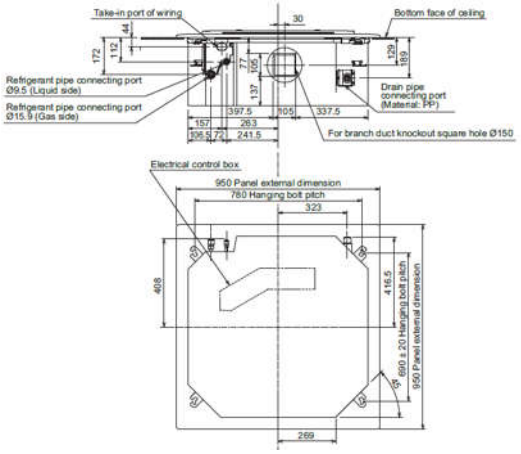
Unit : mm

MMU-UP0091HP-E to MMU-UP0301HP-E





MMU-UP0361HP-E to MMU-UP0561HP-E

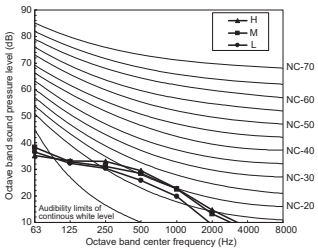


Sound pressure levels

Unit : dB(A)

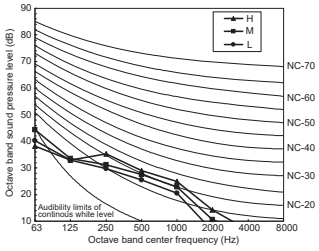
MMU-UP0091HP-E, MMU-UP0121HP-E

Sound pressure level(dB)(A)	H-M-L
	30-29-27



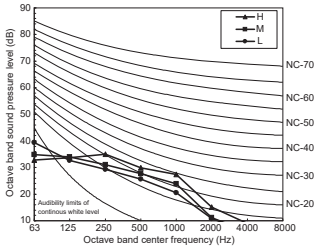
MMU-UP0151HP-E

Sound pressure level(dB)(A)	H-M-L
	31-29-27



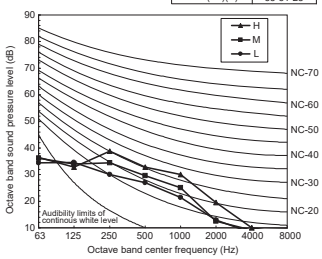
MMU-UP0181HP-E

Sound pressure level(dB)(A)	H-M-L
	32-29-27



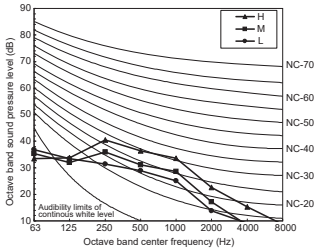
MMU-UP0241HP-E, UP0271HP-E

Sound pressure level(dB)(A)	H-M-L
	35-31-28



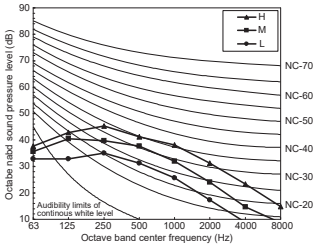
MMU-UP0301HP-E

Sound pressure level(dB)(A)	H-M-L
	38-33-30



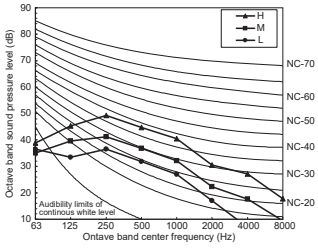
MMU-UP03061HP-E

Sound pressure level(dB)(A)	H-M-L
	43-38-32



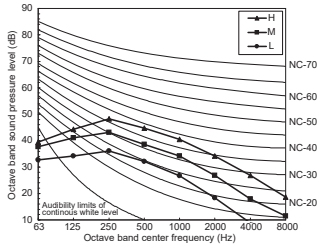
MMU-UP0481HP-E

Sound pressure level(dB)(A)	H-M-L
	46-38-33



MMU-UP0561HP-E

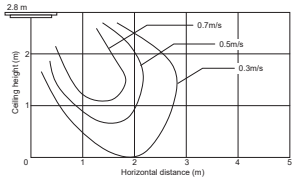
Sound pressure level(dB)(A)	H-M-L
	46-40-33



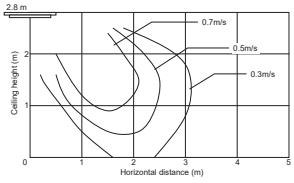
Air diffusion

Unit : m/s

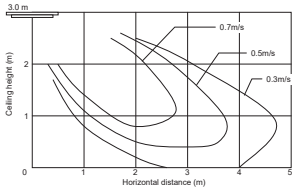
MMU-UP0091HP-E, MMU-UP0121HP-E



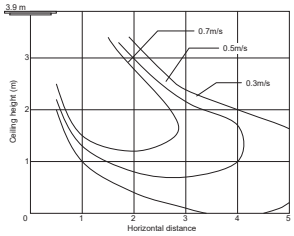
MMU-UP0151HP-E, MMU-UP0181HP-E



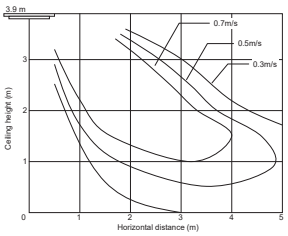
MMU-UP0241HP-E, MMU-UP0271HP-E, MMU-UP0301HP-E



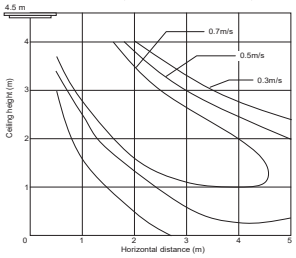
MMU-UP0361HP-E



MMU-UP0481HP-E, MMU-UP0561HP-E

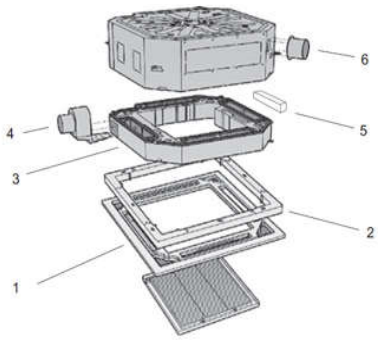


MMU-UP0361HP-E, MMU-UP0481HP-E, MMU-UP0561HP-E (High ceiling 3)



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%



4-way cassette connectors

• : Available

CN32	CN60	CN61	CN70	CN73	CN80
Additional ventilation control from remote control	Operation status signal output (Cooling, heating, fan, defrost, thermo-on)	External On/Off, operation output and alarm output	Warning symbol on remote control based on signal input.o off.	Forced IDU thermo-off based on signal input	Forced IDU thermo-off and IDU lock based on signal input
•	•	•	•	•	•

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-ASCU11-E
RBC-AMTU31-E
RBC-AMSU51-EN/ES

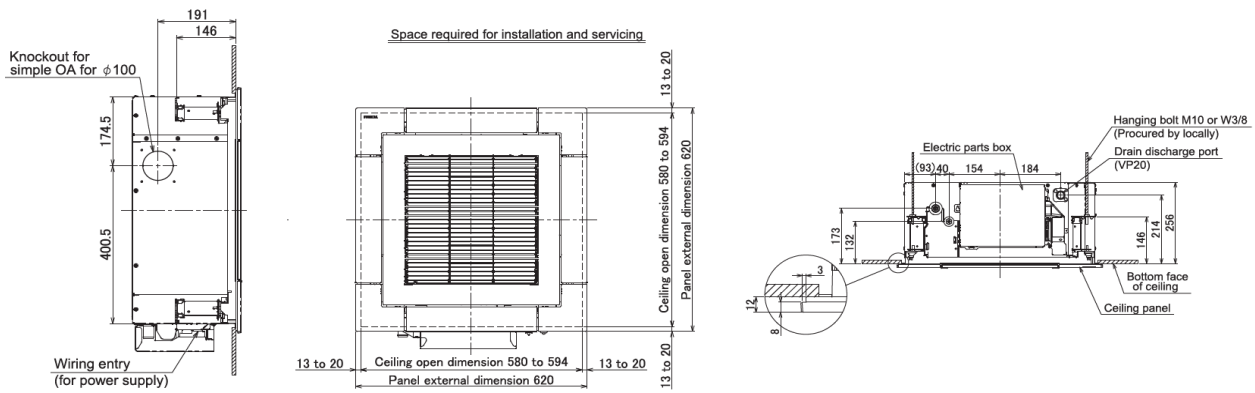
Features

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/60Hz)	A	0.23/0.23	0.24/0.24	0.25/0.25	0.28/0.26	0.46/0.46
	Power consumption (50Hz/60Hz)	kW	0.023/0.023	0.025/0.025	0.027/0.027	0.030/0.030	0.052/0.052
	Starting current (50Hz/60Hz)	A	0.41/0.41	0.43/0.43	0.44/0.44	0.50/0.47	0.80/0.81
Appearance	Main unit		Zinc hot dipping steel plate (Heat-insulating material attached to only 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)	m^3/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
Sound power level		dB(A)	52	53	53	55	62
Air filter			Standard filter supplied (Long life filter)				
Controller (Optional)			Wired or infrared remote controller				
Conecting 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 model

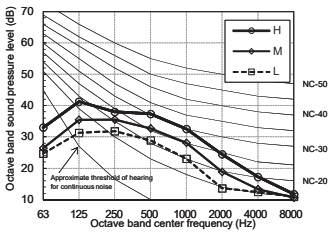


Sound pressure levels

Unit : dB(A)

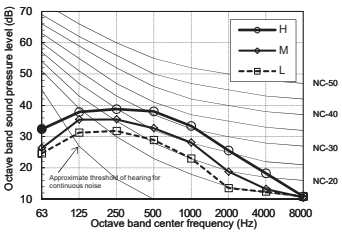
MMU-UP0071MH-E

Fan tap	H	M	L
Sound pressure level (dB(A))	37	33	29



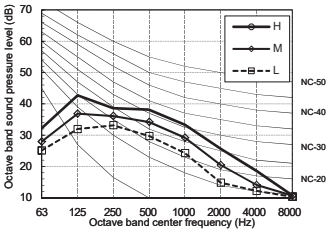
MMU-UP0091MH-E

Fan tap	H	M	L
Sound pressure level (dB(A))	38	33	29



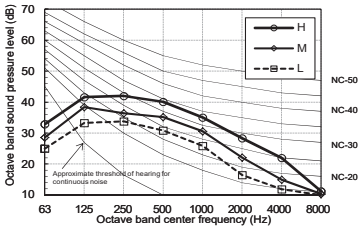
MMU-UP0121MH-E

Fan tap	H	M	L
Sound pressure level (dB(A))	38	34	30



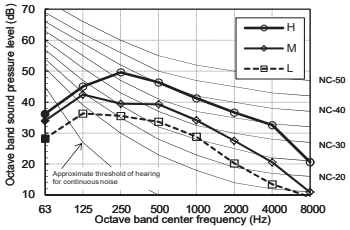
MMU-UP0151MH-E

Fan tap	H	M	L
Sound pressure level (dB(A))	40	35	31



MMU-UP0181MH-E

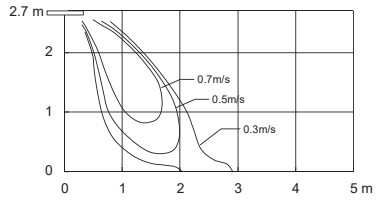
Fan tap	H	M	L
Sound pressure level (dB(A))	47	39	34



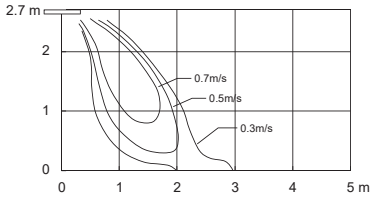
Air diffusion

Unit : m/s

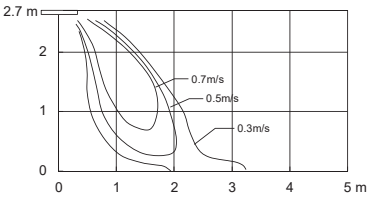
MMU-UP0071MH-E



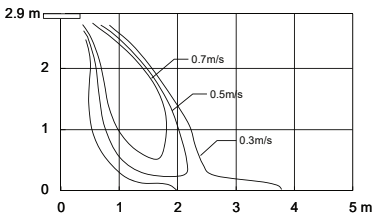
MMU-UP0091MH-E



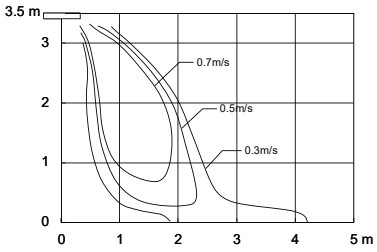
MMU-UP0121MH-E



MMU-UP0151MH-E

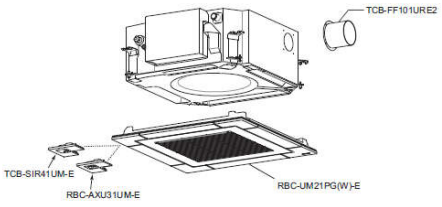


MMU-UP0181MH-E



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		



Compact 4-way cassette connectors

• : Available

CN32	CN60	CN61	CN70	CN73	CN80
Additional ventilation control from remote control	Operation status signal output (Cooling, heating, fan, defrost, thermo-on)	External On/Off, operation output and alarm output	Warning symbol on remote control based on signal input.o off.	Forced IDU thermo-off based on signal input	Forced IDU thermo-off and IDU lock based on signal input
•	TCB-PCUC2E pcb needed	•	TCB-PCUC2E pcb needed	TCB-PCUC2E pcb needed	TCB-PCUC2E pcb needed

MMU-UP_1WH-E
2-WAY CASSETTE



Slim, compact and lightweight, the 2-Way Cassette has been designed to fit easily and discreetely 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-ASCU11-E
RBC-AMTU31-E
RBC-AMSU51-EN/ES

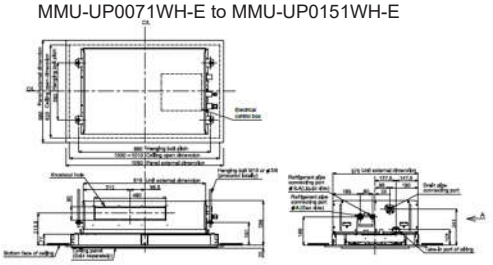
Features

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/60Hz)	A	0.21/0.22			0.21/0.22	0.28/0.29	0.37/0.39		0.43/0.46	0.50/0.53	0.57/0.59	0.77/0.81
	Power consumption (50Hz/60Hz)	kW	0.024/0.024			0.026/0.026	0.034/0.034	0.045/0.045		0.055/0.055	0.081/0.081	0.091/0.091	0.131/0.131
	Starting current (50Hz/60Hz)	A	0.31/0.32			0.33/0.35	0.42/0.44	0.57/0.60		0.65/0.68	0.76/0.79	0.85/0.89	1.17/1.22
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					Centrifugai fan					
	Standard air flow (H/M/L)	m^3/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
Sound power level		dB(A)	49			50		53		55	57	58	61
Air filter			Standard filter supplied (Long life filter)										
Controller (Optional)			Wired or infrared remote controller										
Conecting pipe	Gas side	mm	9.5	9.5	9.5	12.7	12.7	15.9	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	9.5
	Drain port (nominal dia)	mm	25 (Polyvinyl chloride tube)										

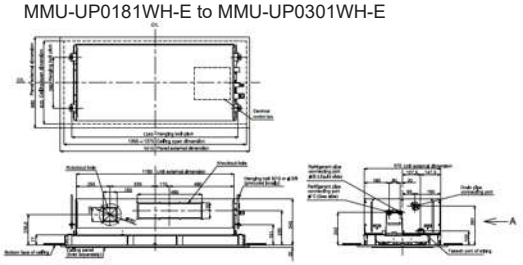
Drawings

Unit : mm

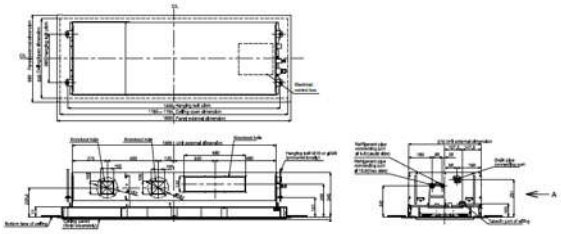
MMU-UP0071WH-E to MMU-UP0151WH-E



MMU-UP0181WH-E to MMU-UP0301WH-E



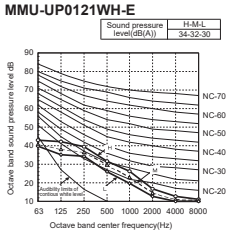
MMU-UP0361WH-E to MMU-UP0561WH-E



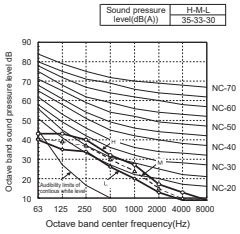
Sound pressure levels

Unit : dB(A)

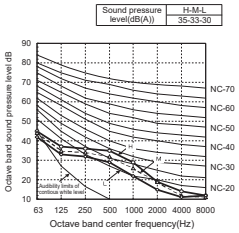
MMU-UP0071WH-E, MMU-UP0091WH-E, MMU-UP0121WH-E



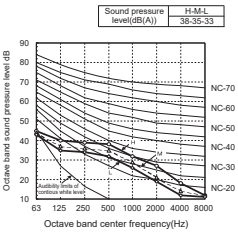
MMU-UP0151WH-E



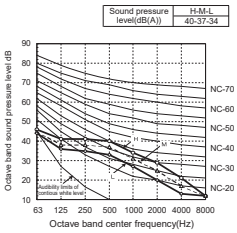
MMU-UP0181WH-E



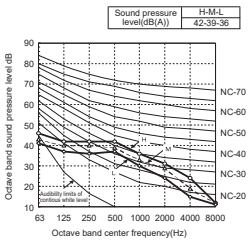
MMU-UP0241WH-E, MMU-UP0271WH-E



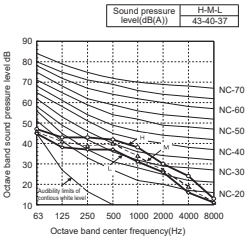
MMU-UP0301WH-E



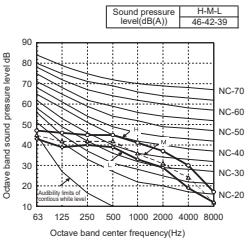
MMU-UP0361WH-E



MMU-UP0481WH-E



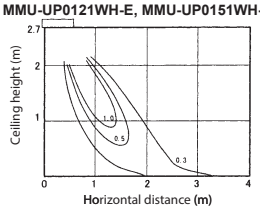
MMU-UP0561WH-E



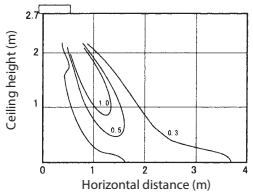
Air diffusion

Unit : m/s

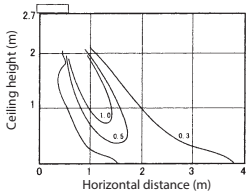
MMU-UP0071WH-E, MMU-UP0091WH-E, MMU-UP0121WH-E, MMU-UP0151WH-E



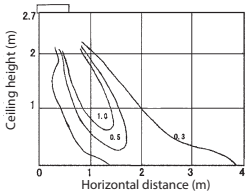
MMU-UP0181WH-E



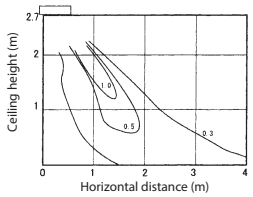
MMU-UP0241WH-E, MMU-UP0271WH-E



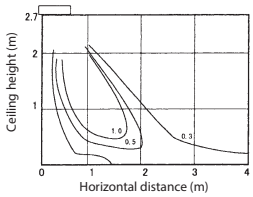
MMU-UP0301WH-E



MMU-UP0361WH-E, MMU-UP0481WH-E

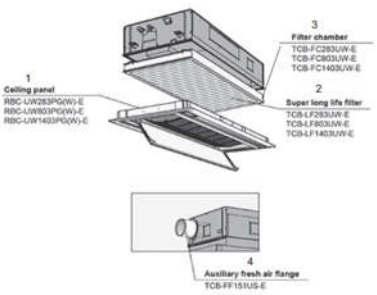


MMU-UP0561WH-E



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 inddor unit.	



2-way cassette connectors

• : Available

CN32	CN60	CN61	CN70	CN73	CN80
Additional ventilation control from remote control	Operation status signal output (Cooling, heating, fan, defrost, thermo-on)	External On/Off, operation output and alarm output	Warning symbol on remote control based on signal input.o off.	Forced IDU thermo-off based on signal input	Forced IDU thermo-off and IDU lock based on signal input
•	•	•	•	•	•

MMU-UP_1YHP-E/SH-E
1-WAY CASSETTE

NEW



Toshiba's innovative slim-line 1-Way Cassette is simple to install and suitable for small areas, such as hotels, offices and reception rooms.

CAPACITY

0.8 HP ~ 2.5 HP

SOUND PRESSURE LEVEL

25 dB(A)

LOCAL CONTROLS



RBC-AX33UYP-E



RBC-AXU31C-E



RBC-ASCU11-E
RBC-AMTU31-E
RBC-AMSU51-EN/ES

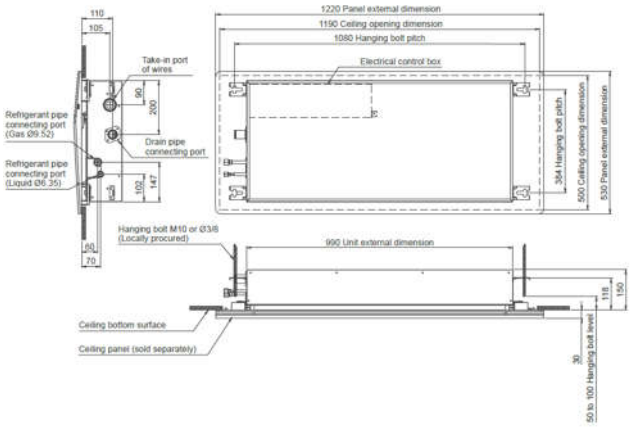
Features

Model name		MMU-	UP0071YHP-E	UP0091YHP-E	UP0121YHP-E	UP0151SH-E	UP0181SH-E	UP0241SH-E
Cooling code		HP	0.8	1.0	1.25	1.7	2.0	2.5
Cooling capacity		kW	2.2	2.8	3.6	4.5	5.6	7.1
Heating capacity		kW	2.5	3.2	4.0	5.0	6.3	8.0
Electrical characteristics	Power supply		1-phase 230V (220-240V) 50Hz / 1-phase 220V (208-230V) 60Hz					
	Running current (50Hz/60Hz)	A	0.17/0.18	0.18/0.19	0.19/0.20	0.34/0.35	0.37/0.39	0.62/0.62
	Power consumption (50Hz/60Hz)	kW	0.017/0.017	0.018/0.018	0.019/0.019	0.042/0.041	0.046/0.045	0.075/0.073
	Starting current (50Hz/60Hz)	A	0.43/0.43	0.43/0.43	0.43/0.43	0.51/0.53	0.54/0.54	0.80/0.80
Appearance	Main unit		Heat-insulating material attached - Zinc hot dipping steel plate					
	Ceiling panel name		RBC-UY32P-E			RBC-US21PGE		
	Panel color		Moon white_(Munsell 2.5GY9.0/0.5)					
Outer dimensions	Main unit (HxWxD)	mm	150x990x450			200x1000x710		
	Ceiling panel (HxWxD)	mm	30x1220x530			20x1230x800		
Total weight	Main unit	kg	14			21		22
	Ceiling panel	kg	4			5.5		
Heat exchanger			Finned tube					
Soundproof / Heat-insulating material			Non-flammable insulation			Polyethylene foam + Expanded polyethylene		
Fan unit	Fan		Centrifugal fan					
	Standard air flow (H/M/L)	m^3/h	500/390/270	520/410/290	540/420/290	750/690/630	780/720/660	1140/960/810
	Motor output	W	30					
Sound pressure level (H/M/L)		dB(A)	38/34/25	39/35/26	40/36/26	37/35/32	38/36/34	45/41/37
Sound power level		dB(A)	53	54	55	52	53	60
Air filter			Standard filter supplied (Long life filter) / Air purifier available as option			Standard filter supplied (Long life filter)		
Controller (Optional)			Wired or infrared remote controller					
Conecting pipe	Gas side	mm	9.5	9.5	9.5	12.7	12.7	15.9
	Liquid side	mm	6.4	6.4	6.4	6.4	6.4	9.5
	Drain port (nominal dia)	mm	25 (Polyvinyl chloride tube)					

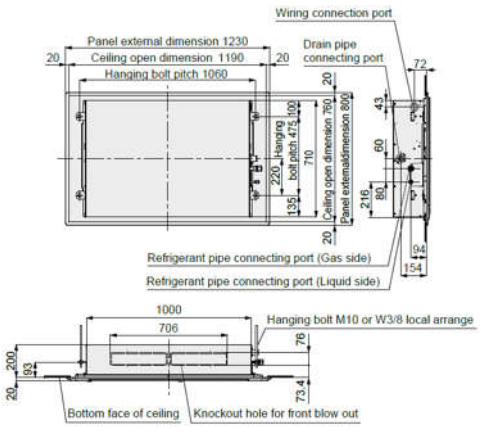
Drawings

Unit : mm

MMU-UP0071YHP-E to MMU-UP0121YHP-E



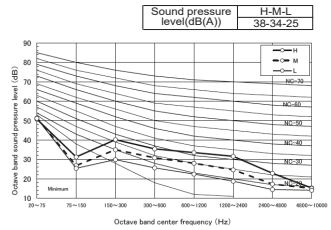
MMU-UP0151SH-E to MMU-UP0241SH-E



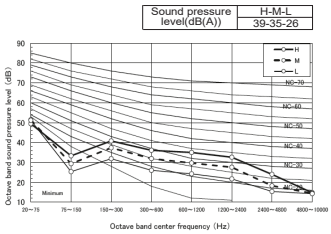
Sound pressure levels

Unit : dB(A)

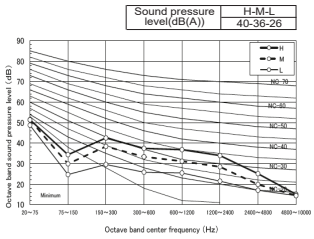
MMU-UP0071YHP-E



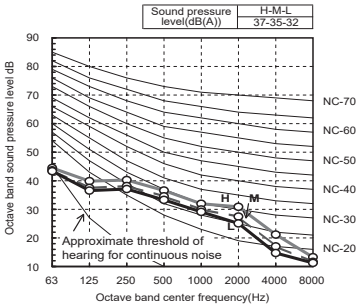
MMU-UP0091YHP-E



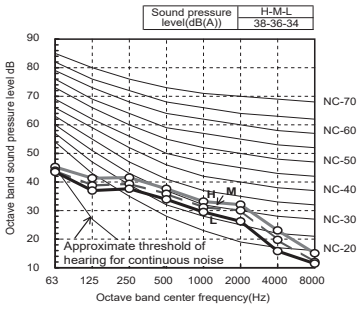
MMU-UP0121YHP-E



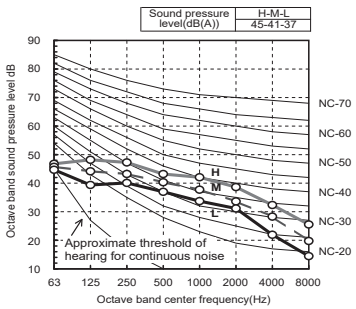
MMU-UP0151SH-E



MMU-UP0181SH-E



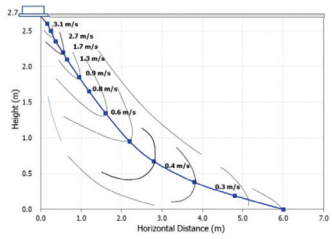
MMU-UP0241SH-E



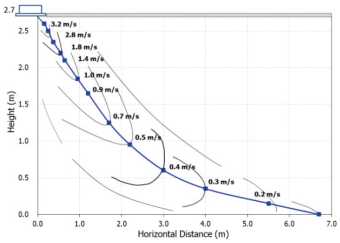
Air diffusion

Unit : m/s

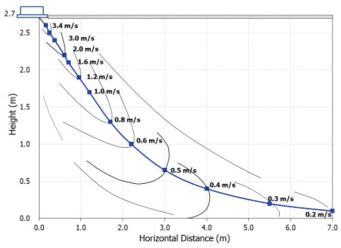
MMU-UP0071YHP-E



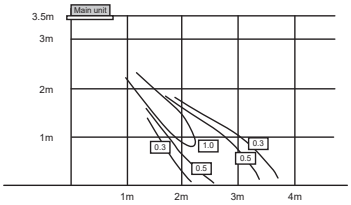
MMU-UP0091YHP-E



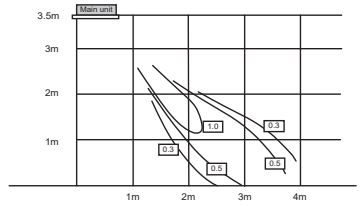
MMU-UP0121YHP-E



MMU-UP0151SH-E, MMU-UP0181SH-E

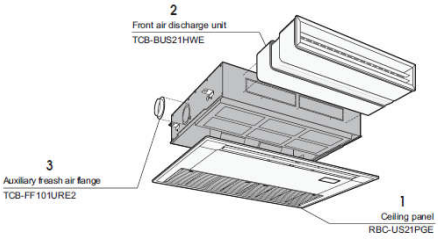


MMU-UP0241SH-E



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-US21PGE	MMU-UP_1SH-E		Required accessory
2	Front air discharge unit	TCB-BUS21HWE			
3	Auxiliary fresh air flange	TCB-FF101URE2			
4	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	
5	Occupancy sensor	TCB-SIR41UYP-E	MMU-UP-1YHP-E	Occupancy sensor	Cannot match with Wireless receiver Kit
6	Wireless receiver kit	RBC-AX33UYP-E	MMU-UP-1YHP-E	Wireless RC kit	Cannot match with Occupancy sensor
7	Wireless receiver kit	RBC-AXU31C-E	MMU-UP-1SH-E	Wireless RC kit	



1-way cassette connectors

• : Available

	CN32	CN60	CN61	CN70	CN73	CN80
	Additional ventilation control from remote control	Operation status signal output (Cooling, heating, fan, defrost, thermo-on)	External On/Off, operation output and alarm output	Warning symbol on remote control based on signal input.o off.	Forced IDU thermo-off based on signal input	Forced IDU thermo-off and IDU lock based on signal input
YHP-E	•	TCB-PCUC2E pcb needed	•	TCB-PCUC2E pcb needed	TCB-PCUC2E pcb needed	TCB-PCUC2E pcb needed
SH-E	•	•	•	•	•	•

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



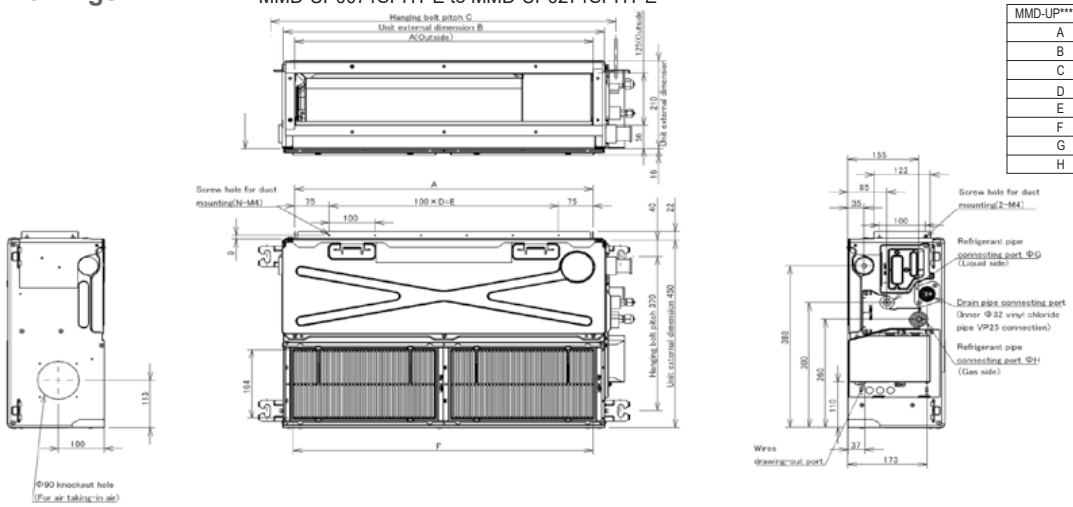
RBC-ASCU11-E
RBC-AMTU31-E
RBC-AMSU51-EN/ES

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/60Hz)	A	0.40/0.42	0.42/0.44	0.44/0.46	0.47/0.49	0.53/0.56	0.69/0.73	0.74/0.78
	Power consumption (50Hz/60Hz)	kW	0.026/0.026	0.029/0.029	0.031/0.031	0.035/0.035	0.044/0.044	0.067/0.067	0.072/0.072
	Starting current (50Hz/60Hz)	A	0.69/0.73	0.73/0.77	0.77/0.81	0.82/0.86	0.92/0.97	1.21/1.27	1.30/1.36
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			Polyethlene foam + Polyurethane foam						
Fan unit	Fan		Centrifugai fan (sirocco fan)						
	Standard air flow (H/M/L)	m^3/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						
	External static pressure	Pa	10-20-30-40-50 (5 Steps)						
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
Sound power level		dB(A)	52	54	54	52	56	60	61
Air filter			Standard filter supplied (Long life filter)						
Controller (Optional)			Wired or infrared remote controller						
Conecting 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

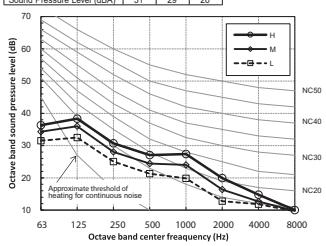
MMD-UP***1SPHY-E	007~012	015~018	024~027
A	650	850	1050
B	700	900	1100
C	770	970	1170
D	5	7	9
E	500	700	900
F	655	855	1055
G	6.4		9.5
H	9.5	12.7	15.9

Sound pressure levels

Unit : dB(A)

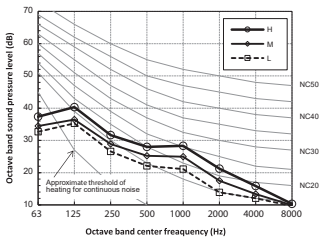
MMD-UP0071SPHY-E

Sound Pressure Level (dBA)	H	M	L
	31	29	26



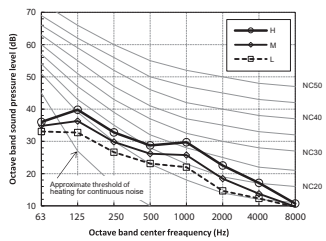
MMD-UP0091SPHY-E

Sound Pressure Level (dBA)	H	M	L
	32	29	26



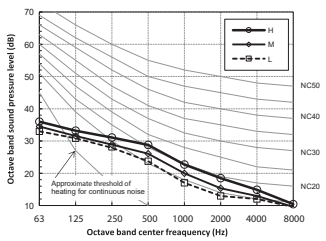
MMD-UP0121SPHY-E

Sound Pressure Level (dBA)	H	M	L
	33	30	27



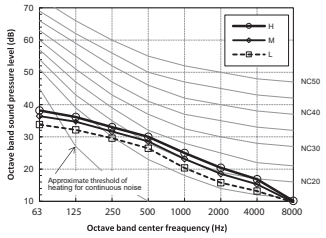
MMD-UP0151SPHY-E

Sound Pressure Level (dBA)	H	M	L
	33	30	28



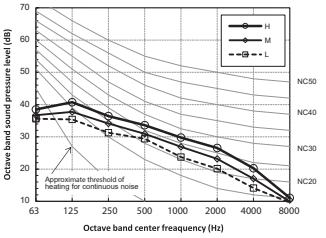
MMD-UP0181SPHY-E

Sound Pressure Level (dBA)	H	M	L
	34	32	29



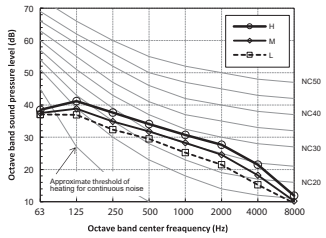
MMD-UP0241SPHY-E

Sound Pressure Level (dBA)	H	M	L
	36	33	30



MMD-UP0271SPHY-E

Sound Pressure Level (dBA)	H	M	L
	37	34	32



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)

Slim duct connectors

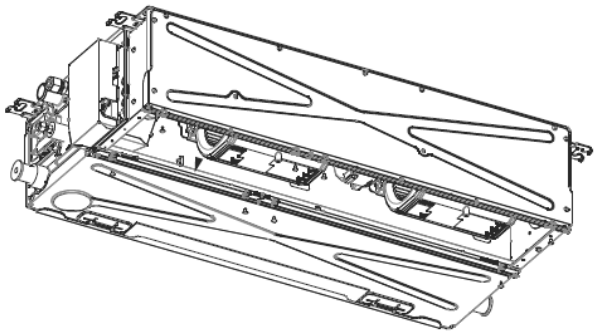
• : Available

CN32	CN60	CN61	CN70	CN73	CN80
Additional ventilation control from remote control	Operation status signal output (Cooling, heating, fan, defrost, thermo-on)	External On/Off, operation output and alarm output	Warning symbol on remote control based on signal input.o off.	Forced IDU thermo-off based on signal input	Forced IDU thermo-off and IDU lock based on signal input
•	TCB-PCUC2E pcb needed	•	TCB-PCUC2E pcb needed	TCB-PCUC2E pcb needed	TCB-PCUC2E pcb needed

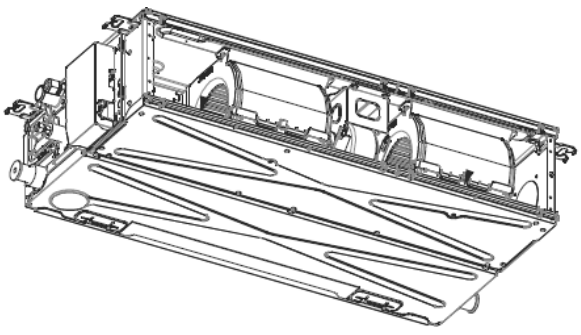
Installation flexibility

Change from under air intake to back air intake

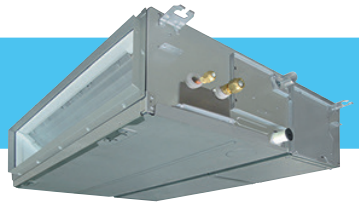
Under air intake



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



RBC-AXU31-E



RBC-ASCU11-E
RBC-AMTU31-E
RBC-AMSU51-EN/ES

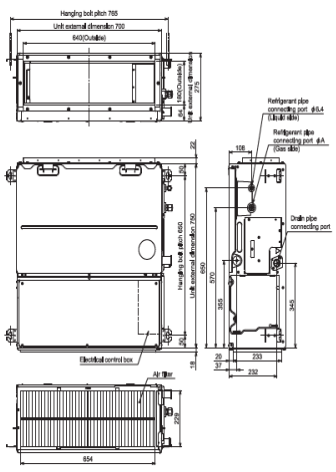
Features

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/60Hz)	A	0.35/0.36	0.38/0.40		0.70/0.72		0.80/0.83		0.95/0.98	1.29/1.33	1.70/1.70	
	Power consumption (50Hz/60Hz)	kW	0.055/0.055	0.060/0.060		0.110/0.110		0.135/0.135		0.160/0.160	0.220/0.220	0.290/0.290	
	Starting current (50Hz/60Hz)	A	0.55/0.56	0.58/0.60		1.10/1.12		1.20/1.23		1.35/1.38	2.09/2.13	2.50/2.56	
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			Polyethlene foam										
Fan unit	Fan		Centrifugai 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
Sound power level		dB(A)	44	45	45	48	48	48	48	51	51	55	55
Air filter			Standard filter supplied (Long life filter)										
Controller (Optional)			Wired or infrared remote controller										
Conecting pipe	Gas side	mm	9.5	9.5	9.5	12.7	12.7	15.9	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	9.5
	Drain port (nominal dia)	mm	25 (Polyvinyl chloride tube)										

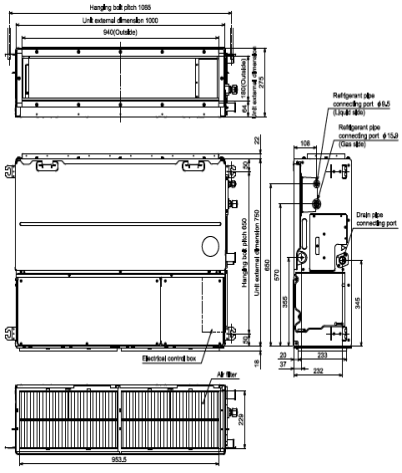
Drawings

Unit : mm

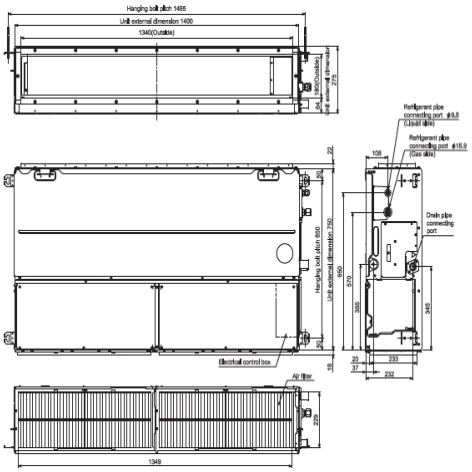
MMD-UP0071BHP-E to MMD-UP0181BHP-E



MMD-UP0241BHP-E to MMD-UP0301BHP-E



MMD-UP0361BHP-E to MMD-UP0561BHP-E



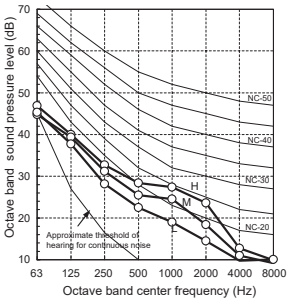
Sound pressure levels

Unit : dB(A)

MMD-UP0071BHP-E

External static pressure 80 Pa

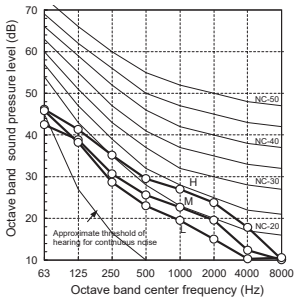
FAN tap	H	M	L
Sound pressure level (dB(A))	33	30	27



MMD-UP0091BHP-E, MMD-UP0121BHP-E

External static pressure 80 Pa

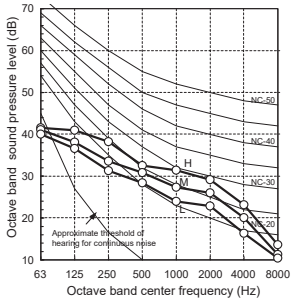
FAN tap	H	M	L
Sound pressure level (dB(A))	34	30	28



MMD-UP0151BHP-E, MMD-UP0181BHP-E

External static pressure 80 Pa

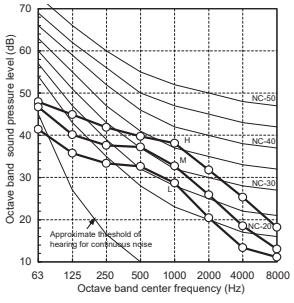
FAN tap	H	M	L
Sound pressure level (dB(A))	37	33	31



MMD-UP0241BHP-E, MMD-UP0271BHP-E

External static pressure 80 Pa

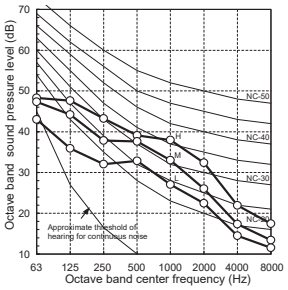
FAN tap	H	M	L
Sound pressure level (dB(A))	42	38	33



MMD-UP0301BHP-E

External static pressure 80 Pa

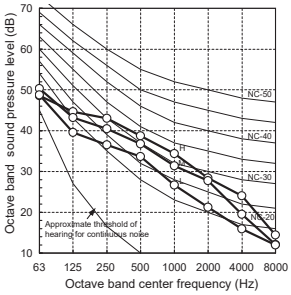
FAN tap	H	M	L
Sound pressure level (dB(A))	42	39	33



MMD-UP0361BHP-E

External static pressure 80 Pa

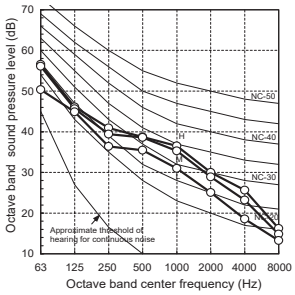
FAN tap	H	M	L
Sound pressure level (dB(A))	41	39	35



MMD-UP0481BHP-E, MMD-UP0561BHP-E

External static pressure 80 Pa

FAN tap	H	M	L
Sound pressure level (dB(A))	41	40	36



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

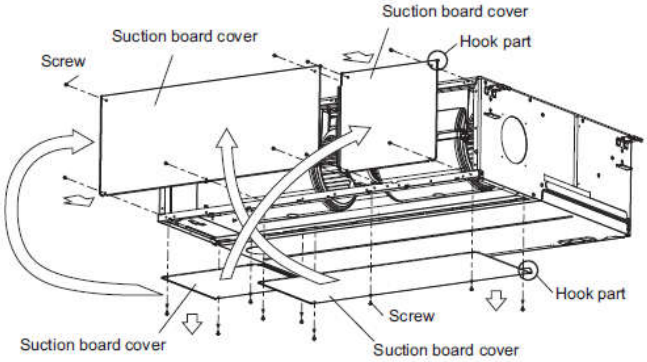
1-way cassette connectors

• : Available

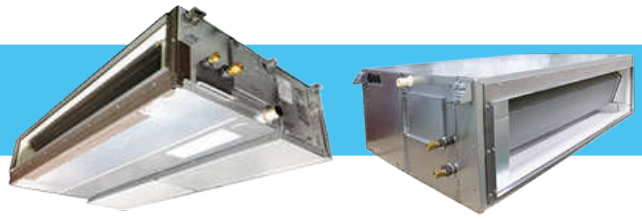
CN32	CN60	CN61	CN70	CN73	CN80
Additional ventilation control from remote control	Operation status signal output (Cooling, heating, fan, defrost, thermo-on)	External On/Off, operation output and alarm output	Warning symbol on remote control based on signal input.o off.	Forced IDU thermo-off based on signal input	Forced IDU thermo-off and IDU lock based on signal input
•	•	•	•	•	•

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-ASCU11-E
RBC-AMTU31-E
RBC-AMSU51-EN/ES

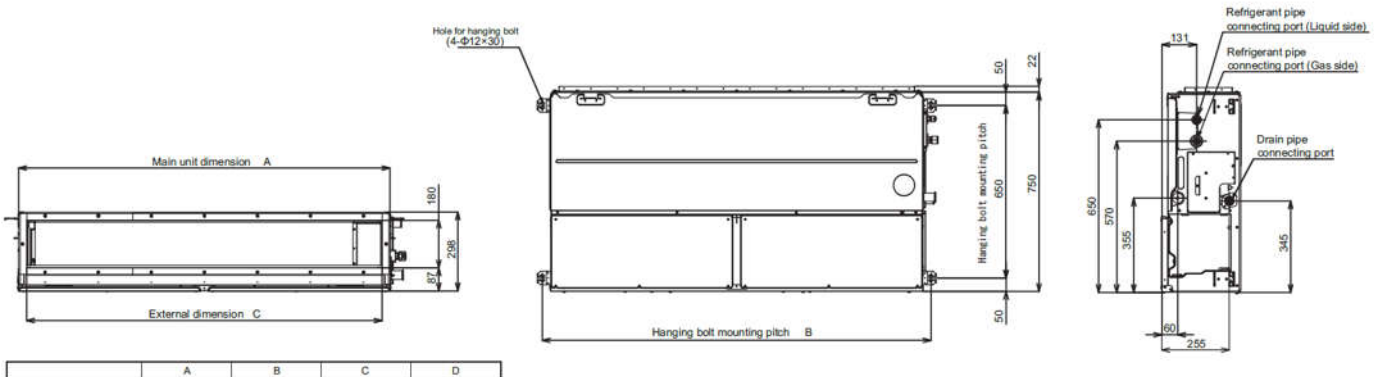
Features

Model name		MMD-	UP0181HP-E	UP0241HP-E	UP0271HP-E	UP0361HP-E	UP0481HP-E	UP0561HP-E	UP0721HP-E	UP0961HP-E
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/60Hz)	A	0.82/0.85	0.92/0.95	1.16/1.20	1.39/1.43	1.81/1.86	2.48/2.57	2.83/2.93	3.77/3.92
	Power consumption (50Hz/60Hz)	kW	0.125/0.125	0.140/0.140	0.190/0.190	0.230/0.230	0.300/0.300	0.400/0.400	0.540/0.540	0.790/0.790
	Starting current (50Hz/60Hz)	A	1.12/1.15	1.22/1.25	1.46/1.50	1.89/1.93	2.41/2.46	3.08/3.17	7.80/8.15	7.80/8.15
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			Polyethlene foam							
Fan unit	Fan		Centrifugai 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
Sound power level		dB(A)	60			62	67	69	79	81
Air filter			Sold separately (TCB-LK801D-E)			Sold separately (TCB-LK1401D-E)			Sold separately (TCB-LK2801DP-E)	
Controller (Optional)			Wired or infrared remote controller							
Conecting 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

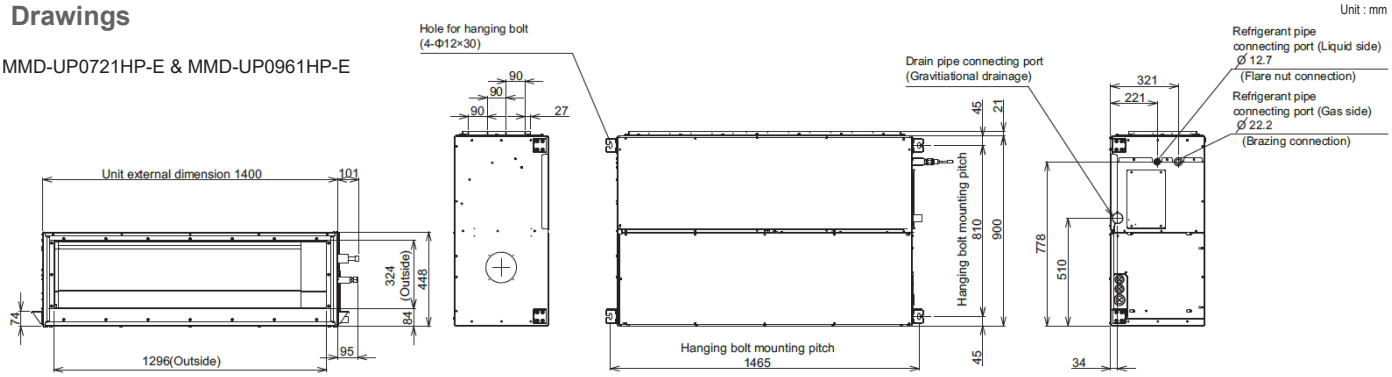


	A	B	C	D
MMD-AP0186~0276HP-E	1000	1065	940	500
MMD-AP0366~0566HP-E	1400	1465	1340	700

Drawings

MMD-UP0721HP-E & MMD-UP0961HP-E

Unit : mm



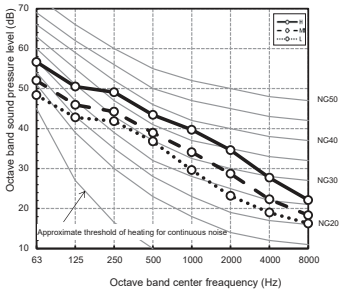
Sound pressure levels

Unit : dB(A)

MMD-UP0181HP-E

External static pressure 150Pa

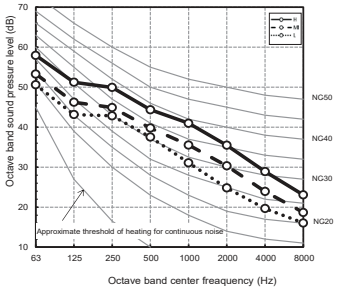
Fan tap	H	M	L
Sound pressure (dBA)	41.0	36.0	33.0



MMD-UP0241HP-E, MMD-UP0271HP-E

External static pressure 150Pa

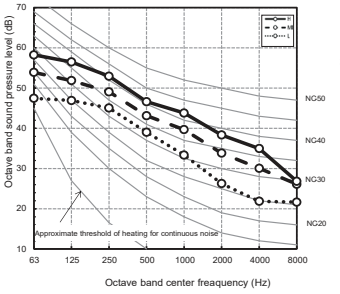
Fan tap	H	M	L
Sound pressure (dBA)	42.0	37.0	34.0



MMD-UP0361HP-E

External static pressure 150Pa

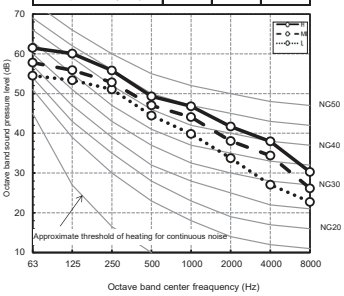
Fan tap	H	M	L
Sound pressure (dBA)	45.0	41.0	36.0



MMD-UP0481HP-E

External static pressure 150Pa

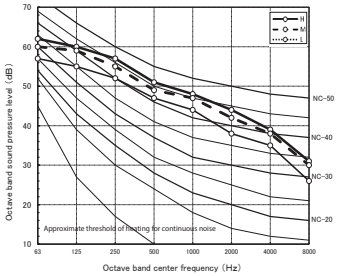
Fan tap	H	M	L
Sound pressure (dBA)	48.0	45.0	42.0



MMD-UP0561HP-E

External static pressure 150Pa

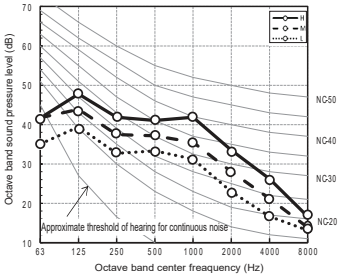
Fan tap	H	M	L
Sound pressure (dBA)	49.0	48.0	45.0



MMD-UP0721HP-E

External static pressure 150Pa

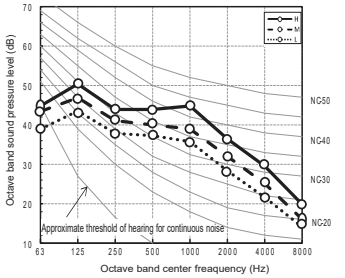
Fan tap	H	M	L
Sound pressure (dBA)	44.0	40.0	36.0



MMD-UP0961HP-E

External static pressure 150Pa

Fan tap	H	M	L
Sound pressure (dBA)	46.0	42.0	38.0



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-E		
	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-E		

HSP duct connectors

• : Available

	CN32	CN60	CN61	CN70	CN73	CN80
	Additional ventilation control from remote control	Operation status signal output (Cooling, heating, fan, defrost, thermo-on)	External On/Off, operation output and alarm output	Warning symbol on remote control based on signal input.o off.	Forced IDU thermo-off based on signal input	Forced IDU thermo-off and IDU lock based on signal input
Up to 6HP	•	•	•	•	•	•
8 & 10HP	•	TCB-PCUC2E pcb needed	•	TCB-PCUC2E pcb needed	TCB-PCUC2E pcb needed	TCB-PCUC2E pcb needed

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-ASCU11-E
RBC-AMTU31-E
RBC-AMSU51-EN/ES

Features

Model name			MMD-	UP0481HFP-E	UP0721HFP-E	UP0961HFP-E	UP1121HFP-E	UP1281HFP-E
Cooling code			HP	5.0	8.0	10.0	12.0	14.0
Cooling capacity (*) (Note 1)			kW	14.0	22.4	28.0	33.5	40.0
Heating capacity (*) (Note 2)			kW	8.9	13.9	17.4	20.8	25.2
Electrical characteristics	Power supply			1-phase 50Hz 220-240V / 1-phase 60Hz 208-230V				
	Running current (50Hz/60Hz)		A	0.77/0.80	0.86/0.90	1.07/1.12	1.30/1.36	1.83/1.91
	Power consumption (50Hz/60Hz)		kW	0.108/0.108	0.153/0.153	0.198/0.198	0.240/0.240	0.330/0.330
	Starting current (50Hz/60Hz)		A	2.01/2.10	7.80/8.15	7.80/8.15	7.80/8.15	7.80/8.15
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	1680/1440/1200	2100/1800/1470	2520/2130/1770	3060/2580/2130
	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	1500	1800
		Upper limit	m^3/h	1320	2040	2520	3060	3600
Sound pressure level (H/M/L)			dB(A)	38/35/31	38/36/33	39/36/33	40/37/34	42/38/35
Air filter				Option or field supply				
Controller (Optional)				Wired or infrared remote controller				
Conecting pipe	Gas / Liquid side		mm	15.9 / 9.5	22.2 / 12.7		28.6 / 12.7	28.6 / 12.7
	Drain port (nominal dia)		mm	25 (Polyvinyl chloride tube)				

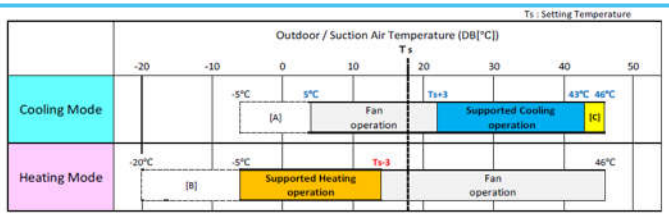
* The setting temperature is 13 - 25°C (standard FCU.. 18 - 30 °C).
* Height difference between Fresh Air Intake Indoor units must be within 5 m.

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 avaialble 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

Use conditions

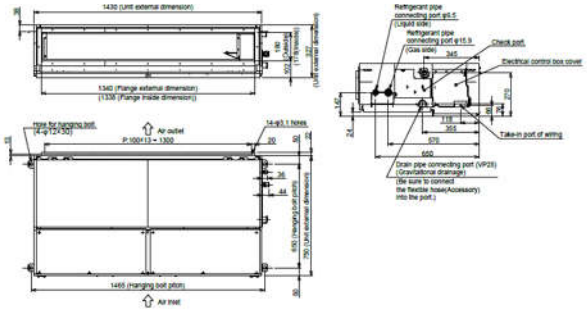
• In "COOL" or "FAN" mode, if temperature of the outdoor/suction air is under 5°C, the operation stops automatically in order to protect the equipment. In this case, continue the operating by selecting "HEAT" mode.

• In "HEAT" mode, if temperature of outdoor/suction air is under -5°C the operation stops automatically in order to protect the equipment. When operation the fresh intake unit with the outdoor/suction temperature under -5°C, make sure to -5°C using duct heater (locally procured).

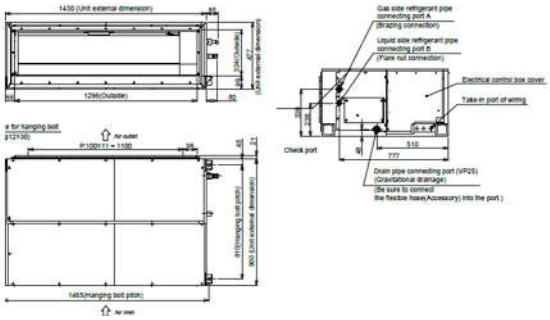


Drawings

MMD-UP0481HFP-E



MMD-UP0721HFP-E to MMD-UP1281HFP-E



FRESH AIR INTAKE

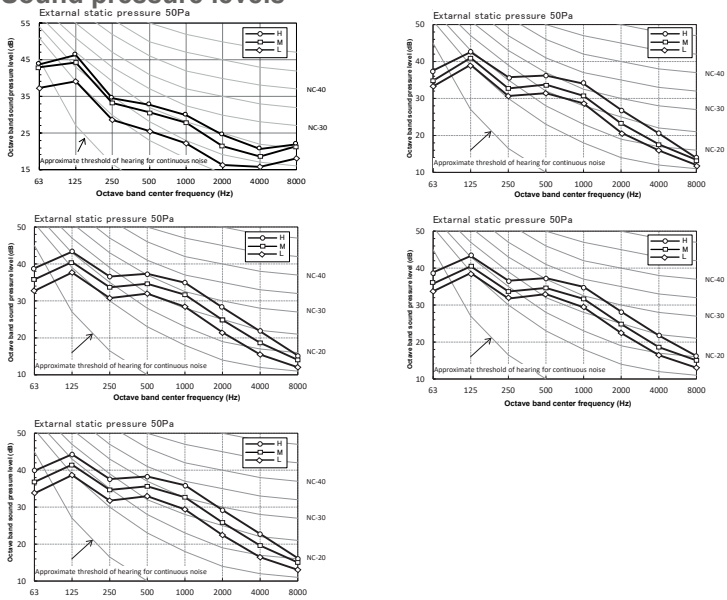
Fresh air intake indoor unit type

System restriction	SMMS-7 Multi FCU connection	SMMS-7 All fresh air intake connection	SMMS-u Multi FCU connection	SMMS-u All fresh air intake connection
Max. no. of combined outdoor units	3	1	5	2
Max. capacity of combined outdoor units	60HP	24HP	120HP	44HP
Maximum number of connected indoor uits	64	3	128	4
Total capacity of combined Indoor+fresh air unit	80 to 110%	100%	80 to 110%	
Max. no. of combined Indoor units	3		4	

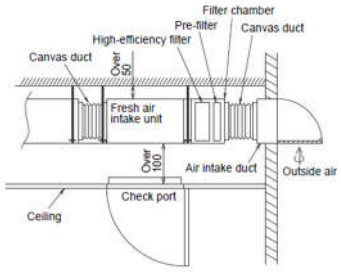
Allowable length and height difference of refrigerant piping				Allowable value (m)			
				SMMS-7 Multi FCU connection	SMMS-7 All fresh air intake connection	SMMS-u Multi FCU connection	SMMS-u All fresh air intake connection
Pipe length	Total extension of pipe (Liquid pipe)	Actual length	m	300/1000	300	500/1200	300
	Farthest piping length	Equivalent / Actual length	m	235/190	150/130	250/210	230/210
	Main piping length	Equivalent / Actual length	m	120/100	120/100	120/100	120/100
	Farthest equivalent piping length from the first branching section	Equivalent length	m	90/65	30	90	90
	Maximum actual length of pipes connected to indoor units	Actual length	m	30	30	30	30
	Maximum equivalent length between branching sections	Equivalent length	m	50	50	50	50
Height difference	Height between outdoor and indoor units	Upper / Lower outdoor unit	m	70/40	40/3	70/40	70/40
	Height between indoor units /fresh air intake inits		m	0.5	0.5	40	5

Sound pressure levels

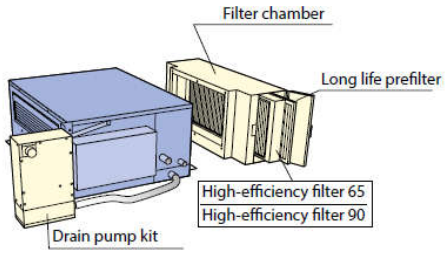
Unit : dB(A)



Other information



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-E to MMD-UP1281HF-E	
	TCB-UFH0481D-E	High-efficiency filter 90	MMD-UP0481HF-E	
	TCB-UFH1281D-E	High-efficiency filter 90	MMD-UP0721HF-E to MMD-UP1281HF-E	
	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-E to MMD-UP1281HF-E	
	TCB-FC0481DF-E	Filter chamber	MMD-UP0481HF-E	
	TCB-FC1281DF-E	Filter chamber	MMD-UP0721HF-E to MMD-UP1281HF-E	
Drain pump kit	TCB-DP40DFP-E	Drain pump kit	All models	

Fresh air duct embedded connectors

• : Available

	CN32	CN60	CN61	CN70	CN73	CN80
	Additional ventilation control from remote control	Operation status signal output (Cooling, heating, fan, defrost, thermo-on)	External On/Off, operation output and alarm output	Warning symbol on remote control based on signal input.o off.	Forced IDU thermo-off based on signal input	Forced IDU thermo-off and IDU lock based on signal input
5HP	•	•	•	•	•	•
8 & 14HP	•	TCB-PCUC2E pcb needed	•	TCB-PCUC2E pcb needed	TCB-PCUC2E pcb needed	TCB-PCUC2E pcb needed

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-ASCU11-E
RBC-AMTU31-E
RBC-AMSU51-EN/ES

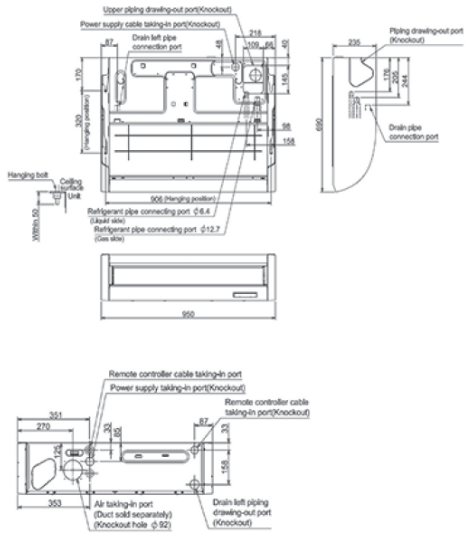
Features

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/60Hz)	A	0.35/0.37	0.36/0.38	0.64/0.67	0.65/0.67	0.77/0.80	0.77/0.80	0.99/1.02
	Power consumption (50Hz/60Hz)	kW	0.033/0.033	0.034/0.034	0.067/0.067	0.067/0.067	0.083/0.083	0.083/0.083	0.111/0.111
	Starting current (50Hz/60Hz)	A	0.54/0.55	0.55/0.57	0.96/1.00	0.97/1.00	1.15/1.20	1.15/1.20	1.49/1.43
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
Sound power level		dB(A)	51	52	56	56	59	59	61
Air filter			Standard filter supplied (Long life filter)						
Controller (Optional)			Wired or infrared remote controller						
Conecting 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)						

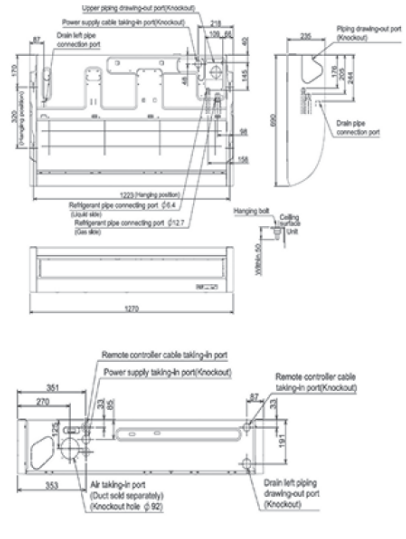
Drawings

Unit : mm

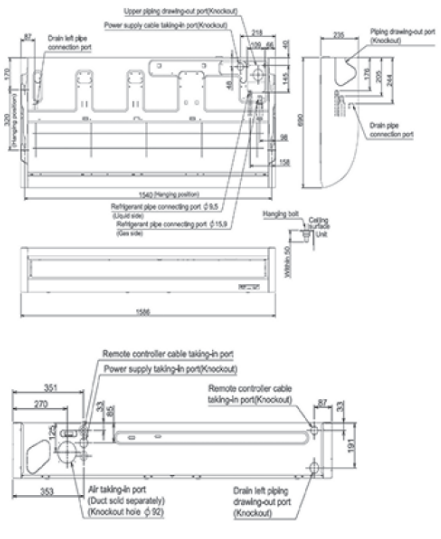
MMC-UP0151HP-E, MMC-UP0181HP-E



MMC-UP0241HP-E, MMC-UP0271HP-E



MMC-UP0361HP-E to MMC-UP0561HP-E

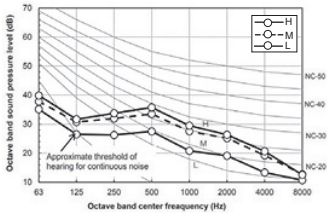


Sound pressure levels

Unit : dB(A)

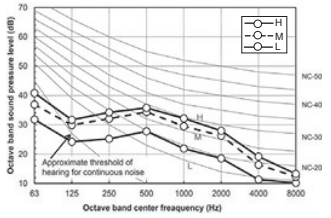
MMC-UP0151HP-E

Fan tap	H	M	L
Sound pressure level (dB(A))	36	34	28



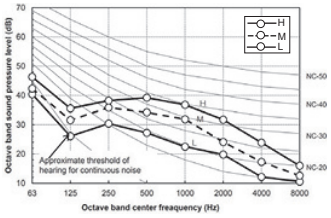
MMC-UP0181HP-E

Fan tap	H	M	L
Sound pressure level (dB(A))	37	35	28



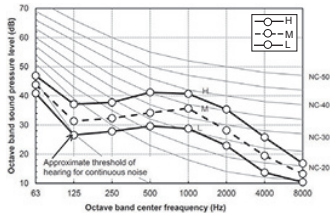
MMC-UP0241, 0271HP-E

Fan tap	H	M	L
Sound pressure level (dB(A))	41	36	29



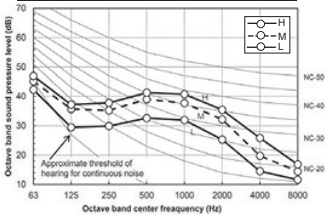
MMC-UP0361HP-E

Fan tap	H	M	L
Sound pressure level (dB(A))	44	38	32



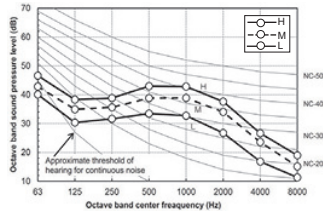
MMC-UP0481HP-E

Fan tap	H	M	L
Sound pressure level (dB(A))	44	41	35



MMC-UP0561HP-E

Fan tap	H	M	L
Sound pressure level (dB(A))	46	42	36

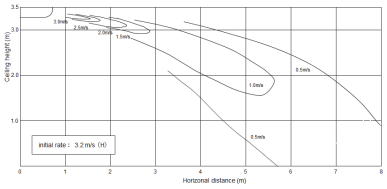


Air diffusion

Unit : m/s

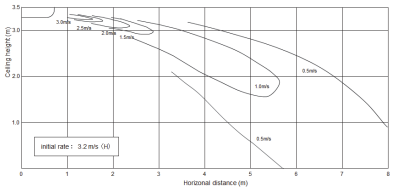
MMC-UP0151HP-E

Cooling



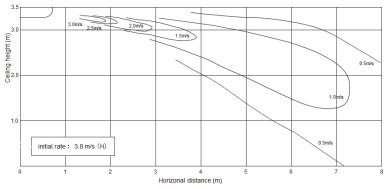
MMC-UP0181HP-E

Cooling



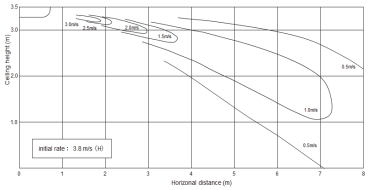
MMC-UP0241, 0271HP-E

Cooling



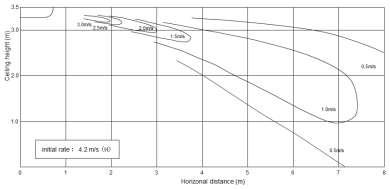
MMC-UP0361, 0481HP-E

Cooling



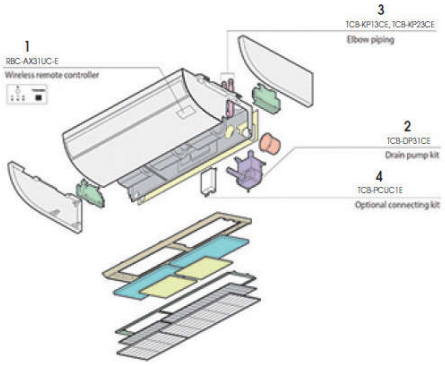
MMC-UP0561HP-E

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	



Ceiling connectors

• : Available

CN32	CN60	CN61	CN70	CN73	CN80
Additional ventilation control from remote control	Operation status signal output (Cooling, heating, fan, defrost, thermo-on)	External On/Off, operation output and alarm output	Warning symbol on remote control based on signal input.o off.	Forced IDU thermo-off based on signal input	Forced IDU thermo-off and IDU lock based on signal input
•	TCB-PCUC2E pcb needed	•	TCB-PCUC2E pcb needed	TCB-PCUC2E pcb needed	TCB-PCUC2E pcb needed

MMK-UP_1HP-E
HIGH-WALL

NEW



Particularly compact, this high-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-ASCU11-E
RBC-AMTU31-E
RBC-AMSU51-EN/ES

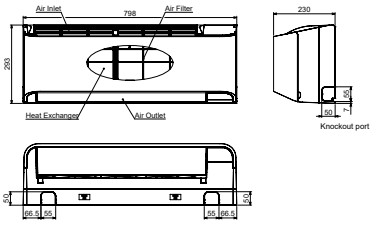
Features

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/60Hz)	A	0.15/0.16	0.16/0.17	0.17/0.18	0.25/0.26	0.28/0.29	0.40/0.42	0.28/0.30	0.44/0.46	0.52/0.56
	Power consumption (50Hz/60Hz)	kW	0.015/0.015	0.016/0.016	0.017/0.017	0.028/0.028	0.032/0.032	0.050/0.050	0.034/0.034	0.054/0.054	0.066/0.066
	Starting current (50Hz/60Hz)	A	0.19/0.20	0.20/0.21	0.21/0.22	0.33/0.35	0.36/0.38	0.48/0.50	0.34/0.34	0.50/0.50	0.60/0.60
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
Sound power level		dB(A)	50	51	52	55	56	60	60	63	65
Air filter			Standard filter supplied (Long life filter)								
Controller (Packed with unit)			Wireless remote controller								
Conecting 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)								

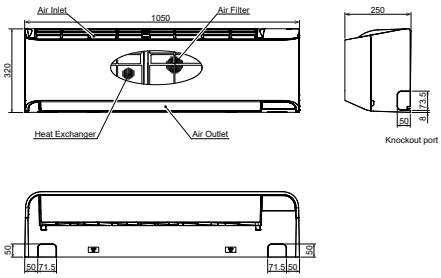
Drawings

Unit : mm

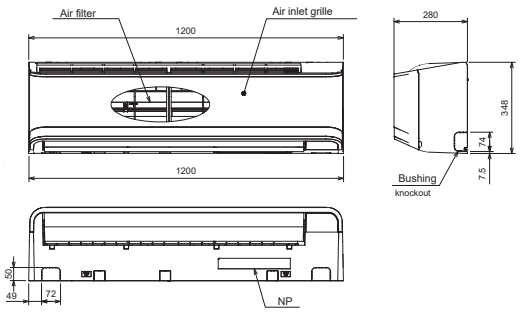
MMK-UP0071HP-E to MMK-UP0121HP-E



MMK-UP0151HP-E to MMU-UP0241HP-E



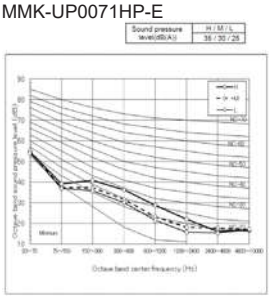
MMK-UP0271HP-E to MMU-UP0361HP-E



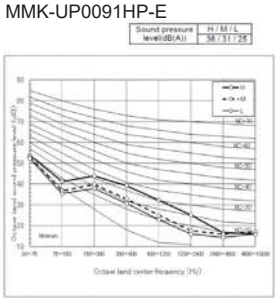
Sound pressure levels

Unit : dB(A)

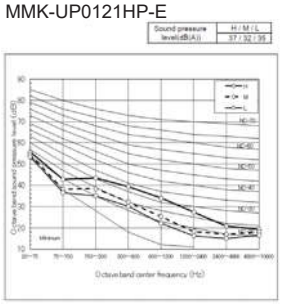
MMK-UP0071HP-E



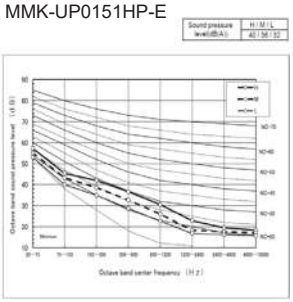
MMK-UP0091HP-E



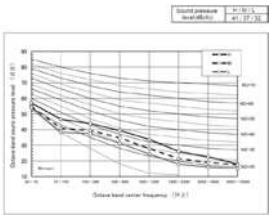
MMK-UP0121HP-E



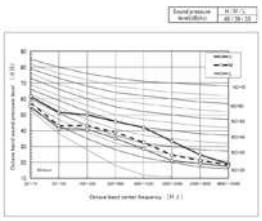
MMK-UP0151HP-E



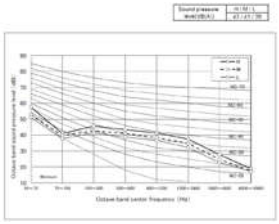
MMK-UP0181HP-E



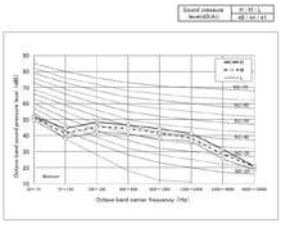
MMK-UP0241HP-E



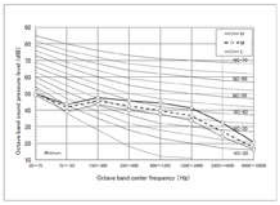
MMK-UP0271HP-E



MMK-UP0301HP-E



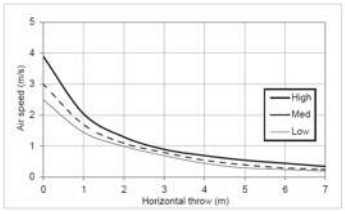
MMK-UP0361HP-E



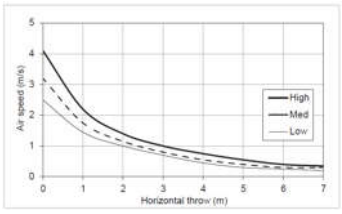
Air diffusion

Unit : m/s

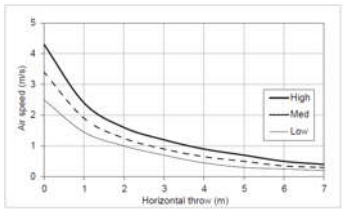
MMK-UP0071HP-E
High wind: 3.9m/s
Mid wind: 3.0m/s
Low wind: 2.5m/s



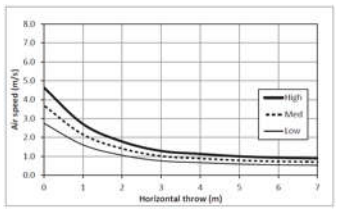
MMK-UP0091HP-E
High wind: 4.1m/s
Mid wind: 3.2m/s
Low wind: 2.5m/s



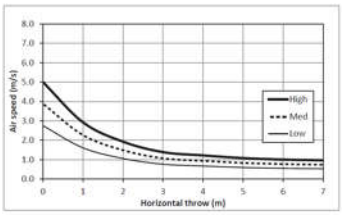
MMK-UP0121HP-E
High wind: 4.3m/s
Mid wind: 3.4m/s
Low wind: 2.5m/s



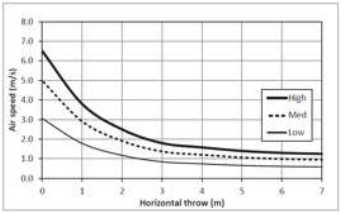
MMK-UP0151HP-E
High wind: 4.6m/s
Mid wind: 3.7m/s
Low wind: 2.8m/s



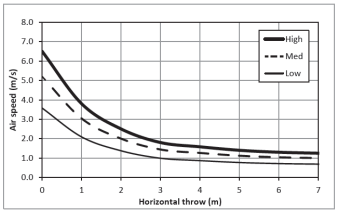
MMK-UP0181HP-E
High wind: 5.0m/s
Mid wind: 3.9m/s
Low wind: 2.8m/s



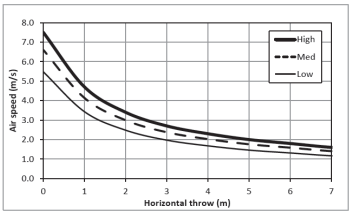
MMK-UP0241HP-E
High wind: 6.5m/s
Mid wind: 5.0m/s
Low wind: 3.1m/s



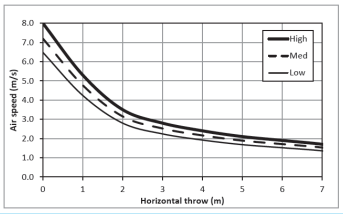
MMK-UP0271HP-E
High wind: 6.5m/s
Mid wind: 5.2m/s
Low wind: 3.6m/s



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



High wall embedded connectors

• : Available

CN32	CN60	CN61	CN70	CN73	CN80
Additional ventilation control from remote control	Operation status signal output (Cooling, heating, fan, defrost, thermo-on)	External On/Off, operation output and alarm output	Warning symbol on remote control based on signal input.o off.	Forced IDU thermo-off based on signal input	Forced IDU thermo-off and IDU lock based on signal input
•	•	•	•	•	•

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)

LOCAL CONTROLS



Included



RBC-ASCU11-E
RBC-AMTU31-E
RBC-AMSU51-EN/ES

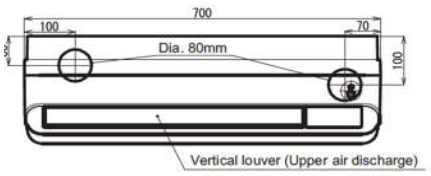
Features

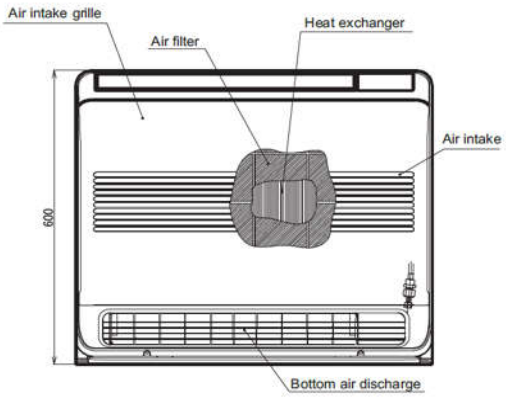
Model name		MML-	UP0071NHP-E	UP0091NHP-E	UP0121NHP-E	UP0151NHP-E	UP0181NHP-E
Cooling code		HP	0.8	1.0	1.25	1.7	2.0
Cooling capacity		kW	2.2	2.8	3.6	4.5	5.6
Heating capacity		kW	2.5	3.2	4.0	5.0	6.3
Electrical characteristics	Power supply		1 phase 50Hz 230V (220-240V) / 1 phase 60Hz 220V				
	Running current (50Hz/60Hz)	A	0.20/0.17	0.20/0.17	0.23/0.19	0.29/0.25	0.42/0.36
	Power consumption (50Hz/60Hz)	kW	0.021/0.021	0.021/0.021	0.025/0.025	0.034/0.034	0.052/0.052
	Starting current (50Hz/60Hz)	A	0.26/0.22	0.26/0.22	0.30/0.30	0.33/0.38	0.55/0.55
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)	m^3/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
Sound power level		dB(A)	53	53	55	58	62
Air filter			Standard filter supplied (Long life filter)				
Controller (Packed with indoor unit)			Wireless remote controller				
Conecting 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)				

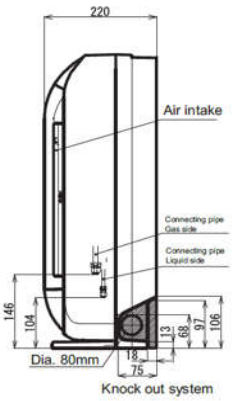
Drawings

Unit : mm

All model





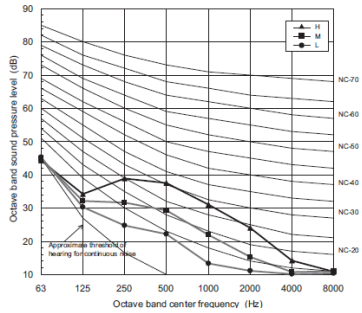


Sound pressure levels

Unit : dB(A)

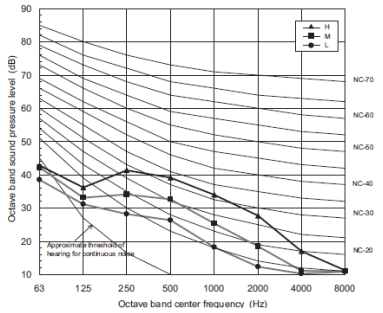
MML-UP0071, 0091NH-E

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



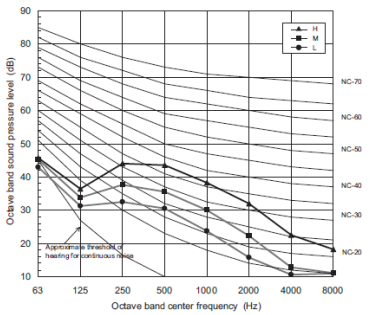
MML-UP0121NH-E

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



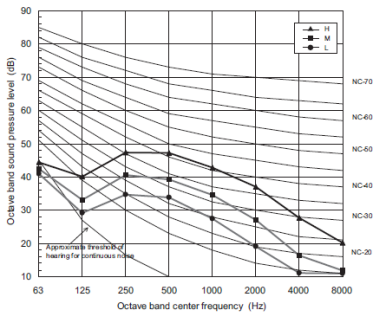
MML-UP0151NH-E

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



MML-UP0181NH-E

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

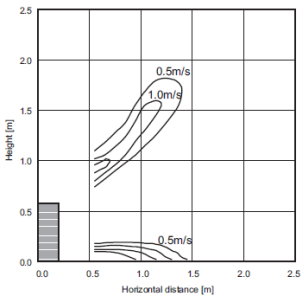


Air diffusion

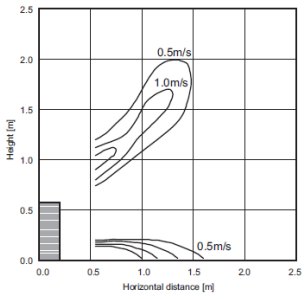
Unit : m/s

MML-UP0071NH-E, UP0091NH-E

Cooling - Upper & Lower

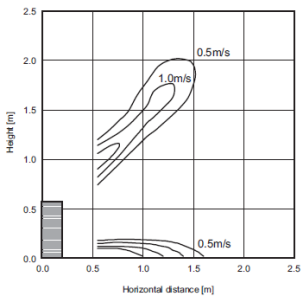


Heating - Upper & Lower

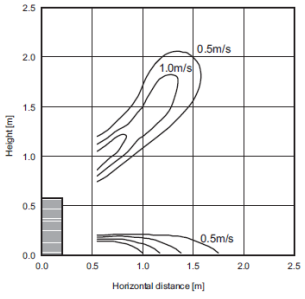


MML-UP0121NH-E

Cooling - Upper & Lower

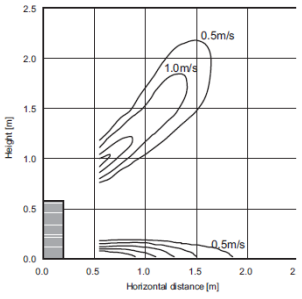


Heating - Upper & Lower

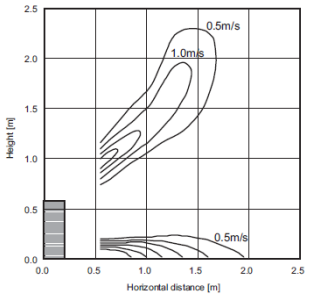


MML-UP0151NH-E

Cooling - Upper & Lower

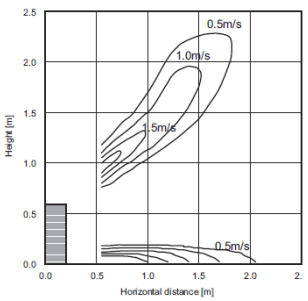


Heating - Upper & Lower

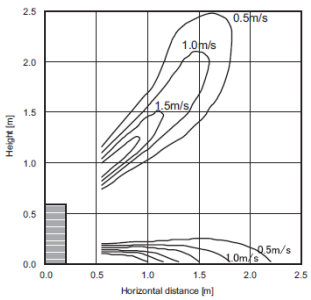


MML-UP0181NH-E

Cooling - Upper & Lower



Heating - Upper & Lower



Bi-flow console connectors

• : Available

CN32	CN60	CN61	CN70	CN73	CN80
Additional ventilation control from remote control	Operation status signal output (Cooling, heating, fan, defrost, thermo-on)	External On/Off, operation output and alarm output	Warning symbol on remote control based on signal input.o off.	Forced IDU thermo-off based on signal input	Forced IDU thermo-off and IDU lock based on signal input
•	•	•	•	•	•

MML-UP_1BH-E
CONCEALED



This slim unit is designed to easily fit into a compact space and to perfectly integrate itself behind a decorative panel. This is the ideal unobtrusive solution that blends into any interior.

CAPACITY

0.8 HP ~ 2.5 HP

SOUND PRESSURE LEVEL

32 dB(A)

LOCAL CONTROLS



RBC-AXU31-E



RBC-ASCU11-E
RBC-AMTU31-E
RBC-AMSU51-EN/ES

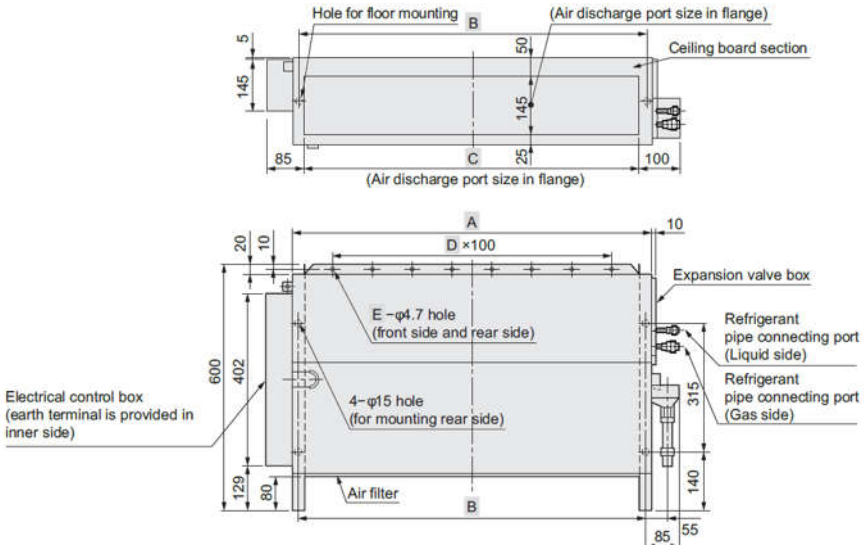
Features

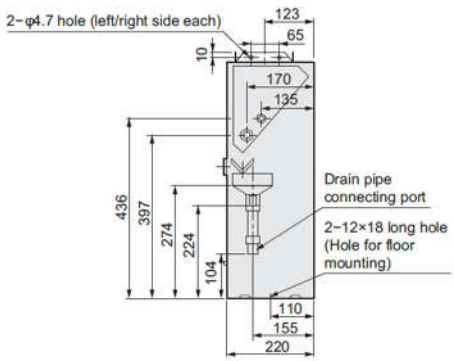
Model name		MML-	UP0071BH-E	UP0091BH-E	UP0121BH-E	UP0151BH-E	UP0181BH-E	UP0241BH-E
Cooling code		HP	0.8	1.0	1.25	1.7	2.0	2.5
Cooling capacity		kW	2.2	2.8	3.6	4.5	5.6	7.1
Heating capacity		kW	2.5	3.2	4.0	5.0	6.3	8.0
Electrical characteristics	Power supply		1 phase 50Hz 230V (220-240V) / 1 phase 60Hz 220V					
	Running current (50Hz/60Hz)	A	0.25/0.27			0.45/0.46		0.46/0.51
	Power consumption (50Hz/60Hz)	kW	0.056/0.058			0.090/0.096		0.095/0.110
	Starting current (50Hz/60Hz)	A	0.60/0.60			0.80/0.80		1.00/1.00
Appearance			Zinc hot dipping steel plate					
Dimensions (HxWxD)		mm	600x745x220			600x1045x220		
Total weight		kg	21			28		
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	460/400/300			740/600/490		950/790/640
	Motor output	W	19			70		
Sound pressure level (H/M/L)		dB(A)	36/34/32					42/37/33
Sound power level		dB(A)	54					60
Air filter			Standard filter supplied (Simple filter)					
Controller (Optional)			Wired or infrared remote controller					
Conecting pipe	Gas side	mm	9.5	9.5	9.5	12.7	12.7	15.9
	Liquid side	mm	6.4	6.4	6.4	6.4	6.4	9.5
	Drain port (nominal dia)	mm	20 (Polyvinyl chloride tube)					

Drawings

Unit : mm

All model





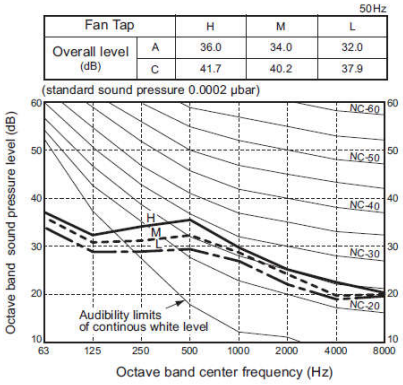
Model MML-	A	B	C	D	E
UP0071BH-E to UP0121BH-E	610	580	550	4	5
UP0151BH-E to UP0241BH-E	910	880	850	7	8

Sound pressure levels

Unit : dB(A)

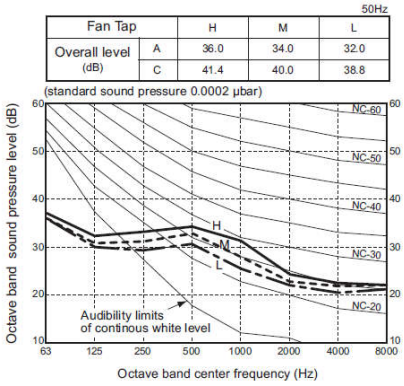
MML-UP0071BH-E to MML-UP0121BH-E

50Hz				
Fan Tap		H	M	L
Overall level (dB)	A	36.0	34.0	32.0
	C	41.7	40.2	37.9



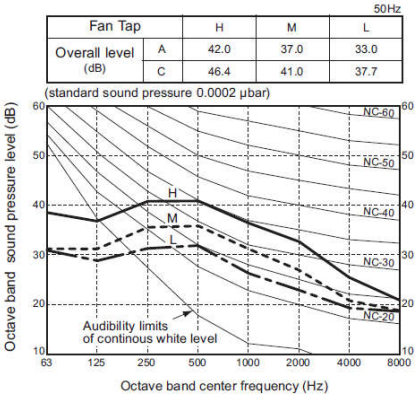
MML-UP0151BH-E, MML -UP181BH-E

50Hz				
Fan Tap		H	M	L
Overall level (dB)	A	36.0	34.0	32.0
	C	41.4	40.0	38.8



MML-UP241BH-E

50Hz				
Fan Tap		H	M	L
Overall level (dB)	A	42.0	37.0	33.0
	C	46.4	41.0	37.7



Concealed chassis embedded connectors

• : Available

CN32	CN60	CN61	CN70	CN73	CN80
Additional ventilation control from remote control	Operation status signal output (Cooling, heating, fan, defrost, thermo-on)	External On/Off, operation output and alarm output	Warning symbol on remote control based on signal input.o off.	Forced IDU thermo-off based on signal input	Forced IDU thermo-off and IDU lock based on signal input
•	•	•	•	•	•

MML-UP_1H-E
CABINET



The simple design of this unit represents the perfect choice, for refurbishment projects, where the available space is limited, or where neither the walls nor ceiling are able to house the unit.

CAPACITY

0.8 HP ~ 2.5 HP

SOUND PRESSURE LEVEL

35 dB(A)

LOCAL CONTROLS



RBC-AXU31-E



RBC-ASCU11-E
RBC-AMTU31-E
RBC-AMSU51-EN/ES

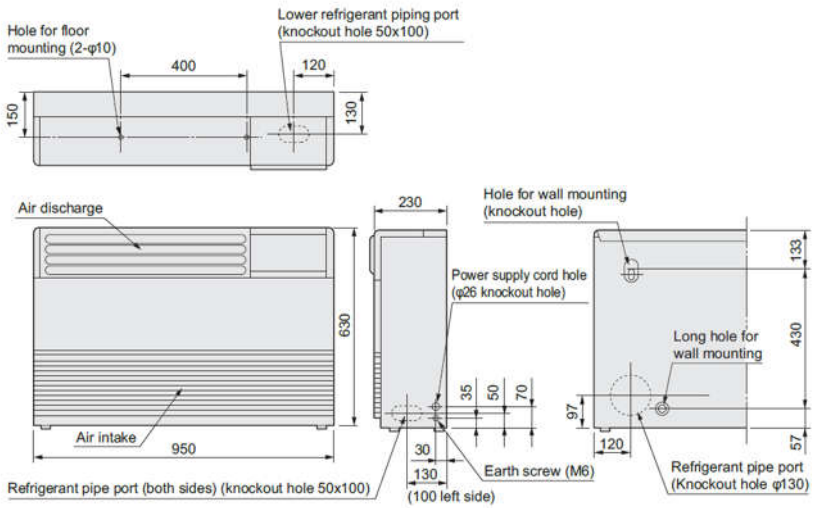
Features

Model name		MML-	UP0071H-E	UP0091H-E	UP0121H-E	UP0151H-E	UP0181H-E	UP0241H-E
Cooling code		HP	0.8	1.0	1.25	1.7	2.0	2.5
Cooling capacity		kW	2.2	2.8	3.6	4.5	5.6	7.1
Heating capacity		kW	2.5	3.2	4.0	5.0	6.3	8.0
Electrical characteristics	Power supply		1 phase 50Hz 230V (220-240V) / 1 phase 60Hz 220V					
	Running current (50Hz/60Hz)	A	0.26/0.25		0.43/0.44		0.47/0.53	
	Power consumption (50Hz/60Hz)	kW	0.056/0.044		0.092/0.069		0.102/0.076	
	Starting current (50Hz/60Hz)	A	0.60/0.60		0.80/0.80		1.10/1.10	
Appearance			Silky shade (1Y8.5/0.5)					
Dimensions (HxWxD)		mm	630x950x230					
Total weight		kg	35				38	
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	480/420/360		900/780/650		1080/930/780	
	Motor output	W	45				70	
Sound pressure level (H/M/L)		dB(A)	39/37/35		45/41/38		49/44/39	
Sound power level		dB(A)	54		60		64	
Air filter			Standard filter supplied (Simple filter)					
Controller (Optional)			Wired or infrared remote controller					
Conecting pipe	Gas side	mm	9.5	9.5	9.5	12.7	12.7	15.9
	Liquid side	mm	6.4	6.4	6.4	6.4	6.4	9.5
	Drain port (nominal dia)	mm	20 (Polyvinyl chloride tube)					

Drawings

Unit : mm

All model



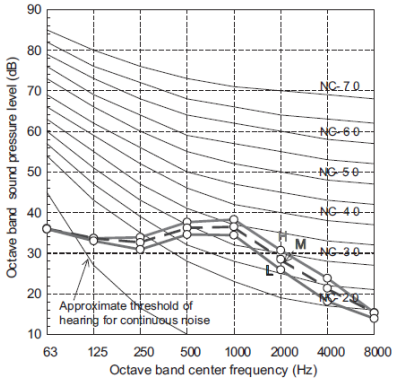
CABINET

Sound pressure levels

Unit : dB(A)

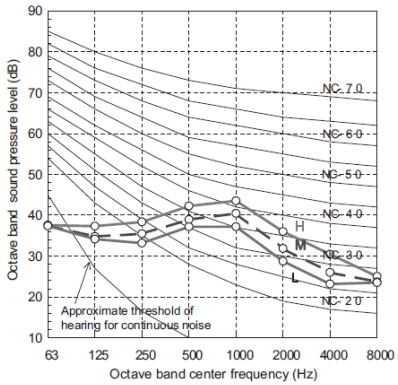
MML-UP0071H-E, MML-UP0091H-E

Fan tap	H	M	L
Sound pressure level (dB(A))	39	37	35



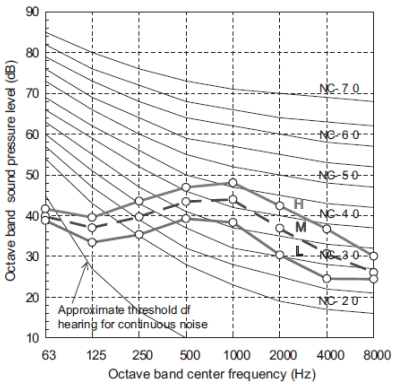
MML-UP0121H-E, MML-UP151H-E

Fan tap	H	M	L
Sound pressure level (dB(A))	45	41	38



MML-UP0181H-E, MML-UP241H-E

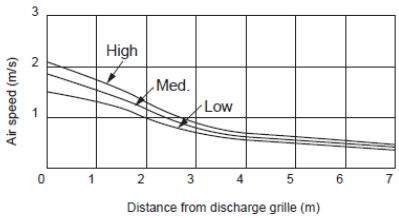
Fan tap	H	M	L
Sound pressure level (dB(A))	49	44	39



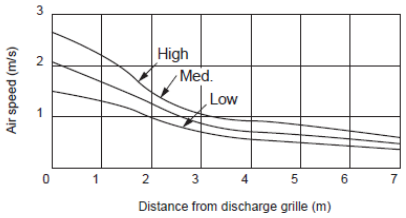
Air diffusion

Unit : m/s

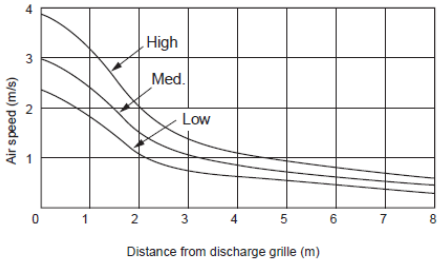
MML-UP0071H-E, MML-UP0091H-E



MML-UP0121H-E, MML-UP151H-E



MML-UP0181H-E, MML-UP241H-E



Console connectors

• : Available

CN32	CN60	CN61	CN70	CN73	CN80
Additional ventilation control from remote control	Operation status signal output (Cooling, heating, fan, defrost, thermo-on)	External On/Off, operation output and alarm output	Warning symbol on remote control based on signal input.o off.	Forced IDU thermo-off based on signal input	Forced IDU thermo-off and IDU lock based on signal input
•	•	•	•	•	•

MMF-UP_1H-E
FLOOR STANDING



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

CAPACITY

1.7 HP ~ 6 HP

SOUND PRESSURE LEVEL

38 dB(A)

LOCAL CONTROLS



RBC-AXU31-E



RBC-ASCU11-E
RBC-AMTU31-E
RBC-AMSU51-EN/ES

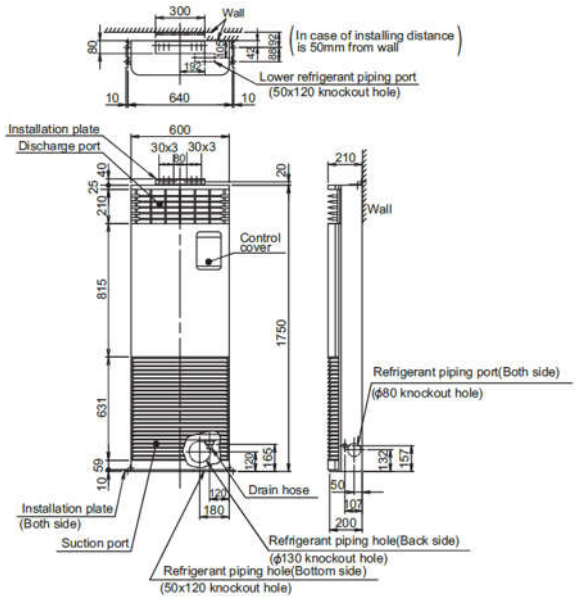
Features

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/60Hz)	A	0.37/0.38		0.55/0.58		0.82/0.86	0.97/1.02	
	Power consumption (50Hz/60Hz)	kW	0.053/0.053		0.087/0.087		0.133/0.133	0.158/0.158	
	Starting current (50Hz/60Hz)	A	0.48/0.50		0.71/0.75		1.06/1.11	1.27/1.33	
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	
Sound power level		dB(A)	64		67		69	72	
Air filter			Standard filter supplied (Simple filter)						
Controller (Optional)			Wired or infrared remote controller						
Conecting pipe	Gas side	mm	12.7	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	9.5
	Drain port (nominal dia)	mm	20 (Polyvinyl chloride tube)						

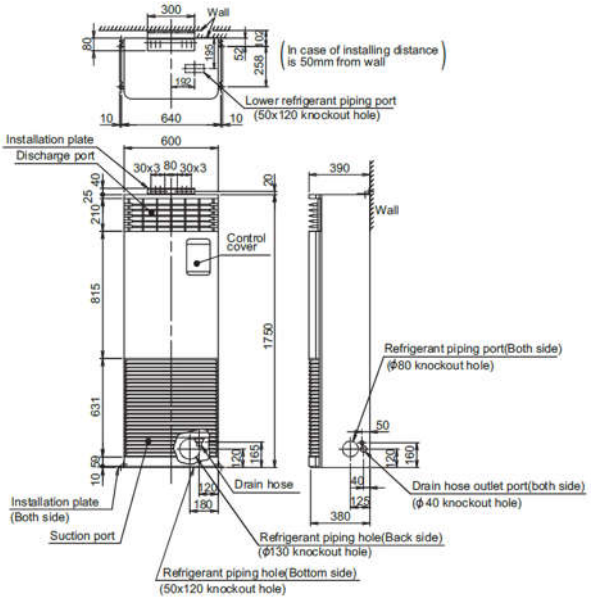
Drawings

Unit : mm

MMF-UP0151H-E to MMF-UP0271H-E



MMF-UP0361H-E to MMF-UP0561H-E



Sound pressure levels

Unit : dB(A)

MMF-UP0151H-E, MMF-UP0181H-E

Fan tap	H	M	L
Sound pressure level (dB(A))	46.0	42.0	37.0

MML-UP0151BH-E, MML-UP0271BH-E

Fan tap	H	M	L
Sound pressure level (dB(A))	49.0	45.0	39.0

MMF-UP0361H-E

Fan tap	H	M	L
Sound pressure level (dB(A))	51.0	46.0	41.0

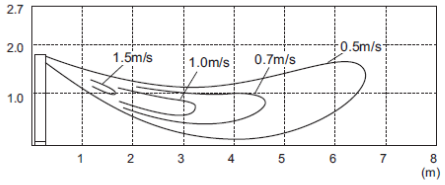
MML-UP0481BH-E, MML-UP0561BH-E

Fan tap	H	M	L
Sound pressure level (dB(A))	54.0	49.0	44.0

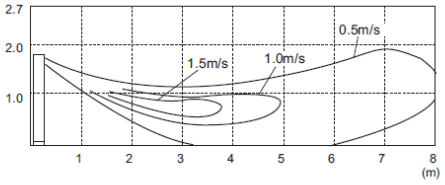
Air diffusion

Unit : m/s

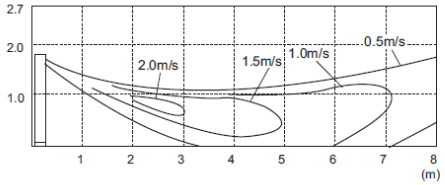
MMF-UP0151H-E, MMF-UP0181H-E



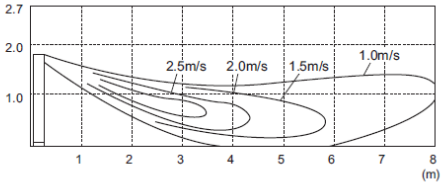
MML-UP0151BH-E, MML-UP0271BH-E



MMF-UP0361H-E



MML-UP0481BH-E, MML-UP0561BH-E



Floor standing embedded connectors

• : Available

CN32	CN60	CN61	CN70	CN73	CN80
Additional ventilation control from remote control	Operation status signal output (Cooling, heating, fan, defrost, thermo-on)	External On/Off, operation output and alarm output	Warning symbol on remote control based on signal input.o off.	Forced IDU thermo-off based on signal input	Forced IDU thermo-off and IDU lock based on signal input
•	TCB-PCUC2E pcb needed	•	TCB-PCUC2E pcb needed	TCB-PCUC2E pcb needed	TCB-PCUC2E pcb needed

MMF-AP_5(D)HP-VA/VB
LARGE CAPACITY FLOOR STANDING



This system is particularly suitable to large rooms air condition like warehouse, factory and shopping mall.

CAPACITY
8 HP ~ 20 HP

AIR FLOW
Up to 3,600m³/h ~ 8,400m³/h

SOUND PRESSURE LEVEL
59 dB(A)

LOCAL CONTROLS



RBC-AXU31-E



RBC-ASCU11-E
RBC-AMTU31-E
RBC-AMSU51-EN/ES

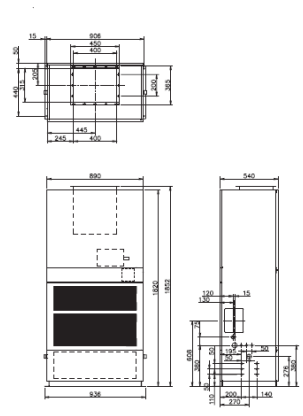
Features

Model name		MMF-	Ducted Type				Direct Blow Type			
			AP0725DHP-VA	AP0965DHP-VA	AP1445DHP-VA	AP1925DHP-VA	AP0725HP-VA	AP0965HP-VA	AP1445HP-VA	AP1925HP-VA
			AP0725DHP-VB	AP0965DHP-VB	AP1445DHP-VB	AP1925DHP-VB	AP0725HP-VB	AP0965HP-VB	AP1445HP-VB	AP1925HP-VB
Cooling code		HP	8	10	16	20	8	10	16	20
Cooling capacity		kW	22.4	28.0	45.0	56.0	22.4	28.0	45.0	56.0
Heating capacity		kW	25.0	31.5	50.0	63.0	25.0	31.5	50.0	63.0
Electrical characteristics	Power supply		VA: 3 phase 50Hz 380-415V / VB: 3 phase 60Hz 380V							
	Running current (50Hz/60Hz)	A	1.68/1.69	2.85/2.74	4.26/4.16	5.67/5.18	1.42/1.29	2.27/1.94	2.91/2.54	3.77/3.49
	Power consumption (50Hz/60Hz)	kW	0.83/0.93	1.35/1.48	2.30/2.41	2.67/2.80	0.62/0.67	0.80/0.86	1.28/1.31	1.96/1.98
	Starting current (50Hz/60Hz)	A	9.4/8.2	19.6/17.7	31.5/27.0	45.6/42.0	9.4/8.2	19.6/17.7	31.5/27.0	31.5/27.0
Appearance			Cream (5Y 7/1.5)							
Dimensions (HxWxD)		mm	1820x890x540		1870x1300x760		2130x890x540		2280x1300x760	
Total weight		kg	150	155	280	290	170	175	320	
Heat exchanger			Copper tubes, Aluminum plate fins							
Soundproof / Heat-insulating material			Polyolefin form							
Fan unit	Fan		Multi blades centrifugal; Belt drive							
	Standard air flow	m³/h	3600	4500	7200	8400	3600	4200	7200	8400
	Air flow limit (Lower/Upper)	m³/h	2880/4320	3360/5040	5760/8640	6720/10080	2880/4320	3360/5040	5760/8640	6720/10080
	External static pressure	Pa	200	300	300	300	-	-	-	-
Sound pressure level		dB(A)	59	64	66	68	60	64	63	66
Air filter			Standard filter supplied (Simple filter)							
Controller (Optional)			Remote controller							
Conecting pipe	Gas side	mm	22.2		28.6		22.2		28.6	
	Liquid side	mm	12.7		15.9		12.7		15.9	
	Drain port (nominal dia)	mm	25 (Both sides of male screw)							

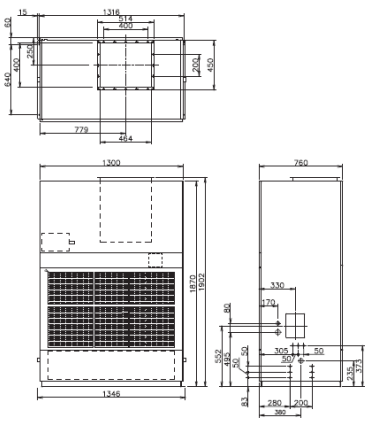
Drawings

Unit : mm

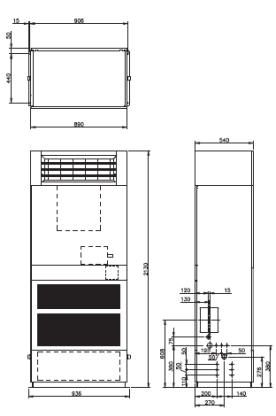
MMF-AP0725DHP-VA/VB,
MMF-AP0965DHP-VA/VB



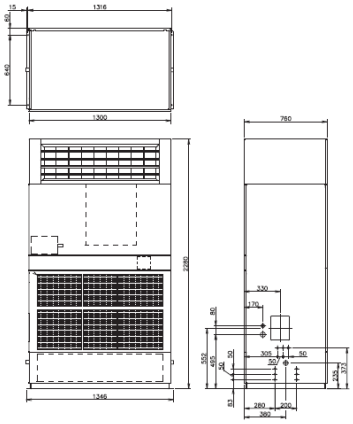
MMF-AP1445DHP-VA/VB,
MMF-AP1925DHP-VA/VB



MMF-AP0725HP-VA/VB,
MMF-AP0965HP-VA/VB



MMF-AP1445HP-VA/VB,
MMF-AP1925HP-VA/VB

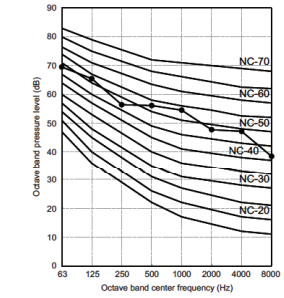


Sound pressure levels

Unit : dB(A)

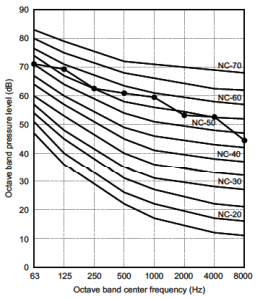
MMF-AP0725DHP-VA/VB

Sound pressure level (dB(A))	59



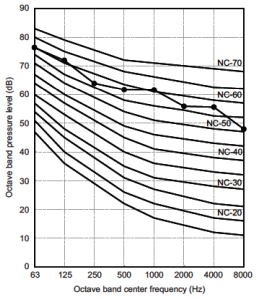
MMF-AP0965DHP-VA/VB

Sound pressure level (dB(A))	64



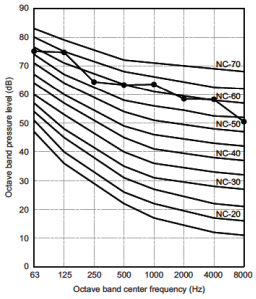
MMF-AP1445DHP-VA/VB

Sound pressure level (dB(A))	66



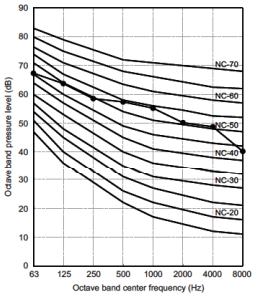
MMF-AP1925DHP-VA/VB

Sound pressure level (dB(A))	68



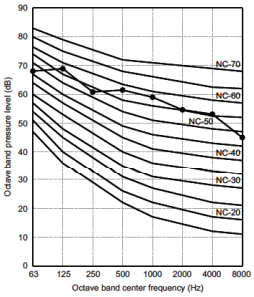
MMF-AP0725HP-VA/VB

Sound pressure level (dB(A))	60



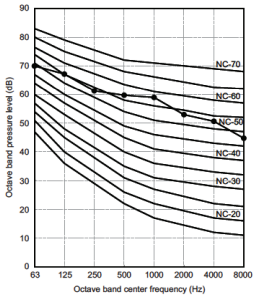
MMF-AP0965HP-VA/VB

Sound pressure level (dB(A))	64



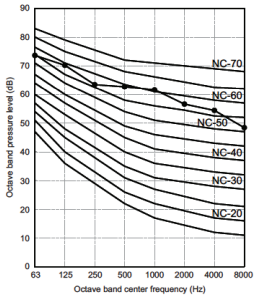
MMF-AP1445HP-VA/VB

Sound pressure level (dB(A))	63



MMF-AP1925HP-VA/VB

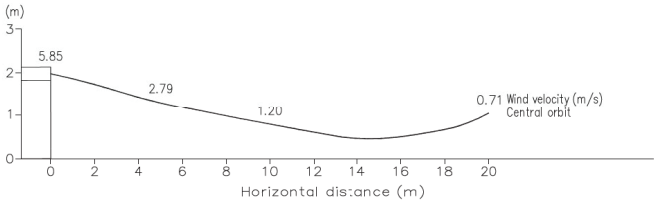
Sound pressure level (dB(A))	66



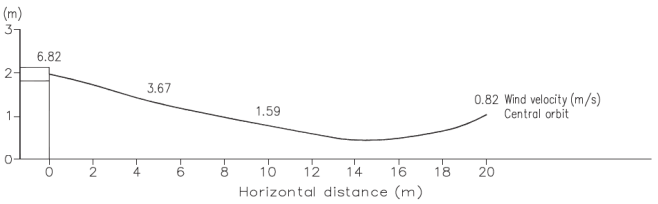
Air diffusion

Unit : m/s

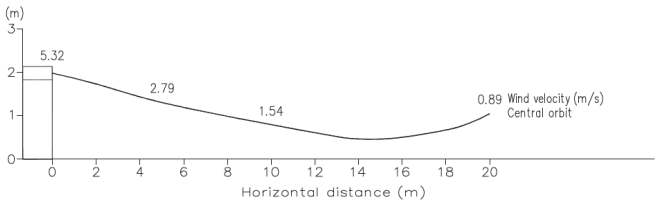
MMF-AP0725HP-VA(VB)



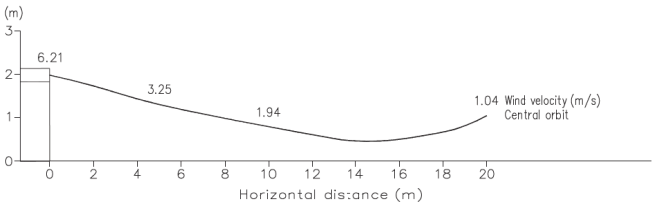
MMF-AP0965HP-VA(VB)



MMF-AP1445HP-VA(VB)



MMF-AP1925HP-VA(VB)



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.

CAPACITY
4.1 kW ~ 8.25 kW

AIR FLOW
Up to 500m³/h ~ 950m³/h

SOUND PRESSURE LEVEL
34.5 dB(A)

LOCAL CONTROLS



NRC-01HE
RBC-AMTU31E

Features

Model name			MMD-	Without humidifier			
				VN502HEX1E	VN802HEX1E	VN1002HEX1E	VN1002HEX1E2
Cooling capacity			kW	4.10(1.30)	6.56(2.06)	8.25(2.32)	8.25(2.32)
Heating capacity			kW	5.53(2.33)	8.61(3.61)	10.92(4.32)	10.92(4.32)
Power supply				1 phase 50Hz 230V (220-240V) / 1 phase 60Hz 220V		1 phase 50Hz 230V(220V-240V)	1 phase 60Hz 220V
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	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	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	66.0/68.5/69.0
Power input (Heat exchange mode)	Extra high		kw	0.300/0.365	0.505/0.595	0.550	0.720
	High		kw	0.280/0.350	0.465/0.555	0.545	0.665
	Low		kw	0.235/0.250	0.335/0.390	0.485	0.530
Running current	Extra high		A	1.30/1.65	2.25/2.77	2.46	3.38
	High		A	1.21/1.62	2.07/2.59	2.43	3.11
	Low		A	1.01/1.14	1.46/1.79	2.16	2.45
Fan unit	Standard air flow	Extra high	m³/h	500/-	800/-	950	950
		High	m³/h	500/-	800/-	950	950
		Low	m³/h	440/410	640/600	820	800
	External static pressure	Extra high	Pa	120/200	120/190	135	195
		High	Pa	105/170	100/155	120	160
		Low	Pa	115/150	100/130	105	130
	Air flow limit	Lower limit	m³/h	330	480	640	640
		Upper limit	m³/h	600	960	1140	1140
Humidifier	System			-	-	-	-
	Amount			-	-	-	-
	Feed water pressure			-	-	-	-
Sound pressure level	Extra high		dB(A)	37.5/40	41/43	43	43.5
	High		dB(A)	36.5/38	40/42	42	42
	Low		dB(A)	34.5/36.5	38/37	40	40
Sound power level			dB(A)	55	58	59	59
Appearance				Zinc hot dipping steel plate			
Dimensions (HxWxD)			mm	430x1140x1690	430x1189x1739	430x1189x1789	430x1189x1789
Weight			kg	84	100	101	101
Heat exchanger / Heat-insulating material				Finned tube / Flexible urethane foam			
Air filter				Standard filter & High efficiency filter			
Controller				Remote controller (Separately sold parts)			
Conecting pipe	Gas side / Liquid side		mm	9.5 / 6.4	12.7 / 6.4	12.7 / 6.4	12.7 / 6.4
	Drain port (nominal dia)		mm	25 (Polyvinyl chloride tube)			
Water supply connection (Port size)				-	-	-	-
Operating range	Around unit			-10 - 40°C . RH ≤80%			
	Outdoor Air (OA)			-15 - 43°C . RH ≤80%			
	Return Air (RA)			5 - 40°C . RH ≤80%			

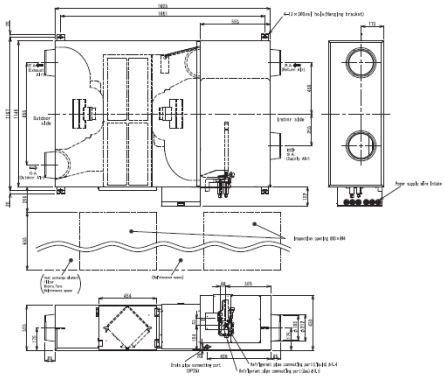
Cooling and heating capacities are based on the following conditions:
cooling capacities are based on: indoor temperature: 27°CDB/19°C WB, Outdoor temperature: 35°C DB
Heating capacities are based on: indoor temperature: 20°C DB, Outdoor temperature: 7 ° CDB/6°C WB.
The figures in ( ) indicate the heat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

AIR-TO-AIR HEAT EXCHANGER WITH DX COIL

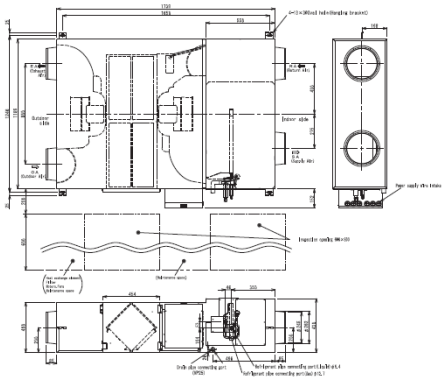
Drawings

Unit : mm

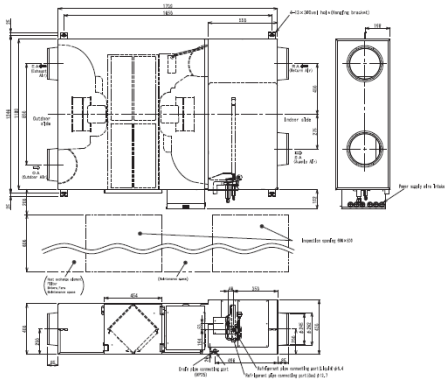
MMD-VN502HEX1E



MMD-VN802HEX1E



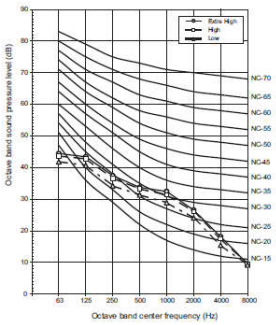
MMD-VN1002HEX1E, MMD-VN1002HEX1E2



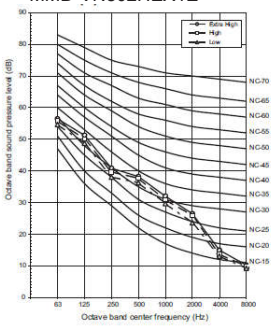
Sound pressure levels

Unit : dB(A)

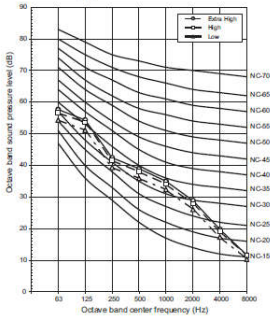
MMD-VN502HEX1E



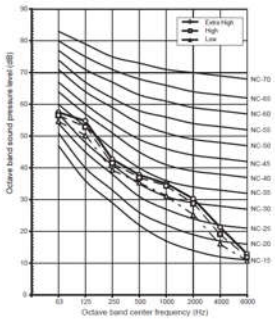
MMD-VN802HEX1E



MMD-VN1002HEX1E



MMD-VN1002HEX1E2



Accessories

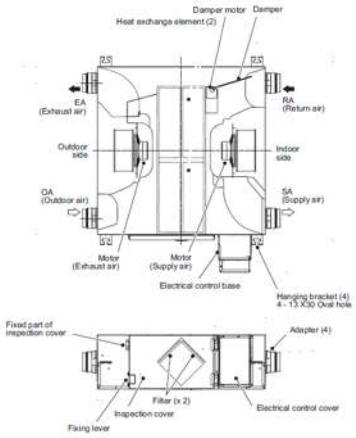
Part name	Model name	Description	Appearance	Remarks
Control	NRC-01HE	Dedicated remote controller for air-to-air heat exchanger		Integrated functions : fan speed, freecooling, air balance volume rate, temperature management and timer.
	NRB-1HE	On/off optional PCB for air-to-air heat exchanger		
Condensates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

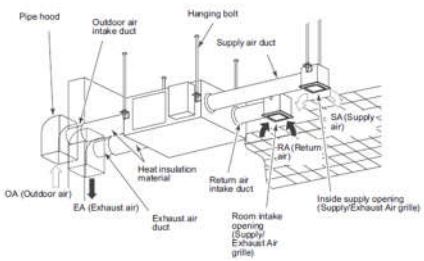
Air-to-air heat exchanger (with DX coil) embedded connectors

• : Available

CN32	CN60	CN61	CN70	CN73	CN80
Additional ventilation control from remote control	Operation status signal output (Cooling, heating, fan, defrost, thermo-on)	External On/Off, operation output and alarm output	Warning symbol on remote control based on signal input.o off.	Forced IDU thermo-off based on signal input	Forced IDU thermo-off and IDU lock based on signal input
-	-	•	•	•	•

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)		m³/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
Duct diameter		mm	100	150		200		250		Inside: 250 / Outside: 283x730	
Filtration efficiency grade (%)			82								
Operating range	Around unit		-10°C-40°C 80%RH or less								
	Outdoor Air (OA)		-15°C(*1)-43°C 80%RH or less								
	Return Air (RA)		5°C-40°C 80%RH or less								

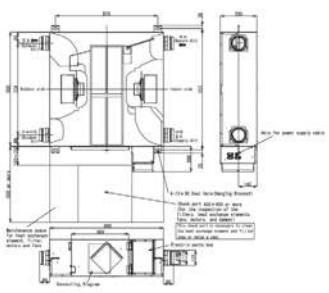
* Air volume can be changed over to high (Extra high) mode or low mode at both heat exchange and normal ventilation modes.
* Sound pressure level is measured 1.5 m below the center of the unit, and the value which was measured at the acoustic room.
* Sound pressure levels usually become higher than above 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 oepration 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.

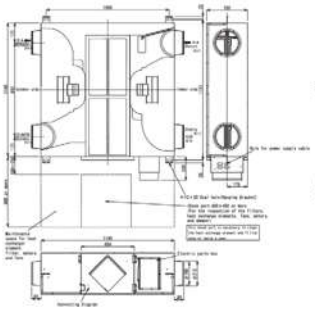
Drawings

Unit : mm

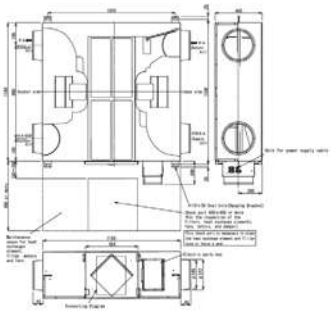
VN-M150HE to VN-M350HE



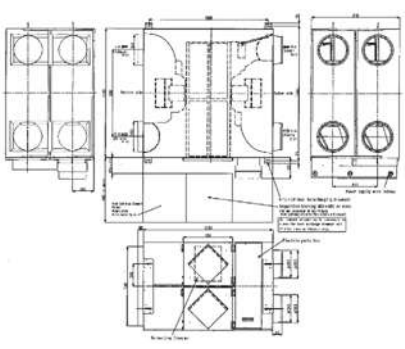
VN-M500HE to VN-M650HE



VN-M800HE to VN-M1000HE1



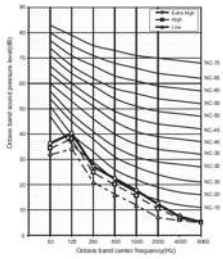
VN-M1500HE1 to VN-M2000HE1



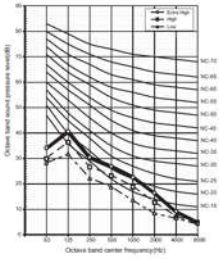
Sound pressure levels

Unit : dB(A)

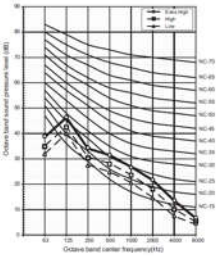
VN-M150HE



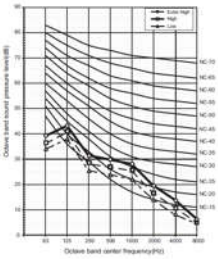
VN-M250HE



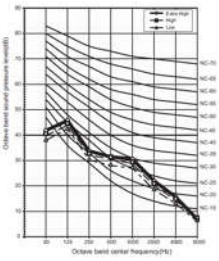
VN-M350HE



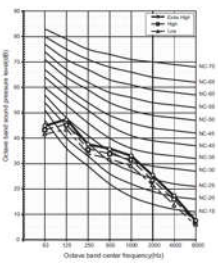
VN-M500HE



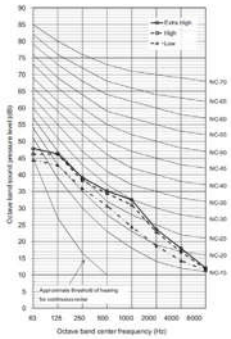
VN-M650HE



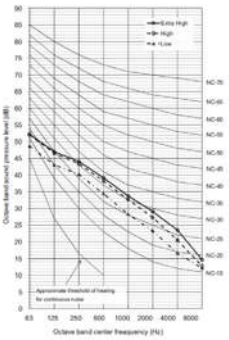
VN-M800HE



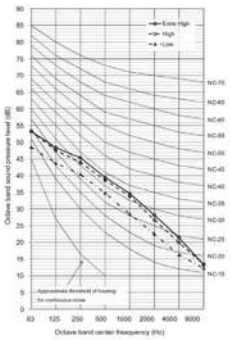
VN-M1000HE1



VN-M1500HE1



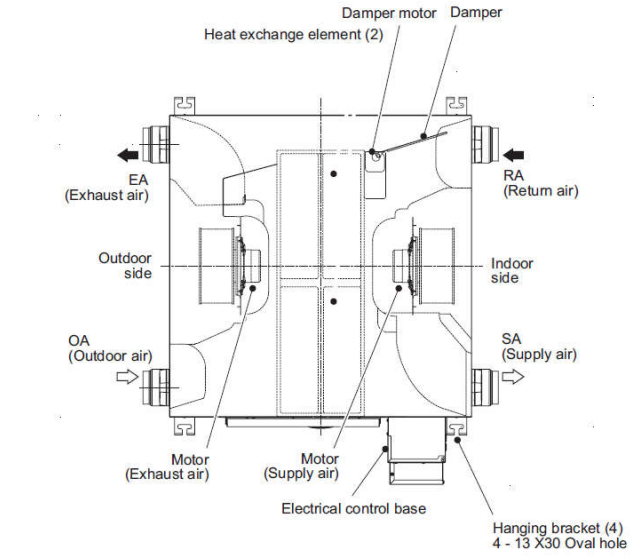
VN-M2000HE1

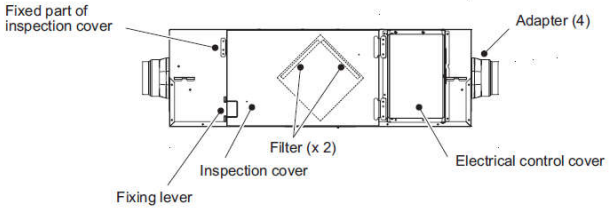


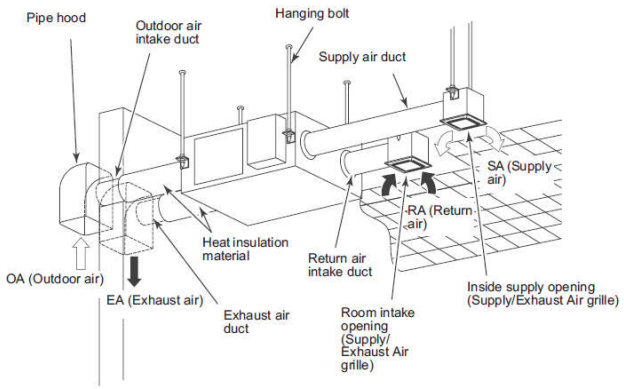
Accessories

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 additionnal PCB		On/off optionnal PCB for air-to-air heat exchanger

Other information







MMW-UP_1LQ-E
MID TEMP HOT WATER MODULE



With the mid temperature hot water module, produce hot water in addition of cooling and heating.

CAPACITY
8 kW ~ 16 HP

HOT WATER
Max 50°C

SOUND PRESSURE LEVEL
25 dB(A)

LOCAL CONTROLS



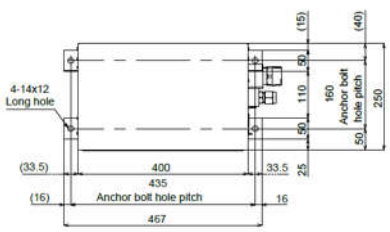
RBC-ASCU11-E
RBC-AMTU31-E
RBC-AMSU51-EN/ES

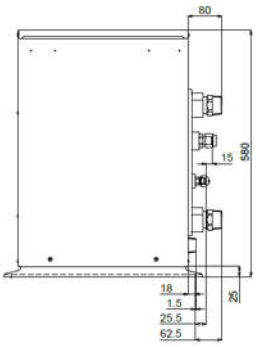
Features

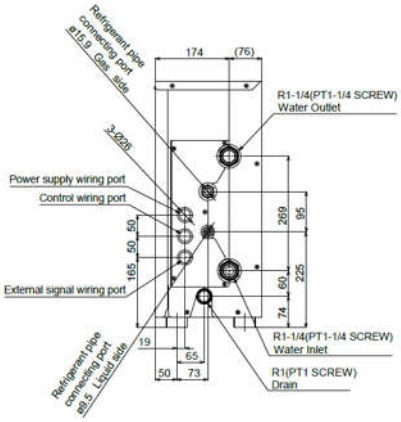
Model name			MMW-	UP0271LQ-E	UP0561LQ-E
Heating capacity *1			kW	8.0	16.0
Electrical characteristics	Power supply *2			1 phase / 50Hz / 230V (220V-240V)	
	Running current		A	0.08	0.08
	Power consumption		kW	0.14	0.14
Appearance				Zinc hot dipping steel plate	
Dimensions (HxL(leg included)xD)			mm	580x400(467)x250	
Weight			kg	17.8	20.3
Design pressure	Refrigerant / water side		MPa	4.15 / 1.0	
Heat exchanger				Plate type heat exchanger	
Heat-insulating material				Polyethylene foam + Polyurethane foam	
Water flow rate	Standard / Min.		L/min	22.9/19.5	45.8/38.9
Water pressure loss (at standard water flow rate)			kPa	40.5	44.2
Controller				Remote controller	
Operation range	Ambient	Indoor	°CDB	5 - 32	
		Allowable dew point	°CWB	23 or less	
			RH(%)	30 - 85	
		Outdoor (at heating) SMMS-e, SMMS-u	°CDB	-25 - 21	
			°CWB	-25 - 19	
		Outdoor (at heating) SMMS-7	°CDB		
			°CWB		
	Water inlet side		°C	15 or more and 45 or less	
	Water outlet side		°C	25 - 50	
Water filter				Strainer with Mesh 30 to 40 (procured locally)	
Conecting pipe	Water pipe (Inlet/Outlet)			R1 - 1/4	
	Gas / Liquid side		mm	φ15.9 / φ9.5	
	Drain port (nominal dia)		mm	R1	
Sound pressure level / Sound power level			dB(A)	25/25	27/27

*1: Rated conditions: inlet water temp. 30 °C outlet water temp. 35 °C Outdoor air temp. 7 °CDB / 6 °CWB
The standard piping means that mean pipe length is 5 m, branching pipe length is 2.5 m of branch piping connected with a 0 meter height.
*2: The source voltage must not fluctuate more than ±10%.
*3: The unit is packed in a sideways state.

Drawings







MID TEMPERATURE HOT WATER MODULE

Allowable length / height difference of refrigerant piping

			SMMS-e	SMMS-u
Pipe length	Total extension of pipe (Liquide pipe, real lenght)	Below 34HP	300m	500m
		34HP or more	1000m	1200m
	Fathest piping lenght	Equivalent lenght	235m	250m
		Real lenght	190m	210m
	Equivalent lenght of farthest piping form 1st branching	High differnece btween IDU >3m	65m	65m
		High differnece btween IDU ≤3m	90m	90m
	Equivalent lenght of farthest piping between outodoor unuits		25m	40m
	Max equivalent lenght of main piping	High differnece btween IDU >3m	120/100m	120/100m
		High differnece btween IDU ≤3m		
	Max. equivalent lenght of outdoor unit connecitng piping		10m	10m
	Max. real lenght of indoor unit connecitng piping		30m	30m
	Max. equivalenet lenght between branches		50m	50m
	Maximum real lenght of terminal branching section to indoor units	Single / Multi port type	-	-
	Maximum equivalent lenght between branching section		-	-
Difference in height	Height between indoor and outdoor units	Upper / Lower Outdoor unit	70m / 40m	70m / 40m
	Height between indoor units	Upper / Lower Outdoor unit	3m* / 10m*	3m* / 10m*
	Height between HWM	Upper / Lower Outdoor unit	3m	3m
	Height between indoor units and HWM	Upper / Lower Outdoor unit	3m* / 10m*	3m* / 10m*
	Height between outdoor units		5m	5m
In case of 4serie flow selector connection to indoor units	Maximum equivalent lenght indoor units in group cotronl by one single port flow selector unit		-	-
	Maximum real lenght between flow selector unit and indoor unit	Single / Multi port type	-	-
	Height difference between indoor units in group control by one flow selector unit		-	-

Diversity and connectivity restrictions

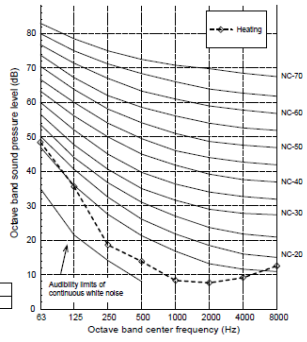
			SMMS-e	SMMS-u
Indoor connection capacity	Total	Standard indoor unit + M-HWM	65 - 115%	65 - 115%
	Allowed capacity	Standard indoor unit	50 - 115%	50 - 115%
		M-HWM	0 - 50%	0 - 50%
Number of combined indoor units and M-HWM	Total	Standard indoor unit + M-HWM	2 - 64	2 - 128
	Allowed capacity	Standard indoor unit	2 - 128	
		M-HWM	0 - 2	0 - 2

Sound pressure levels

Unit : dB(A)

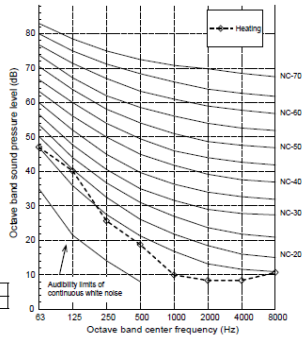
MMW-UP0271LQ-E

Sound pressure level dB(A)	Heating
	25



MMW-UP0561LQ-E

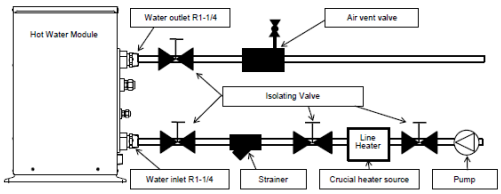
Sound pressure level dB(A)	Heating
	27



Other information

Water piping and line heater installation
- Make the piping route a closed circuit. (An open water circuit may cause a failure.)
- Before a long period of none use. purge the water out of the pipes and thoroughly let them dry.
- Do not add brine to the circulating water.
- Do not use the water used for the unit for drinking or food manufacturing.
- To ensure easy maintenance. inspection. and replacement of the unit. use a proper joint. valve. etc. (procured locally) on the water inlet and outlet port.
- Be sure to install a strainer with 30 to 40 meshes (procured locally) on the water inlet pipe. If a strainer is not installed. this may cause impaired performance. or damage to the plate heat exchanger from freezing.
- Install a suitable air vent (procured locally) on the water pipe. After sending water through the pipe. be sure to vent the excess air.
- To avoid water leak. wrap some sealing tape around the screw part.
- Water pipes can get very hot. depending on the preset temperature. Wrap the water pipes with heat insulation (procured locally) to prevent burns.
- Be sure to install the line heater (procured locally) on the water inlet side. In addition. position it within 5 m of the water inlet pipe of the Hot Water Module.
- Follow capacity table to select a line heater (procured locally) within the range of 40 to 50% of the Hot Water Module's rated capacity.

Hot Water Module model name	Capacity of line heater (kW)
MMW-UP0271LQ-E	3.2~4.0
MMW-UP0561LQ-E	6.4~8.0



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. As well as 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

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 equipement.

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

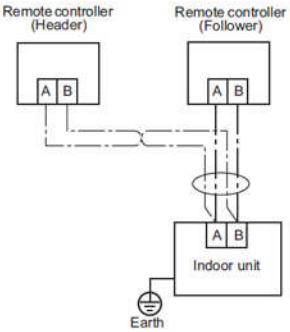
INDIVIDUAL REMOTE CONTROLLER

• : Available

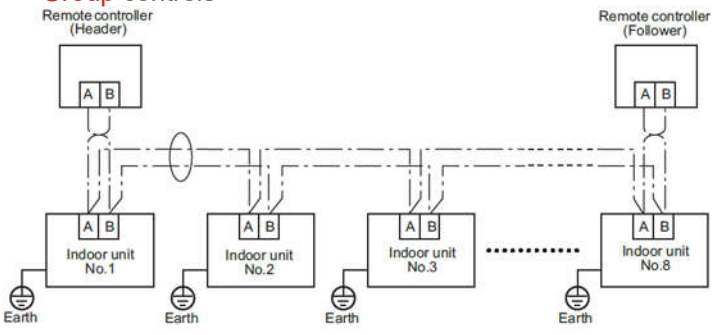
TYPE		INFRARED							WIRED			
Part number		RBC-AXU31-E	RBC-AXU41U-E	RBC-AXU31U-E	RBC-AXU31UM-E	RBC-AXU31UW-E	RBC-AXU31C-E	RBC-AX33UYP-E	RBC-ASCU11-E	RBC-AMTU31-E	RBC-AMSU51-EN/ES	NRC-01HE
Picture												
Dimensions (HxWxD) in mm	Remote	157x56x19	157x56x19	157x56x19	157x56x19	157x56x19	157x56x19	157x56x19	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 orien-tation)	•	•	•	•	•	•	•	•	•	•	
Scheduling	Timer function	•	•	•	•	•	•	•		•	•	•
	Schedule fonction								•		•	
	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 duirty indication								•	•	•	
	Error display	•	•	•	•	•	•	•	•	•	•	•
	System settings								•	•	•	
	Indoor unit serial number										•	
Outputs	Error output								•	•	•	•
	External ventila-tion 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

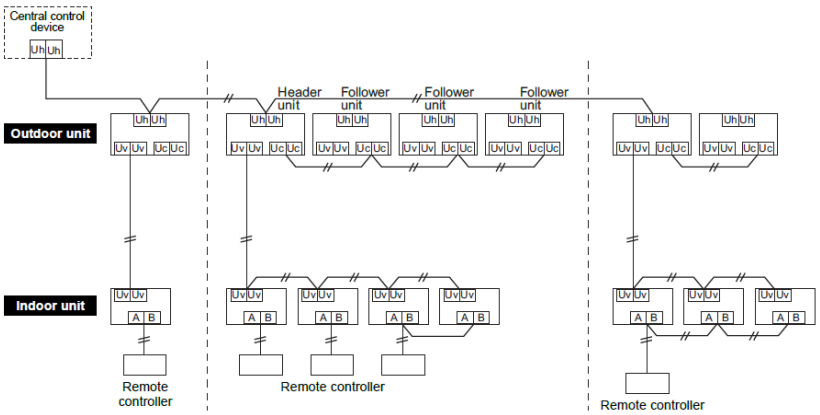


CONTROL

TOUCH SCREEN SOLUTIONS

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 fonction	•	•
	Return back		•
Advanced functions	Dual set point		•
	Soft cooling		•
	Energy save function		
	Energy monitoring		• (If power metter,BMS-IFWH5E interface relay needed)
Central control	Permit/prohibit function	•	•
	Groupe control	•	•
Installation & maintenance	Filter duirty indication	•	•
	Error display	•	•
	Error transfert 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

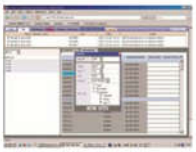
Drawings



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

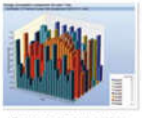




Focus on Data Analyzer

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.

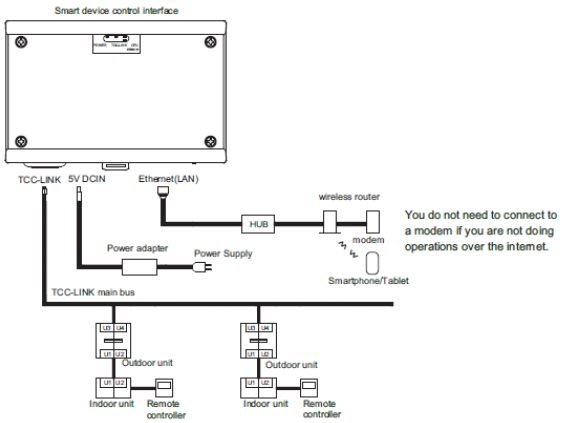




CLOUD SOLUTION

Part number		BMS-IWF0320E - Smart Device control interface
App name		Toshiba AC control
Picture		
Dimensions (HxWxD) in mm		140x90x45
Compatibility		All indoor units (except hot water module, DX kit, fresh air, A2A heat exhcanger)
Connectivity		1:32
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 fonction	•
	Return back	•
Advanced functions	Energy save function	•
	Eco temperature schift	•
	Soft cooling	•
	Customize room/floor/building name	•
Central control	Permit/prohibit function	•
	Groupe control	•
Display & Interface	Interface	App
	Multilanguage	•
	App compatiblity	Android & IOS
	Devices compatibility	Smartphone and Phablet
Installation & maintenance	Filter duirty indication	•
	Error display	•
	Error transfert by Email	•
Users	User acces	Login & Password
	Max user	1 admin / 32 users
Communication protocol		TCC Link

Drawings



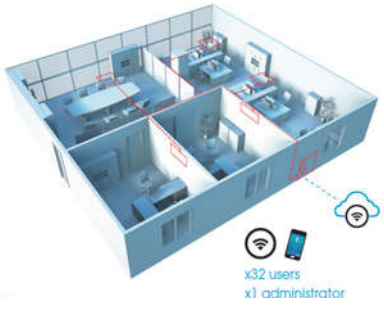
Level function	Administrator	User
Air conditioner's display	•	•*1
Air conditioner's settings	•	•*1, *2
Users sttings	•	-
Alarm	•	-*3
Schedule	•	-
Air conditioner's various settings	•	-*4
Clock settings	• (via intranet acces only)	-
Operation mode restriction	• (via intranet acces only)	-

*1:Only the air conditioners in the "Access Area" can be displayed.
*2:If the locking setting is enabled, you cannot do any settings.
*3:The alarm settings for "Access Area" can only be displayed.
*4:The settings can only be displayed.

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.



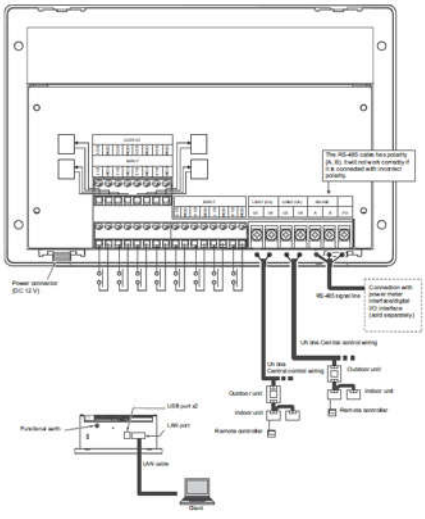


TOUCH SCREEN SOLUTIONS

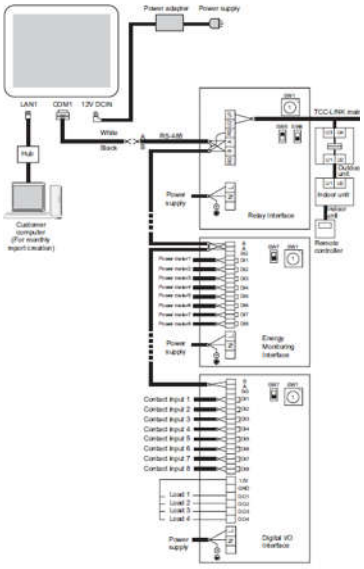
Part number	Touch Screen Smart Manager	BMS-CT2560U-E	BMS-CT5121E
Picture			
Dimensions (HxWxD) in mm		205x136x90	255x323x49
Compatibility		All indoor units (except hot water module, DX kit, fresh air, A2A heat exhcanger)	All indoor units. TCS-NET relay interface needed (BMS-IFLSV4E)
Connectivity		1:256	1:512
Screen	Type / Dimension	Capacitive color touch screen / 7"	Capacitive color touch screen / 12.1"
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 fonction	•	•
	Return back	•	•
Advanced functions	Dual set point	•	•
	Soft cooling	•	•
	Energy save function	•	•
	Energy monitoring	•	• (If power metter,BMS-IFWH5E interface relay needed)
	Rooms naming		
Central control	Permit/prohibit function		
	Groupe control	•	•
Installation & maintenance	Filter duirty indication	•	•
	Error display	•	•
	Error transfert 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



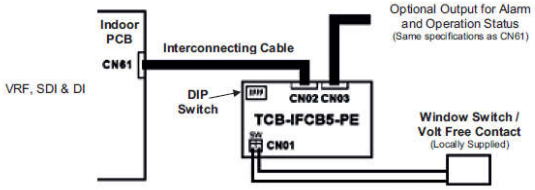
Additional PCB for outdoor units

Model name	Power peak-cut control borad			External master ON/OFF control board			Output control board		
									
	TCB-PCDM4E			TCB-PCMO4E			TCB-PCIN4E		
System	SMMSe/SMMSu	SHRMe	MiNi SMMSe	SMMSe/SMMSu	SHRMe	MiNi SMMSe	SMMSe/SMMSu	SHRMe	MiNi SMMSe
Power peak cut control	•	•	•						
Power peak cut extand	•	•	•						
Snowfall fan control				•	•				
External master ON/OFF control				•	•	•			
Night operation (Sound reductio) control				•	•	•			
Operation mode selection cotnrol				•	•	•			
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

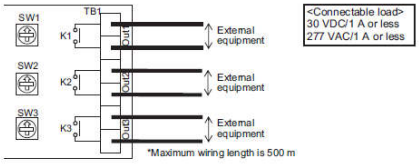


Optional connection kit TCB-PCUC2-E

SIGNAL

OUTPUT TERMINAL TB1

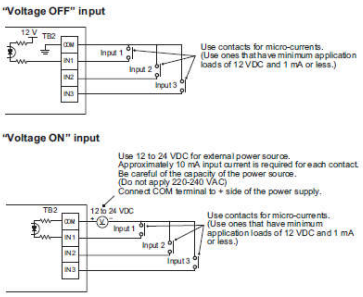
Signal outputs (Mode, fans status, alarm, defrost,…) are extracted from “OUT1”, “OUT2”, and “OUT3.



EXTERNAL

DIGITAL INPUT TERMINAL TB2

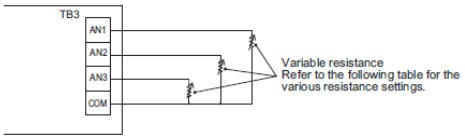
Stop air conditioner or lock local remote by inputting signal.



EXTERNAL

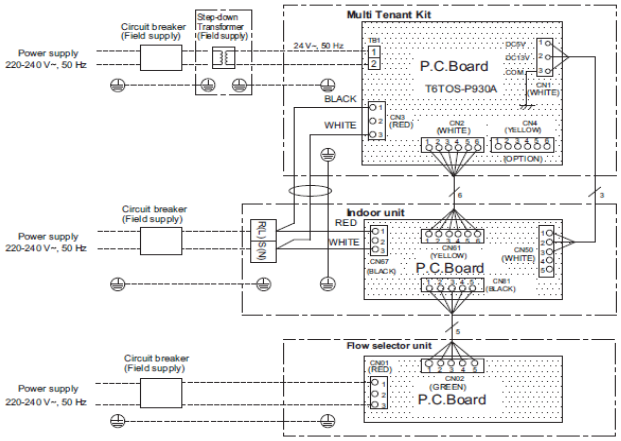
ANALOG INPUT TERMINAL TB3

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.



Multi tenant kit TCB-PSMT1E

For multi tenant application, this PCB maintian low voltage power during tenant absence when main power supply for the FCU is shut down.



Features

Part number		BMS-IFMB0TLR-E	TCB-IFMB641TLE	BMS-IFKX0TLR-E	TCB-IFLN642TLE	BMS-IFBN640TLE	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/Prohibt of 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

Controls

Model number	Reference	TCC Link	TU2C Link	Description	Used with
BMS-CT256U-E	7" Touch Screen Controller	x	x	Enables full control of up to 256 indoor units	
BMS-CT5121E	12" Touch Screen Controller	x		Enables full control of up to 512 indoor units with electric billing, ML	
BMS-IFBN640TLE	BN Interface	x		BACnet Interface for LC & VRF	Enables integration with BACnet
BMS-IFDD03E	Digital I/O relay interface	x		Digital I/O relay interface	Touch screen controller, Compliant manager, Web based controller, Smart Manager
BMS-IFKX0TLR-E	1:1 KNX interface	x		Connect the system to a KNX Building Management System	Remote Control wiring
BMS-IFLSV4E	TCS-Net Relay Interface	x		Relay for integration to TCS-Net	Bacnet gateway, Touch-screens & Web based controller
BMS-IFMB0TLR-E	1:1 Modbus interface	x		Connect the system to a Modbus Building Management System	Remote Control wiring
BMS-IFWH5E	Energy monitoring relay interface	x		Energy monitoring relay interface	Touch screen controller, Compliant manager, Web based controller, Smart Manager
BMS-IWF0320E	Smart Device Control Interface	x		Enables full control of up to 32 indoor units by usin Toshiba AC app (Smart phone & Tablet)	
BMS-SM1281ETLE	Smart BMS Manager with data analyzer	x		Enables full control of up to 128 indoor units with Energy Monitoring and Advanced Control Options.	Network 1:1 model connection interface required for DI/SDI (Excluding high-wall type)
NRB-1HE	Remote ON/OFF adapter	x		Allows ON/OFF control	All Air-to-air heat exchangers
NRC-01HE	Wired Remote Controller	x		Air-to-air heat exchanger remote controller, including with DX coil and humidifiers models	Air-to-air heat exchangers and Air-to-air heat exchangers with DX coil
RBC-AMS41E	Remote controller with schedule timer	x		Indoor unit operation with schedule timer (7-days) allowing to program 8 functions/day + clock display	
RBC-AMSU51-EN/ES	Design remote Controller with schedule timer	x	x	Multi-Language LCD display, a built-in 7-Day timer, Energy Saving options and return back function,Dual set points,and Soft cooling. EN = English, Italian, Polish, Greek, Russian, Turkish. ES = English, Spanish, Portuguese, French, Dutch, German	
RBC-AMTU31-E	Wired Remote Controller	x	x	Main wired remote controller	
RBC-AMT32-E	Wired Remote Controller	x		Main wired remote controller	
RBC-AS41E	Simplified Wired Remote Controller	x		Dedeicated for hotel and domestic applications	
RBC-AXU31C-E	Infra-red Remote Kit	x	x	Wireless remote controller	All ceiling units and one-way cassettes (SH series)
RBC-AXU31U-E	Wireless remote unit kit	x	x	Wireless remote unit kit for 4-way cassette	4 way cassette series 4 & RBC-U31PGP(W)-E panel
RBC-AX33UYP-E	Wireless remote kit	x	x	Wireless remote kit for YHP 1-way cassette	
RBC-AXU31-E	Infra-red Remote Kit	x	x	Wireless remote controller	All units
TCB-IFCB-4E2	Remote location On/Off Control Box	x		Enables remote location On/Off control	
TCB-IFCB5-PE	Window Switch & Remote on/off	x		Ensure the indoor unit not operate when outside window is open or for Door Entry systems	
TCB-IFCB640TLE	Analog interface	x		Control & monitoring up to 64 IU on TCC-link	Combination with TCB-IFCG1TLE
TCB-IFCG1TLE	General purpose interface	x		Enables control of A/C by the DI/DO and AI/AO	Combination with TCB-IFCB640TLE
TCB-IFLN642TLE	LN interface	x		Allows control of 64 indoor units from a Lonworks based BMS	
TCB-IFMB641TLE	Modbus interface box	x		Connect the system to a Modbus Building Management System	
TCB-KBCN32VEE	Connectors	x		For CN32	
TCB-KBCN60OPE	Connectors	x		For CN60	
TCB-KBCN61HAE	Connectors	x		For CN61	
TCB-KBCN70OAE	Connectors	x		For CN70	
TCB-KBCN73DEE	Connectors	x		For CN73	
TCB-KBCN80EXE	Connectors	x		For CN80	
TCB-PCDM4E	Application Control PC Board	x		Power Peak Cut Control	
TCB-PCIN4E	Application Control PC Board	x		Error/Individual compressor Operation Output Control Board	
TCB-PCMO4E	Application Control PC Board	x		External Master ON/OFF Control Board	
TCB-PCUC2E	Optionnal connection kit	x			
TCB-PSMT1E	Optionnal connection kit	x		Multi-Tenant Kit for VRF Systems	SMMS-e, SHRM-e and Mini-SMMS Indoor Units (refer to I/M for more details of connectable Indoor units)
TCB-PX100-PE	Enclosure for the Window Switch / Remote On/Off	x		For use when the Window Switch / Remote On/Off Accessory cannot fit within the AC unit, eg. High Walls	For use with TCB-IFCB5-PE
TCB-PX30MUE	E-Box Extension Enclosure	x		For 1:1 Model connection I/F and Window Switch / Remote On/Off PCB	4-Way Cassettes only & TCB-IFCB5-PE
TCB-PX40MUE	E-Box Extension Enclosure	x		For 1:1 Model connection I/F and Window Switch / Remote On/Off PCB	4-Way Compact Cassettes only & TCB-IFCB5-PE
TCB-SC640U-E	Centralized remote controlle	x	x	Up to 64 indoor units	
TCB-TC41U-E	Remote temperature sensor	x	x	Remote temperature sensor for cassette & duct	
RBC-ASC11U-E	Wired Remote Controller	x	x	Main wired remote controller	
RBC-ASC11-E	Wired Remote Controller	x		Main wired remote controller	

ACCESSORIES

Indoor units accessories

Indoor unit type	Parts name	Model name	COMPLY WITH VRF FCU	Notes	Remarks
4-way Air Discharge cassette type	Standard panel	RBC-U32PGP-E	MMU-UP***1HP-E	Required accessory	
	Fresh air and filter chamber TCB	TCB-GFC1602UE	MMU-UP***1HP-E	For fresh air inlet box	
	Fresh air inlet box	TCB-GB1602UE		For fresh air intake by using the knockout hole of Fresh air and filter chamber. (dia.=100 mm)	Use with TCB-GFC1602UE
	Auxiliary fresh air flange	TCB-FF101URE2		For easy fresh air intake by using the knockout hole of indoor unit. (dia.=100mm)	
	Spacer for height adjustment	TCB-SP1602UE		height 50 mm	
	Air discharge direction kit	TCB-BC1602UE		Air direction change by cutting off air discharge port (3 pcs.)	
Compact 4-way cassette type	Standard panel	RBC-UM21PG(W)-E	MMU-UP***1MH-E	Required accessory	
	Motion Sensor	TCB-SIR41UM-E			Wireless remote controller kit (RBC-AX32UM(W)-E) and Occupancy sensor cannot be used on the same indoor unit.
2-way cassette type	Standard panel	RBC-UW283PG(W)-E	MMU-UP0071-0151WH-E	Required accessory	
		RBC-UW803PG(W)-E	MMU-UP0181-0301WH-E		
		RBC-UW1403PG(W)-E	MMU-UP0361-0561WH-E		
	Auxiliary fresh air flange	TCB-FF151US-E	MMU-UP***1WH-E	For easy fresh air intake by using the knockout hole of indoor unit	
	Filter chamber	TCB-FC283UW-E	MMU-UP0071-0151WH-E		
		TCB-FC803UW-E	MMU-UP0181-0301WH-E		
		TCB-FC1403UW-E	MMU-UP0361-0561WH-E		
	Super Long life filter	TCB-LF283UW-E	MMU-UP0071-0151WH-E	For use with filter chamber	Use with TCB-FC283UW-E
		TCB-LF803UW-E	MMU-UP0181-0301WH-E		Use with TCB-FC803UW-E
		TCB-LF1403UW-E	MMU-UP0361-0561WH-E		Use with TCB-LF1403UW-E
1-way cassette type	Standard panel	RBC-UY32P-E	MMU-UP_1YHP-E	Required accessory	
		RBC-US21PGE	MMU-UP-0151/0181/0241SH-E		
	Front air discharge unit	TCB-BUS21WHE			
	Auxiliary fresh air flange	TCB-FF101URE2		For easy fresh air intake by using the knockout hole of indoor unit. (dia.=100mm)	
	Air purifier kit	TCB-EAPC1UYHP-E	MMU-UP***1YHP-E	Set of Plasma Air Purifier, Dust sensor, Air quality indicator and Wireless receiver	
	Occupancy sensor	TCB-SIR41UYP-E		Occupancy sensor for 1Way cassette	Cannot be match with Wireless receiver Kit
	Wireless reciever kit	RBC-AX33UYP-E		Wireless RC kit for 1Way cassette	Cannot be match with Occupancy sensor
Slim duct type	Auxiliary fresh air flange	TCB-FF101URE2	MMU-UP***1SPH-E	For easy fresh air intake by using the knockout hole of indoor unit. (dia.=100mm)	
Concealed duct type	Spigot shaped flange	TCB-SF56C6BE	MMD-UP0071-0181BHP-E		
		TCB-SF80C6BE	MMD-UP0241-0301BHP-E		
		TCB-SF160C6BE	MMD-UP0361-0561BHP-E		
Concealed Duct high static pressure type	Long life filter kit	TCB-LK801D-E	MMD-UP0181-0271HP-E		
		TCB-LK1401D-E	MMD-UP0361-0561HP-E		
		TCB-LK2801DP-E	MMD-UP0721-0961HP-E		
	Spigot shaped flange	TCB-SF80C6BE	MMD-UP0181-0271HP-E		
		TCB-SF160C6BE	MMD-UP0361-0561HP-E		
	Auxiliary fresh air flange	TCB-FF151US-E	MMD-UP***1HP-E		
	Drain Pump kit	TCB-DP40DPE			
High Wall	PMV Kit	RBM-PMV0361U-E		For FCU capacity 0.8-1.3HP	Suitable for high wall 1 serie with or without embedded PMV
		RBM-PMV0901U-E		For FCU capacity 1.7-2.5HP	
Under Ceiling type	Drain pump kit	TCB-DP31CE	MMC-UP***1HP-E	Lift up to 600 mm	Use TCB-KP13, 23CE
	Elbow Piping kit	TCB-KP13CE	MMC-UP0151/0181HP-E		
		TCB-KP23CE	MMC-UP0241-0561HP-E		
Fresh air intake type	High-efficiency filter 65	TCB-UFM0481D-E	MMD-UP0481HF-E	Dust collecting effect: 65% (NBS Colorimetric method)	Use with TCB-FC0481DF-E
		TCB-UFM1281D-E	MMD-UP0721-1281HF-E		Use with TCB-FC1281DF-E
	High-efficiency filter 90	TCB-UFH0481D-E	MMD-UP0481HF-E	Dust collecting effect: 90% (NBS Colorimetric method)	Use with TCB-FC0481DF-E
		TCB-UFH1281D-E	MMD-UP0721-1281HF-E		Use with TCB-FC1281DF-E
	Stand alone long life prefilter	TCK-LK1401D-E	MMD-UP0481HF-E		
		TCK-LK2801DP-E	MMD-UP0721-1281HF-E		

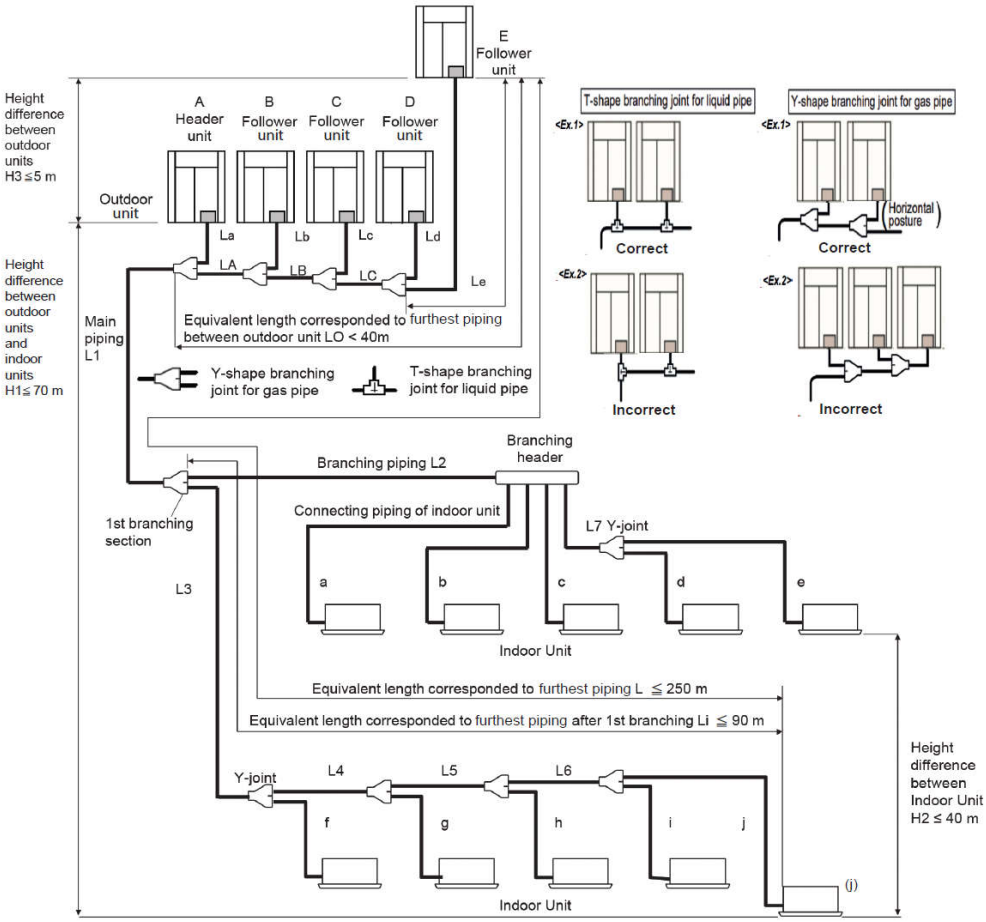
Indoor units accessories

Indoor unit type	Parts name	Model name	COMPLY WITH VRF FCU	Notes	Remarks
Fresh air intake type	High efficiency long life prefilter	TCK-LK1401D-E (*2)	MMD-UP0481HF-E		Use with TCB-FC0481DF-E
		TCK-PF1281DF-E	MMD-UP0721-1281HF-E		Use with TCB-FC1281DF-E
	Filter chamber	TCB-FC0481DF-E	MMD-UP0481HF-E	For high efficiency filter or long life prefilter	
		TCB-FC1281DF-E	MMD-UP0721-1281HF-E		
	Drain pump kit	TCB-DP40DFP-E	All models	Lift up to 330 mm	
Air-to-air heat exchanger with DX coil	Drain pump kit	TCB-DP31HEXE	MMD-VN502/802/1002 HEXE & MMD-VNK502/802/1002 HEXE	Lift up to 330 mm	

Refrigerant accessories

Model name		Specification	Picture	Total capacity codes
Compatible SMMSu	Compatible SHRM-e			
RBM-BY55E	RBM-BY55FE	Branching joint		under 6.4 HP
RBM-BY105E	RBM-BY105FE			from 6.4 to 14.2 HP
RBM-BY205E	RBM-BY205FE			from 14.2 to 25.2 HP
RBM-BY305E	RBM-BY305FE			from 25.2 to 61.2 HP
RBM-BY405E				61.2 HP or more
RBM-HY1043E	RBM-HY1043FE	Headers branching four-way		< 14.2 HP
RBM-HY2043E	RBM-HY2043FE			< 14.2 - 25.2 HP
RBM-HY1083E	RBM-HY1083FE	Headers branching eight-way		< 14.2 HP
RBM-HY2083E	RBM-HY2083FE			< 14.2 - 25.2 HP
RBM-BT14E	RBM-BT14FE	Joints for connection of outdoor units		< 26 HP system capacity
RBM-BT24E	RBM-BT24FE			> 26 < 62 HP system capacity
RBM-BT34E				> 62 HP system capacity

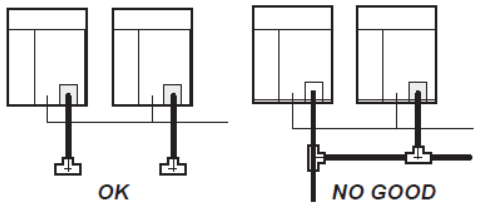
SMMS-u piping



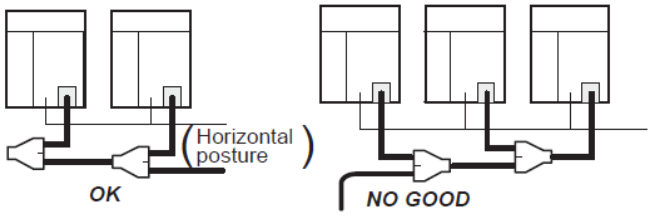
SYSTEM RESTRICTION

		SMMSu	SMMS-7
Outdoor unit combination		Up to 5 units	Up to 3 units
Total capacity of outdoor units		Up to 120HP	Up to 60HP
Indoor unit connection		Up to 128 units	Up to 64 units
Total capacity of indoor units	H2 ≤ 15m	Max. 200%	Max. 200%
	15m > H2	105%	105%

T-shape branching joint for liquid pipe



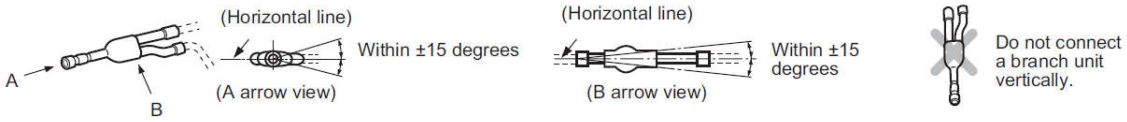
Y-shape branching joint for gas pipe



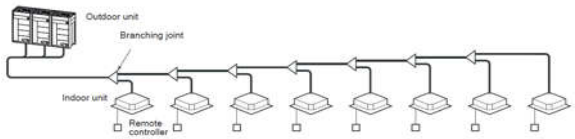
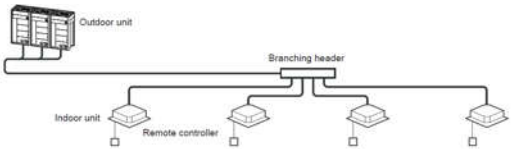
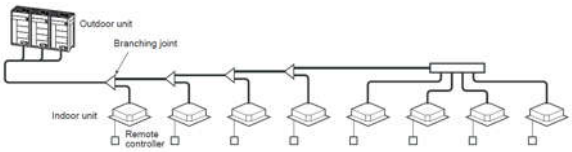
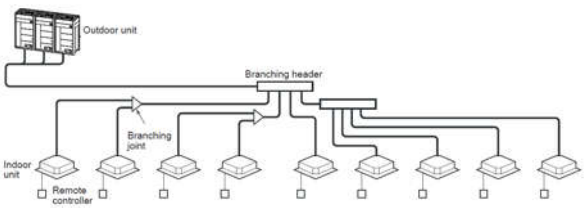
CAUTION FOR INSTALLATION

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.

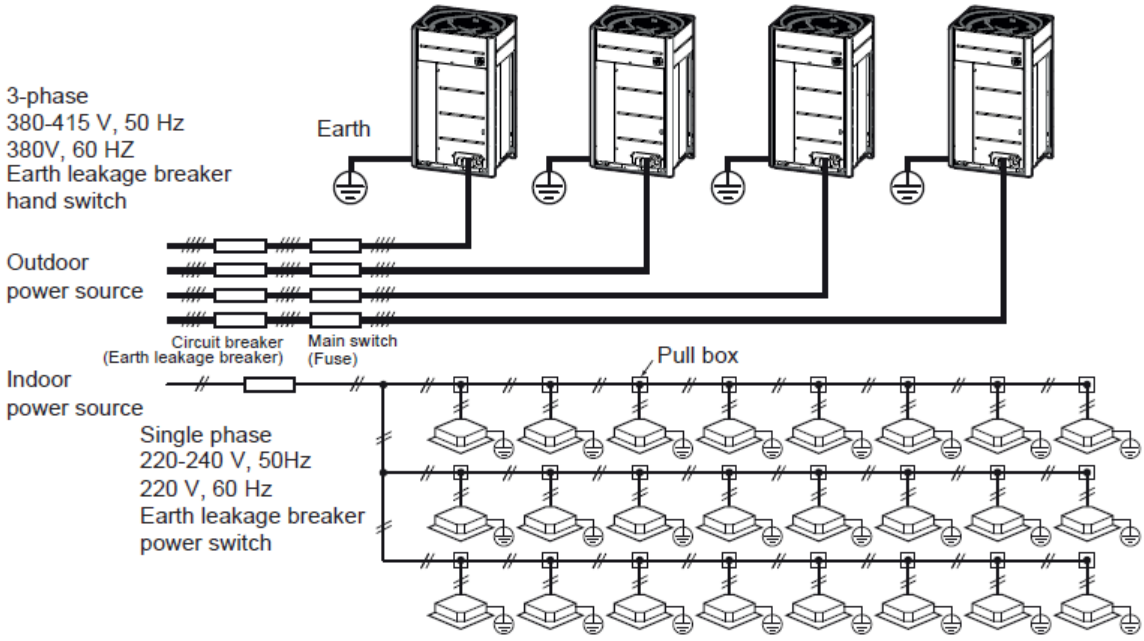
At a level position



FREE BRANCHING SYSTEM

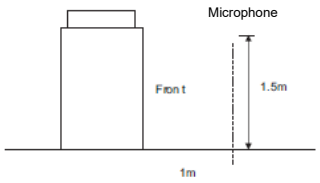
Line branching system	
Header branching system	
Header branching system after line branching	
Line branching system after header branching	
Header branching system after header branching	

Electrical wiring

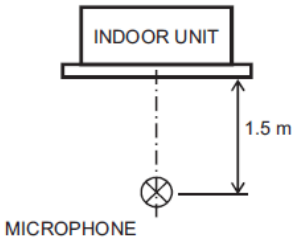


Sound pressure level measurement

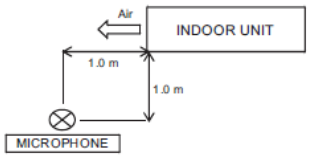
SMMS-u



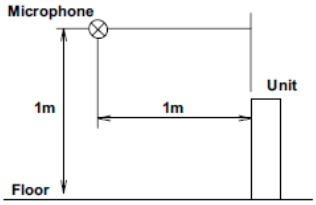
COMPACT 4-WAY CASSETTE & 4-WAY CASSETTE & 2-WAY CASSETTE & 1-WAY CASSETTE



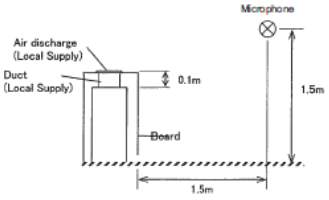
HIGH-WALL & CEILING



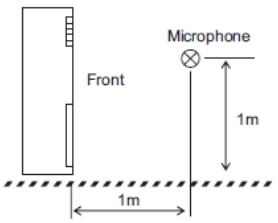
CONSOLE & BIFLOW CONSOLE



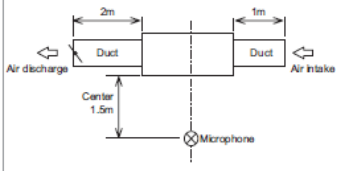
CONCEALED CHASSIS



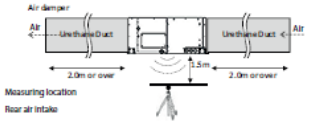
FLOOR STANDING



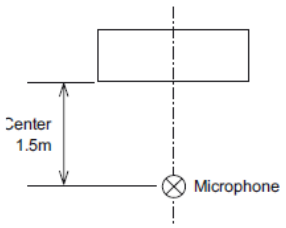
SLIM DUCT & STANDARD DUCT & HIGH STATIC DUCT



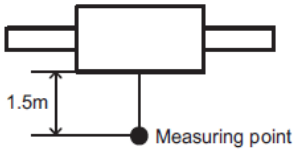
HIGH STATIC DUCT SIZES 72 & 96



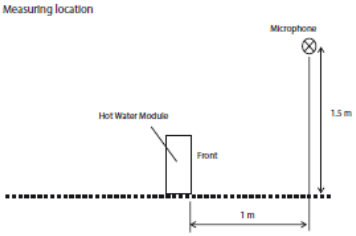
FRESH AIR



A2A HEAT EXCHANGER



HOT WATER MODULE (MID & HIGH TEMPERATURE)



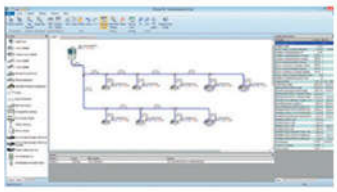
CONTROL

SELECTION TOOL

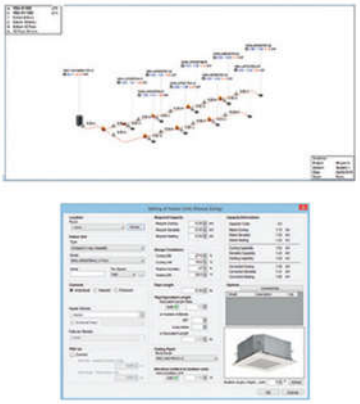


Toshiba Selection software has been fully designed, with a user-friendly interface allowing novice and expert users alike to create simple, yet detailed VRF system schematics. It is highly versatile, allowing the level of detail to be tailored to suit customer requirements. The software also allows the 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.

Software main screen



Project fully customizable



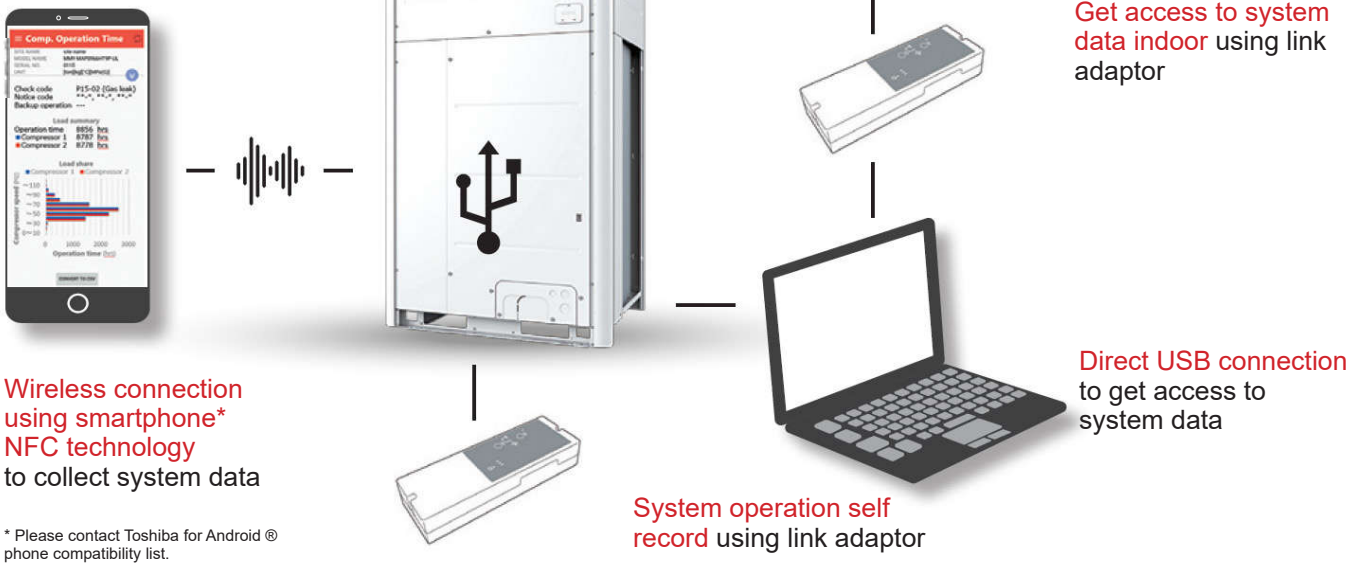
Complete report



SERVICE TOOL

Save time during commissioning and maintenance. Choose between the “Wave Tool Advance” using Smartphone NFC connection or the link adaptor connected to the outdoor or indoor unit.

NEW Application
Wave Tool Advance



Get access to system data indoor using link adaptor

Direct USB connection to get access to system data

Wireless connection using smartphone* NFC technology to collect system data

System operation self record using link adaptor

* Please contact Toshiba for Android ® phone compatibility list.

NOTE

TOSHIBA



Better Air Solutions

Through our commitment to world-class **efficiency,** versatile **scalability** and leading **quality**, Toshiba Air Conditioning advances leading-edge technologies to find the most forward-thinking solutions possible for your world.

HFC R-410A

MASCI

ISO 9001	QMS18026/1686
ISO 14001	EMS18012/471
ISO 45001	OHSMS19061/078

Notice: - Products listed in this catalogue use HFC refrigerant R410A with a GWP of 2,088*.
- Toshiba is committed to continuously improving its products to ensure the highest quality and reliability standards, and regulations and market requirements. All features and specifications are subject to change without prior notice.

*The GWP value is calculated based on information provided in the EU F gas Regulation and IPCC Fourth Assessment Report.

T2021-C07-SMMS-u