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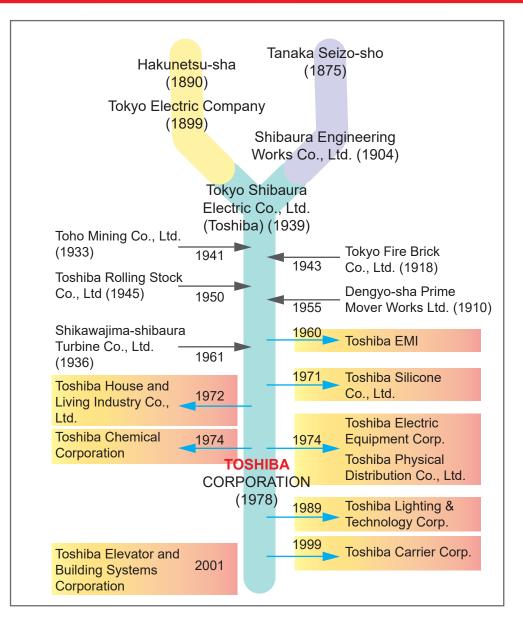
History

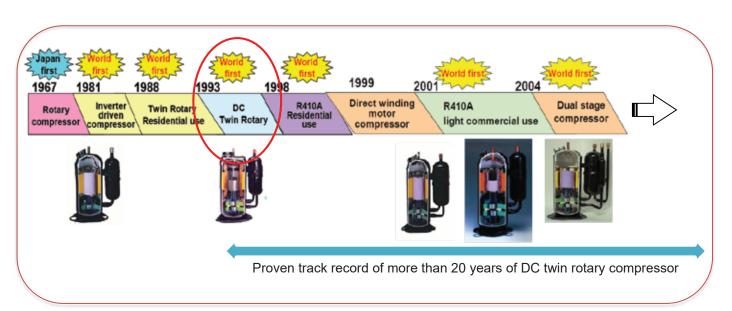


Ichisuke Fujioka



Hisashige Tanaka







TOSHIBA VRF History

1985

Multi System AC



Multi System AC

1986

Super Multi



Multi controller

1994

Wide Multi



Optimal ref control free branch piping

2000

MMS



Module CDU
Oil balance control

2003

SMMS



All inverter control R410A DC twin rotary comp

2005

Mini SMMS



Small capacity VRF



SMMS-i



3 inverter control, High energy efficiency



SMMS-i High Ambient



3 inverter control, Tropical VRF

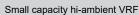


SMMS-e

Expanded product/ operation range, wave tool



Mini SMMS-e







Over 10 years experience with all inverter technology

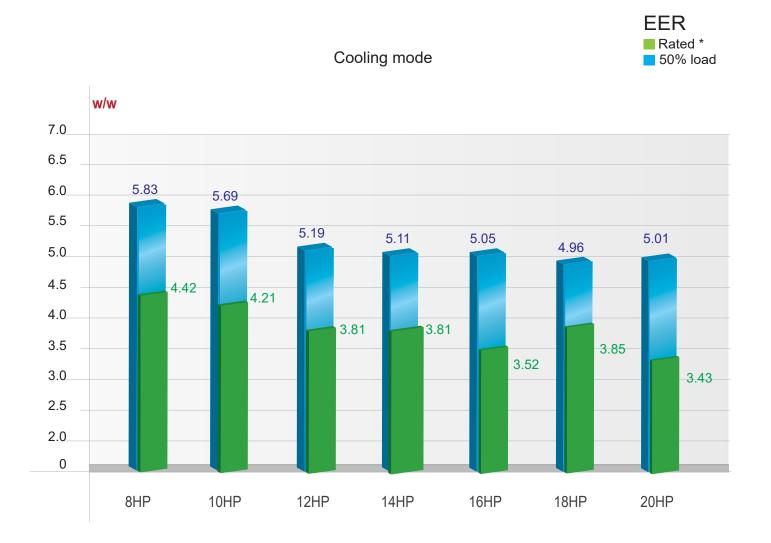
35Years experience in VRF technology





Greater efficiency performance

Adopting the highly efficient new DC twin-rotary compressors with various technologies.



Note:

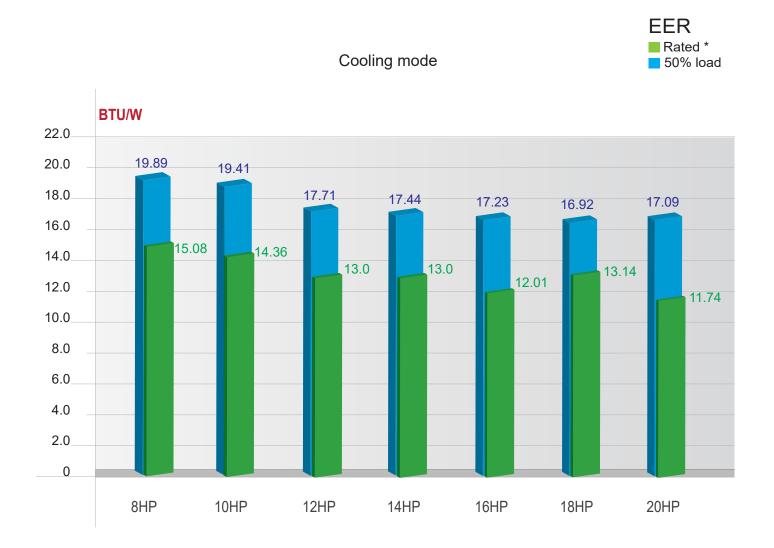
The source voltage must not flucture more than ±10%.

^{*} Indoor temperature: 26.7°C DB/19.4°CWB, outdoor temperature: 35°C DB (AHRI 1230 standard), power input of indoor units included.





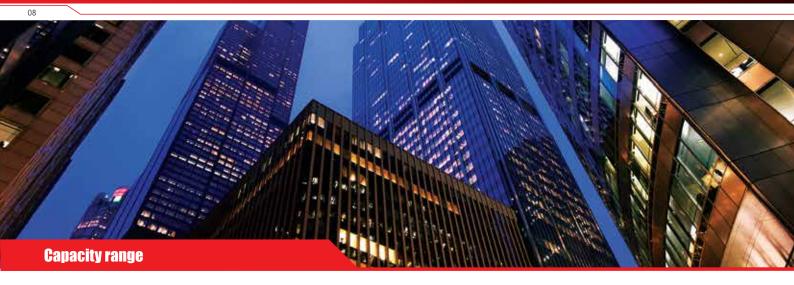
The overall capacity range and the highest EER of 4.42 (15.08) The SMMS-e has truly excellence as the industry's top class in energy saving.



Note

The source voltage must not flucture more than ±10%.

 $^{^* \ \, \}text{Indoor temperature: } 26.7^\circ\text{C DB/19.4}^\circ\text{CWB, outdoor temperature: } 35^\circ\text{C DB (AHRI 1230 standard), power input of indoor units included.}$



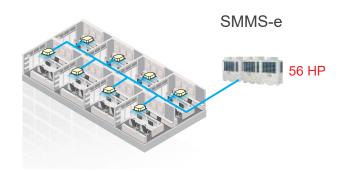
Single unit capacity expanded

SMMS-e comes with 3 new larger capacity units, producing up to 20HP on a single module platform.



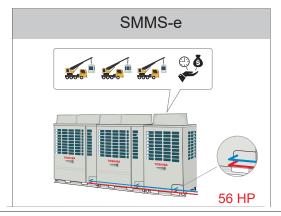
System capacity expanded

With the SMMS-e, it is now possible to connect up to $56 \mathrm{HP}$ in one system.



Installation flexibility

While expanding the maximum combination from 48 to 56HP in one system. This helps save more time and expense on additional unit system required in the previous model. The new compact unit design also increases more flexibility on installation with less foot print.



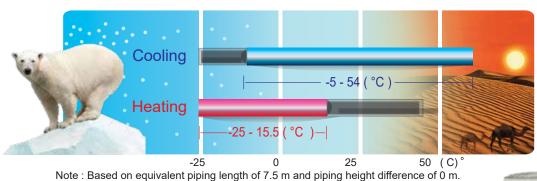
SMMS-e is capable of covering up to 20HP with a single module. Reducing pipe work and overall installation time.

Outdoor temperature range

Utilizing the newly designed compressor, SMMS-e can operate under the wider range of outdoor ambience with the expansion of cooling and heating temperature from -25°C to 54°C.

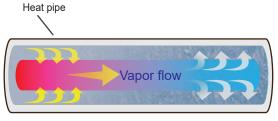
Operation ambient temperature expansion

(Cooling : CDB, Heating : CWB)



Heat pipe technology*

Thank to excellent heat sink with heat pipe technology, SMMS-e product can keep high reliability at high ambient temperature.



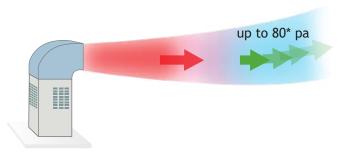
Evaporation Adiabatic section Condensation



*18-20 HP - High ambient model

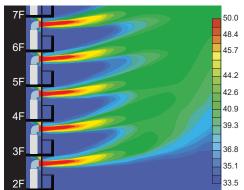
The external static pressure

The SMMS-e units are suitable for challenging installations where high external static pressure performance



Note: For ESP consult to local sales person.

Air flow simulation diagram



Note: This result is analytical simulation, that does not guarantee actual temperatures.

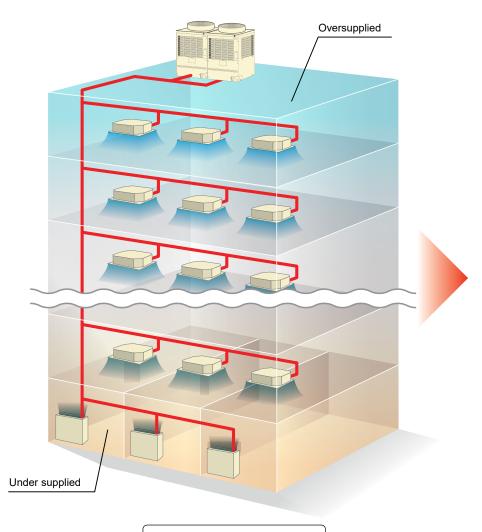


New intelligent VRF control

Toshiba systems with intelligent VRF control provide levels of comfort other systems simply cannot match. That's because differing pipe lengths in commercial buildings result in inconsistent levels of performance, especially when several indoor units are connected to a system. This imbalance is caused by pressure loss and thermal leaks that inhibit the optimum refrigerant flow to each indoor unit.

For example, without intelligent control, upper floor indoor units within VRF systems place loads on the refrigerant supply. This causes a delay before enough refrigerant reaches the lower floors to deliver efficient levels of operation.

Without intelligent VRF control, refrigerant flows unevenly throughout the structure, typically oversupplying areas closer to the outdoor unit and undersupplying areas that are farther away.



Without intelligent VRF control





Can be adjusted to maintain consistent temperature

With intelligent VRF control

Total system control and consistent room-to-room temperature

The Toshiba intelligent VRF control overcomes these issues by providing precise control of indoor units with just electrical wiring and copper refrigerant tubing. It's intelligent because it sends more refrigerant to areas that need it, and supplies less refrigerant to areas that don't. Comfort is distributed evenly regardless of line length. As a result, occupants enjoy greater overall comfort whether they are closest to the outdoor unit or farthest away.

Additionally, Toshiba SMMS-e systems monitor the flow of refrigerant to each indoor unit while tracking the model number of each indoor unit, pipe length between each indoor unit and the outdoor unit, as well as data on operating conditions. The system computes the amount of refrigerant required by each indoor unit and controls the unit's pulse motor valve to ensure optimal supply across the system with height difference between outdoor unit and indoor unit of up to 90 meter.

With intelligent VRF control, Toshiba delivers consistent, room to room comfort across several floors of a commercial structure.



Wide range compressor

More powerful and efficient with the cutting-edge technology of compressor – DC Twin-Rotary operates in wider range of rotation speed.



2-stage vane

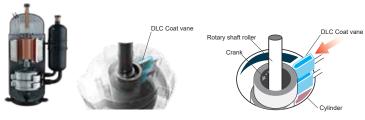
With 2-stage vane innovatively designed to reduce friction while increasing hardness and enhancing performance at its best.

Infinity variable control

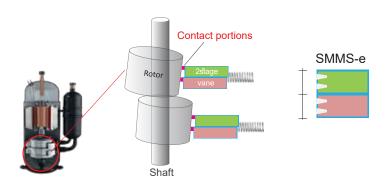
Infinity variable control adjusts speed compressor rotation near-seamless 0.1 Hz steps. Responding precisely to the capacity needs of the moment, this fine control minimizes energy loss when changing frequencies, and also creates a comfortable environment subject to minimal temperature variations.

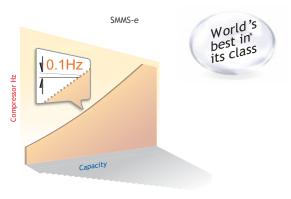
DLC coated vane

Increased hardness of the DLC coated vane reduces friction and increase both reliability and performance.



* DLC: Diamond Like Carbon



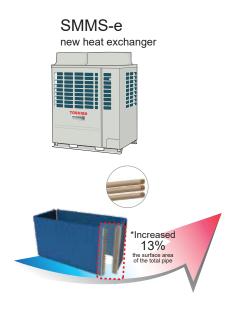


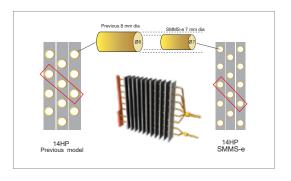
Ultra-precise 0.1 Hz control over compressor rotation speed



New heat exchanger

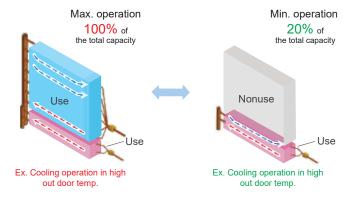
New heat exchanger of SMMS-e increases from 2 to 3 rows, providing even more surface area of the total pipe up to 13%.





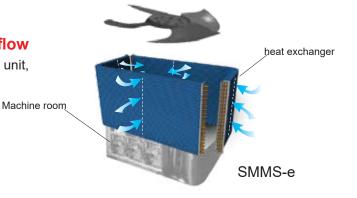
Variable heat exchanger

New system controls allows the outdoor unit to select the most efficient heat exchanger size, which matches the capacity load in order to provide higher energy savings.



4-way heat exchanger can realize balanced airflow

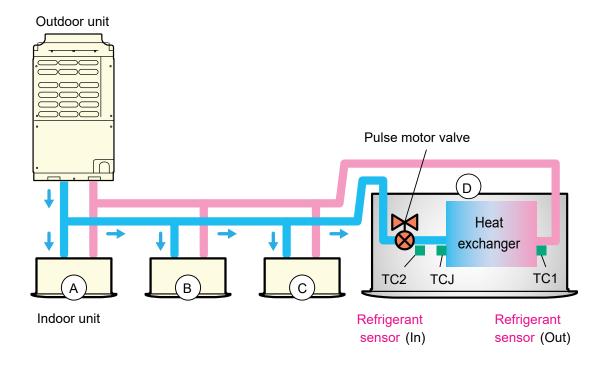
Heat exchangers are located on all four sides of the outdoor unit, ensuring air flow is equal in all directions.

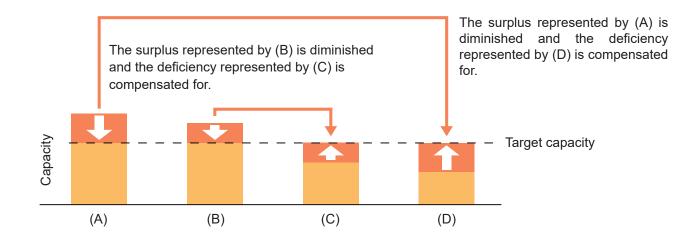


^{*} For higher capacity model.



One of the keys to delivering precision refrigerant flow and enhanced comfort is the Toshiba pulse motor valve (PMV) control. The PMV control prevents refrigerant from flowing to indoor units that are not operating. The system reduces bypass loss and achieves tighter control over the compressor capacity of the outdoor unit.



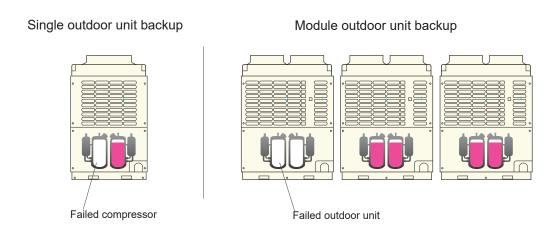






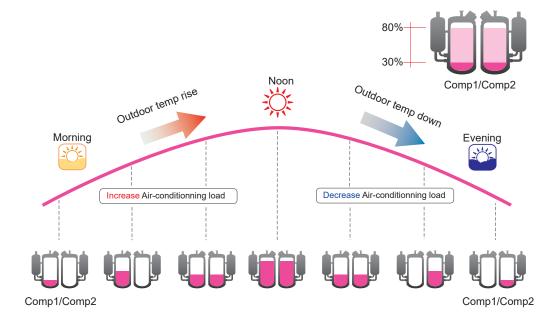
Backup operation

In case of a compressor failure, SMMS-e can keep working with the backup operation under All Inverter Control to compensate a failed compressor or header unit. This backup operation is available in both a single system or as a module.



Reliability rotational control

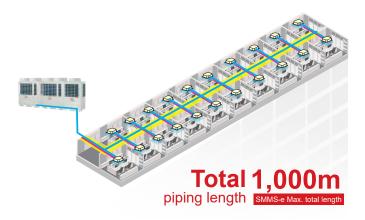
The rotational control in SMMS-e is designed to improve system reliability by controlling the operation of each compressor to work equally under variable conditions.





Total piping length

Applied with Toshiba's unique and greatly improved technology, SMMS-e can reach up to 1,000 meters maximum piping length.



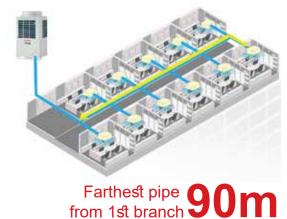
Farthest equivalent length

The maximum equivalent distance between outdoor unit and farthest indoor unit tops at 235 meters, which tops the industry class.



Farthest pipe from 1st branch

Even more convenient with the piping distance from the first branch to the furthest indoor unit at 90 meters, increasing the flexibility of the installation within the hotel or office building.



Height between indoor units

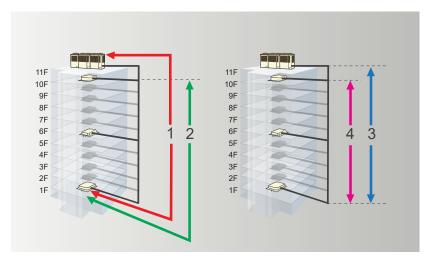
Another industry's top class is a maximum vertical distance between indoor units which reaches up to 40 meters, equal to an entire 11-storied building. SMMS-e's enhanced piping capabilities result in more benefits for the system design, installation flexibility, as well as the less installation cost.





Piping capabilities summary

Piping capability can provide more benefits for the system design, the installation flexibility, and the installation cost.



Total length	1,000m*
1. Farthest equivalent length	235m
2. Farthest pipe from 1st branch	90m**
Height between outdoor unit - indoor unit (outdoor unit above/below)	90m***/40m
4. Height between indoor unit - indoor unit	40m

* : 34HP combination or more

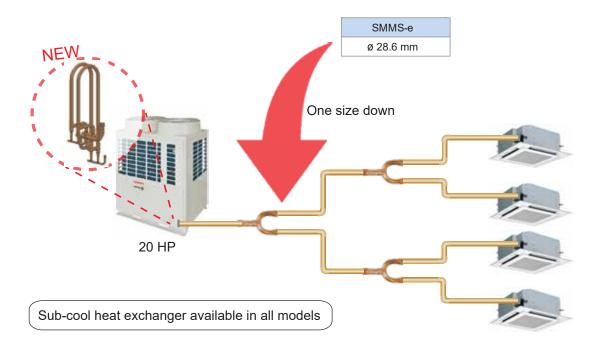
** : 65m if the height piping length between outdoor unit and indoor unit is more than 3m

*** : Be sure to refer to local sales person for details of these conditions and requirements.

Slimmer pipe size

Piping saving costs

With the sub-cool heat exchanger less refrigerant is needed therefore now it is possible to use smaller pipes and save in installation costs.

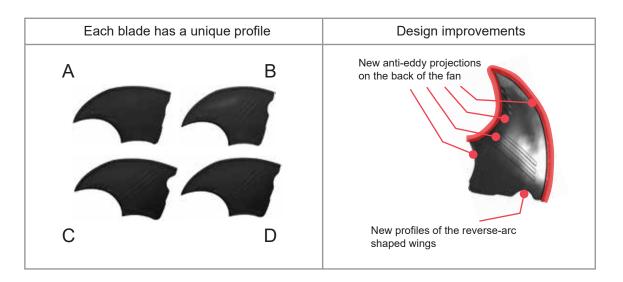




New advanced blade shapes for a better air flow management

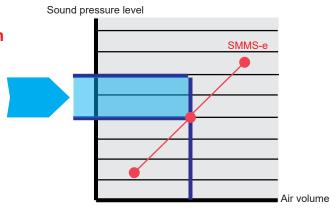
Every single blade is designed with a unique profile, a solution that guarantees a smoother air flow without turbulences. The new propeller deliver the same amount of air with less sound pressure level.





More quiet in comparison with the previous fan

In the same working condition the new design of the propeller ensure a reduction of 1.5 dB compared to the previous models.







Indoor line-up

		Cooling capacity												
Туре	kW HP	2.2 0.8	2.8 1.0	3.6 1.25	4.5 1.7	5.6 2.0	7.1 2.5	8.0 3.0	9.0 3.2	11.2 4.0	14.0 5.0	16.0 6.0	22.4 8.0	28.0 10.0
4-way air discharge cassette type														
Compact 4-way cassette type (620 x 620)														
2-way air discharge cassette type														
1-way air discharge cassette type														
Slim duct type														
Concealed duct high static pressure type														
Concealed duct type														
Ceiling type														
High wall type Series 7														
Floor standing concealed type														
Floor standing cabinet type														
Console type														
Fresh air intake indoor unit type														
Floor standing type														



With SMMSe wave Tool, you can read and write data from outdoor unit directly on your smart phone without the needs of connecting PC or opening cabinet.



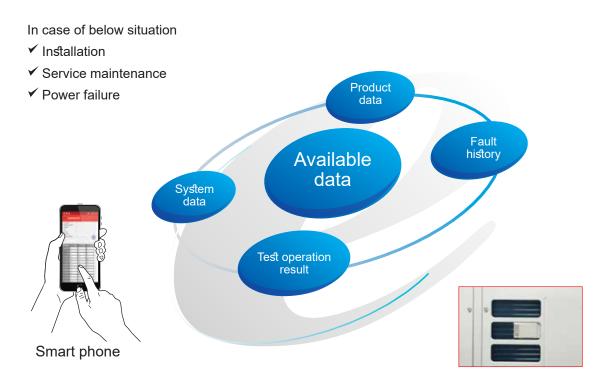
By the new smart phone application, the testing and commissioning can be done without opening the cabinet.





Available data

Whether the product data, system data, fault history or testing and commissioning, all can be obtained easily even in case of under service maintenance or power failure. The data can be easily sent to the distant office via email. Possible to receive system data by e-mail without moving from your office and the operation conditions can be checked in the office.





Outdoor units

Standard model

Capacity		8HP	10HP 12HP		8HP 10HP 12HP 14HP 16HP		18HP	20HP	
Model Name (MMY-)	50 Hz	MAP0806HT8P-ME	MAP1006HT8P-ME	MAP1206HT8P-ME	MAP1406HT8P-ME	MAP1606HT8P-ME	MAP1806HT8P-ME	MAP2006HT8P-ME	
Cooling capacity*1	(kW)	22.4	28.0	33.5	40.0	45.0	50.4	56.0	
Cooling capacity*2	(kW)	20.3	25.2	26.8	32.5	36.0	42.8	44.8	
Heating capacity	(kW)	25.0	31.5	37.5	45.0	50.0	56.0	63.0	
No's of connectable Indoor units		13	16	20	23	27	30	33	

	III I	m I			mit in 1		
Capacity	22HP 24HP		26HP	28HP	30HP	32HP	34HP
Model Name (MMY-) 50 Hz	AP2216HT8P-ME	AP2416HT8P-ME	AP2616HT8P-ME	AP2816HT8P-ME	AP3016HT8P-ME	AP3216HT8P-ME	AP3416HT8P-ME
Units in combination (MMY-MAP)	1206HT8P-ME 1006HT8P-ME	1206HT8P-ME 1206HT8P-ME	1406HT8P-ME 1206HT8P-ME	1406HT8P-ME 1406HT8P-ME	1606HT8P-ME 1406HT8P-ME	1606HT8P-ME 1606HT8P-ME	1806HT8P-ME 1606HT8P-ME
Cooling capacity*1 (kW)	61.5	67.0	73.5	80.0	85.0	90.0	95.4
Cooling capacity*2 (kW)	52.0	53.6	59.3	65.0	68.5	72.0	78.8
Heating capacity (kW)	69.0	75.0	82.5	90.0	95.0	100.0	106.0
No's of connectable Indoor units	37	40	43	47	50	54	57

		mit mit t		IIII IIII IIII I				
Capacity	36HP 38HP 40HP			42HP	44HP	46HP	48HP	
Model Name (MMY-) 50 Hz	AP3616HT8P-ME	AP3816HT8P-ME	AP4016HT8P-ME	AP4216HT8P-ME	AP4416HT8P-ME	AP4616HT8P-ME	AP4816HT8P-ME	
Units in combination (MMY-MAP)	1806HT8P-ME 1806HT8P-ME	2006HT8P-ME 1806HT8P-ME	2006HT8P-ME 2006HT8P-ME	1406HT8P-ME 1406HT8P-ME 1406HT8P-ME	1606HT8P-ME 1406HT8P-ME 1406HT8P-ME	1606HT8P-ME 1606HT8P-ME 1406HT8P-ME	1606HT8P-ME 1606HT8P-ME 1606HT8P-ME	
Cooling capacity*1 (kW)	100.8	106.4	112.0	120.0	125.0	130.0	135.0	
Cooling capacity*2 (kW)	85.6	87.6	89.6	97.5	101.0	104.5	108.0	
Heating capacity (kW)	112.0	119.0	126.0	135.0	140.0	145.0	150.0	
No's of connectable Indoor units	60	64	64	64	64	64	64	

	mir i sein trinn i	min t saint unit l					
Capacity	50HP	52HP	54HP	56HP			
Model Name (MMY-) 50 Hz	AP5016HT8P-ME	AP5216HT8P-ME	AP5416HT8P-ME	AP5616HT8P-ME			
Units in combination (MMY-MAP)	1806HT8P-ME 1606HT8P-ME 1606HT8P-ME	1806HT8P-ME 1806HT8P-ME 1606HT8P-ME	2006HT8P-ME 2006HT8P-ME 1406HT8P-ME	2006HT8P-ME 2006HT8P-ME 1606HT8P-ME			
Cooling capacity*1 (kW)	140.4	145.8	152.0	157.0			
Cooling capacity*2 (kW)	114.8	121.6	122.1	125.6			
Heating capacity (kW)	156.0	162.0	171.0	176.0			
No's of connectable Indoor units	64	64	64	64			

^{*} Power: 3-phase 50 Hz 400V (380 - 415V)

* The source voltage must not fluctuate more than ±10%.

* Rated conditions

*1 Cooling: Indoor air temperature 26.7°C DB/19.4°C WB, outdoor air temperature 35°C DB (AHRI 1230 standard)

^{*2} Cooling: Indoor air temperature 29°C DB/19°C WB, outdoor air temperature 46°C DB (ISO 15042 standard)

Heating: Indoor air temperature 20°C DB, outdoor air temperature 7°C DB/6°C WB



High efficiency model

				nin nin nin 1
Capacity	16HP	18HP	20HP	30HP
Model Name (MMY-) 50 Hz	AP1626HT8P-ME	AP1826HT8P-ME	AP2026HT8P-ME	AP3026HT8P-ME
Units in combination (MMY-)	MAP0806HT8P-ME MAP0806HT8P-ME	MAP1006HT8P-ME MAP0806HT8P-ME	MAP1006HT8P-ME MAP1006HT8P-ME	MAP1006HT8P-ME MAP1006HT8P-ME MAP1006HT8P-ME
Cooling capacity*1 (kW)	44.8	50.4	56.0	84.0
Cooling capacity*2 (kW)	40.6	45.5	50.4	75.6
Heating capacity (kW)	50.0	56.5	63.0	94.5
No's of connectable Indoor units	27	30	33	50

	in tin tin 1	nin nin nin 1	in in tit l	nin nin nin 1
Capacity	32HP	34HP	38HP	40HP
Model Name (MMY-) 50 Hz	AP3226HT8P-ME	AP3426HT8P-ME	AP3826HT8P-ME	AP4026HT8P-ME
Units in combination (MMY-)	MAP1206HT8P-ME MAP1006HT8P-ME MAP1006HT8P-ME	MAP1206HT8P-ME MAP1206HT8P-ME MAP1006HT8P-ME	MAP1406HT8P-ME MAP1206HT8P-ME MAP1206HT8P-ME	MAP1406HT8P-ME MAP1406HT8P-ME MAP1206HT8P-ME
Cooling capacity*1 (kW)	89.5	95.0	107.0	113.5
Cooling capacity*2 (kW)	77.2	78.8	86.1	91.8
Heating capacity (kW)	100.5	106.5	120.0	127.5
No's of connectable Indoor units	54	57	64	64

		Y-shape branching joint				Branch	headers		Outdoor unit connection piping kit	
Appearance	RBM- RBM- RBM- RBM-		(4-branch headers)				••••			
Model name	RBM - BY55E	RBM - BY105E	RBM - BY205E	RBM - BY305E	RBM - HY1043E	RBM - HY2043E	RBM - HY1083E	RBM - HY2083E	RBM-BT14E	RBM-BT24E
		Total 6.4	Total		Max.4 branche s Max.8 branches			ranches		
Usage (Classification according to indoor unit capacity code)	Total below 6.4	or more and below 14.2	14.2 or more and below 25.2	Total 25.2 or more	Total below 14.2	Total 14.2 or more and below 25.2	Total below 14.2	Total 14.2 or more and below 25.2	Total below 26.0	Total 26.0 or more

^{*} Power: 3-phase 50 Hz 400V (380 - 415V)

* The source voltage must not fluctuate more than ±10%.

* Rated conditions

*1 Cooling: Indoor air temperature 26.7°C DB/19.4°C WB, outdoor air temperature 35°C DB (AHRI 1230 standard)

^{*2} Cooling: Indoor air temperature 29°C DB/19°C WB, outdoor air temperature 46°C DB (ISO 15042 standard) Heating: Indoor air temperature 20°C DB, outdoor air temperature 7°C DB/6°C WB

Standard m	odel (Single unit)			To	echnical specification			
Equivalent HP			8HP	10HP	12HP			
Model name	Heat Pump	50Hz (MMY-)	MAP0806HT8P-ME	MAP1006HT8P-ME	MAP1206HT8P-ME			
Outdoor unit type			Inverter					
Power supply (*1))		3phase 4wires 50Hz 400V (380-415V)					
	Capacity 100%	(kW)	22.4	28.0	33.5			
Cooling (*)	Power consumption	(kW)	4.84	6.28	8.24			
	EER (Energy efficiency ratio)		4.63	4.46	4.07			
	Capacity 100%	(kW)	20.3	25.2	26.8			
Cooling (**)	Power consumption	(kW)	6.54	8.75	8.98			
	EER (Energy efficiency ratio)		3.10	2.88	2.98			
	Capacity 100%	(kW)	25.0	31.5	37.5			
Heating (*2)	Power consumption	(kW)	5.38	7.08	9.24			
	COP (Coefficiency of performance)		4.65	4.45	4.06			
Starting Current		(A)	Soft Start					
External dimension	ons (Height / Width / Depth)	(mm)	1,800 / 990 / 780	1,800 / 990 / 780	1,800 / 990 / 780			
Total weight	Heat Pump	(kg)	242	242	242			
Compressor	Quantity	(nos)	2	2	2			
Fan unit	Air volume	(m³/h)	9,700	9,700	12,200			
Refrigerant R410	A(Charged refrigerant amount)	(kg)	11.5	11.5	11.5			
		Gas side (mm)	Ф19.1	Ф22.2	Ф28.6			
Refrigerant piping	Main pipe diameter	Liquid side (mm) Φ12.7 Φ12.7		Ф12.7	Ф12.7			
rivii 3		Balance pipe (mm)	Ф9.5	Ф9.5	Ф9.5			
Sound pressure level (Cooling/Heating) (dB(A))			55 / 56	57 / 58	59 / 61			
Sound power leve	el (Cooling/Heating)	(dB(A))	74 / 74	74 / 74	80 / 82			
Connectable indo	or units	(nos)	13	16	20			

Standard mod	del (Single unit)					Technic	al specifications			
Equivalent HP				14HP	16HP	18HP	20HP			
Model name	Heat Pump	50Hz	(MMY-)	MAP1406HT8P-ME	MAP1606HT8P-ME	MAP1806HT8P-ME	MAP2006HT8P-ME			
Outdoor unit type	<u>'</u>			Inverter						
Power supply (*1)					3phase 4wires 50H	z 400V (380-415V)				
	Capacity 100%		(kW)	40.0	45.0	50.4	56.0			
Cooling (*)	Power consumption		(kW)	9.9	12.1	12.3	15.5			
	EER (Energy efficiency ratio)			4.04	3.72	4.1	3.61			
Capacity 100%				32.5	36.0	42.8	44.8			
Cooling (**)	Power consumption		(kW)	11.6	12.5	14.2	14.9			
	EER (Energy efficiency ratio)			2.8	2.88	3.01	3.01			
	Capacity 100%		(kW)	45.0	50.0	56.0	63.0			
Heating (*2)	Power consumption		(kW)	10.6	12.50	13.6	16.5			
	COP (Coefficiency of performance)			4.25	4.00	4.12	3.82			
Starting Current			(A)		Soft					
External dimensions	(Height / Width / Depth)		(mm)	1,800 / 1,210 / 780	1,800 / 1,210 / 780	1,800/1,600/780	1,800/1,600/780			
Total weight	Heat Pump		(kg)	299	299	370	370			
Compressor	Quantity		(nos)	2	2	2	2			
Fan unit	Air volume		(m³/h)	12,200	12,600	17,300	17,900			
Refrigerant R410A (Charged refrigerant amount)		(kg)	11.5	11.5	11.5	11.5			
		Gas side	(mm)	Ф28.6	Ф28.6	Ф28.6	Ф28.6			
Refrigerant piping	Main pipe diameter	Liquid side	(mm)	Ф15.9	Ф15.9	Ф15.9	Ф15.9			
		Balance pipe	(mm)	Ф9.5	Ф9.5	Ф9.5	Ф9.5			
Sound pressure leve	el (Cooling/Heating)		(dB(A))	60 / 62	62 / 64	60 / 61	61 / 62			
Sound power level (Cooling/Heating)		(dB(A))	80 / 82	81 / 83	81 / 83	80 / 82			
Connectable indoor	units		(nos)	23	27	30	33			

^{*1} The source voltage must not flucture more than ±10%.

 $^{^{\}star}$ $\,$ Indoor temperature: 26.7°C DB/19.4°CWB, outdoor temperature: 35°C DB (AHRI 1230 standard).

 $^{^{\}star\star}$ Indoor temperature: 29°C DB/19°CWB, outdoor temperature: 46°C DB (ISO 15042 standard).

^{*2} Heating : Indoor air temperature 20°C DB, Outdoor air temperature 7°C DB/6°C WB



Standard m	nodel (Combination)						T	echnical spe	cifications	
Equivalent HP				22	HP	24	HP	26	HP	
Model name	Heat Pump	50Hz	(MMY-)	AP2216H	HT8P-ME	MAP2416	HT8P-ME	MAP2616HT8P-ME		
Outdoor unit type						Inve	erter	·		
Power supply (*1)					3phase 4wires 50H	Iz 400V (380-415V)			
Outdoor unit model	Heat Pump	50Hz	(MMY-)	MAP1206HT8P-ME	MAP1006HT8P-ME	MAP1206HT8P-ME	MAP1206HT8P-ME	MAP1406HT8P-ME	MAP1206HT8P-M	
Capacity 100% (I				61	1.5	67	7.0	73	3.5	
Cooling (*)	ooling (*) Power consumption (F				.52	16	.48	18	.14	
	EER (Energy efficiency ratio)				27	4.	07	4.	06	
	Capacity 100%		(kW)	52.0		53.6		59.3		
Cooling (**)	Power consumption		(kW)	17.	.73	17	.96	20.58		
	EER (Energy efficiency ratio)			2.	93	2.	98	2.	89	
	Capacity 100%		(kW)	69.0		75	5.0	82	2.5	
Heating (*2)	Power consumption		(kW)	16	3.3	18	3.5	19.8		
	COP (Coefficiency of performance	ce)		4.:	23	4.	16			
Starting current			(A)			Soft	start			
Total weight	Heat Pump		(kg)	242	242	242	242	299	242	
Compressor	Quantity		(nos)	2	2	2	2	2	2	
Fan unit	Air volume		(m³/h)	12,200	9,700	12,200	12,200	12,200	12,200	
Refrigerant R410	A (Charged refrigerant amount)		(kg)	11.5	11.5	11.5	11.5	11.5	11.5	
Refrigerant		Gas side	(mm)		8.6	Ф3	4.9	Ф3	4.9	
piping			(mm)	Ф19.1		Ф1	9.1	Ф1	9.1	
		Balance pipe	(mm)	Ф9.5		Ф9.5		Ф9.5		
Sound pressure level (Cooling/Heating) (dB(A)						62/64		62.5/64.5		
Sound power leve	ound power level (Cooling/Heating) (dB(A)))) 81/83		83/85		83/85		
Connectable indo	nnectable indoor units (no				37		.0	43		

Standard mo	odel (Combination)						Ī	echnical spe	cifications
Equivalent HP				281	HP	301	HP	32	HP
Model name	Heat Pump	50Hz	(MMY-)	AP2816H	IT8P-ME	AP3016F	HT8P-ME	AP3216F	HT8P-ME
Outdoor unit type	·					Inve	erter		
Power supply (*1)						3phase 4wires 50H	z 400V (380-415V)		
Outdoor unit model	Heat Pump	50Hz	(MMY-)	MAP1406HT8P-ME	MAP1406HT8P-ME	MAP1606HT8P-ME	MAP1406HT8P-ME	MAP1606HT8P-ME	MAP1606HT8P-ME
	Capacity 100% (I				.0	85	i.0	90.0	
Cooling (*)					.8	22	2.0	24	.2
	EER (Energy efficiency ratio))4	3.8	88	3.	72
	Capacity 100%		(kW)	65.0		68.50		72.0	
Cooling (**)	Power consumption		(kW)	23.2		24.1		25	i.0
	EER (Energy efficiency ratio)			2.8 2.84			2.8	88	
	Capacity 100%		(kW)	90	.0	95	i.0	100	0.0
Heating (*2)	Power consumption		(kW)	21	.2	23	3.1	25.0	
	COP (Coefficiency of performance)		4.2	25	4.	00		
Starting current			(A)			Soft	start		
Total weight	Heat Pump		(kg)	299	299	299	299	299	299
Compressor	Quantity		(nos)	2	2	2	2	2	2
Fan unit	Air volume		(m³/h)	12,200	12,200	12,600	12,200	12,600	12,600
Refrigerant R410A	(Charged refrigerant amount)		(kg)	11.5	11.5	11.5	11.5	11.5	11.5
Deficement		Gas side	(mm)	Ф34	4.9	Ф3	4.9	Ф3	4.9
piping	Refrigerant iping Main pipe diameter Liquid side (n			Ф1	9.1	Ф1	9.1	Ф1	9.1
	Balance pipe (mr				Ф9.5		Ф9.5		9.5
·	Sound pressure level (Cooling/Heating) (dB(A)						64.5/66.5		67
Sound power level	Sound power level (Cooling/Heating) (dB(A)))) 83/85		83.5/85.5		/86
Connectable indoo	onnectable indoor units (no				7	50		54	

 $Protective\ devices:\ Discharge\ temp.\ sensor\ /\ Suction\ temp.\ sensor\ /\ High-pressure\ s$

^{*1} The source voltage must not flucture more than ±10%.

Indoor temperature: 26.7°C DB/19.4°CWB, outdoor temperature: 35°C DB (AHRI 1230 standard).

 $^{^{\}star\star}$ Indoor temperature: 29°C DB/19°CWB, outdoor temperature: 46°C DB (ISO 15042 standard).

^{*2} Heating : Indoor air temperature 20°C DB, Outdoor air temperature 7°C DB/6°C WB

Standard m	odel (Combination)						T	echnical spe	cifications	
Equivalent HP				341	HP	36	HP	38	HP	
Model name	Heat Pump	50Hz	(MMY-)	AP3416H	HT8P-ME	AP3616H	HT8P-ME	AP3816HT8P-ME		
Outdoor unit type				Inverter						
Power supply (*1)					3phase 4wires 50H	z 400V (380-415V)			
Outdoor unit model	Heat Pump	50Hz	(MMY-)	MAP1806HT8P-ME	MAP1606HT8P-ME	MAP1806HT8P-ME	MAP1806HT8P-ME	MAP2006HT8P-ME	MAP1806HT8P-M	
	Capacity 100%		(kW)	95	5.4	10	0.8	10	6.4	
Cooling (*)	1 /				.4	24	l.6	27	' .8	
	EER (Energy efficiency ratio)				91	4.1		3.	86	
	Capacity 100%		(kW)	78.8		85.6		87.6		
Cooling (**)	Power consumption		(kW)) 26.7		28.4		29.1		
	EER (Energy efficiency ratio)			2.9	95	3.	01	3.	01	
	Capacity 100%		(kW)	106.0		112.0		11	9.0	
Heating (*2)	Power consumption		(kW)	26	5.1	27	7.2	30.1		
	COP (Coefficiency of performance)			4.0	06	4.	12	3.95		
Starting current			(A)			Soft	start			
Total weight	Heat Pump		(kg)	370	299	370	370	370	370	
Compressor	Quantity		(nos)	2	2	2	2	2	2	
Fan unit	Air volume		(m^3/h)	17,300	12,600	17,300	17,300	17,900	17,300	
Refrigerant R410	A (Charged refrigerant amount)		(kg)	11.5	11.5	11.5	11.5	11.5	11.5	
Defile		Gas side	(mm)	Ф3	4.9	Ф4	1.3	Ф4	1.3	
Refrigerant piping	Main pipe diameter Liquid side (m		(mm)	Ф1	9.1	Ф2	2.2		2.2	
		Balance pipe	(mm)	Φ9	9.5	Ф	9.5	Ф:	9.5	
·	evel (Cooling/Heating)		(dB(A))	64.5		63	/64	63.5		
	ound power level (Cooling/Heating) (dB(A)			"		84/86		84.5/86.5		
Connectable indo	or units		(nos)	5	7	6	0	6	4	

Standard mo	del (Combination)							Ţ	echnical	specific	ations	
Equivalent HP				40l	HP		42HP			44HP		
Model name	Heat Pump	50Hz	(MMY-)	AP4016H	T8P-ME	AF	4216HT8P-1	ME	AP4416HT8P-ME		ИE	
Outdoor unit type	<u>'</u>					'	Inverter					
Power supply (*1)						3phase 4wire	es 50Hz 400\	/ (380-415V)				
Outdoor unit model	Heat Pump	50Hz	(MMY-)	MAP2006HT8P-ME	MAP2006HT8P-ME	MAP1406HT8P-ME	MAP1406HT8P-ME	MAP1406HT8P-ME	MAP1606HT8P-ME	MAP1406HT8P-ME	MAP1406HT8P-ME	
	Capacity 100%	(kW)	112	120.0			125.0					
Cooling (*)	Power consumption	(kW)	31	.0		29.7			31.9			
	EER (Energy efficiency ratio)				61	4.04				3.93		
	Capacity 100%		(kW)	89.6		97.5			101.0			
Cooling (**)	Power consumption		(kW)	29		34.8			35.7			
	EER (Energy efficiency ratio)			3.0		2.8			2.83			
	Capacity 100%		(kW)	126		135.0			140.0			
Heating (*2)	Power consumption		(kW)	33	.0	31.8			33.7			
	COP (Coefficiency of performance)			3.8	32	4.25				4.15		
Starting current			(A)				Soft start					
Total weight	Heat Pump		(kg)	370	370	299	299	299	299	299	299	
Compressor	Quantity		(nos)	2	2	2	2	2	2	2	2	
Fan unit	Air volume		(m³/h)	17,900	17,900	12,200	12,200	12,200	12,600	12,200	12,200	
Refrigerant R410A	(Charged refrigerant amount)		(kg)	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	
Refrigerant	Gas side (1.3		Ф41.3			Ф41.3		
piping	Main pipe diameter	(mm)	Ф2:	2.2		Ф22.2			Ф22.2			
J 1 3		Balance pipe	(mm)			Ф9.5			Ф9.5			
	el (Cooling/Heating)		(dB(A))			65/67			66.5/67.5			
Sound power level	Sound power level (Cooling/Heating) (dB(A)))) 85/87		85/87			85.5/87.5		
Connectable indoor	Connectable indoor units (no				64		64			64		

^{*1} The source voltage must not flucture more than ±10%.

Indoor temperature: 26.7°C DB/19.4°CWB, outdoor temperature: 35°C DB (AHRI 1230 standard).

 $^{^{\}star\star}$ Indoor temperature: 29°C DB/19°CWB, outdoor temperature: 46°C DB (ISO 15042 standard).

^{*2} Heating : Indoor air temperature 20°C DB, Outdoor air temperature 7°C DB/6°C WB



Standard m	odel (Combination)								T	echnical	specific	ations
Equivalent HP					46HP			48HP			50HP	
Model name	Heat Pump	50Hz	(MMY-)	AF	24616HT8P-N	ИΕ	AF	4816HT8P-I	ME	AP5016HT8P-ME		ΛE
Outdoor unit type	<u>'</u>							Inverter				
Power supply (*1)							3phase 4wire	es 50Hz 400\	V (380-415V)			
Outdoor unit model	Heat Pump	50Hz	(MMY-)	MAP1606HT8P-ME	MAP1606HT8P-ME	MAP1406HT8P-ME	MAP1606HT8P-ME	MAP1606HT8P-ME	MAP1606HT8P-ME	MAP1806HT8P-ME	MAP1606HT8P-ME	MAP1606HT8P-M
	Capacity 100%		(kW)		130.0			135.0			140.4	
Cooling (*)					34.1			36.3			36.5	
EER (Energy efficiency ratio)					3.83			3.72			3.85	
	Capacity 100%		(kW)	104.5			108.0			114.8		
Cooling (**)	Power consumption		(kW)	36.6			37.5				39.2	
	EER (Energy efficiency ratio)			2.85				2.88			2.92	
	Capacity 100%		(kW)	,				150.0			156.0	
Heating (*2)	Power consumption		(kW)	35.6			37.5			38.6		
	COP (Coefficiency of performance)				4.07		4.00			4.04		
Starting current			(A)					Soft start				
Total weight	Heat Pump		(kg)	299	299	299	299	299	299	370	299	299
Compressor	Quantity		(nos)	2	2	2	2	2	2	2	2	2
Fan unit	Air volume		(m^3/h)	12,600	12,600	12,200	12,600	12,600	12,200	17,300	12,600	12,600
Refrigerant R410	A (Charged refrigerant amount)		(kg)	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5
Defrimenent		Gas side	(mm)		Ф41.3			Ф41.3			Ф41.3	
Refrigerant piping			(mm)		Ф22.2			Ф22.2			Ф22.2	
	Balance pipe (mm			'			Ф9.5			Ф9.5		
<u> </u>	evel (Cooling/Heating)		(dB(A))	**			67/69			66.5/68		
Sound power leve	und power level (Cooling/Heating) (dB(A))			A)) 85.5/87.5			86/88			86/88		
Connectable indo	nectable indoor units (nos				64		64			64		

Standard m	odel (Combination)								T	echnical	specific	ations	
Equivalent HP					52HP			54HP			56HP		
Model name	Heat Pump	50Hz	(MMY-)	AF	°5216HT8P-N	ИΕ	AP	°5416HT8P-1	ME	AP5616HT8P-ME			
Outdoor unit type	<u>'</u>							Inverter					
Power supply (*1)							3phase 4wire	es 50Hz 400\	V (380-415V)				
Outdoor unit model	Heat Pump	50Hz	(MMY-)	MAP1806HT8P-ME	MAP186HT8P-ME	MAP1606HT8P-ME	MAP2006HT8P-ME	MAP2006HT8P-ME	MAP1406HT8P-ME	MAP2006HT8P-ME	MAP2006HT8P-ME	MAP1606HT8P-N	
	Capacity 100% (kV				145.8		152.0				157.0		
Cooling (*)	, ,				36.7			40.9			43.1		
	EER (Energy efficiency ratio)				3.22			3.75			3.65		
	Capacity 100%		(kW)	121.6			122.1			125.6			
Cooling (**)	Power consumption		(kW)	40.9				41.4			42.3		
	EER (Energy efficiency ratio)				2.4			2.94			2.97		
	Capacity 100%		(kW)	162.0				171.0			176.0		
Heating (*2)	Power consumption		(kW)	39.7			43.6			45.5			
	COP (Coefficiency of performance)				4.08			3.92		3.87			
Starting current			(A)					Soft start					
Total weight	Heat Pump		(kg)	370	370	299	370	370	299	370	370	299	
Compressor	Quantity		(nos)	2	2	2	2	2	2	2	2	2	
Fan unit	Air volume		(m³/h)	17,300	17,300	12,600	17,900	17,900	12,200	17,900	17,900	12,600	
Refrigerant R410	A (Charged refrigerant amount)		(kg)	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	
5.6	Gas side (mm		(mm)		Ф41.3			Ф41.3			Ф41.3		
Refrigerant piping			Ф22.2		Ф22.2				Ф22.2				
F-F3		Balance pipe	(mm)	φ9.5			Ф9.5			Ф9.5			
Sound pressure le	Sound pressure level (Cooling/Heating) (dB(A))				(5.5/67			65.5/67			66.5/67.5		
Sound power level (Cooling/Heating) (dB(A))			A)) 86/88			86.5/88.5			86.5/88.5				
Connectable indoor units (nos				64			64			64			

^{*1} The source voltage must not flucture more than ±10%.

^{*} Indoor temperature: 26.7°C DB/19.4°CWB, outdoor temperature: 35°C DB (AHRI 1230 standard).

 $^{^{**}}$ $\,$ Indoor temperature: 29°C DB/19°CWB, outdoor temperature: 46°C DB (ISO 15042 standard).

^{*2} Heating : Indoor air temperature 20°C DB, Outdoor air temperature 7°C DB/6°C WB

High efficier	ncy model (Combination)					Technica	l specifications				
Equivalent HP				16	HP	181					
Model name	Heat Pump	50Hz	(MMY-)	AP1626F	IT8P-ME	AP1826F	T8P-ME				
Outdoor unit type	<u>'</u>			Inverter							
Power supply (*1)					3phase 4wires 50H	Iz 400V (380-415V)					
Outdoor unit model	Heat Pump	50Hz	(MMY-)	MAP0806HT8P-ME	MAP0806HT8P-ME	MAP1006HT8P-ME	MAP0806HT8P-ME				
	Capacity 100%		(kW)	44	.8	50	.4				
Cooling (*)	Power consumption	(kW)	10	.2	11	.8					
	EER (Energy efficiency ratio)		4.:	38	4.2	28					
	Capacity 100%		(kW)	40	.6	45.5					
Cooling (**)	Power consumption		(kW)	13	.6	15.9					
	EER (Energy efficiency ratio)			2.9	98	2.8	35				
	Capacity 100%		(kW)	50	.0	56	.5				
Heating (*2)	Power consumption		(kW)	10.	76	12	.5				
	COP (Coefficiency of performance)			4.0	65	4.53					
Starting current			(A)		Soft	start					
Total weight	Heat Pump		(kg)	242	242	242	242				
Compressor	Quantity		(nos)	2	2	2	2				
Fan unit	Air volume		(m³/h)	9,700	9,700	9,700	9,700				
Refrigerant R410	A (Charged refrigerant amount)		(kg)	11.5	11.5	11.5	11.5				
Refrigerant		Gas side	(mm)	Ф2	8.6	Ф2	3.6				
piping			(mm)	Ф1	5.9	Ф15.9					
Balance pipe (mr			, ,	Ф	9.5	Ф9.5					
<u> </u>	Sound pressure level (Cooling/Heating) (dB(A)			58 /	59	59.5 / 60.5					
<u> </u>	ound power level (Cooling/Heating) (dB(A))			77 /		77 / 77					
Connectable indo	or units		(nos)	2	7	30					

rigii eiilcie	ncy model (Combination)					To	echnical spec	cifications	
Equivalent HP				20⊦	IP		30HP		
Model name	Heat Pump	50Hz	(MMY-)	AP2026H	T8P-ME		AP3026HT8P-ME		
Outdoor unit type					Inv	verter			
Power supply (*1)				3phase 4wires 50l	Hz 400V (380-415V)			
Outdoor unit model	Heat Pump	50Hz	(MMY-)	MAP1006HT8P-ME	MAP1006HT8P-ME	MAP1006HT8P-ME	MAP1006HT8P-ME	MAP1006HT8P-ME	
	Capacity 100%		(kW)	56.	0	84.0			
Cooling (*)	Power consumption		(kW)	13.	3		20.0		
	EER (Energy efficiency ratio)			4.2		4.21			
	Capacity 100%		(kW)	50.	75.6				
Cooling (**)	Power consumption		(kW)	18.		27.4			
	EER (Energy efficiency ratio)			2.7	2.76				
	Capacity 100%		(kW)	63.	0	94.5			
Heating (*2)	Power consumption		(kW)	14.	2	21.2			
	COP (Coefficiency of performance)		4.4	5	4.45			
Starting current			(A)		Sof	t start			
Total weight	Heat Pump		(kg)	242	242	242	242	242	
Compressor	Quantity		(nos)	2	2	2	2	2	
Fan unit	Air volume		(m³/h)	9,700	9,700	9,700	9,700	9,700	
Refrigerant R410	A (Charged refrigerant amount)		(kg)	11.5	11.5	11.5	11.5	11.5	
Defi		Gas side	(mm)	Ф28	3.6		Ф34.9		
Refrigerant piping			(mm)	Ф15	i.9		Ф19.1		
		Balance pipe	e (mm)	Ф9.	Ф9.5				
	evel (Cooling/Heating)		(dB(A))	60 /	62 / 63				
<u> </u>	el (Cooling/Heating)		(dB(A))	77 /	79 / 79				
Connectable indo	por units	(nos)	33	50					

- *1 The source voltage must not flucture more than ±10%.
- $^* \quad \text{Indoor temperature: } 26.7^{\circ}\text{C DB/19.4}^{\circ}\text{CWB, outdoor temperature: } 35^{\circ}\text{C DB (AHRI 1230 standard), power input of indoor units included.}$
- $^{**} \quad \text{Indoor temperature: } 29^{\circ}\text{C DB/19}^{\circ}\text{CWB, outdoor temperature: } 46^{\circ}\text{C DB (ISO 15042 standard), power input of indoor units included.}$
- *2 Heating : Indoor air temperature 20°C DB, Outdoor air temperature 7°C DB/6°C WB



High efficie	ncy model (Combination	1)					T	echnical spe	cifications	
Equivalent HP					32HP			34HP		
Model name	Heat Pump	50Hz	(MMY-)		AP3226HT8P-ME			AP3426HT8P-ME		
Outdoor unit type						Inve	erter			
Power supply (*1						3phase 4wires 50H	Iz 400V (380-415V)			
Outdoor unit model	Heat Pump	50Hz	(MMY-)	MAP1206HT8P-ME	MAP1006HT8P-ME	MAP1006HT8P-ME	MAP1206HT8P-ME	MAP1206HT8P-ME	MAP1006HT8P-M	
	Capacity 100%	· ·	(kW)		89.5	'		95.0		
Cooling (*)	pooling (*) Power consumption (F				22.1			24.3		
	EER (Energy efficiency rat	tio)			4.05			3.92		
	Capacity 100%		(kW)		77.2		78.8			
Cooling (**)	Power consumption	Power consumption (kW)			27.8		28.2			
	EER (Energy efficiency rat	tio)			2.78			2.79		
	Capacity 100%		(kW)		100.5			106.5		
Heating (*2)	Power consumption				23.4			25.6		
	COP (Coefficiency of perfo	ormance)			4.29		4.17			
Starting current			(A)			Soft	start			
Total weight	Heat Pump		(kg)	242	242	242	242	242	242	
Compressor	Quantity		(nos)	2	2	2	2	2	2	
Fan unit	Air volume		(m^3/h)	12,200	9,700	9,700	12,200	12,200	9,700	
Refrigerant R410	A (Charged refrigerant amount	:)	(kg)	11.5	11.5	11.5	11.5	11.5	11.5	
Defilment		Gas side	(mm)		Ф34.9			Ф34.9		
Refrigerant piping	Main pipe diameter	Main pipe diameter Liquid side (mm)		Ф19.1			Ф19.1			
		Balance pipe	e (mm)		Ф9.5			Ф9.5		
•	evel (Cooling/Heating)		(dB(A))				63.5 / 65			
			(dB(A))	**			83.5 / 85.5			
Connectable indo	nectable indoor units (no			54			57			

High efficien	cy model (Combination)						Ţ	echnical spe	cifications		
Equivalent HP					38HP			40HP			
Model name	Heat Pump	50Hz	(MMY-)		AP3826HT8P-ME		AP4026HT8P-ME				
Outdoor unit type	·					Inve	erter				
Power supply (*1)						3phase 4wires 50H	z 400V (380-415V)				
Outdoor unit model	Heat Pump	50Hz	(MMY-)	MAP1406HT8P-ME	MAP1206HT8P-ME	MAP1206HT8P-ME	MAP1406HT8P-ME	MAP1406HT8P-ME	MAP1206HT8P-ME		
	Capacity 100%	(kW)		107.0			113.5				
Cooling (*) Power consumption (k					28.1			29.8			
	EER (Energy efficiency ratio)				3.81			3.81			
	Capacity 100%		(kW)		86.1		91.8				
Cooling (**)	Power consumption		(kW)		31.3			33.9			
	EER (Energy efficiency ratio)				2.75			2.70			
	Capacity 100%		(kW)		120.0			127.5			
Heating (*2)	Power consumption		(kW)		29.1			30.4			
	COP (Coefficiency of performance)				4.13		4.19				
Starting current			(A)			Soft	start				
Total weight	Heat Pump		(kg)	299	242	242	299	299	242		
Compressor	Quantity		(nos)	2	2	2	2	2	2		
Fan unit	Air volume		(m³/h)	12,200	12,200	12,200	12,200	12,200	12,200		
Refrigerant R410A	(Charged refrigerant amount)		(kg)	11.5	11.5	11.5	11.5	11.5	11.5		
Defrieses		Gas side	(mm)		Ф41.3			Ф41.3			
Refrigerant piping Main pipe diameter Liquid side (mi				Ф22.2				Ф22.5			
		Balance pipe	(mm)	111			Ф9.5				
·	vel (Cooling/Heating)		(dB(A))				64.5 / 66.5				
Sound power level (Cooling/Heating) (dB(A))				A)) 85 / 87			85 / 87				
Connectable indoo	connectable indoor units (no				64			64			

^{*1} The source voltage must not flucture more than ±10%.

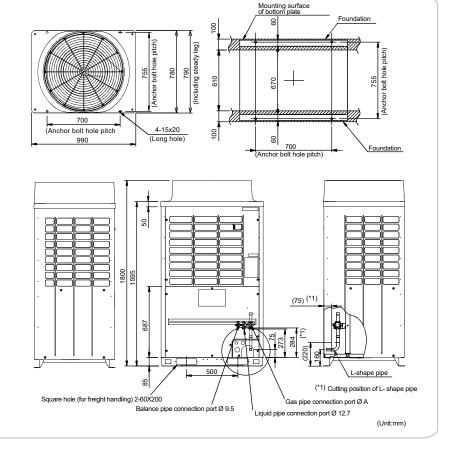
Indoor temperature: 26.7°C DB/19.4°CWB, outdoor temperature: 35°C DB (AHRI 1230 standard), power input of indoor units included.

^{**} Indoor temperature: 29°C DB/19°CWB, outdoor temperature: 46°C DB (ISO 15042 standard), power input of indoor units included.

^{*2} Heating : Indoor air temperature 20°C DB, Outdoor air temperature 7°C DB/6°C WB

Model: MMY-MAP0806HT8P-ME MMY-MAP1006HT8P-ME

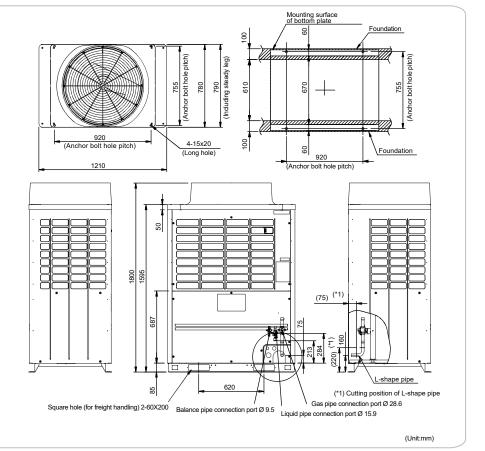
MMY-MAP1206HT8P-ME



Note:

- 1. If there is an obstacle at the upper side of the outdoor unit, set the top end of the outdoor unit 2000mm apart from the obstacle.
- 2. Limit the height of the obstacle surrounding the outdoor unit to 800mm or less from the bottom end of the outdoor unit.
- 3. Draw out the pipe procured locally to the front of the outdoor unit horizontally and keep 500mm or more between the outdoor unit and traversing pipe if placing pipe transversely.
- 4. Dimensional drawing of corrosion heavey protection model is the same as that of standard model.

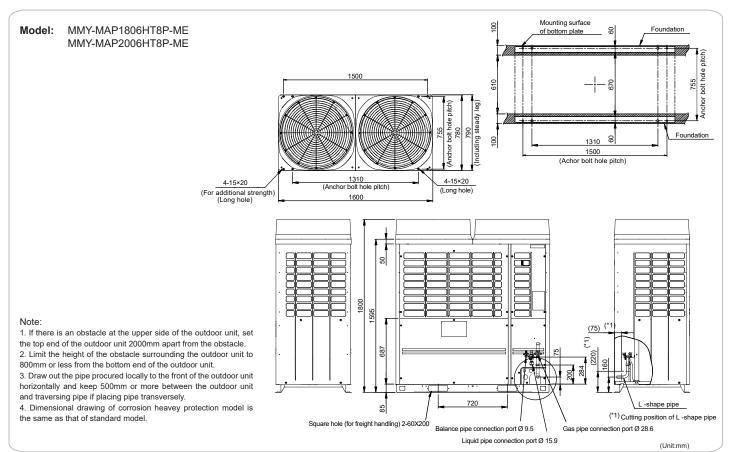




Note

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Indoor units line-up











Cooling capacity (HF	equivalent)	4-way air discharge cassette type	Compact 4-way cassette (620 × 620) type	2-way air discharge cassette type	1-way air discharge cassette type	Concealed duct type
007 type 2.2 kW	(0.8HP)		MMU-AP0077MH-E	MMU-AP0072WH1	MMU-AP0074YH1-E	MMD-AP0076BHP1-E
009 type 2.8 kW	(1HP)	MMU-AP0094HP1-E	MMU-AP0097MH-E	MMU-AP0092WH1	MMU-AP0094YH1-E	MMD-AP0096BHP1-E
012 type 3.6 kW	(1.25HP)	MMU-AP0124HP1-E	MMU-AP0127MH-E	MMU-AP0122WH1	MMU-AP0124YH1-E	MMD-AP0126BHP1-E
015 type 4.5 kW	(1.7HP)	MMU-AP0154HP1-E	MMU-AP0157MH-E	MMU-AP0152WH1	MMU-AP0154SH1-E	MMD-AP0156BHP1-E
018 type 5.6 kW	(2HP)	MMU-AP0184HP1-E	MMU-AP0187MH-E	MMU-AP0182WH1	MMU-AP0184SH1-E	MMD-AP0186BHP1-E
024 type 7.1 kW	(2.5HP)	MMU-AP0244HP1-E		MMU-AP0242WH1	MMU-AP0244SH1-E	MMD-AP0246BHP1-E
027 type 8.0 kW	(3HP)	MMU-AP0274HP1-E		MMU-AP0272WH1		MMD-AP0276BHP1-E
030 type 9.0 kW	(3.2HP)	MMU-AP0304HP1-E		MMU-AP0302WH1		MMD-AP0306BHP1-E
036 type 11.2 kW	(4HP)	MMU-AP0364HP1-E		MMU-AP0362WH1		MMD-AP0366BHP1-E
048 type 14.0 kW	(5HP)	MMU-AP0484HP1-E		MMU-AP0482WH1		MMD-AP0486BHP1-E
056 type 16.0 kW	(6HP)	MMU-AP0564HP1-E		MMU-AP0562WH1		MMD-AP0566BHP1-E
072 type 22.4 kW	(8HP)					
096 type 28.0 kW	(10HP)					











Cooling capacity (HP	equivalent)	Concealed duct high static pressure type	Slim duct type	Ceiling type	High wall type 7 series	Console
007 type 2.2 kW	(0.8HP)		MMD-AP0074SPH1-E		MMK-AP0077HP-E	MML-AP0074NH1-E
009 type 2.8 kW	(1HP)		MMD-AP0094SPH1-E		MMK-AP0097HP-E	MML-AP0094NH1-E
012 type 3.6 kW	(1.25HP)		MMD-AP0124SPH1-E		MMK-AP0127HP-E	MML-AP0124NH1-E
015 type 4.5 kW	(1.7HP)		MMD-AP0154SPH1-E	MMC-AP0158HP-E	MMK-AP0157HP-E	MML-AP0154NH1-E
018 type 5.6 kW	(2HP)	MMD-AP0186HP1-E	MMD-AP0184SPH1-E	MMC-AP0188HP-E	MMK-AP0187HP-E	MML-AP0184NH1-E
024 type 7.1 kW	(2.5HP)	MMD-AP0246HP1-E	MMD-AP0244SPH1-E	MMC-AP0248HP-E	MMK-AP0247HP-E	
027 type 8.0 kW	(3HP)	MMD-AP0276HP1-E	MMD-AP0274SPH1-E	MMC-AP0278HP-E		
030 type 9.0 kW	(3.2HP)					
036 type 11.2 kW	(4HP)	MMD-AP0366HP1-E		MMC-AP0368HP-E		
048 type 14.0 kW	(5HP)	MMD-AP0486HP1-E		MMC-AP0488HP-E		
056 type 16.0 kW	(6HP)	MMD-AP0566HP1-E		MMC-AP0568HP-E		
072 type 22.4 kW	(8HP)	MMD-AP0726HP-E				
096 type 28.0 kW	(10HP)	MMD-AP0966HP-E				









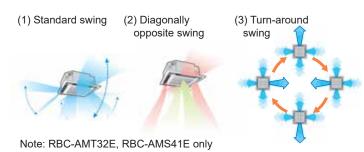


Cooling capacity (HP equivalent)		Floor standing cabinet type	Floor standing concealed type	Floor standing type	Fresh air intake indoor unit type	
007 type 2.2 kW	(0.8 HP)	MML-AP0074H1-E	MML-AP0074BH1-E			
009 type 2.8 kW	(1.0 HP)	MML-AP0094H1-E	MML-AP0094BH1-E			
012 type 3.6 kW	(1.25 HP)	MML-AP0124H1-E	MML-AP0124BH1-E			
015 type 4.5 kW	(1.7 HP)	MML-AP0154H1-E	MML-AP0154BH1-E	MMF-AP0156H1-E		
018 type 5.6 kW	(2.0 HP)	MML-AP0184H1-E	MML-AP0184BH1-E	MMF-AP0186H1-E		
024 type 7.1 kW	(2.5 HP)	MML-AP0244H1-E	MML-AP0244BH1-E	MMF-AP0246H1-E		
027 type 8.0 kW	(3.0 HP)			MMF-AP0276H1-E		
030 type 9.0 kW	(3.2 HP)					
036 type 11.2 kW	(4.0 HP)			MMF-AP0366H1-E		
048 type 14.0 kW	(5.0 HP)			MMF-AP0486H1-E	MMD-AP0481HFE	
056 type 16.0 kW	(6.0 HP)			MMF-AP0566H1-E		
072 type 22.4 kW	(8.0 HP)				MMD-AP0721HFE	
096 type 28.0 kW	(10.0 HP)				MMD-AP0961HFE	



Individual louver control

The angles of each of the four louver can be set individually. => Enables airflow to be adapted to user preferences.



Easy installation

The panel is attached using the bolt already installed on the indoor unit.



RBC-U31PGP(W)-E Remote controller



260



RBC-AX32U(W)-E

RBC-ASC11E

RBC-AMS55E-ES RBC-AMS55E-EN

ı													-
											Technica	l specific	ations
Model name		MMU-	AP0074HP-ME	AP0094HP1-E	AP0124HP1-E/HP-ME	AP0154HP1-E	AP0184HP1-E/HP-ME	AP0244HP1-E	AP0274HP1-E	AP0304HP1-E	AP0364HP1-E	AP0484HP1-E	AP0564HP1-E
Cooling/Heating capacity*1 (kW)		(kW)	2.2/2.5	2.8/3.2	3.6/4.0	4.5/5.0	5.6/6.3	7.1/8.0	8.0/9.0	9.0/10.0	11.2/12.5	14.0/16.0	16.0/18.0
Power requirem			1-phase 50Hz 230V (220–240V) / 1-phase 60Hz 220V (Separate power supply for indoor units required.)										
Electrical characteristics	Power consumption 50 Hz/60 Hz	(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	0.112/0.112	
Appearance (Ceiling panel) Model		RBC-U31PGP(W)-E / RBC-U31PGXP(W)-IN1											
		(mm)	256 (30)* 319 (30)*										
dimensions: Main unit Width (840 (950)*										
(Ceiling panel)*	Depth	(mm)		840 (950)*									
Total weight: Main unit (Ceiling panel)* (kg)		18 (4)*				20 (4)*			25 (4)*				
Fan unit	Standard air flow (High/Mid/Low)	(m³/h)		800/730/680		930/830/790	1050/ 920/800	1290/9	20/800	1320/ 1110/850	1970/ 1430/1070	2130/ 1430/1130	2130/ 1520/1230
	Motor output	(w)	14					20			68 72		
	Gas side	(mm)	ø9.5			ø12.7 ø1			15.9				
Connecting pipe	Liquid side	(mm)	ø6.4					ø9.5					
	Drain port (nominal dia.) (mm)	25 (Polyvinyl chloride tube)										
Sound pressure level*2 (High/Mid/Low) (dB(A))			30/29/27		31/29/27	32/29/27	35/3	1/28	38/33/30	43/38/32	46/38/33	46/40/33	
Sound power level (High/Mid/Low) (dB(A))			45/44/42		46/44/42	47/44/42	50/4	6/43	53/48/45	58/53/47	61/53/48	61/55/48	

^{*} Figures in parentheses are for ceiling panels.

Note 1: The capacities are measured under the conditions specified by JIS B 8615 based on the reference piping.

Note 2: The sound level are measured in an anechoic chamber in accordance with JIS B 8616.

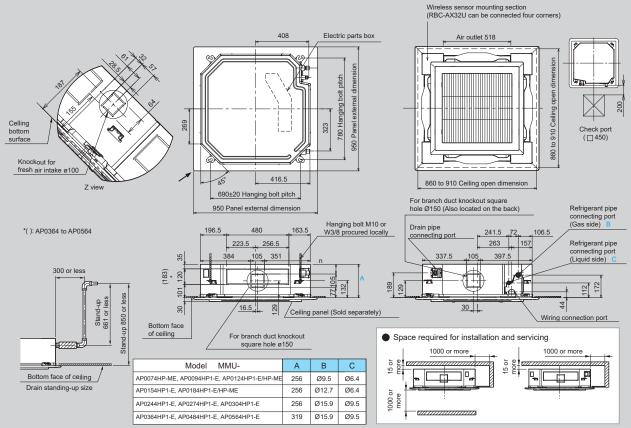
 $Normally, the \ values \ measured \ in \ the \ actual \ operating \ environment \ become \ larger \ than \ the \ indicated \ values \ due \ to \ the \ e \square ects \ of \ external \ sound.$

 $Note: \qquad \text{Rated conditions Cooling: Indoor air temperature 27°C DB/19°C WB, Outdoor air temperature 35°C DB} \\$

Heating: Indoor air temperature 20°C DB, Outdoor air temperature 7°C DB/6°C WB



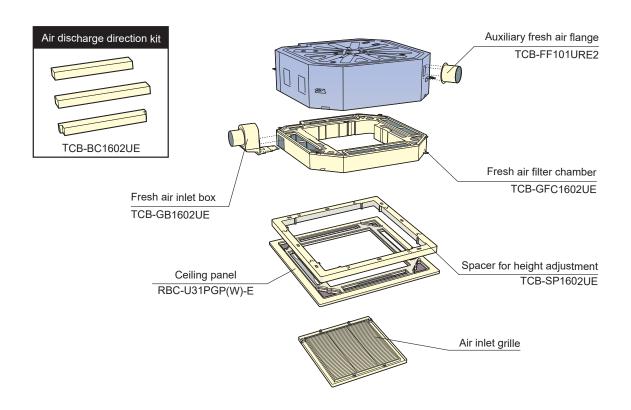
MMU- AP0074HP-ME, AP0094HP1-E to AP0564HP1-E



* The figure shows the RBC-U31PGP(W)-E panel

(Unit:mm)

Options





Perfect for grid system ceiling

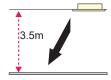
This compact unit (575 × 575 mm) fits perfectly into ceilings and matches standard architectural modules, without the need to cut ceiling tiles. The flaps fold tightly against the ceiling when operation stops so that the ceiling is affected only slightly even if air conditioning is installed.

Designed for simple & easy installation and maintenance

The slim design is only 256 mm in height even when an electrical box is located inside the unit. Easy installation is also possible using the panel adjust pocket. Use the "adjust pocket" function for fine adjustments after installation. Available for ceilings up to 3.5 m in height.



RBC-UM21PG(W)E



Maximum height



TCB-SIR41UM-E RBC-AX32UM(W)-E



Remote controller

RBC-ASC11E



RBC-AMS55E-ES RBC-AMS55E-EN

						Technic	al specifications				
Model name		MMU-	AP0077MH-E	AP0097MH-E	AP0127MH-E	AP0157MH-E	AP0187MH-E				
Cooling/Heating capacity*1 (kW		(kW)	2.2/2.5	2.8/3.2	3.6/4.0	4.5/5.0	5.6/6.3				
Electrical	Power requirements		1-phase 50Hz 230V (220–240V) / 1-phase 60Hz 220V (Separate power supply for indoor units required.)								
Electrical characteristics	Power consumption 50 Hz/60 Hz	(kW)	0.023/0.023	0.023/0.023 0.025/0.025		0.030/0.030	0.052/0.052				
Appearance (Ceiling panel) Model		Model	RBC-UM21PG(W)-E								
External dimensions:	Height	(mm)	256 (12)*								
	Width	(mm)	575 (620)*								
(Ceiling panel)*	Depth	(mm)	575(620)*								
Total weight: Main unit (Ceiling panel)* (kg)		(kg)	17 (3)*								
Fan unit	Standard air flow (High/Mid/Low)	(m³/h)	552/462/378	570/468/378	594/504/402	660/552/468	840/642/522				
	Motor output	(w)	60								
	Gas side	(mm)		ø1	ø12.7						
Connecting pipe	Liquid side	(mm)	ø6.4								
	Drain port (nominal dia.)	(mm)									
Sound pressure level*2 (High/Mid/Low) (dB(A))		(dB(A))	37/33/29	38/33/29	38/34/30	40/35/31	47/39/34				
Sound power leve	el (High/Mid/Low)	(dB(A))	52/48/44	53/48/44	53/49/45	55/50/46	62/54/49				

^{*} Figures in parentheses are for ceiling panels.

Note 1: The capacities are measured under the conditions specified by JIS B 8615 based on the reference piping.

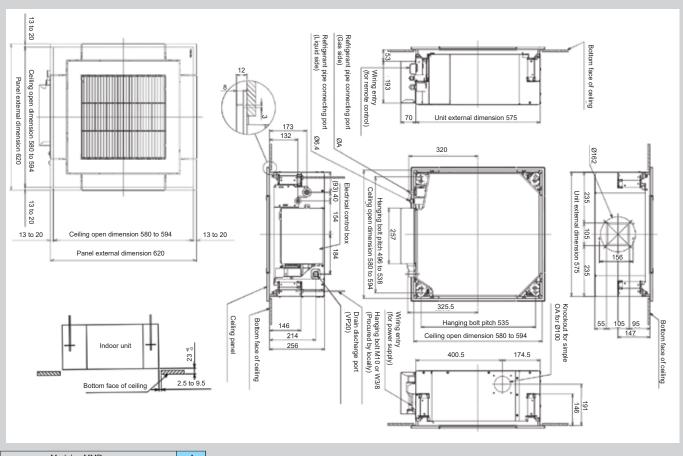
Note 2: The sound level are measured in an anechoic chamber in accordance with JIS B 8616.

Normally, the values measured in the actual operating environment become larger than the indicated values due to the e□ects of external sound.

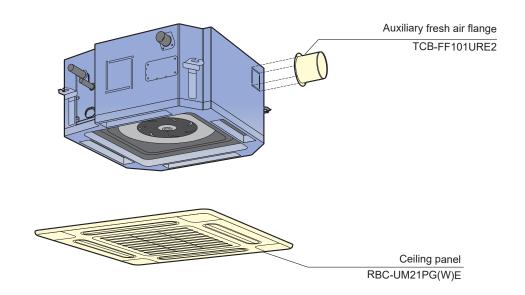
Note: Rated conditions Cooling: Indoor air temperature 27°C DB/19°C WB, Outdoor air temperature 35°C DB
Heating: Indoor air temperature 20°C DB, Outdoor air temperature 7°C DB/6°C WB

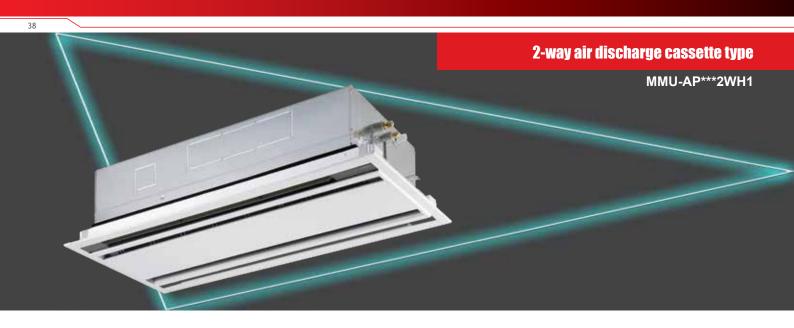


MMU-APO077MH-E to APO187MH-E



Model MMD-	Α	
AP0077MH-E, AP0097MH-E, AP0127MH-E	Ø 9.5	
AP0157MH-E, AP0187MH-E	Ø12.7	





Slim and compact unit

Unified the width of ceiling panel to 680mm.

Condensate drain pump included.

Available for ceilings up to 3.8m in height. (in case of 0.8HP to 3.2HP)

Easy installation and fine adjustment using the "Adjust-Cover" function.

Remote controller





RBC-AX32UW(W)-E

RBC-ASC11E

RBC-AMS55E-ES RBC-AMS55E-EN

			_								Technica	l specific	ations	
Model name		MMU-	AP00722WH1	AP0092WH1	AP0122WH1	AP0152WH1	AP0182WH1	AP0242WH1	AP0272WH1	AP0302WH1	AP0362WH1	AP0482WH1	AP0562WH1	
Cooling/Heating of	apacity*1	(kW)	2.2/2.5	2.8/3.2	3.6/4.0	4.5/5.0	5.6/6.3	7.1/8.0	8.0/9.0	9.0/10.0	11.2/12.5	14.0/16.0	16.0/18.0	
	Power requirements			1-ph	ase 50Hz 230	V (220–240V) / 1-phase 60	Hz 220V (Se	parate power	supply for inde	oor units requ	ired.)		
Electrical characteristics	Power consumption 50 Hz/60 Hz	(kW)		0.029/0.029		0.030/0.030	0.044/0.044	0.054	/0.054	0.064/0.064	0.076/0.076	0.088/0.088	0.117/0.117	
Appearance (Ceil	ing panel)	Model	RBC-UW283PG(W)-E				RBC-UW803PG(W)-E				RBC-UW1403(W)PG-E			
External	Height	(mm)	295 (20)				345 (20)							
dimensions: Main unit				815 (1050) 1180 (1415)								1600 (1835)		
(Ceiling panel)*	Depth	(mm)		570 (680)										
Total weight: Mair	unit (Ceiling panel)*	(kg)	19 (10)				26 (14)				36 (14)			
Fan unit	Standard air flow (High/Mid/Low)	(m³/h)	558/498/450		600/ 534/450	900/ 750/618	1050/8	340/738	1260/ 900/780	1740/ 1434/1182	1800/ 1482/1230	2040/ 1578/1320		
	Motor output	(w)		2	0		30	4	10	50		70		
	Gas side	(mm)		ø9.5		ø1:	2.7			ø1	5.9			
Connecting pipe	Liquid side	(mm)			ø6.4					ø9	9.5			
	Drain port (nominal dia.) (mm						25 (Po	lyvinyl chlorid	e tube)					
Sound pressure le	evel*2 (High/Mid/Low)	(dB(A))	34/32/30		35/3	3/30	38/3	35/33	40/37/34	42/39/36	43/40/37	46/42/39		
Sound power leve	el (High/Mid/Low)	(dB(A))	49/47/45			50/4	48/45 53/50/48		55/52/49	57/54/51	58/55/52	61/57/54		

^{*} Figures in parentheses are for ceiling panels.

Note 1: The capacities are measured under the conditions specified by JIS B 8615 based on the reference piping.

Note 2: The sound level are measured in an anechoic chamber in accordance with JIS B 8616.

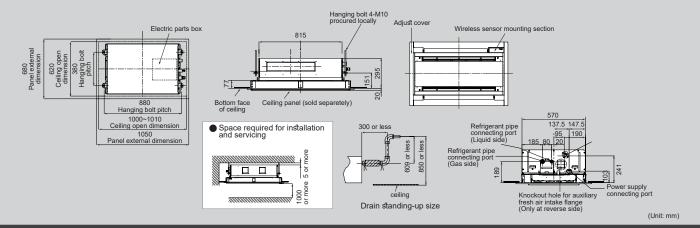
Normally, the values measured in the actual operating environment become larger than the indicated values due to the effects of external sound.

Note : Rated conditions Cooling : Indoor air temperature 27°C DB/19°C WB, Outdoor air temperature 35°C DB

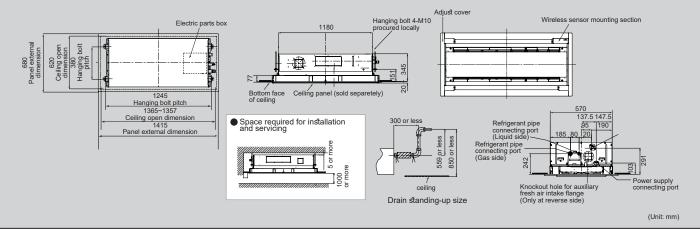
Heating: Indoor air temperature 20°C DB, Outdoor air temperature 7°C DB/6°C WB



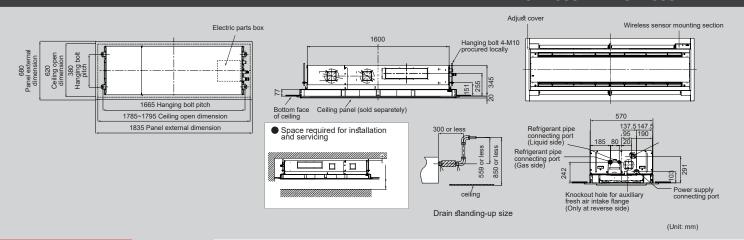
MMU-AP0072WH1 to AP0152WH1

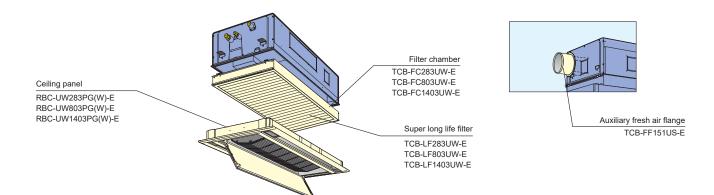


MMU-AP0182WH1 to AP0302WH1



MMU-AP0362WH1 to AP0562WH1







The perfect choice for hotels and reception areas

Silent sound design ensures the quiet required for the

Ideal for smaller rooms where one-way air distribution is required.

Able to blow air straight out. Condensate drain pump included. Long-life filters fitted as standard.

Preparations/connection possible with a circle duct flange.

Remote controller

(MMU-AP***4SH-E)

Fresh air intake is possible







TCB-AX32E2 (YH)

RBC-AX33CE2 (SH)

RBC-ASC11E

RBC-AMS55F-FS

							Technical s	specifications		
Model name		MMU-	AP0074YH1-E	AP0094YH1-E	AP0124YH1-E	AP0154SH1-E	AP0184SH1-E	AP0244SH1-E		
Cooling/Heating of	apacity*1	(kW)	2.2/2.5	2.8/3.2	3.6/4.0	4.5/5.0	5.6/6.3	7.1/8.0		
=	Power requirements		1-	phase 50Hz 230V (220–	240V) / 1-phase 60Hz 220	OV (Separate power suppl	ly for indoor units require	d.)		
characteristics	Power consumption 50 Hz/60 Hz	(kW)		0.053/0.056		0.042/0.041	0.046/0.045	0.075/0.073		
Appearance (Ceiling panel) Model RBC-UY136PG RBC-US21PGE										
External Height (mm) 235 (18)*						200 (20)*				
dimensions: Main unit	Power requirements									
(Ceiling panel)*	Depth	tith (mm) 850 (1050)* 1000 (1230)* oth (mm) 400 (470)* 710 (800)*								
Total weight: Mair	n unit (Ceiling panel)*	(kg)		22 (3.5)*		21 (5	5.5)*	22 (5.5)*		
Fan unit		(m³/h)		540/480/420		750/690/630 780/720/660 1140/960/8				
	Motor output	(w)		22			30			
	Gas side	(mm)		ø9.5		ø1:	2.7	ø15.9		
Connecting pipe	Liquid side	(mm)		ø6.4		,		ø9.5		
	Drain port (nominal dia.)	(mm)			25 (Polyvinyl	chloride tube)				
Sound pressure le	evel*2 (High/Mid/Low)	(dB(A))		42/39/34		37/35/32	38/36/34	45/41/37		
Sound power leve	el (High/Mid/Low)	(dB(A))		57/54/49		57/54/51 58/				

^{*} Figures in parentheses are for ceiling panels.

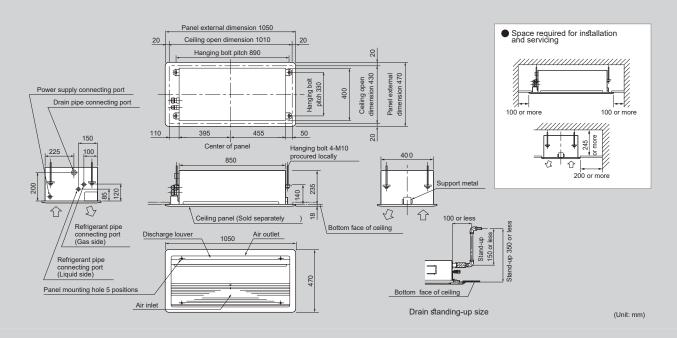
Note 1: The capacities are measured under the conditions specified by JIS B 8615 based on the reference piping.

Note 2: The sound level are measured in an anechoic chamber in accordance with JIS B 8616.

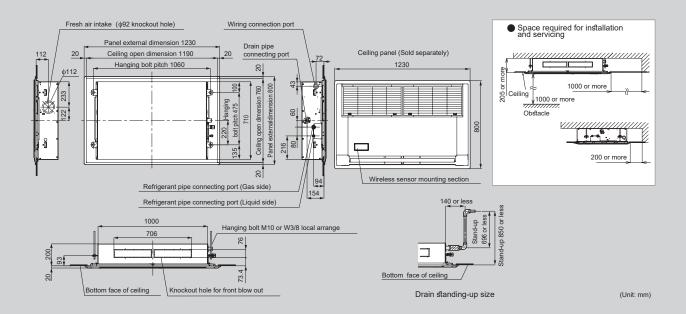
Normally, the values measured in the actual operating environment become larger than the indicated values due to the effects of external sound.

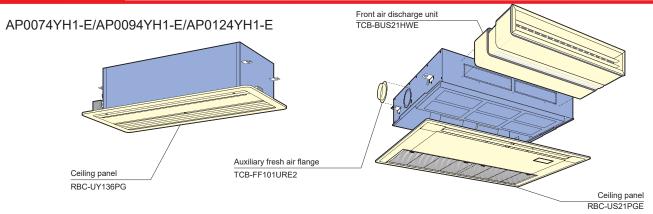


MMU-AP0074YH1-E to AP0124YH1-E

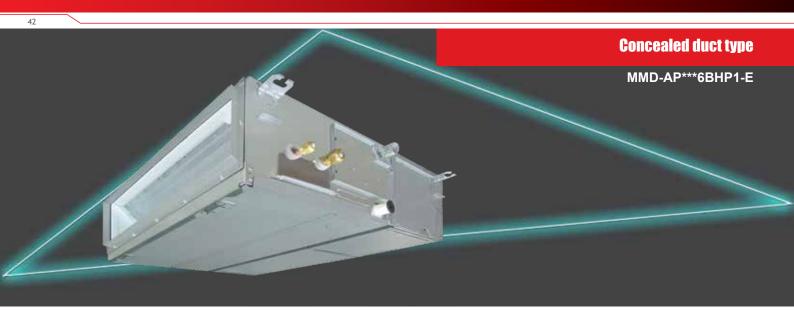


MMU-AP0154SH1-E to AP0244SH1-E





TOSHIBA



High static pressure

External static pressure can be raised as high as 120 Pa, so that all areas of the room can be reached for even temperature distribution, no matter how complex the layout.

High-lift drain pump

Built-in high-lift drain pump up to 850 mm.

Remote controller







TCB-AX32E2

RBC-ASC11E

RBC-AMS55E-ES RBC-AMS55E-EN

										1	<mark>Technica</mark>	l specific	ations
Model name		MMD-	AP0076BHP1-E	AP0096BHP1-E	AP0126BHP1-E	AP0156BHP1-E	AP0186BHP1-E	AP0246BHP1-E	AP0276BHP1-E	AP0306BHP1-E	AP0366BHP1-E	AP0486BHP1-E	AP0566BHP1-E
Cooling/Heating of	apacity*1	(kW)	2.2/2.5	2.8/3.2	3.6/4.0	4.5/5.0	5.6/6.3	7.1/8.0	8.0/9.0	9.0/10.0	11.2/12.5	14.0/16.0	16.0/18.0
E	Power requirements			1-phase 50Hz 230V (220–240V) / 1-phase 60Hz 220V (Separate power supply for indoor units require							red.)		
Electrical characteristics	Power consumption 50 Hz/60 Hz	(kW)	0.038/0.038	0.043	/0.043	0.062/	0.062	0.077	0.077	0.094/ 0.094	0.172/ 0.172	0.198/	0.198
	Height	(mm)						275					
External dimensions	Width	(mm)		700		70	00		1,000			1,400	
	Depth	(mm)						750					
Total weight		(kg)	23						30			40	
	Standard air flow (High/Mid/Low)	(m³/h)	540/ 450/360		570/ 480/390		98/ /540	1,2 990		1,260/ 1,110/930	1,920/ 1,620/1,380	2,1 1,740/	
F	Motor output	(w)				15	50					250	
Fan unit	External static pressu (factory setting)	ure (Pa)			30				40			50	
	External static pressu	ıre (Pa)					30-40-50-	65-80-100-120	0 (7 steps)				
	Gas side	(mm)		ø9.5		ø1	2.7			ø1:	ø15.9		
Connecting pipe	Liquid side	(mm)			ø6.4					ø9	0.5		
	Drain port (nominal dia	.) (mm)					25 (F	olypropylene	tube)				
Sound pressure le (High/Mid/Low)	Sound pressure level*2 High/Mid/Low) (dB(A		29/26/23	29/26/23 30/26/23		33	/29/25	36/31/27			40/36/33		
Sound power leve (High/Mid/Low)	44/41/38 45/41/38 48/44/40			51/46/42			55/51/48						

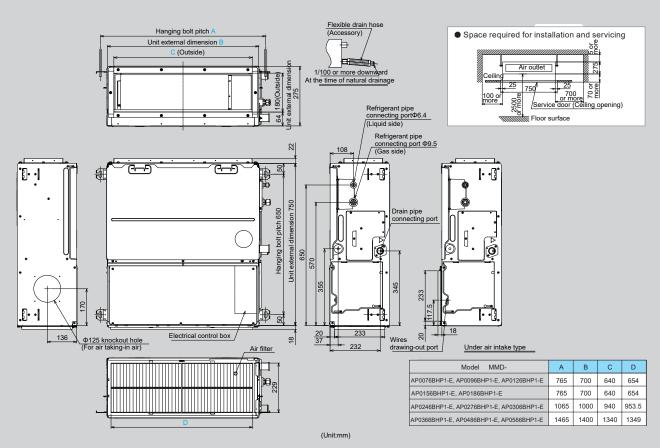
Note 1: The capacities are measured under the conditions specified by JIS B 8615 based on the reference piping.

Note 2 : The sound level are measured in an anechoic chamber in accordance with JIS B 8616.

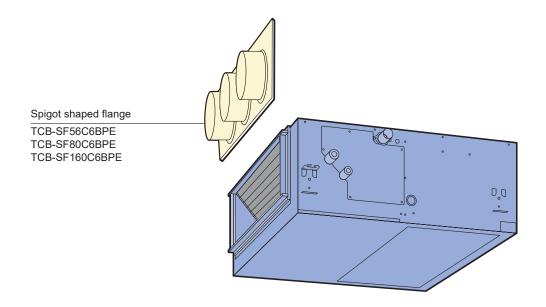
Normally, the values measured in the actual operating environment become larger than the indicated values due to the e⊡ects of external sound.

MMD-AP0076BHP1-E to AP0566BHP1-E

SMMS



^{*} Standard filter is provided, but deeper filtration filter needs to be purchased locally.





Design flexibility

Satisfies all your design needs. Compatible with external static pressures up to 200 Pa (2-6HP) and 250 Pa (8 & 10HP).

Can be equipped with the following options:

- · Long life filter kit
- Drain pump kit

Construction characteristics

The flexible duct is accessible.

Easy service and installation.

Inspection hole enables easy access and maintenance.

High-lift drain pump (up to 6 HP)

Built-in high-lift drain pump up to 850 mm.

Remote controller







TCB-AX32E2

RBC-ASC11E

RBC-AMS55E-ES RBC-AMS55E-EN

								Te	chnical spec	ifications	
Model name		MMD-	AP0186HP1-E	AP0246HP1-E	AP0276HP1-E	AP0366HP1-E	AP0486HP1-E	AP0566HP1-E	AP0726HP-E	AP0966HP-E	
Cooling/Heating of	capacity*1	(kW)	5.6/6.3	7.1/8.0	8.0/9.0	11.2/12.5	14.0/16.0	16.0/18.0	22.4/25.0	28.0/31.5	
E	Power requirements		1-phase 50Hz 230V (220–240V) / 1-phase 60Hz 220V (Separate power supply for indoor u								
Electrical characteristics	Power consumption 50 Hz/60 Hz	(kW)	0.085	0.1	115	0.198	0.230	0.290	0.54	0.79	
	Height	(mm)			2	98			44	48	
External dimensions	Width	(mm)		1,000			1,400		1,4	100	
dimensions	Depth	(mm)			7	50			90	00	
Total weight	tal weight (kg)			34			43	97			
	Standard air flow (High/Mid/Low)	(m³/h)	800 (660/550)	1,2 (970	200 /800)	1,920 (1,560/1,340)	2,100 (1,740/1,420)	2,400 (2,040/1,660)	3,800 (3,200/2,500)	4,800 (4,200/3,500)	
F	Motor output	(w)		250			350		2	50	
Fan unit	External static pressu (factory setting)	ire (Pa)			1	00			150		
	External static pressu	ıre (Pa)			50-75-125-150-	175-200 (7steps)			50-83-117-150-18	3-217-250 (7 steps	
	Gas side	(mm)	ø12.7			ø15.9			ø2	2.2	
Connecting pipe	Liquid side	(mm)	ø6.4			ø9.5			ø1	2.7	
	Drain port (nominal dia.	.) (mm)			25 (Polyvinyl chloride t	rube)		25 (Polyvinyl	Chloride Tube)	
Sound pressure le (High/Mid/Low)			37 (32/30)		88 /31)	41 (37/34)	42 (40/35)	45 (42/37)	44 (40/36)	46 (42/38)	
Sound power level (dB(A)) 60 60 62 65 68 (High/Mid/Low) (55/51) (57/53) (62/54) (64/56)		79 (75/71)	81 (77/73)								

Note 1: The cooling capacities and electrical characteristics are measured under the conditions specified by JIS B 8615 based on the reference piping.

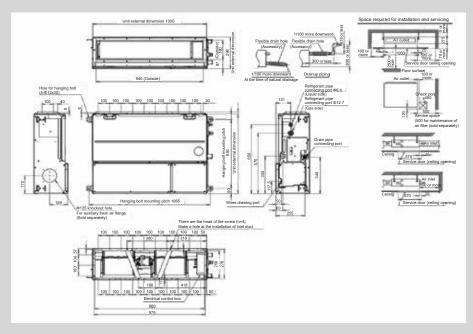
Note 2 : The sound level are measured in an anechoic chamber in accordance with JIS B 8616.

Normally, the values measured in the actual operating environment become larger than the indicated values due to the e \sqsubseteq ects of external sound.

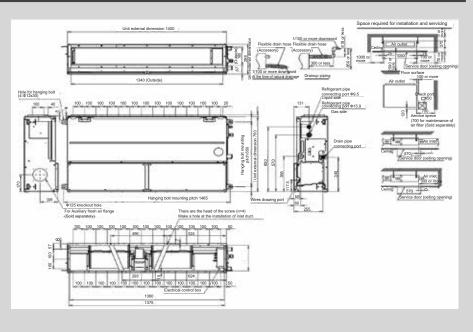
SMMS @

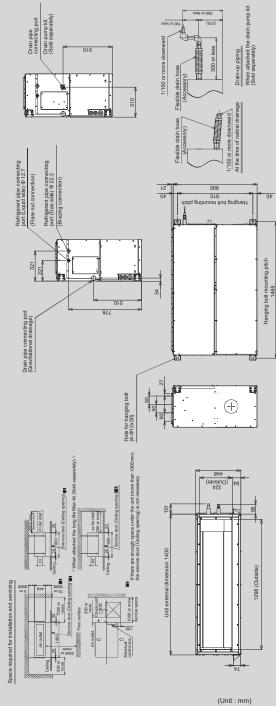
MMD-AP0186HP1-E to AP0276HP1-E

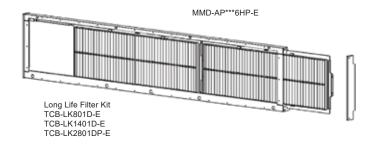
MMD-AP0726HP-E, AP0966HP-E

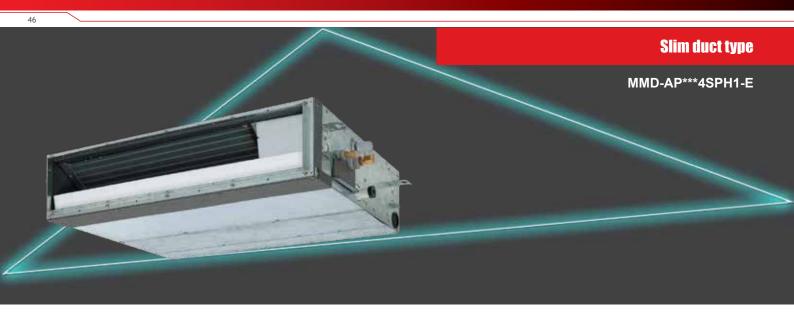












Functional design

Only 210 mm in height for greater application flexibility. 4-step static pressure setup. Concealed installation within a ceiling void. Auxiliary fresh air intake available.

Slim & quiet

Perfect comfort throughout the room. Can be used with any style of air diffuser. Quiet, powerful operation.

High-lift drain pump

Built-in high-lift drain pump up to 850 mm.

Remote controller







TCB-AX32E2

RBC-ASC11E

RBC-AMS55E-ES RBC-AMS55E-EN

								Technical spe	ecifications			
Model name		MMD-	AP0074SPH1-E	AP0094SPH1-E	AP0124SPH1-E	AP0154SPH1-E	AP0184SPH1-E	AP0244SPH1-E	AP0274SPH1-E			
Cooling/Heating of	apacity*1	(kW)	2.2/2.5	2.8/3.2	3.6/4.0	4.5/5.0	5.6/6.3	7.1/8.0	8.0/9.0			
E	Power requirements			1-phase 50Hz 230V	(220-240V) / 1-phas	e 60Hz 220V (Separa	ate power supply for in	indoor units required.)				
Electrical characteristics	Power consumption 50 Hz/60 Hz	(kW)	0.039/	0.037	0.043/0.041	0.045/0.043	0.054/0.052	0.105/	//0.105			
	Height	(mm)				210						
External dimensions	Width	(mm)		845 1140								
dimonolono	Depth	(mm)										
otal weight (kg				22		2	3	29				
F	Standard air flow (High/Mid/Low)	(m³/h)	540/470/400		600/520/450	690/600/520	780/680/580	1,080/1,	000/900			
Fan unit	Motor output	(w)			60			12	20			
	External static pressu	re (Pa)	6-16-31-46 (4 steps)		5-15-30-	45 (4 steps)	4-14-29-44(4 steps)	2-12-22-4	2 (4 steps)			
	Gas side	(mm)		ø9.5		ø1	2.7	ø1	5.9			
Connecting pipe	Liquid side	(mm)			ø6.4			øS	9.5			
	Drain port (nominal dia.)	(mm)			25	(Polyvinyl chloride tu	be)					
Sound pressure	Under air inlet	(dB(A))	36/3	3/30	38/35/32	39/36/33	40/38/36	49/4	7/44			
level*2 (High/Med./Low)	Back air inlet	(dB(A))	28/20	6/24	29/27/25	32/30/28	33/31/29	38/3	6/33			
Sound power level	Under air inlet	(dB(A))	51/4	3/45	53/50/47	54/51/48	55/53/51	64/6	2/59			
(High/Med./Low)	Back air inlet	(dB(A))	43/4	1/39	44/42/40	47/45/43	48/46/44	53/5	1/48			

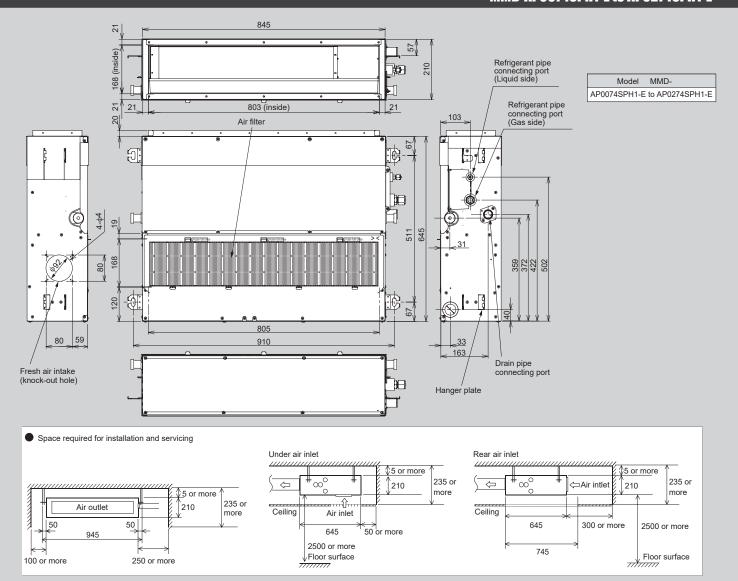
Note 1: The capacities are measured under the conditions specified by JIS B 8615 based on the reference piping.

Note 2: The sound level are measured in an anechoic chamber in accordance with JIS B 8616.

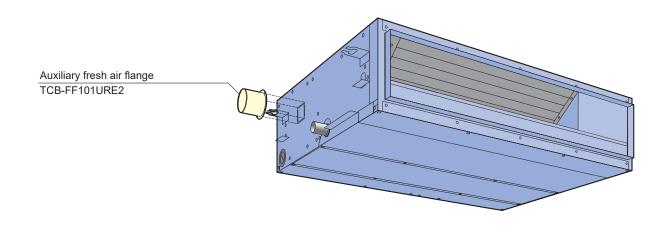
Normally, the values measured in the actual operating environment become larger than the indicated values due to the effects of external sound.

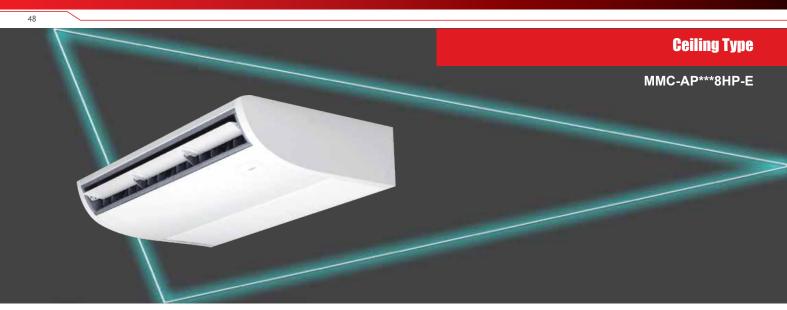


MMD-AP0074SPH1-E to AP0274SPH1-E



(Unit: mm)





Smooth curve for pliant Shape

All-new chassis and new rounded design, This new models have been developed in response to customers' needs for ceiling units that better match their room interiors.

Smooth curve for pliant Shape

New fan has adopted the turbulence prevention rib to optimize the ventilating way.

Air volume has increased and noise level also has decreased compared with previous model. Winds of new ceiling type of 4HP to 6HP can be reached up to 4.3 metre.

New Designed Wide Flap

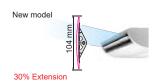
The new air outlet has realized both high noise reduction and large air volume.

Flap control

The airflow angle is automatically set to the most suitable setting according to your cooling or heating needs, and an automatic swing mode enables airflow to reach all areas of the room to create a comfortable ambience.













RBC-ASC11F

Remote controller

RBC-AMS55E-EN

								Technical sp	ecifications				
Model name		MMC-	AP0158HP-E	AP0188HP-E	AP0248HP-E	AP0278HP-E	AP0368HP-E	AP0488HP-E	AP0568HP-E				
Cooling/Heating of	apacity*1	(kW)	4.5/5.0	5.6/6.3	7.1/8.0	8.0/9.0	11.2/12.5	14.0/16.0	16.0/18.0				
E	Power requirements			1-phase 50Hz 230V	(220–240V) / 1-phase	e 60Hz 220V (Separa	ite power supply for in	door units required.)					
Electrical characteristics	Power consumption 50 Hz/60 Hz	(kW)	0.033/0.033	0.034/0.034	0.067	/0.067	0.083	/0.083	0.111/0.111				
	Height	(mm)				235							
External dimensions	Width	(mm)	99	50	1,2	169		1,586					
difficition	Depth	(mm)		690									
Total weight		(kg)	2	24	3	0	39						
Fan unit	Standard air flow (High/Mid/Low)	(m³/h)	840 /690/540	960 /720/540	1,440 /1,020/750		1,860 /1,350/1,020	1,860 /1,530/1,200	2,040 /1,650/1,260				
	Motor	(w)	9)4	9	4	139						
	Gas side	(mm)	ø1	2.7	ø15.9								
Connecting pipe	Liquid side	(mm)	Øθ	6.4			ø9.5						
	Drain port (nominal dia.) (mm)			20	(Polyvinyl chloride tu	be)						
Sound pressure le (High/Mid/Low)	evel*2	(dB(A))	36/34/28	37/35/28	41/36/29		44/38/32	44/41/35	46/42/36				
Sound power leve (High/Mid/Low)				52/50/43	56/5	1/44	59/53/47	59/56/50	61/57/51				

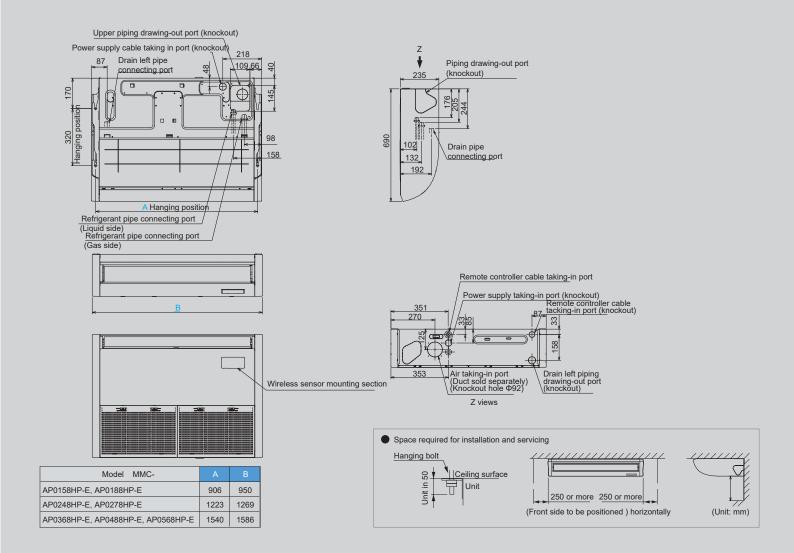
Note 1: The capacities are measured under the conditions specified by JIS B 8615 based on the reference piping.

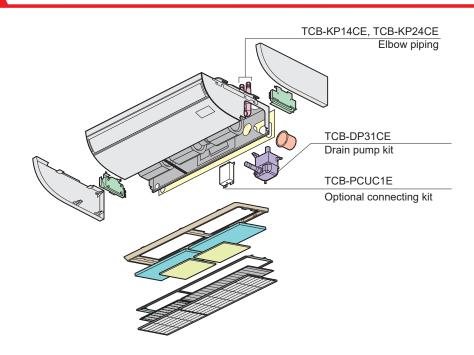
The sound level are measured in an anechoic chamber in accordance with JIS B 8616. Note 2:

Normally, the values measured in the actual operating environment become larger than the indicated values due to the e□ects of external sound.

SMMS COLLAR MULTI SYSTEM

MMC-AP0158HP-E to AP0568HP-E





Elegant and slim

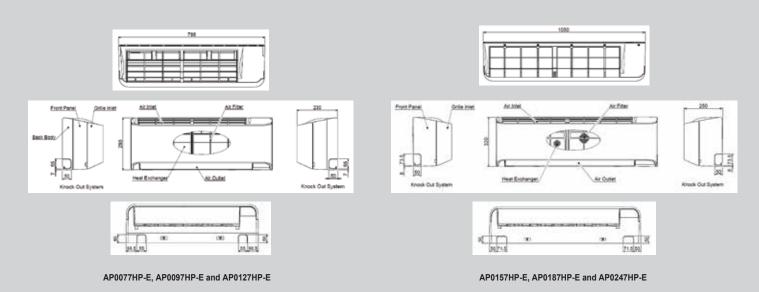
This modern look high-wall is elegant and slim; it can easily blend in with any room interior.

Total comfort is granted. For uniform air distribution with the help of directional auto switch louver. Special coated fins and low noise operation.



Remote controller

MMK- AP0077HP to AP0247HP

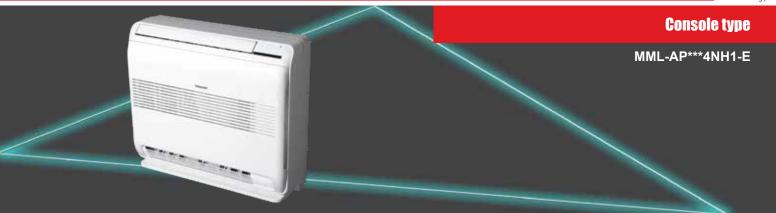


							Technical :	specifications		
Model name		MMK-	AP0077HP-E	AP0097HP-E	AP0127HP-E	AP0157HP-E	AP0187HP-E	AP0247HP-E		
Cooling/Heating of	apacity*1	(kW)	2.2/2.5	2.8/3.2	3.6/4.0	4.5/5.0	5.6/6.3	7.1/8.0		
E	Power requirements			1-phase 50Hz 2	30V (220-240V) (Separat	e power supply for indoo	for indoor units required.)			
Electrical characteristics	Power consumption 50 Hz/60 Hz	(kW)	0.015	0.016	0.017	0.028	0.032	0.050		
	Height	(mm)		293		320				
External dimensions	Width	(mm)		798		1050				
dimensions				230			250			
Total weight		(kg)		11			16			
Fan unit	Standard air flow (High/Low)	(m³/h)	480/300	510/300	540/300	840/550	900/550	1200/600		
	Motor output	(w)		30			-			
	Gas side	(mm)		ø9.5		ø12	2.7	ø15.88		
Connecting pipe	Liquid side	(mm)		ø6.4		ø6.	35	ø9.53		
	Drain port (nominal dia	.) (mm)	1	6 (polyvinyl chloride tube	:)	-				
Sound pressure le	evel*2 (High/Low)	(dB(A))	35/25	36/25	37/25	40/32	41/32	45/33		

Note 1: The capacities are measured under the conditions specified by JIS B 8615 based on the reference piping.

Note 2: The sound level are measured in an anechoic chamber in accordance with JIS B 8616.

Normally, the values measured in the actual operating environment become larger than the indicated values due to the effects of external sound.



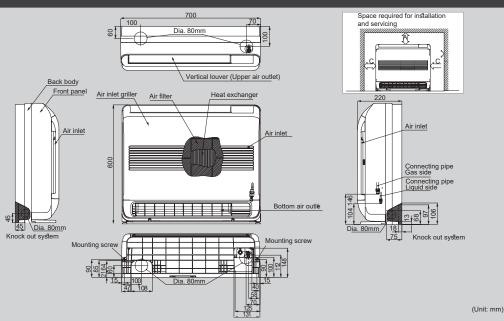
Wide outlet

Elegant & simple design makes this unit a perfect fit for shops, office buildings, and luxury apartments. Bottom flow functionality ensures comfortable air bi-flow for an advantage in heating and floor warming. Multi-function operation is convenient, making adjustments by the user possible using the wireless remote controller.



Remote controller

MML-AP0074NH1-E to AP0184NH1-E



						Technic	al specifications			
Model name		MML-	AP0074NH1-E	AP0094NH1-E	AP0124NH1-E	AP0154NH1-E	AP0184NH1-E			
Cooling/Heating o	apacity*1	(kW)	2.2/2.5	2.8/3.2	3.6/4.0	4.5/5.0	5.6/6.3			
Electrical	Power requirements		1-phase	50Hz 230V (220–240V) / 1-p	phase 60Hz 220V (Separate po	ower supply for indoor units red	quired.)			
Electrical characteristics	Power consumption 50 Hz/60 Hz	(kW)	0.02	21	0.025	0.034	0.052			
	Height	(mm)			600					
External dimensions	Width	(mm)			700					
Depth		(mm)	220							
Total weight		(kg)			17					
Fan unit	Standard air flow (High/Mid/Low)	(m³/h)	510/36	6/282	552/408/324	624/468/384	726/528/426			
	Motor output	(w)			41					
	Gas side	(mm)		ø9.5		ø12	2.7			
Connecting pipe	Liquid side	(mm)			ø6.4					
	Drain port (nominal dia.) (mm)			16 (Polyvinyl chloride tube)					
Sound pressure le	evel*2 (High/Mid/Low)	(dB(A))	38/32	2/26	40/34/29	43/37/31	47/40/34			
Sound power leve	el (High/Mid/Low)	(dB(A))	53/4	11	55/44	58/46	62/55			

Note 1: The capacities are measured under the conditions specified by JIS B 8615 based on the reference piping.

Note 2: The sound level are measured in an anechoic chamber in accordance with JIS B 8616.

Normally, the values measured in the actual operating environment become larger than the indicated values due to the effects of external sound.

TOSHIBA



Slim & compact design

Under-window mounting does not block lighting. Indoor unit size of 2.2 kW to 7.1 kW is the same.

Slim & compact design

Distribution can be reversed to suit occupant preference. Air blown from front p (factory default)





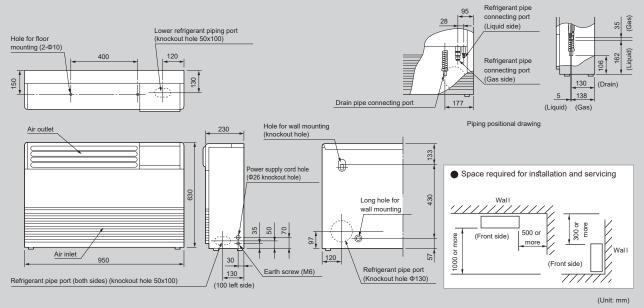


TCB-AX32E2

RBC-ASC11E

RBC-AMS55E-ES RBC-AMS55E-EN

MML-AP0074H1-E to AP0244H1-E



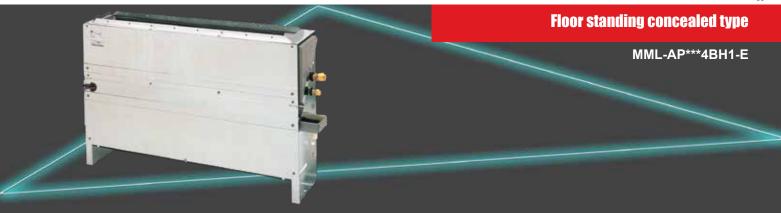
							Technical s	specifications		
Model name		MML-	AP0074H1-E	AP0094H1-E	AP0124H1-E	AP0154H1-E	AP0184H1-E	AP0244H1-E		
Cooling/Heating c	apacity*1	(kW)	2.2/2.5	2.8/3.2	3.6/4.0	4.5/5.0	5.6/6.3	7.1/8.0		
E	Power requirements		1-	phase 50Hz 230V (220–2	ly for indoor units require	y for indoor units required.)				
Electrical characteristics	Power consumption 50 Hz/60 Hz	(kW)	0.056	/0.053	0.092/	0.092	0.102	0.113		
	Height	(mm)			63	30				
External dimensions	Width	(mm)			95	50				
difformiono	Depth	(mm)			23	30				
Total weight		(kg)		3	37		4	0		
Fan unit	Standard air flow (High/Mid/Low)	(m³/h)	480/4	20/360	900/78	80/650	1080/930/780			
	Motor output	(w)		4	5		7	0		
	Gas side	(mm)		ø9.5		ø1:	2.7	ø15.9		
Connecting pipe	Liquid side	(mm)			ø6.4			ø9.5		
	Drain port (nominal dia.) (mm)				20 (Polyvinyl	chloride tube)				
Sound pressure le	evel*2 (High/Mid/Low)	(dB(A))	39/3	7/35	45/4	1/38	49/44/39			
Sound power leve	l (High/Mid/Low)	(dB(A))	54/5	2/50	60/5	6/53	64/59/54			

Note 1: The capacities are measured under the conditions specified by JIS B 8615 based on the reference piping.

The sound level are measured in an anechoic chamber in accordance with JIS B 8616. Note 2:

Normally, the values measured in the actual operating environment become larger than the indicated values due to the effects of external sound.





Cool air makes for a pleasant indoor environment

Install it under a window and air-condition any room effectively.

Easy maintenance

Simplified design of fan and drainage pipe eases maintenance.



Remote controller





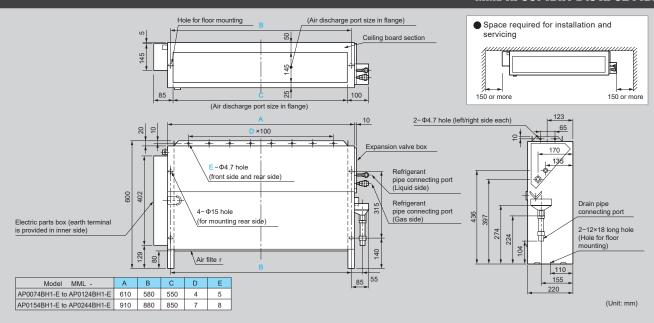


TCB-AX32E2

2E2 RBC-ASC11E

RBC-AMS55E-ES RBC-AMS55E-EN

MML-AP0074BH1-E to AP0244BH1-E



							Technical	specifications		
Model name		MML-	AP0074BH1-E	AP0094BH1-E	AP0124BH1-E	AP0154BH1-E	AP0184BH1-E	AP0244BH1-E		
Cooling/Heating of	apacity*1	(kW)	2.2/2.5	2.8/3.2	3.6/4.0	4.5/5.0	5.6/6.3	7.1/8.0		
	Power requirements		1-	ohase 50Hz 230V (220-	240V) / 1-phase 60Hz 220	OV (Separate power supp	ly for indoor units require	ed.)		
Electrical characteristics	Power consumption 50 Hz/60 Hz	(kW)		/0.096	0.095/0.110					
	Height	(mm)			00					
External dimensions	Width	(mm)		745		1,145				
amionolono	Depth	(mm)								
Total weight		(kg)		21			29			
Fan unit	Standard air flow (High/Mid/Low)	(m³/h)		460/400/300		740/60	950/790/640			
	Motor output	(w)		19			70			
	Gas side	(mm)		ø9.5		ø1:	2.7	ø15.9		
Connecting pipe	Liquid side	(mm)			ø6.4			ø9.5		
	Drain port (nominal dia	.) (mm)		:	20 (Polyvinyl chloride tube	ibe)				
Sound pressure le	evel*2 (High/Mid/Low)	(dB(A))			36/34/32	42/3				
Sound power leve	el (High/Mid/Low)	(dB(A))	54/52/50 60/55/51							

Note 1: The capacities are measured under the conditions specified by JIS B 8615 based on the reference piping.

Note 2 : The sound level are measured in an anechoic chamber in accordance with JIS B 8616.

Normally, the values measured in the actual operating environment become larger than the indicated values due to the effects of external sound.

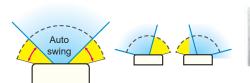
Thin profile suits interior design

Slender, space-saving type (1.7-6.0HP)

Wide outlet

Corner location is also possible, with right and left auto swing.

Set the vertical angle manually.



Remote controller



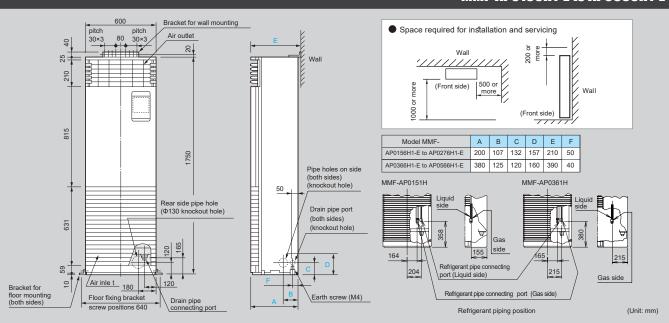


TCB-AX32E2

RBC-ASC11E

RBC-AMS55E-ES

MMF-AP0156H1-E to AP0566H1-E



								Technical sp	ecifications			
Model name		MMF-	AP0156H1-E	AP0186H1-E	AP0246H1-E	AP0276H1-E	AP0366H1-E	AP0486H1-E	AP0566H1-E			
Cooling/Heating o	apacity*1	(kW)	4.5/5.0	5.6/6.3	7.1/8.0	8.0/9.0	11.2/12.5	14.0/16.0	16.0/18.0			
Electrical	Power requirements			1-phase 50Hz 230V	(220–240V) / 1-phase	e 60Hz 220V (Separa	te power supply for in	door units required.)				
Electrical characteristics	Power consumption 50 Hz/60 Hz	(kW)	0.0	55	0.0	89	0.135	0.160				
	Height	(mm)	1,750									
External dimensions	Width	(mm)	600									
limensions Depth		(mm)		2				390				
Total weight		(kg)	4	6	4	7		62				
Fan unit	Standard air flow (High/Mid/Low)	(m³/h)	900/78	30/660	1200/9	90/840	1920/1620/1380	2160/17	30/1560			
	Motor output	(w)	6	2	6	2	109	11	09			
	Gas side	(mm)		ø12.7			ø1:	2.7				
Connecting pipe	Connecting pipe Liquid side (mm			ø6.4			ø9).5				
	Drain port (nominal dia.) (mm)			20	(one side of male scr	ew)					
Sound pressure le	evel*2 (High/Mid/Low)	(dB(A))	46/42/37		49/45/39		51/46/41	54/4	9/44			
Sound power leve	el (High/Mid/Low)	(dB(A))	64/6	0/55	67/6	3/57	69/64/59	72/6	7/62			

Note 1: The capacities are measured under the conditions specified by JIS B 8615 based on the reference piping.

Note 2: The sound level are measured in an anechoic chamber in accordance with JIS B 8616.

Normally, the values measured in the actual operating environment become larger than the indicated values due to the effects of external sound.





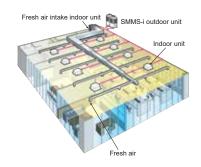
Air controller for fresh-air intake

Outside static pressure maximum 230 Pa (in case of 50 Hz of 5HP). Use of high-performance filter provides more comfortable room environment. Introduces outdoor air at a temperature close to that of the indoor air. Primary processing of fresh outdoor air.

Fresh-air intake often influences the system, rendering normal control of the air conditioner difficult, or placing large loads on the system and its cooling performance. Therefore it is frequently adopted to handle the fresh air to a certain condition before the fresh air will enter in the main air conditioner.

This device is known as a fresh air intake indoor unit.

NOTE: The fresh air intake indoor unit is an air conditioner provided to handle the fresh air load and is not to control the room temperature. For correspondence to the load of the indoor air controller, set an air conditioner separately.



Remote controller





RBC-ASC11E

RBC-AMS55E-ES RBC-AMS55E-EN

					Technical specifications
Model name MMD-		AP0481HFE	AP0721HFE	AP0961HFE	
Cooling/Heating	capacity (Note 1)	(kW)	14.0/8.9	22.4/13.9	28.0/17.4
	Power requirements		1-phase 50 Hz 230 V (220–240 V)/60 Hz 220 V		
Electrical characteristics	Power consumption 50 Hz/60 Hz	(kW)	0.28/0.34	0.45/0.55	0.52/0.65
	Height	(mm)		492	
External dimensions	Width	(mm)	892	1,;	392
	Depth	(mm)		1,262	
Total weight		(kg)	93	1	44
	Standard air flow	(m³/h)	1,080	1,680	2,100
	Motor output	(kW)	0.160	0.160×2	
Fan unit	External static pressu 50 Hz/60 Hz	ure (w)	170-210-230 / 115-215-260	140-165-180 / 150-210-235	160-190-205 / 80-180-220
	Air flow limit Lower limit/Upper limit	(mm)	756/1,188	1,176/1,848	1,470/2,310
	Gas side	(mm)	ø15.9	ø2	2.2
Connecting pipe	Liquid side	(mm)	ø9.5	ø1	2.7
	Drain port	(mm)		25	
Sound pressure level*2 (Note 2) (High/Mid/Low)		(dB(A))	45/43/41	46/45/44	
Sound power leve	el (High/Mid/Low)	(dB(A))	60/58/56 61/60/59		60/59
Operation	Cooling (Note 3)	(°C)		5 – 46	
Range	Heating (Note 4)	(°C)	-5 - 46		

^{*} The setting temperature is $16-27^{\circ}\text{C}$ (standard FCU... $18-29^{\circ}\text{C}$).

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 Normally, the values measured in the actual operating environment become large than the indicated values due to the effects of external sound.

^{*} An optional humidifier is not available with fresh air intake indoor unit.

^{*} Height difference between fresh air intake indoor units must be within 0.5 m. Height difference between fresh air intake indoor unit and standard FCU must be within 30 m.

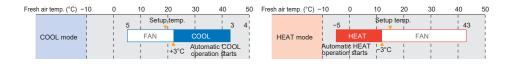
NOTE 3 * When supply air temperature is "setting temperature + 3°C" or less, fresh air intake indoor unit operates as FAN mode.

^{*} When supply air temperature is 19°C or less, Fresh Air Intake Indoor unit operates as FAN mode.

NOTE 4 * When supply air temperature is "setting temperature –3°C" or over, fresh air intake indoor unit operates as FAN mode.

Use Conditions

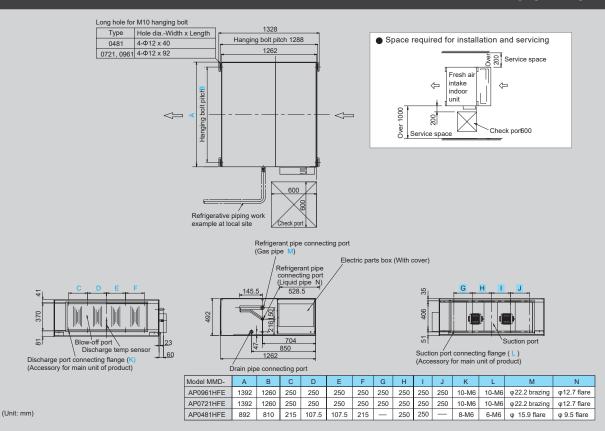
- In COOL mode, if temperature of the fresh air is below the setup temp. of +3°C, FAN status is automatically made. When temperature of the fresh air is below 19°C, FAN status is also made regardless of the setup temperature.
- In HEAT mode, if temperature of the fresh air is above the setup temp. -3° C, FAN status is automatically made. When temperature of the fresh air is above 15°C, FAN status is also made regardless of the setup temperature.

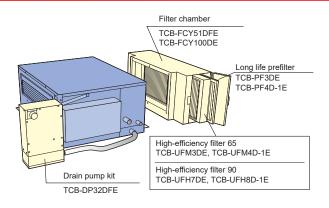


Operable mode and discharge temperature setup range

Operation mode	At shipment from factory	Setup range
COOL	18°C	16 to 27°C
HEAT	25°C	16 to 27°C

MMD-AP0481HFE to AP0961HFE



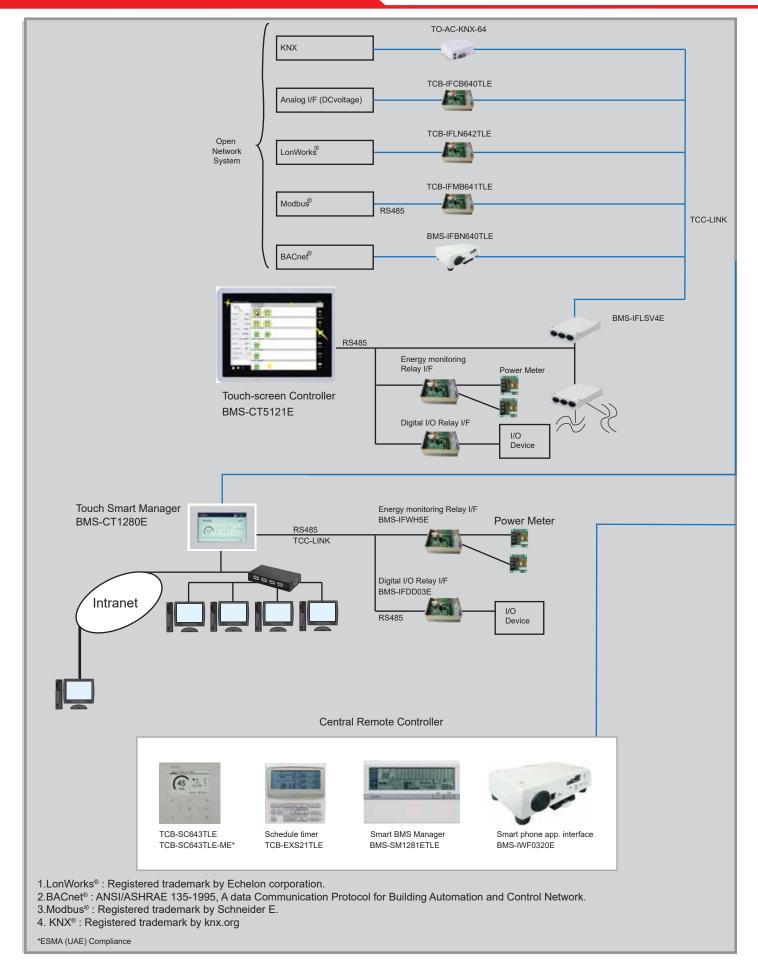


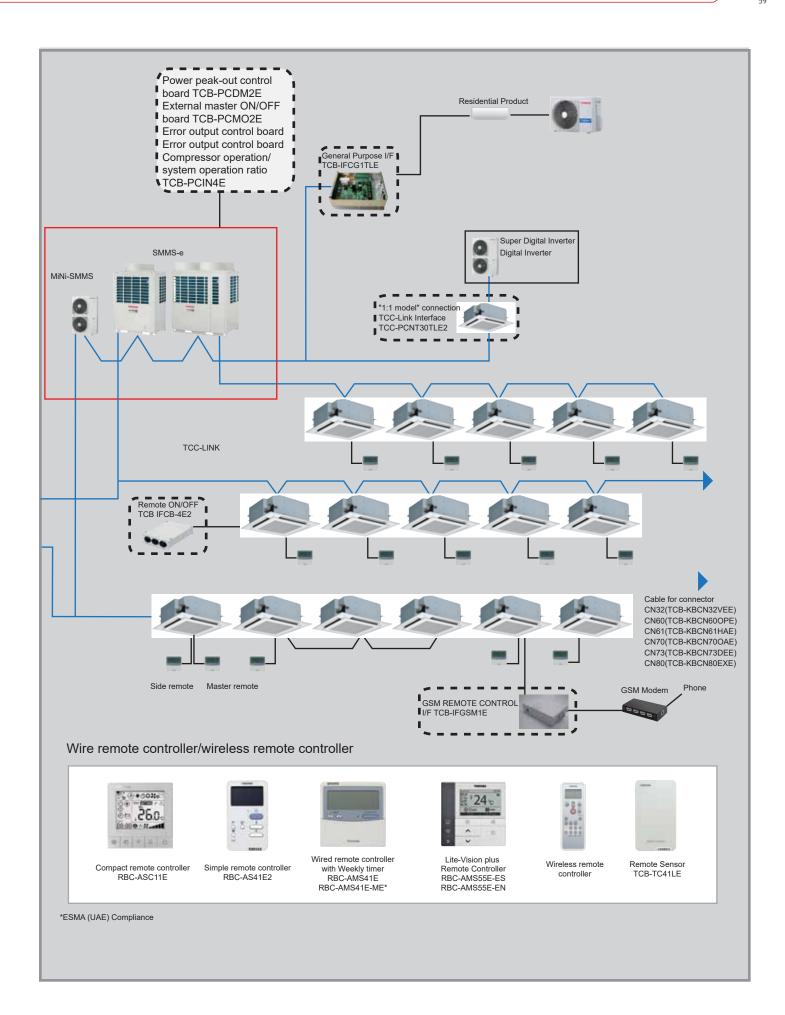


				Indoor	unit accessories
Indoor unit	Parts Name	Model Name	Applied Model	Notes	Remarks
	Ceiling panel	RBC-U31PGP(W)-E		Required accessory	
	Fresh air inlet box	TCB-GB1602UE		For fresh air intake by using the knockout hole of fresh air filter chamber. (dia.=100 mm)	Use with TCB-GFC1602UE
4-way air	Fresh air filter chamber	TCB-GFC1602UE	MMII AD*****	For fresh air inlet box	
discharge cassette type	Auxiliary fresh air flange	TCB-FF101URE2	MMU-AP***4HP1-E	For easy fresh air intake by using the knockout hole of indoor unit. (dia.=100 mm)	
	Spacer for height	TCB-SP1602UE		Height=50 mm	
	Air discharge direction kit	TCB-BC1602UE		Air direction charge by cutting off air discharge port (3 pcs.)	
Compact 4-way	Ceiling panel	RBC-UM21PG(W)E		Required accessory	
cassette (620 × 620) type	Auxiliary fresh air flange	TCB-FF101URE2	MMU-AP***7MH-E	For easy fresh air intake by using the knockout hole of indoor unit. (dia.=100 mm)	
		RBC-UW283PG(W)-E	MMU-AP0072 to 0152WH1		
	Ceiling panel	RBC-UW803PG(W)-E	MMU-AP0182 to 0302WH1	Required accessory	
		RBC-UW1403PG(W)-E	MMU-AP0362/0482/0562WH1		
		TCB-LF283UW-E	MMU-AP0072 to 0152WH1		Use with TCB-FC283UW-E
2-way air discharge	Super long life filter	TCB-LF803UW-E	MMU-AP0182 to 0302WH1	Dust collecting effect: 50% (Weight method)	Use with TCB-FC803UW-E
cassette type		TCB-LF1403UW-E	MMU-AP0362/0482/0562WH1		Use with TCB-FC1403UW-F
		TCB-FC283UW-E	MMU-AP0072 to 0152WH1		
	Filter chamber	TCB-FC803UW-E	MMU-AP0182 to 0302WH1	For super long life filter	
		TCB-FC1403UW-E	MMU-AP0362/0482/0562WH1		
	Auxiliary fresh air flange	TCB-FF151US-E	MMU-AP***2WH1	For fresh air intake by using the knockout hole of indoor unit.	
	Ceiling panel	RBC-UY136PG	MMU-AP***4YH1-E	Required accessory	
1-way air	Celling parier	RBC-US21PGE		Required accessory	
discharge	Front air discharge unit	TCB-BUS21HWE	MMU-AP***4SH1-E		
cassette type	Auxiliary fresh air flange	TCB-FF101URE2	WIWO-74 FOITI-E	For easy fresh air intake by using the knockout hole of indoor unit. (dia.=100 mm)	
	Spigot shaped flange	TCB-SF56C6BPE	MMD-AP0076 to 0186BHP1-E		
Concealed duct type		TCB-SF80C6BPE	MMD-AP0246/0276/0306BHP1-E		
ddol typo		TCB-SF160C6BPE	MMD-AP0366/0486/0566BHP1-E		
		TCB-LK801D-E	MMD-AP0186/0246/0276HP1-E		
	Long Life Filter Kit	TCB-LK1401D-E	MMD-AP0366/0486/0566HP1-E		
		TCB-LK2801DP-E	MMD-AP0726/0966HP-E		
	Cuinat Chanad Flanca	TCB-SF80C6BPE	MMD-AP0186/0246/0276HP1-E		
Concealed duct	Spigot Shaped Flange	TCB-SF160C6BPE	MMD-AP0366/0486/0566HP1-E		
high static	Auxiliary fresh air flange	TCB-FF151US-E	All Models		
pressure type	High-efficiency filter 65	TCB-UFM3DE	MMD-AP0726/0966HP-E	Dust collecting effect: 65%(NBS Colorimentric method)	
	High-efficiency filter 90	TCB-UFH7DE	MMD-AP0726/0966HP-E	Dust collecting effect: 90%(NBS Colorimentric method)	
	Long life prefilter	TCB-PF3DE	MMD-AP0726/0966HP-E	Dust collecting effect: 50%(Weight method)	
	Filter chamber	TCB-FCY100DE	MMD-AP0726/0966HP-E	For high-efficiency filter or long life prefilter	
	Drain pump kit	TCB-DP40DPE	MMD-AP0726/0966HP-E	Stand-up 330 mm or less (from bottom face of ceiling)	
Slim duct type	Auxiliary fresh air flange	TCB-FF101URE2	MMD-AP***4SPH1-E	For fresh air intake by using the knockout hole of indoor unit. (dia.=100)	
	Drain pump kit	TOD DD0405	MMC-AP0158/0188HP-E	Stand up 600 or loss (from bottom for a figure)	Use with TCB-KP13CE
Coiling to ma	Drain pamp kit	TCB-DP31CE	MMC-AP0248 to 0568HP-E	Stand-up 600 or less (from bottom face of ceiling)	Use with TCB-KP23CE
Ceiling type	Elbow piping kit	TCB-KP14CE	MMC-AP0158/0188HP-E	Needed when drain numn kit is used	
	Piping Int	TCB-KP24CE	MMC-AP0248 to 0568HP-E	Needed when drain pump kit is used	

	Accessory for 4-way air discharge cassette type:	1	2	3	4	5	6
	combination pattern	Ceiling panel	Fresh air inlet box + Fresh air filter chamber	Fresh air filter chamber	Auxiliary fresh air flange	Spacer for height adjustment	Air discharge direction kit
1	Ceiling panel		OK	OK	OK	OK	OK
2	Fresh air inlet box + Fresh air filter chamber	OK			OK	-	OK
3	Fresh air filter chamber	OK			OK	OK	OK
4	Auxiliary fresh air flange	OK	OK	OK		OK	OK
5	Spacer for height adjustment	OK	-	OK	OK		OK
6	Air discharge direction kit	OK	OK	OK	OK	OK	

Air-conditioning management system on site





Wired remote controller



Compact Remote controller RBC-ASC11E

The new RBC-ASC11E local compact remote controller with LCD backlight display features simpler control keys for easier use. Key Features:

- Simple keys; Menu, Timer; Up & Down, On/Off Large LCD display Mode
- Fan Speed Louvre Direction Timer setting • Fault diagnosis • DN code setting
- Room temperature display always available
 Remote TA sensor available in controller.



Simple wired remote controller RBC-AS41E

Key Features:

- Start/Stop Temperature setting
- · Air flow changing · Check code display



Remote controller with weekly timer (7-day timer function)

RBC-AMS41E RBC-AMS41E-ME*

each day of the week.

- Key Features:
 Clock display Schedule timer: Possible to program schedule timer (7-day timer) function Possible to program 8 functions for
- * The following items can be set in program: operation time, operation start/stop, operation mode, temperature setting, restriction on button operation.



Lite-Vision plus Remote Controller RBC-AMS55E-ES RBC-AMS55E-EN

Wired remote controller with a built in 7-day timer-featuring a new multi-lanquage.

LCD display with backlight, energy saving options and a return back function.

- Possibility to set and display the room name to easily set-up and monitor the working parameter.
- New modern and desirable controller design with menu driven display.
- Save mode by schedule timer to optimise energy consumption.
- · Room temperature display always available.
- Two "Hot Keys" (F1, F2) for easy operation of air conditioner functions.
- Easy to read layout including display of indoor unit model name and serial number.
- Built-in backup power. Settings are kept in memory up to 72 hours in case of power failure.
- Remote TA sensor available in controller.
- Can be connected to a single indoor unit or a group of up to 8 indoor units.

*ESMA (UAE) Compliance

Wireless remote controller



Wireless remote controller kit & receiver unit

- Start/Stop Changing mode Temperature setting Airflow changing
- Timer function

Either "ON" time or "OFF" time or "CYCLIC" can be set how many 30 min. later ON or OFF is operated.

- Control by 2 remote controllers is available. Two wireless remote controllers can operate one indoor unit. The indoor unit can then be operated separately from the two different locations.
- · Check code display
- * The wireless remote control cannot be connected to concealed duct high static pressure type



RBC-AX33CE Integral receiver (For ceiling) (MMC-AP***8HP-E) (MMU-AP***4SH1-E)



RBC-AX32U(W)-E Integral receiver (For 4-way air discharge cassette) (MMU-AP***4HP1-E)



RBC-AX32UW(W)-E Integral receiver (For 2-way air discharge cassette) (MMU-AP***2WH1)



TCB-AX32E2

Stand alone receiver (For 4-way air discharge cassette, compact 4-way cassette (600 x 600), 2-way air discharge cassette, ceiling, concealed duct standard, slim duct, floor standing cabinet, floor standing, 1-way discharge cassette (MMU-AP ***4YH1-E/SH1-E)



Central remote controller



Central remote controller TCB-SC643TLE TCB-SC643TLE-ME*

The TCB-SC643TLE 64-way central controller is TOSHIBA's standard central control solution and can be connected to up to 64 indoor units via the TCC-Link central control network.

Indoor units can be controlled in terms of: individual indoor unit/group, all units in a zone (1 to 10), and all units connected. Additional features include 4-levels of remote controller permit/prohibit functions and the option of connecting an additional Schedule Timer TCB-EXS21TLE.

*ME - Applicable for UAE only



Advance central controller - Smart Manager BMS-SM1281ETLE

The Smart Manager has the same hardware Control Function as the BMS-CM1280TLE Controller, but also has the ability of control from a Local Area Network and , with the use of an additional Interface, is capable of Energy Monitoring and Report Creation Functions. This controller is ideal where advanced control, Energy Monitoring, advanced scheduling or access to individual Air Conditioners is required from networked computer systems.

Web Browser Control Software Features:

- List View available -Displays all Indoor Units from one screen
- Set View available Shows Basic Indoor Unit settings on main screen g
- Advanced Operation and Master schedule functions available
- Up to 4 Concurrent users can be connected
- Up to 32 User accounts can be programmed with different levels of access (at least 1 must be administrator level)







Smart Phone Application Interface



BMS-IWF0320E

The BMS-IWF0320E is a versatile interface for Toshiba air conditioning units that enables monitoring and controlling air conditioners (up to 32) using smart phone application.

You can change the details of the settings, turn the air conditioners and off, and monitor the operation status, settings status, and error incident status of the air conditioners.

Air conditioners are divided into hierarchies based on floors and can be positioned and registered for each floor. Controls for the air conditioners can be set per air conditioner unit.

Scheduling operations:

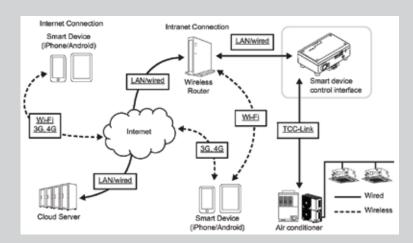
You can control the schedule for the air conditioners' operation in weekly units.

The items that you can set are almost the same as normal setting details, including starting and stopping operation, operation modes, operation temperature settings, air speed, and air direction. You can also display and check the schedule you set as a graph.



Administrator functions and user privilege functions:

You can set either administrator privileges or user privileges for each user ID. Users with administrator privileges can use all functions. Users with user privileges cannot use some functions.



This application is confirmed to operate with the following manufacturer's models:

- Apple iPhone 7, iPhone 7 Plus, iPad Operating System (iOS) Version 9.x, 10.x
- Sony Xperia XZ, Xperia XA1 Ultra Operating System (Android) 5.x, 6.x, 7.x
- Samsung Galaxy S7, Galaxy S8, Galaxy Tab A10.1, Galaxy Tab S3 9.7, Galaxy Tab A7.0 Operating System (Android) 5.x, 6.x, 7.x

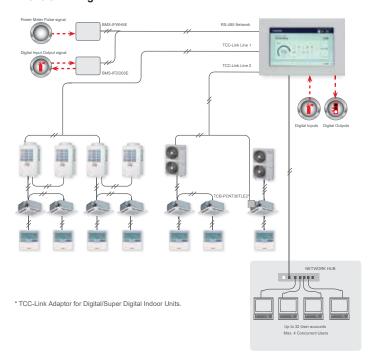
Advance control systems

Touch Smart Manager



Advance central controller - Touch Smart Manager BMS-CT1280E

Control Wiring



The Touch Screen Controller offers energy monitoring, schedule programming and full function control of all connected indoor units. This controller is ideally suited to any small or large installation where energy monitoring functions is required. It enables control for each individual indoor unit and is capable of providing information from the indoor unit settings and malfunction check codes. The Touch Screen is connected to the air conditioning control network directly by relay interfaces.

Features

- Compact size & white design for perfect integration in every interiors.
- Outstanding control experience with 7" capacitive touch screen.
- Developed for every kind of system up to 128 indoor units.
- Easy installation with direct connection to TCC link Toshiba protocol.
- Interlocking with external device
 - 8 Inputs (Built-in)
 - No-voltage contact (A Pulse or static) for Power Meter Pulse input.
 - No-voltage contacts (Interlock)
 - 4 Outputs (Built-in)
 - External device control
- Expansion Module are available for addition I/O requirement.

BMS-IFWH5E – Energy Monitoring Interface BMS-IFDD03E -Digital Input/Out Interface.

• Monitoring of data trending through the smart manager Touch screen



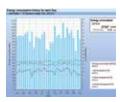
Display the total electric power on a daily/monthly basis on a graph.



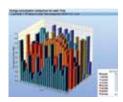
Display operating time and sensor information.

		Equipment List
Device	Number of pieces	Description
BMS-CT1280E	1	Up to 128 indoor unit can be connected to Touch Smart Manager
BMS-IFDD03E	Up to 4 Boards	Interface for Digital Input & Outputs. Can connect up to 8 Power Meters per Board (Optional)
BMS-IFWH5E	Up to 4 Boards	Interface for Power Meter (Energy Monitoring Option only)
	'	
		Locally Procured Item

Device	Number of pieces	Description
Power Meter		Digital Energy Meter with Pulse Output (Energy Monitoring Option only)
PC		For Operation Monitoring
Network Hub		For LAN Connection.



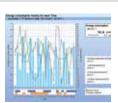
Energy consumption history (days)



Energy consumption comparison



Alarm list



Energy consumption history (Hours)

LAR MULTI SYSTEM

Advance control systems

Touch-screen controller



Touch-screen Controller BMS-CT5121E





Touch-screen controller

Using the touch-screen controller provides a clear display and enables easy operation. A maximum of 512 units are controllable using the one-touch controller.

Function

- Operation monitoring
- Operation control
- Operation Schedule
- Error Code
- Alarm List
- Energy monitoring/Billing
- Digital I/O Signal Control
- Web function
- Email alert
- · Graphical report
- Building layout



Up to 8





Up to 8

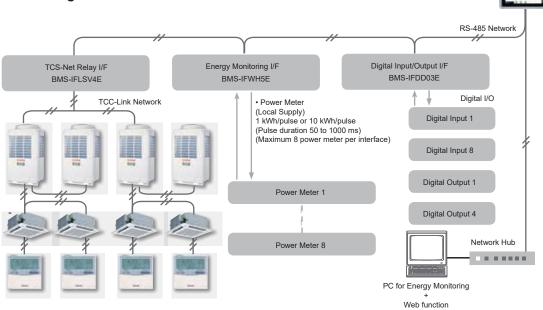
Relay Interface BMS-IFWH5E For Energy Monitoring (Optional)



Up to 8

Relay Interface BMS-IFDD03E For Digital I/O (Optional)

Control Wiring

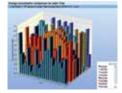


		Equipment List
Device	Number of pieces	Description
BMS-CT5121E	1	Up to 512 indoor units can be connected to Touch controller
BMS-IFLSV4E	Up to 8 Boards	Relay Interface for up to 64 indoor units
BMS-IFDD03E Up to 8 Boards		Interface for Digital Input & Outputs. Can connect up to 8 Power Meters per Board (Optional)
BMS-IFWH5E	Up to 8 Boards	Interface for Power Meter (Energy Monitoring Option only)

		Locally Procured Item
Device	Number of pieces	Description
Power Meter		Digital Energy Meter with Pulse Output (Energy Monitoring Option only)
PC		For Operation Monitoring
Network Hub		For LAN Connection.



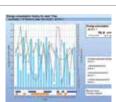
Energy consumption history (days)



Energy consumption comparison



Alarm list



Energy consumption history (Hours)

Open network systems

BACnet®

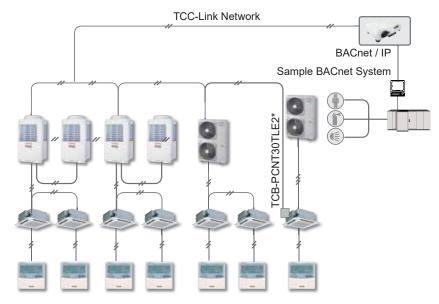


BAC net/IP Interface BMS-IFBN640TLE

BACnet Interface

The Toshiba BMS-IFBN640TLE BACnet Interface can be connect to the TCC-Link Central Control Network to enable control of the attached Air Conditioner product from a BACnet Building Management System.

- Maximum 64 Indoor Units/Groups and 16 Outdoor Systems can be connected to a single Interface.
- TCB-PCNT30TLE2 Network adaptor required for connection of DI/SDI to BACnet System.



* TCC-Link Adaptor for Digital/Super Digital Indoor Units.

KNX®



KNX/TP Interface TO-AC-KNX-64

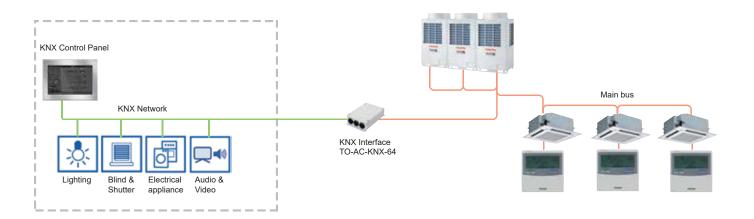
KNX Interface

The KNX interface manages the Toshiba VRF System air conditioning system as a KNX® device to communicate with the custormer s Home automation.

Accessible to 64 units per one,

Signals and provides the following functions:

- ON/OFF
- Mode: cool/heat/fan
- Air flow and fan speed
- Temperature setting
- Filter reset



Open network systems

LonWorks ®



LonWorks Interface TCB-IFLN642TLE

LonWorks Interface

The LonWorks interface manages the SMMS-i air conditioning system as a Lon device to communicate with the custormer's Building Management System and to monitor operational status.

A maximum of 64 units are controllable per interface.

SNVT signal

Signals and provides the following functions: Object signals command

- ON/OFF
- Mode: cool/heat/fan
- Temperature setting
- Central/local

Monitoring

• ON/OFF

Mode

- · Cool/heat/fan/failure
- Temperature setting
- Room temperature
- · Central/local, etc.



Modbus ®



Modbus Interface TCB-IFMB641TLE

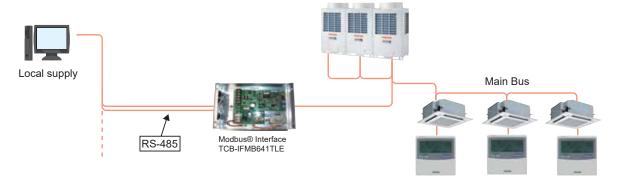
Modbus Interface

The Modbus® interface manages the Toshiba VRF System air conditioning system as a Modbus® device to communicate with the custormer's Building Management System.

Accessible to 64 units per one TCB-IFMB641TLE, 15 TCB-IFMB641TLEs on one Modbus® Master (prepared by user).

Signals and provides the following functions:

- ON/OFF
- · Mode: cool/heat/fan
- · Air flow/Louver setting
- Temperature setting
- Filter reset
- Accumulated operation time, etc.

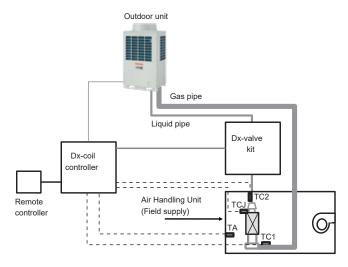


- 1. LonWorks®: Registered trademark Echelon corporation
- 2. BACnet®: ANSI/ASHRAE 135-1995, A data Communication Protocol for Building Automation and Control Networks.
- 3. Modbus® is a registered trademark of Schneider E.

VRF DX coil interface

VRF DX coil interface - AHU application

VRF DX-coil interface is suitable for AHU with the DX Coil combined with TOSHIBA VRF outdoor unit . VRF Outdoors's capacity control using DX Kit PCB based on the return air temperature sensor.



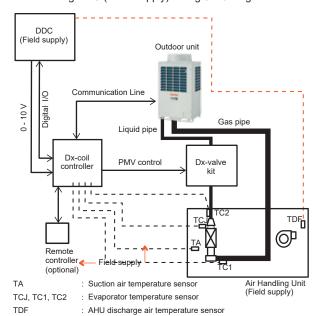
U - Series				
MM-DXC010	VRF DX COIL CONTROLLER (Individual / Header)			
MM-DXC012	VRF DX COIL CONTROLLER (Follower)			
MM-DXV080	VRF DX COIL VALVE KIT (5.6kW, 7.1kW, 8.0kW)			
MM-DXV140	VRF DX COIL VALVE KIT (11.2kW, 14.0kW, 16.0kW)			
MM-DXV280	VRF DX COIL VALVE KIT (22.4kW, 28.0kW)			
J - Series				
TCB-IFDTA201E	VRF DX COIL CONTROLLER			
RBM-A101VAE	VRF DX COIL VALVE KIT (22.4kW,28kW)			
RBM-A201VAE	VRF DX COIL VALVE KIT (44.8kW,50.4kW,56kW)			

Notes:

- AHU & AHU's Stater panel (Field supply)
- Wired remote control (optional for J-series).

VRF DX coil interface - FAHU application

VRF DX-coil interface (DDC type) is suitable for FAHU with the DX Coil combined with TOSHIBA VRF outdoor unit . VRF Outdoors's capacity control using DDC (Field Supply) using 0~10V signal based on the supply air temperature sensor (Field Supply) .



U - Series				
RBC-DXC031	VRF DX COIL CONTROLLER (0-10V AHU)			
MM-DXV141	VRF DX COIL VALVE KIT (16.0kW)			
MM-DXV281	VRF DX COIL VALVE KIT (22.4kW, 28.0kW)			
J - Series				
TCB-IFDDC201E	VRF DX COIL CONTROLLER (0-10V AHU)			
RBM-A101VAE	VRF DX COIL VALVE KIT (22.4kW,28kW)			
RBM-A201VAE	VRF DX COIL VALVE KIT (44.8kW,50.4kW,56kW)			

Notes:

- AHU & AHU's Stater panel (Field supply)
- DDC control panel (Field supply) is mandatory for operation.



Control Devices

			Control Devices
Model Number	Reference	Description	Used with
RBC-AMT32E	Wired Remote Controller	Main wired remote controller	VRF and VRF Air-to-air heat exchangers with (DX coil) indoor units
RBC-AS41E	Simplified Wired Remote Controller	As above but designed for hotel and domestic applications	VRF and VRF Air-to-air heat exchanges with (DX coil) indoor units
NRC-01HE	Wired Remote Controller	Wired remote controller for Air-to-air heat exchanger, including with DX coil and humidifiers models	New Air-to-air heat exchangers and Air-to-air heat exchangers with DX coil
TCB-EXS21TLE	Schedule timer	Operating in weekly timer mode or schedule timer mode	All RAV/VRF indoor units.
RBC-ASC11E	Compact remote	Wired remote	VRF and VRF Air-to-air heat exchangers with (DX coil) indoor units
RBC-AMS41E RBC-AMS41E-ME*	Remote controller with schedule timer	Enables to control indoor unit operation with schedule timer (7-days) allowing to program 8 functions/day + clock display	VRF and VRF Air-to-air heat exchangers with (DX coil) indoor units
RBC-AMS55E-EN RBC-AMS55E-ES	Lite-Vision plus Remote Controller	Local Controller with Multi-Language LCD display, a built-in 7-Day timer, Energy Saving options and return back function. EN =English, Italian, Polish, Greek, Russian, Turkish. ES = English, Spanish, Portuguese, French, Dutch, German	VRF and VRF Air-to-air heat exchangers with (DX coil) indoor units
RBC-AX33CE	Infra-red Remote Kit	Wireless remote controller	All ceiling units and one-way cassettes (SH series)
TCB-AX32E2	Infra-red Remote Kit	Wireless remote controller	All other units (including compact 4-way cassette
RBC-AX32UW(W)-E	Wireless remote unit kit	Wireless remote unit kit for 2-way cassette	2-way-cassette MMU-AP***2WH
RBC-AX32U(W)-E	Wireless remote unit kit	Wireless remote unit kit for 4-way cassette	RBC-U31PGP(W)-E & RBC-U31PGXP(W)-IN1 panels for 4-way cassette indoors
RBC-AX32UM(W)-E	Wireless remote unit kit	Wireless remote unit kit for compact 4-way cassette	With RBC-UM21PG(W)E panels for compact 4-way cassette indoors.
TCB-SIR41UM-E	PIR sensor	Occupancy sensor	With RBC-UM21PG(W)E panels for compact 4-way cassette indoors.
TCB-TC41LE	Remote temperature sensor	Remote temperature sensor for cassette & duct	All VRF
TCB-IFCB5-PE	Remote location On / Off Control Box	Enables remote location On / Off control	All VRF indoor units.
BMS-IWF0320E	Smart phone application interface.	Enables full control of up to 32 indoor units	All VRF indoor units.
TCB-SC643TLE TCB-SC643TLE-ME*	64 way control	Enables full control of up to 64 indoor units	All VRF indoor units.
BMS-SM1281ETLE	Smart Manager with Data analyser	Enables full control of up to 128 indoor units with Energy Monitoring and Advanced Control Options	All VRF indoor units.
BMS-CT1280E	Touch Smart Manager	Enables full control of up to 128 indoor units	All VRF indoor units.
BMS-CT5121E	Touch Screen Controller	Enables full control of up to 512 indoor units, ML	All VRF indoor units.
BMS-IFLSV4E	TCS-Net Relay Interface	Relay for integration to TCS-Net	Bacnet gateway, Touch-screens & Web based controller
BMS-IFDD03E	Digital I/O interface	Enable digital input/output interlock signal	Applicable for Touch screen controller and Smart Manager
BMS-IFWH5E	Energy monitoring relay interface	Energy monitoring relay interface	Touch screen controller, Compliant manager, Web based controller, Smart Manager
BMS-IFBN640TLE	BACnet	BACnet interface	Up to 64 indoor unit. All VRF indoor unit.
TCB-IFLN642TLE	Lonworks® Gateway	Allows control of 64 indoor units from a Lonworks based BMS	All VRF indoor units
TCB-IFMB641TLE	Modbus Interface	Allows control of 64 indoor units from a Modbus based BMS	All VRF indoor units
TO-AC-KNX-64	KNX Interface	Allows control of 64 indoor units from a KNX based BMS/Home Auto machine	All VRF indoor units

^{*}ESMA (UAE) Compliance

			Control Devices
Model Number	Reference	Description	Used with
TO-RC-WiFi-1	WiFi Interface	Interface for smart phone application	All VRF
TCB-IFCG1TLE	General purpose interface	Enables control of A/C by the DI/DO and AI/AO	All VRF indoor units
TCB-PX30MUE	Terminal box	Steel Terminal box to connect to	TCB-PCNT30TLE2, TCB-IFCB5-PE
TCB-PX100PE	Terminal box	Plastic Terminal box to connect to	TCB-PCNT30TLE2, TCB-IFCB5-PE
TCB-IFCB-4E2	Application Control PC Board	Remote On/Off Control	All VRF indoor units.
TCB-IFCB5-PE	Application Control PC Board	Window Switch Remote On/Off control	All VRF indoor units.
TCB-PCDM4E	Application Control PC Board	Power Peak Cut Control	All VRF outdoor units.
TCB-PCMO4E	Application Control PC Board	External Master ON/OFF Control Board	All VRF outdoor units.
TCB-PCUC2E	Application Control PC Board	Input / Output Control Board	Ceiling, Floor standing and high static duct.
TCB-PCIN4E	Connectors	Error/Individual compressor Operation Output Control Board	All VRF outdoor units.
TCB-KBCN32VEE		For CN32	All VRF indoor units.
TCB-KBCN60OPE		For CN60	All VRF indoor units.
TCB-KBCN61HAE	Application Control PC Board	For CN61	All VRF indoor units.
TCB-KBCN70OAE		For CN70	All VRF indoor units.
TCB-KBCN73DEE		For CN73	All VRF indoor units.
TCB-KBCN80EXE		For CN80	All VRF indoor units.

*ESMA (UAE) Compliance





Installation and the use of refrigerants not specified by Toshoba Carrier Corporation

Toshiba refrigeration and air-conditioning units are designed and manufactured on the assumption that the product is used with a specific refrigerant suitable for each unit.

We have recently seen some cases where the type of refrigerant used in different from the one originally installed in the product. Such actions may cause mechanical defects, malfunctions, failures and in some cases result in a serious safety issue. Therefore do not install any refrigerant other than the one specified by Toshiba Carrier Corporation for its respective products.

The type of the refrigerant used for each of our products is shown in the accompanying owners manual, or on the product label attached on the product itself.

Toshiba Carrier Corporation shall not assume any liability for failures, malfunctions or safety in its products if the refrigerant used is different from the one specified.



SAFETY PRECAUTIONS

For operation:

- Before use, read through the operating instructions to ensure proper use.
- Concerning the purpose for which the air conditioners are to be used
- The air conditioners presented in this catalogue are air conditioning/heating units to be used solely by general consumers.
- Do not use these air conditioners for special applications such as for the storage of food items, animals, plants, precision machines or works of art. Doing so may degrade the quality of the items.
- Do not use these air conditioners for air-conditioning applications in vehicles or ships. Doing so may cause water and/or power leakages.

Precautions for using air conditioners

Concerning the automatic defrosting unit

When the outdoor air temperature drops, frost may form on the heat exchanger of the outdoor unit. In such cases, the automatic defrosting unit will be activated, and it will take 5 to 8 minutes for the heating operation to be restored.

Concerning the air conditioner's operating conditions and their selection

- (1) Avoid using the air conditioner in the following locations.
 - Locations with acidic or alkaline atmospheres (locations at which highly acidic or alkaline air is directly drawn in, such as in hot springs areas from which sulfur gases are given off, or where chemicals, vinegar, exhaust air from burners, etc., are given off)
 The heat exchangers and other parts may become corroded.
 - Locations with atmospheres filled with coolant or other machine oil or steam exhaust (such as at food preparation factories or machine plants). The heat exchangers may corrode; frost may form as a result of heat exchanger malfunction; air conditioner operating performance may be compromised or condensation may form as a result of clogged filters; plastic parts may incur damage; heat-insulation materials may become separated, etc.
- (2) Before using an air conditioner in any of the following locations, consult with your dealer or a qualified contractor.
 - Locations where vapors from edible oils are given off (such as in bakeries or kitchens and restaurants that use edible oils) ...The air conditioner's operating performance may be compromised or condensation may form as a result of clogged filters and the plastic parts may incur damage. In line with the prevailing conditions, take countermeasures such as tailoring the installation conditions in accordance with the conditions, using air conditioner designed for kitchens or oil guard filters, etc.
 - Locations with disinfectant-induced chlorine atmospheres (water tanks, etc.) The metal parts in the heat exchangers, motors, etc., may become corroded.
 - Locations with high salinity (coastal areas, etc.) Corrosion may occur so use outdoor units specifically designed to withstand exposure to salt.

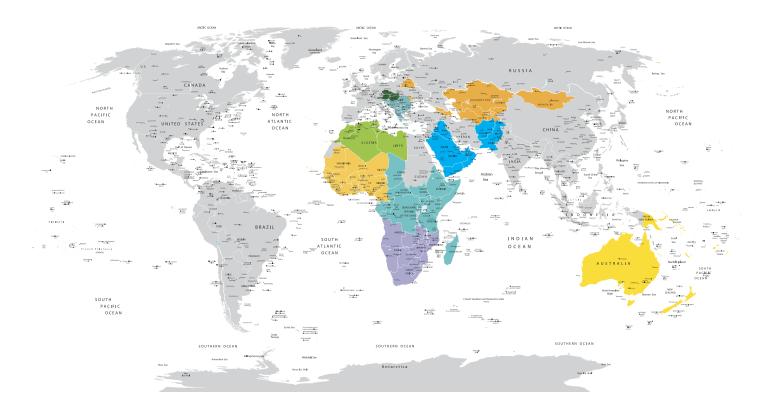
- Locations where power is supplied from independent power generators. The power line frequency and/or voltage may fluctuate, possibly causing the air conditioner to malfunction.
- Locations where high frequencies or electrical noise is generated (from high-frequency welders used for vinyl welding and processing, high-frequency therapeutic devices used for thermotherapy, etc.)
 The electronic components may be adversely affected, possibly causing the air conditioner to malfunction.
- Locations where electronic equipment is installed. Electrical noise may adversely affect the operation of the electronic equipment.
- (3) Concerning use in locations with high ceilings
 - In locations with high ceilings, use of circulators for improving the temperature distribution during heating is recommended.
- (4) Concerning use in high-humidity environments
 - When the ceiling-recessed type of indoor unit is installed in a location, such as those described below, and it is very hot and humid inside the ceiling, condensation may form on the external surfaces of the indoor unit and drip down. In such cases, add external heat-insulating materials.
 - Locations such as food preparation sites in which the areas above the ceilings are hot and humid
 - $-\mbox{ Locations}$ in which outside air is drawn in and routed above the ceiling
 - Above ceilings with a slate roof or tiled roof overhead
- (5) Concerning use in high-humidity environments
 - When the ceiling-recessed type of indoor unit is installed in a location, such as those described below, and it is very hot and humid inside the ceiling, condensation may form on the external surfaces of the indoor unit and drip down. In such cases, add external heat-insulating materials.
 - Locations such as food preparation sites in which the areas above the ceilings are hot and humid
 - Locations in which outside air is drawn in and routed above the ceiling
 - Above ceilings with a slate roof or tiled roof overhead

TOSHIBA

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Toshiba VRF and direct expansion solutions are available through AHI Carrier in over 96 countries



Middle East

Afghanistan, Bahrain, Iraq, Kuwait, Oman, Pakistan, Qatar, Saudi Arabia, UAE, Yemen.

Central & East Africa

Burundi, Chad, Democratic Republic of Congo, Central African Republic, Djibouti, Eritrea, Ethiopia, Gabon, Kenya, Republic Of Congo, Rwanda, South Sudan, Somalia, Tanzania, Uganda, Mauritius, Seychelles, Mauritania, Madagascar, Reunion Island, Comoros.

Western Africa

Ivory Coast, Nigeria, Ghana, Burkino Faso, Senegal, Liberia, Mali, Niger, Sierra Leone, Guinea Bissau, Benin, Togo, Cameroon, Guinea, Cape Verde, Equatorial Guinea, Gambia, Sao Tome and Principe.

Northern Africa

Tunisia, Algeria, Libya, Morocco.

Southern Africa

Mozambique, Angola, Lesotho, Swaziland, Namibia, Zambia, South Africa, Botswana, Malawi, Zimbabwe.

Russia & Other CIS

Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgystan, Moldova, Mongolia, Tajikistan, Turkmenistan, Uzbekistan.

Greece & the Balkans

Greece, Romania, Bulgaria, Cyprus, Albania, Bosnia-Herzogovina, Serbia, Croatia, Slovenia, Montenegro, Fyr Macedonia.

Central & Eastern Europe

Austria, Czech Republic, Slovakia, Hungary.

Australia & New Zealand

Australia, Torress Strait Island, Christmas Island, Norforlk Island, Tasmania, New Zealand, New Caledonia, Papua New Guinea, Fiji, Tahiti, Samoa, Cook Islands, Tonga, Vanuatu, Solomon Islands.







Tested at 3rd party laboratory (Intertek,USA)



Notice:

Product listed in this leaflet 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 to meet local 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.