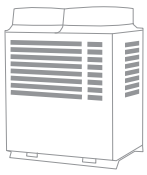
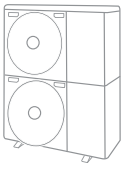
TOSHIBA

VRF Solutions

Catalogue 2024







INTRODUCTION 04
SMMS-e features energy saving 10
- Capacity range 11
- Operating temperature range 12
- Enhanced comfort 14
- System control 15
- DC twin-rotary compressor 16
- Heat exchanger 17
- Precise refrigerant flow 18
- Reliability 19
- Propeller fan 21
- Piping design flexibility 22
- Slimmer pipe size 25
- Connectable indoor unit 27
- SMMSe wave tool 28

OUTDOOR UNITS
- Outdoor units line-up 30
- Outdoor units specifications 32
- Outdoor units external view drawings 36

INDOOR UNITS
- Indoor units line-up for SMMS-e 38
- 4-way cassette type 40
- Compact 4-way cassette (620 x 620) Type 42
- 2-way cassette Type 44
- 1-way cassette type 47
- Standard duct type 50
- High static pressure type 53
- Slim duct type 56
- Ceiling type 58
- High-wall type 61
- Floor standing type 63
- Fresh air intake indoor unit type 65
- Console type 68
- Floor standing cabinet type 70
- Floor standing concealed console type 72

TAILORED TO MEET CHALLENGES

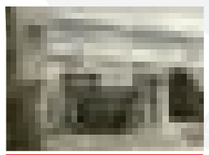
We are committed to global growth by offering products of the highest quality and services based on heat pump application solutions that respond to all of our customers' needs and are environmentally friendly.



UNITED KINGDOM
PLYMOUTH

TCEU - DISTRIBUTION SUPPORT

TCEU - ENGINEERING CENTRES



FRANCE
MONTLUEL

TOSHIBA EMEA

TCEU - ENGINEERING CENTRES



POLAND
GNIEZNO

TCAE - PRODUCTION FACILITIES



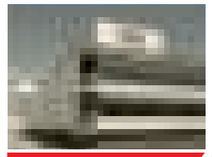
JAPAN
TSUYAMA CITY

TCC - PRODUCTION FACILITIES



JAPAN
KAWASAKI CITY

TCC - TOSHIBA HQ



JAPAN
FUJI CITY

TCC - PRODUCTION FACILITIES

TCC - ENGINEERING CENTRES



CHINA
HANGZHOU

TCAC - PRODUCTION FACILITIES

TCAI - PRODUCTION FACILITIES



INDIA
HARYANA

TCTC - ENGINEERING CENTRES

TCTC - PRODUCTION FACILITIES



THAILAND
PATHUMTHANI

LEADING THE WAY TO EXCELLENCE

At Toshiba Air Conditioning, we conduct our own research and development to create innovative technologies and essential parts. By using these advanced technologies and high-quality components, we are able to offer top-notch products that provide maximum comfort while keeping costs low for our customers.

A global network of innovation

Toshiba Air Conditioning boasts Research and Development (R&D) centres in Japan, Europe, Thailand, and China, where global research activities are carefully managed and integrated to provide innovative solutions to customers worldwide. With over 1200 patents in Japan and abroad, Toshiba is a leader in the industry. Furthermore, Toshiba has received a prestigious award for its significant achievements in air conditioning every year since 1994, demonstrating its innovative spirit and relentless drive to improve products and systems.

Products designed to perform, engineered to perfection

Toshiba Air Conditioning has been leading the way in air conditioning technology since 1981 with its groundbreaking inverter technology. Our unwavering commitment to innovation has always kept us ahead of the competition, exemplified by our latest DC hybrid inverter system.

Committed to the Future

Going further than just products and beyond their basic functions, we create reliable and safe solutions that can interact with each other and with users. Incorporating Toshiba's technical building management systems, the world is made simpler, clearer and more effective.



1981 1st WORLD
First inverter-based air conditioner

1993 1st WORLD
Digital twin rotary air conditioner

1999
Establishment Toshiba Carrier Corporation

2003 TOP CLASS EFFICIENCY
VRF (SMMS), Super Modular Multi System R410A
All inverter Compressors

2006 TOP CLASS EFFICIENCY
Toshiba's first mini VRF (MiNi SMMS)

2010
VRF (SMMS-i) All inverter Compressors

2015 TOP CLASS EFFICIENCY
VRF (SMMS-e) Excellence Expansion Experience

2020 1st INVERTER
Triple rotary compressor

TOSHIBA
AIR CONDITIONING

Toshiba Air Conditioning's philosophy is based on a profound respect for our global environment and the desire to improve our customers' quality of life worldwide.

With our Inverter, the unit can maintain optimal comfort and efficiency levels by dynamically adjusting the speed of the compressor through a variable-frequency drive. This innovative solution ensures consistent and reliable heating and cooling performance.

TOSHIBA BUSINESS SOLUTIONS

CREATING BENEFITS AROUND COMFORT

Investors

Support decarbonizationof buildings. Make true energy savings. Boost your investments

Consultants

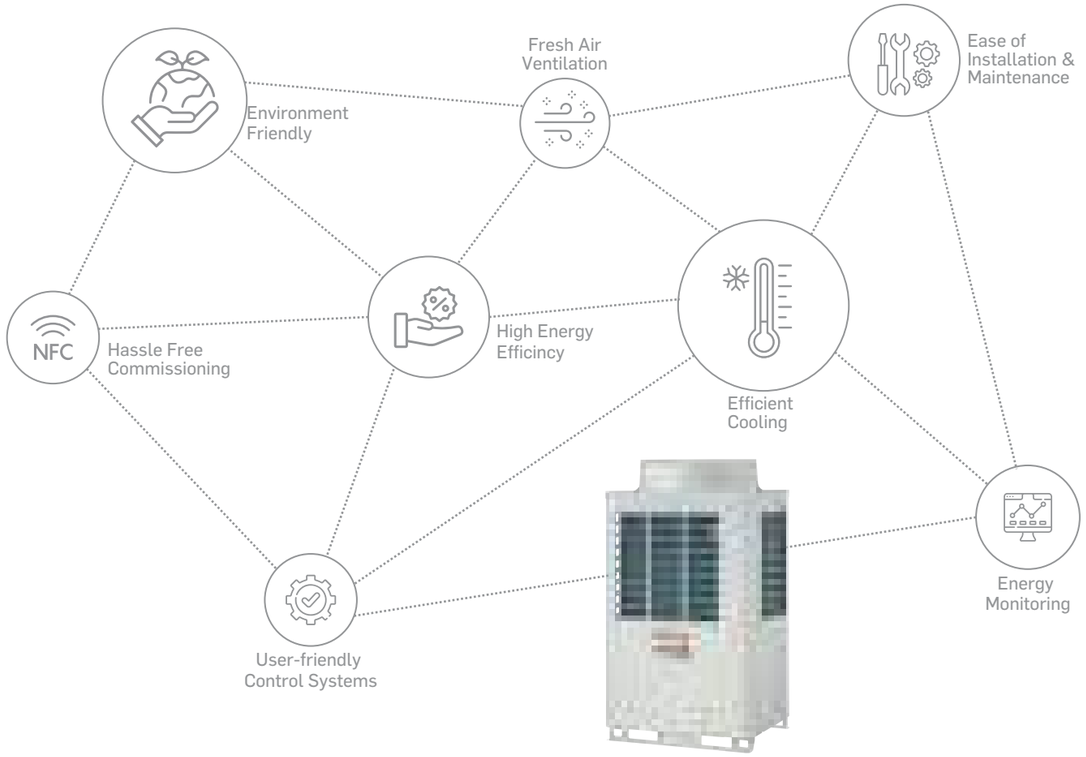
Secure your specifications. Ensure premium comfort. Ease buildings labelling.

Installers

Differentiate yourself from competitors, save time on installation and commissioning

Our planet

Always consider the impact. Go further than just products, create safe, sustainable solutions



FEATURES AND BENEFITS

Energy Saving

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.



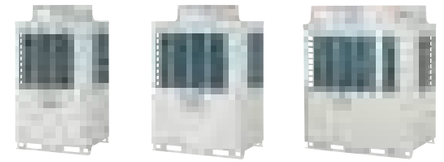
Note:

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

Design Flexibility

Single Module Up to 20HP

SMMS-e comes with three chassis offering capacity up to 20HP as a single module.



Expanded Capacity

With the SMMS-e, it is possible to connect up to 56HP in one system.

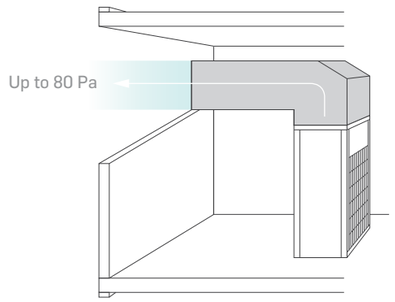
Reduced Footprint

Expanding the maximum combination up to 56HP in one system helps save time and cost.
The compact unit design also increases flexibility on installation with less footprint.



External static pressure range

The SMMSe has higher external static pressure up to 80Pa, ensuring stable operation, which makes it more suitable for high rise buildings installation

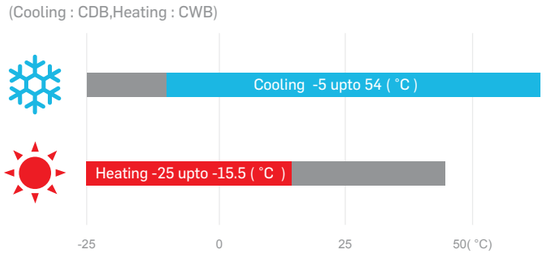




High Reliability

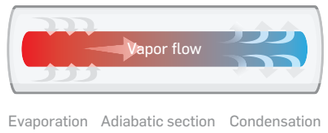
Operating Temperature Range

Utilizing the highly durable compressor technology, SMMS-e can operate under a broader range of outdoor ambiance with the cooling and heating temperature expansion from -25°C to 54°C.



Heat pipe technology*

Thanks to the highly reliable heat sink with heat pipe technology, the SMMS-e series can sustain at high ambient temperatures

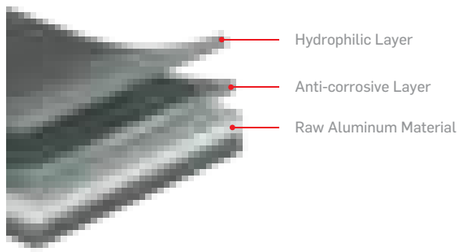




Heat sink with heat pipe
- In order to cool for inverter

Corrosion Protection

SMMS-e features improved anti-corrosion capabilities on the heat exhanger and chassis to ensure maximum durability in harsh weather conditions.

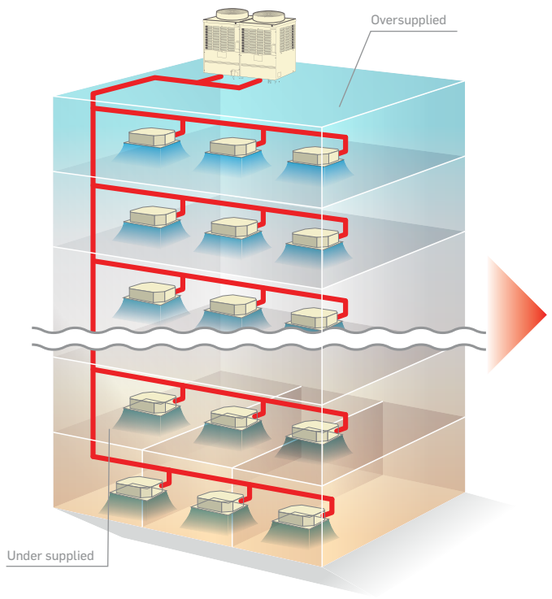


Standard model salt spray (SST): 1,500 hrs in accordance with ASTM-B117
Heavy anti-corrosion model salt spray test (SST): 5,000 hours in accordance with ASTM-B117

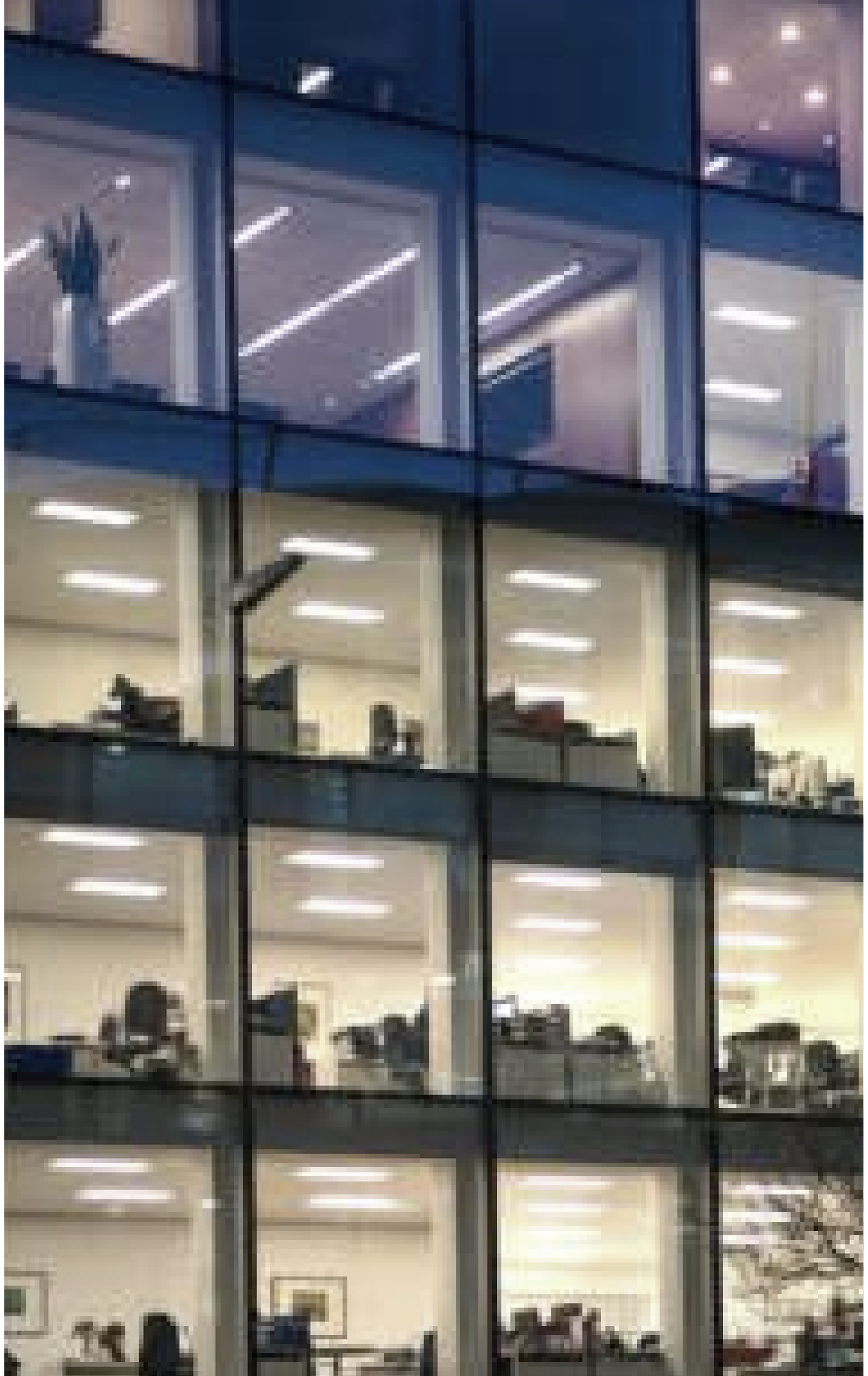
Enhanced Comfort

New intelligent VRF control

Experience unmatched comfort with Toshiba's intelligent VRF control systems. In commercial buildings, multiple indoor units can sometimes perform inconsistently due to varying pipe lengths, resulting in pressure loss and thermal leaks that disrupt the optimal refrigerant flow to each unit. Without intelligent control, upper-floor indoor units can strain the refrigerant supply, causing lower floors to experience delayed and inefficient operation. Additionally, refrigerant flow can be unevenly distributed, with some areas near the outdoor unit being oversupplied while others are undersupplied. However, with Toshiba's intelligent VRF control, you can enjoy a more balanced and efficient system.



Without intelligent VRF control

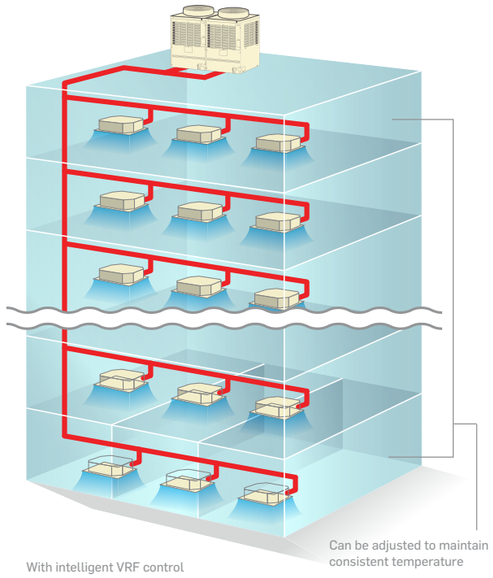


Total system control

And a 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.

Toshiba SMMS-e systems monitor refrigerant flow to each indoor unit, ensuring optimal supply throughout the system, even with a height difference of up to 90 meters. With intelligent VRF control, Toshiba delivers consistent, room-to-room comfort across several floors of a commercial structure.



With intelligent VRF control

Inverter DC Twin Rotary Compressor

Wide range compressor

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

2-stage vane

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

DLC-coated vane

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

Infinity variable control

Adjusts compressor rotation speed in 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.

.

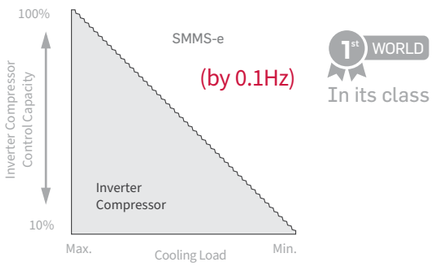


Displacement volume 64cm3

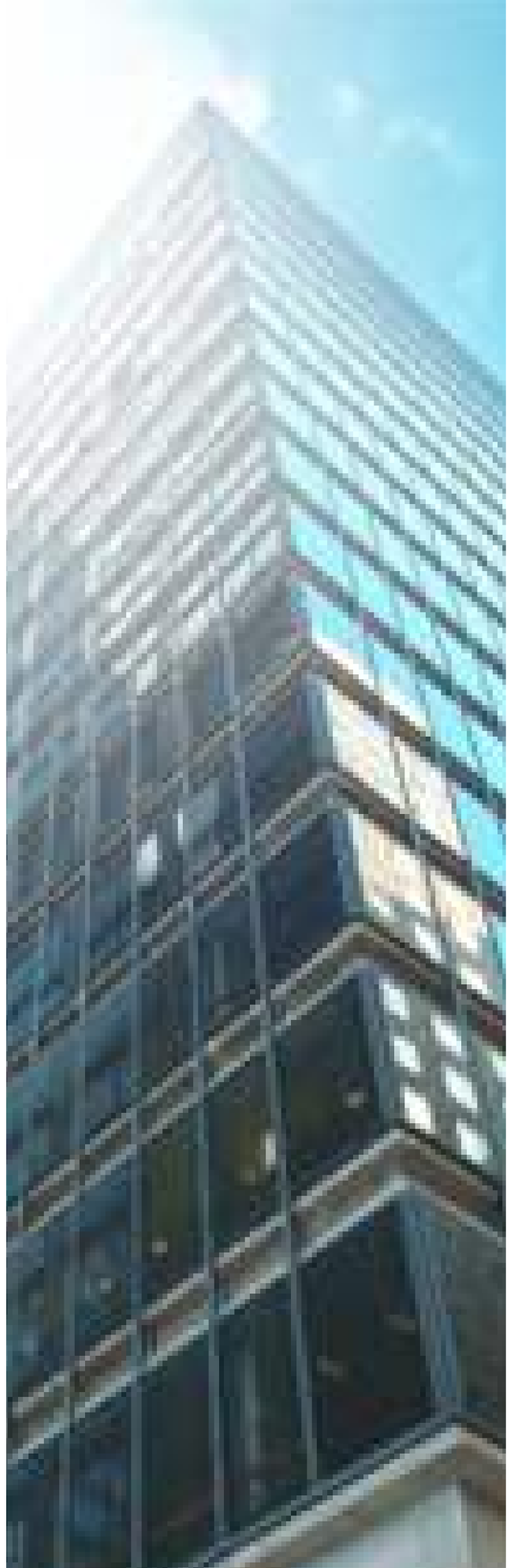


DLC Coat vane





Ultra-precise 0.1 Hz control over compressor rotation speed



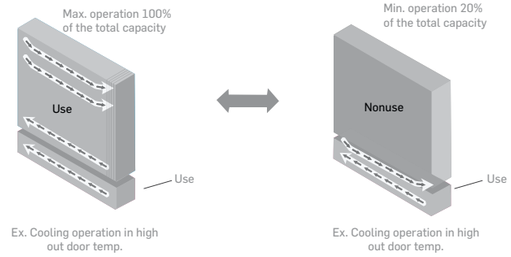
DID YOU KNOW?

Toshiba is the only brand that provides double compressor for all capacities in VRF.

Heat Exchanger

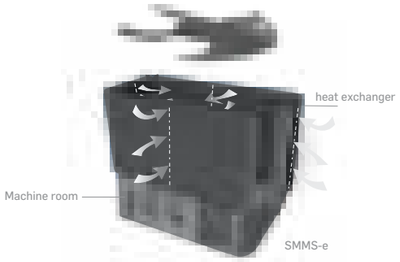
Variable heat exchanger

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 airflow is equal in all directions.

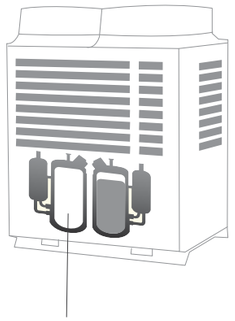


Continuous Operation

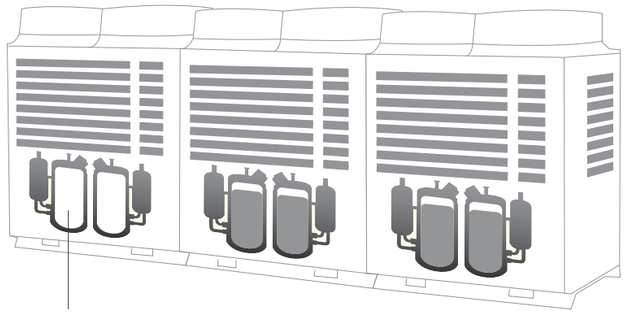
Backup operation

Toshiba assures your peace of mind with the backup operation providing continuity of activity. Allowing the SMMS-e to continue to operate if any compressor fails. This backup operation is available in both single system and modular system.

Single Outdoor unit backup
(8-20 HP)

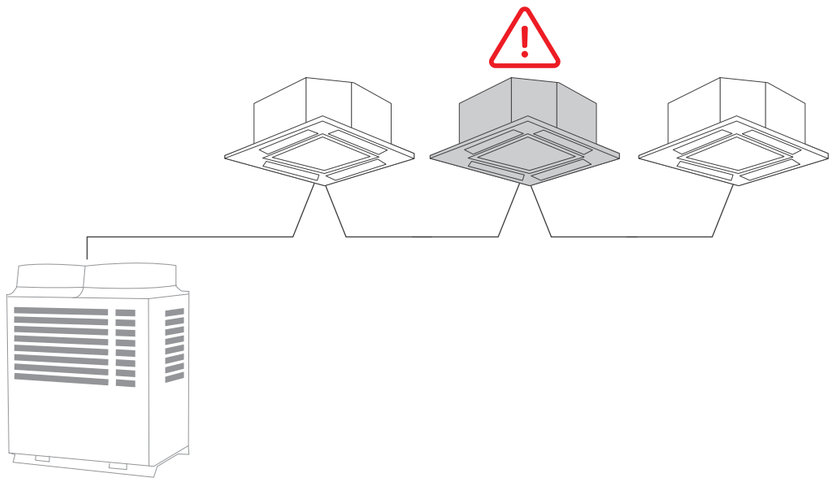


Module Outdoor unit backup
(22-56 HP)



Uninterrupted operation

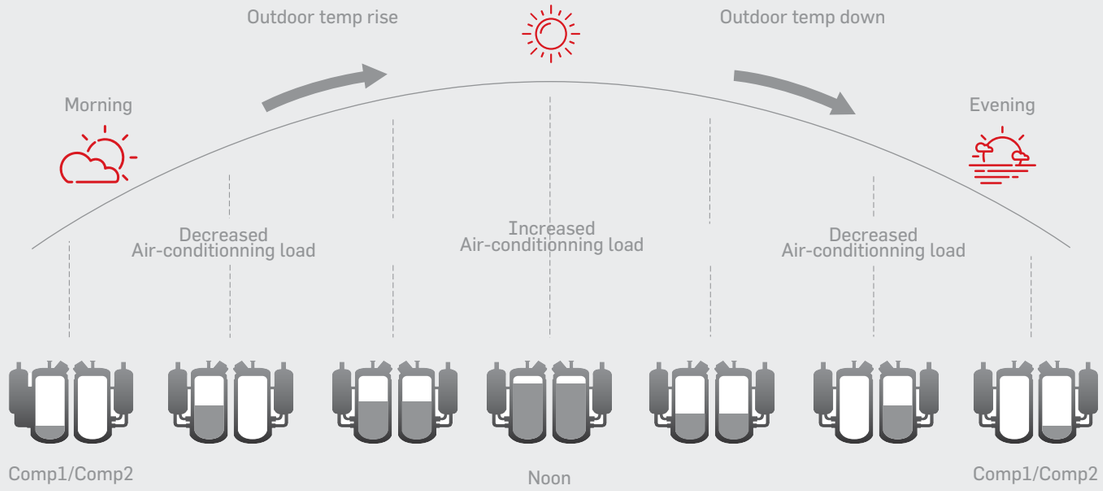
The uninterrupted operation function ensure the entire VRF system's continuous operation even if any indoor unit is failed or powered off, thanks to Toshiba advanced communication protocol.





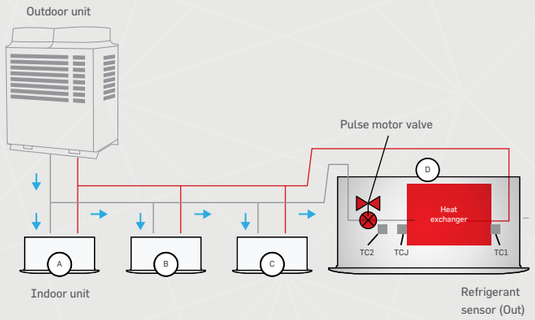
Reliability rotational control

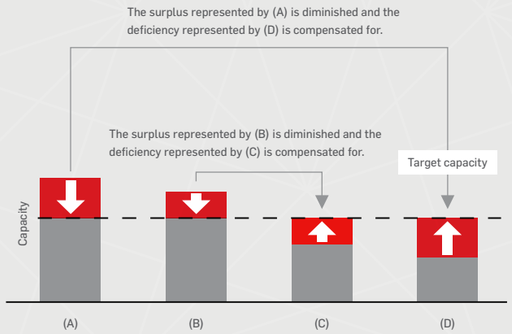
The rotational control in SMMS-e is designed to improve system reliability and durability by controlling the operation of each compressor to work equally under variable conditions.



Precise Refrigerant Flow

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.







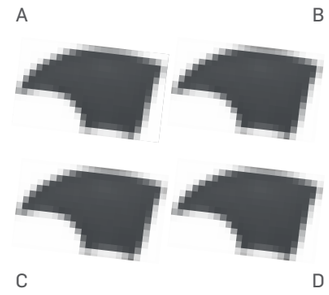
Propeller Fan

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.

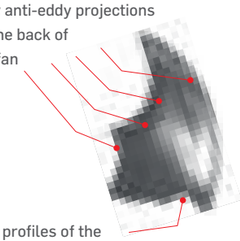


Each blade has a unique profile



Design improvements

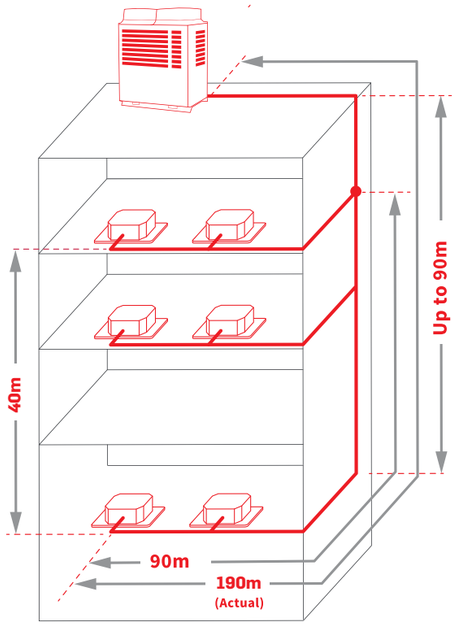
New anti-eddy projections on the back of the fan



New profiles of the reverse-arc shaped wings

Piping Design Flexibility

The industry's top class piping technology makes installation of piping in the SMMS-e much more flexible. Units can be much further apart, giving more options for attractive and optimised systems.



Maximum piping length		Unit	
Maximum total piping length		m	1,000
Farthest piping length	Actual	m	190
	Equivalent	m	**235**
Height between outdoor-indoor units	Outdoor above	m	90
	Outdoor Below	m	40
Height between indoor units		m	40
Farthest pipe from 1st branch		m	90

NOTE :
Please refer to the technicl documents for further details.



CONNECTABLE NO. OF INDOOR UNIT

Indoor line-up

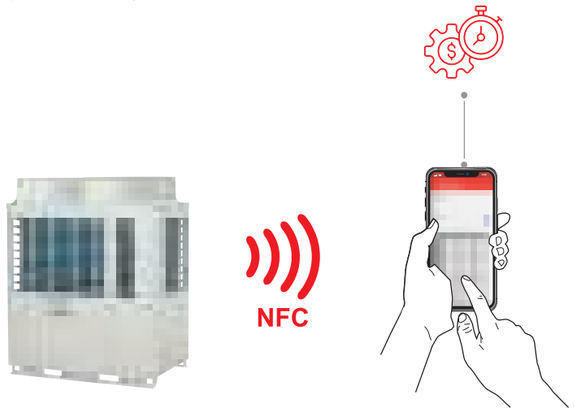
Type	Cooling capacity														
kW HP	1.7 0.6	2.2 0.8	2.8 1.0	3.6 1.25	4.5 1.7	5.6 2.0	7.1 2.5	8.0 3.0	9.0 3.2		14.0 5.0	16.0 6.0	22.4 8.0	28.0 10.0	33.5 12.0	40.0 14.3
4-way cassette type			●	●	●	●	●	●	●							
Compact 4-way cassette type 620 x 620			●	●	●	●	●	●								
2-way cassette type			●	●	●	●	●	●	●							
1-way cassette type			●	●	●	●	●	●								
Standard duct type			●	●	●	●	●	●	●		●	●	●	●	●	●
High static pressure type											●	●	●	●	●	●
Slim duct type			●	●	●	●	●	●								
Ceiling type						●	●	●	●		●	●	●			
Hi wall type - upto 10kw			●	●	●	●	●	●	●							
Floor standing type						●	●	●	●		●	●	●			
Fresh air intake indoor unit type											●	●	●	●	●	●
Console type			●	●	●	●	●	●								
Floor standing cabinet type			●	●	●	●	●	●								
Floor standing concealed console type			●	●	●	●	●	●								

Hassle-free maintenance and commissioning

With SMMSe wave Tool, you can read and write data from the outdoor unit directly on your smartphone without the need to connect a laptop or open the cabinet.



The NFC powered technology allows for diagnostic reports and unit information to be uploded and downloaded in one tap. This smart technology makes the job of every service engineer quick and easy.



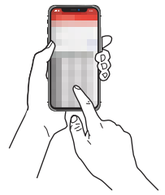


Data Available at all times:

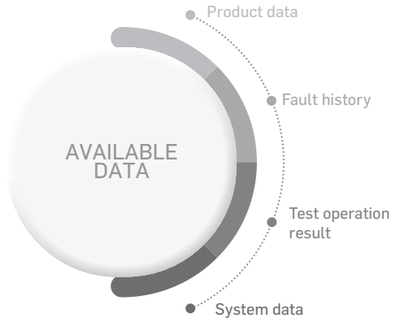
Accessing critical information such as product data, system data, fault history, and testing and commissioning is effortless, even during under-service maintenance or power outages. Moreover, this information can be conveniently sent to remote offices via email. With the ability to receive system data directly to your inbox, there's no need to leave your office to check operational conditions.

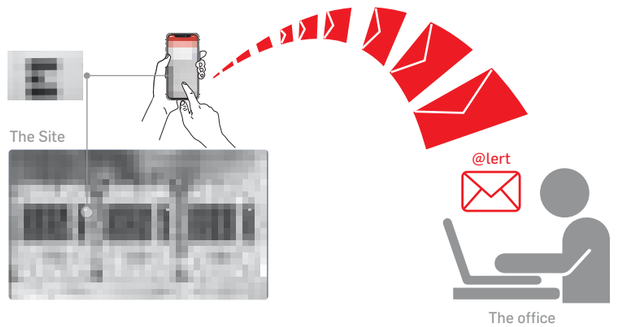
If any of these situations arise:

- ✔ Installation
- ✔ Service maintenance
- ✔ Power failure



Smart phone





OUTDOOR UNITS

Capacity	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* (kW)	22.4	28.0	33.5	40.0	45.0	50.4	56.0
Cooling capacity* (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

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
No's of connectable Indoor units	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* (kW)	61.5	67.0	73.5	80.0	85.0	90.0	95.4
Cooling capacity* (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

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* (kW)	100.8	106.4	112.0	120.0	125.0	130.0	135.0
Cooling capacity* (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

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* (kW)	140.4	145.8	152.0	157.0
Cooling capacity* (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
・ Cooling: Indoor air temperature 26.7°C DB/19.4°C WB, outdoor air temperature 35°C DB (AHRI 1230 standard)
・ 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

Branching Joints & Headers

	Y-shape branching joint				Branch headers				Outdoor unit connection piping kit	
Appearance					 (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
Usage (Classification according to indoor unit capacity code)	Total below 6.4	Total 6.4 or more and below 14.2	Total 14.2 or more and below 25.2	Total 25.2 or more	Max.4 branche s		Max.8 branches		Total below 26.0	Total 26.0 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		

OUTDOOR UNIT SPECIFICATIONS

Protective devices: Discharge temp. sensor / Suction temp. sensor / High-pressure sensor
Low-pressure sensor / High-pressure switch / PC board fuse
1. The source voltage must not fluctuure 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

Standard model (Single unit)				Technical specifications		
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)		
Cooling (*)	Capacity 100%		(kW)	22.4	28.0	33.5
	Power consumption		(kW)	4.84	6.28	8.24
	EER (Energy efficiency ratio)			4.63	4.46	4.07
Cooling (**)	Capacity 100%		(kW)	20.3	25.2	26.8
	Power consumption		(kW)	6.54	8.75	8.98
	EER (Energy efficiency ratio)			3.1	2.88	2.98
Heating (*2)	Capacity 100%		(kW)	25.0	31.5	37.5
	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 dimensions (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		(m /h)	9,700	9,700	12,200
Refrigerant R410A(Charged refrigerant amount)			(kg)	11.5	11.5	11.5
Refrigerant piping	Main pipe diameter	Gas side	(mm)	Φ19.1	Φ22.2	Φ28.6
		Liquid side	(mm)	Φ12.7	Φ12.7	Φ12.7
		Balance pipe	(mm)	Φ9.5	Φ9.5	Φ9.5
Sound pressure level (Cooling/Heating)			(dB(A))	55 / 56	57 / 58	59 / 61
Sound power level (Cooling/Heating)			(dB(A))	74 / 74	74 / 74	80 / 82
Connectable indoor units			(nos)	13	16	20

Standard model (Single unit)				Technical specifications			
Equivalent HP				14HP	16HP	18HP	20HP
Model name	Heat Pump	50Hz	(MMY-)	MAP1406HT8P-ME	MAP1606HT8P-ME	MAP1806HT8P-ME	MAP2006HT8P-ME
Outdoor unit type				Inverter			
Power supply (*1)				3phase 4wires 50Hz 400V (380-415V)			
Cooling (*)	Capacity 100%		(kW)	40.0	45.0	50.4	56.0
	Power consumption		(kW)	9.90	12.1	12.3	15.5
	EER (Energy efficiency ratio)			4.04	3.72	4.1	3.61
Cooling (**)	Capacity 100%		(kW)	32.5	36.0	42.8	44.8
	Power consumption		(kW)	11.6	12.5	14.2	14.9
	EER (Energy efficiency ratio)			2.80	2.88	3.01	3.01
Heating (*2)	Capacity 100%		(kW)	45.0	50.0	56.0	63.0
	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 Start			
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		(m /h)	12,200	12,600	17,300	17,900
Refrigerant R410A(Charged refrigerant amount)			(kg)	11.5	11.5	11.5	11.5
Refrigerant piping	Main pipe diameter	Gas side	(mm)	Φ28.6	Φ28.6	Φ28.6	Φ28.6
		Liquid side	(mm)	Φ15.9	Φ15.9	Φ15.9	Φ15.9
		Balance pipe	(mm)	Φ9.5	Φ9.5	Φ9.5	Φ9.5
Sound pressure level (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

Protective devices: Discharge temp. sensor / Suction temp. sensor / High-pressure sensor Low-pressure sensor / High-pressure switch / PC board fuse
1. The source voltage must not fluctuure 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

Standard model (Combination)				Technical specifications					
Equivalent HP				22HP		24HP		26HP	
Model name	Heat Pump	50Hz	(MMY-)	AP2216HT8P-ME		MAP2416HT8P-ME		MAP2616HT8P-ME	
Outdoor unit type				Inverter					
Power supply (*1)				3phase 4wires 50Hz 400V (380-415V)					
Outdoor unit model	Heat Pump	50Hz	(MMY-)	MAP1206HT8P-ME	MAP1006HT8P-ME	MAP1206HT8P-ME	MAP1206HT8P-ME	MAP1406HT8P-ME	MAP1206HT8P-ME
Cooling (*)	Capacity 100%		(kW)	61.5		67.0		73.5	
	Power consumption		(kW)	14.52		16.48		18.14	
	EER (Energy efficiency ratio)			4.27		4.07		4.06	
Cooling (**)	Capacity 100%		(kW)	52.0		53.6		59.3	
	Power consumption		(kW)	17.73		17.96		20.58	
	EER (Energy efficiency ratio)			2.93		2.98		2.89	
Heating (*2)	Capacity 100%		(kW)	69.0		75.0		82.5	
	Power consumption		(kW)	16.3		18.5		19.8	
	COP (Coefficiency of performance)			4.23		4.06		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		(m /h)	12,200	9,700	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
Refrigerant piping	Main pipe diameter	Gas side	(mm)	Φ28.6		Φ34.9		Φ34.9	
		Liquid side	(mm)	Φ19.1		Φ19.1		Φ19.1	
		Balance pipe	(mm)	Φ9.5		Φ9.5		Φ9.5	
Sound pressure level (Cooling/Heating)			(dB(A))	61.5/63		62/64		62.5/64.5	
Sound power level (Cooling/Heating)			(dB(A))	81/83		83/85		83/85	
Connectable indoor units			(nos)	37		40		43	

Standard model (Combination)				Technical specifications					
Equivalent HP				28HP		30HP		32HP	
Model name	Heat Pump	50Hz	(MMY-)	AP2216HT8P-ME		MAP2416HT8P-ME		MAP2616HT8P-ME	
Outdoor unit type				Inverter					
Power supply (*1)				3phase 4wires 50Hz 400V (380-415V)					
Outdoor unit model	Heat Pump	50Hz	(MMY-)	MAP1406HT8P-ME	MAP1406HT8P-ME	MAP1606HT8P-ME	MAP1406HT8P-ME	MAP1606HT8P-ME	MAP1606HT8P-ME
Cooling (*)	Capacity 100%		(kW)	80.0		85.0		90.0	
	Power consumption		(kW)	19.8		22.0		24.2	
	EER (Energy efficiency ratio)			4.04		3.88		3.72	
Cooling (**)	Capacity 100%		(kW)	65.0		68.50		72.0	
	Power consumption		(kW)	23.2		24.1		25.0	
	EER (Energy efficiency ratio)			2.80		2.84		2.88	
Heating (*2)	Capacity 100%		(kW)	90.0		95.0		100.0	
	Power consumption		(kW)	21.2		23.1		25.0	
	COP (Coefficiency of performance)			4.25		4.11		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		(m /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
Refrigerant piping	Main pipe diameter	Gas side	(mm)	Φ34.9		Φ34.9		Φ34.9	
		Liquid side	(mm)	Φ19.1		Φ19.1		Φ19.1	
		Balance pipe	(mm)	Φ9.5		Φ9.5		Φ9.5	
Sound pressure level (Cooling/Heating)			(dB(A))	63/65		64.5/66.5		65/67	
Sound power level (Cooling/Heating)			(dB(A))	83/85		83.5/85.5		84/86	
Connectable indoor units			(nos)	47		50		54	

Standard model (Combination) / Technical specifications

Equivalent HP				34HP		36HP		38HP	
Model name	Heat Pump	50Hz	(MMY-)	AP3416HT8P-ME		AP3616HT8P-ME		AP3816HT8P-ME	
Outdoor unit type				Inverter					
Power supply (*1)				3phase 4wires 50Hz 400V (380-415V)					
Outdoor unit model	Heat Pump	50Hz	(MMY-)	MAP1806HT8P-ME	MAP1606HT8P-ME	MAP1806HT8P-ME	MAP1806HT8P-ME	MAP2006HT8P-ME	MAP1806HT8P-ME
Cooling (*)	Capacity 100%		(kW)	95.4		100.8		106.4	
	Power consumption		(kW)	24.4		24.6		27.8	
	EER (Energy efficiency ratio)			3.91		4.1		3.86	
Cooling (**)	Capacity 100%		(kW)	78.8		85.6		87.6	
	Power consumption		(kW)	26.7		28.4		29.1	
	EER (Energy efficiency ratio)			2.95		3.01		3.01	
Heating (*2)	Capacity 100%		(kW)	106.0		112.0		119.0	
	Power consumption		(kW)	26.1		27.2		30.1	
	COP (Coefficiency of performance)			4.06		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 /h)	17,300	12,600	17,300	17,300	17,900	17,300
Refrigerant R410A(Charged refrigerant amount)			(kg)	11.5	11.5	11.5	11.5	11.5	11.5
Refrigerant piping	Main pipe diameter	Gas side	(mm)	Φ34.9		Φ41.3		Φ41.3	
		Liquid side	(mm)	Φ19.1		Φ22.2		Φ22.2	
		Balance pipe	(mm)	Φ9.5		Φ9.5		Φ9.5	
Sound pressure level (Cooling/Heating)			(dB(A))	64.5/66		63/64		63.5/64.5	
Sound power level (Cooling/Heating)			(dB(A))	84/86		84/86		84.5/86.5	
Connectable indoor units			(nos)	57		60		64	

Standard model (Combination) / Technical specifications

Equivalent HP				40HP		42HP			44HP		
Model name	Heat Pump	50Hz	(MMY-)	AP4016HT8P-ME		AP4216HT8P-ME			AP4416HT8P-ME		
Outdoor unit type				Inverter							
Power supply (*1)				3phase 4wires 50Hz 400V (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
Cooling (*)	Capacity 100%		(kW)	112.0		120.0			125.0		
	Power consumption		(kW)	31.0		29.7			31.9		
	EER (Energy efficiency ratio)			3.61		4.04			3.93		
Cooling (**)	Capacity 100%		(kW)	89.6		97.5			101.0		
	Power consumption		(kW)	29.8		34.8			35.7		
	EER (Energy efficiency ratio)			3.01		2.8			2.83		
Heating (*2)	Capacity 100%		(kW)	126.0		135.0			140.0		
	Power consumption		(kW)	33.0		31.8			33.7		
	COP (Coefficiency of performance)			3.82		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		(m /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 piping	Main pipe diameter	Gas side	(mm)	Φ41.3		Φ41.3			Φ41.3		
		Liquid side	(mm)	Φ22.2		Φ22.2			Φ22.2		
		Balance pipe	(mm)	Φ9.5		Φ9.5			Φ9.5		
Sound pressure level (Cooling/Heating)			(dB(A))	64.0/65.0		65/67			66.5/67.5		
Sound power level (Cooling/Heating)			(dB(A))	85/87		85/87			85.5/87.5		
Connectable indoor units			(nos)	64		64			64		

Protective devices: Discharge temp. sensor / Suction temp. sensor / High-pressure sensor Low-pressure sensor / High-pressure switch / PC board fuse
1. The source voltage must not fluctuate 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

Standard model (Combination) / Technical specifications

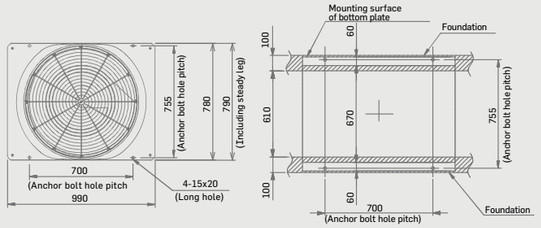
Equivalent HP				46HP			48HP			50HP		
Model name	Heat Pump	50Hz	(MMY-)	AP4616HT8P-ME			AP4816HT8P-ME			AP5016HT8P-ME		
Outdoor unit type				Inverter								
Power supply (*1)				3phase 4wires 50Hz 400V (380-415V)								
Outdoor unit model	Heat Pump	50Hz	(MMY-)	2 x MAP1606HT8P-ME + MAP1406HT8P-ME			3 x MAP1606HT8P-ME			2 x MAP1606HT8P-ME + MAP1806HT8P-ME		
Cooling (*)	Capacity 100%		(kW)	130.0			135.0			140.4		
	Power consumption		(kW)	34.1			36.3			36.5		
	EER (Energy efficiency ratio)			3.83			3.72			3.85		
Cooling (**)	Capacity 100%		(kW)	104.5			108.0			114.8		
	Power consumption		(kW)	36.6			37.5			39.2		
	EER (Energy efficiency ratio)			2.85			2.88			2.92		
Heating (*2)	Capacity 100%		(kW)	145.0			150.0			156.0		
	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 /h)	12,600	12,600	12,200	12,600	12,600	12,200	17,300	12,600	12,600
Refrigerant R410A(Charged refrigerant amount)			(kg)	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5
Refrigerant piping	Main pipe diameter	Gas side	(mm)	Φ41.3			Φ41.3			Φ41.3		
		Liquid side	(mm)	Φ22.2			Φ22.2			Φ22.2		
		Balance pipe	(mm)	Φ9.5			Φ9.5			Φ9.5		
Sound pressure level (Cooling/Heating)			(dB(A))	66.5/68.5			67/69			66.5/68		
Sound power level (Cooling/Heating)			(dB(A))	85.5/87.5			86/88			86/88		
Connectable indoor units			(nos)	64			64			64		

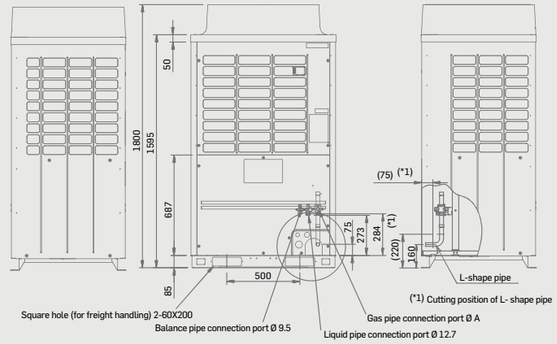
Standard model (Combination) / Technical specifications

Equivalent HP				52HP			54HP			56HP		
Model name	Heat Pump	50Hz	(MMY-)	AP5216HT8P-ME			AP5416HT8P-ME			AP5616HT8P-ME		
Outdoor unit type				Inverter								
Power supply (*1)				3phase 4wires 50Hz 400V (380-415V)								
Outdoor unit model	Heat Pump	50Hz	(MMY-)	2 x MAP1806HT8P-ME + MAP1606HT8P-ME			2 x MAP20806HT8P-ME + MAP14606HT8P-ME			2 x MAP20806HT8P-ME + MAP1606HT8P-ME		
Cooling (*)	Capacity 100%		(kW)	145.8			152.0			157.0		
	Power consumption		(kW)	36.7			40.9			43.1		
	EER (Energy efficiency ratio)			3.22			3.75			3.65		
Cooling (**)	Capacity 100%		(kW)	121.6			122.1			125.6		
	Power consumption		(kW)	40.9			41.4			42.3		
	EER (Energy efficiency ratio)			2.4			2.94			2.97		
Heating (*2)	Capacity 100%		(kW)	162.0			171.0			176.0		
	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		(m /h)	17,300	17,300	12,600	17,900	17,900	12,200	17,900	17,900	12,600
Refrigerant R410A(Charged refrigerant amount)			(kg)	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5
Refrigerant piping	Main pipe diameter	Gas side	(mm)	Φ41.3			Φ41.3			Φ41.3		
		Liquid side	(mm)	Φ22.2			Φ22.2			Φ22.2		
		Balance pipe	(mm)	Φ9.5			Φ9.5			Φ9.5		
Sound pressure level (Cooling/Heating)			(dB(A))	65.5/67			65.5/67			66.5/67.5		
Sound power level (Cooling/Heating)			(dB(A))	86/88			86.5/88.5			86.5/88.5		
Connectable indoor units			(nos)	64			64			64		

Protective devices: Discharge temp. sensor / Suction temp. sensor / High-pressure sensor Low-pressure sensor / High-pressure switch / PC board fuse
1. The source voltage must not fluctuate 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

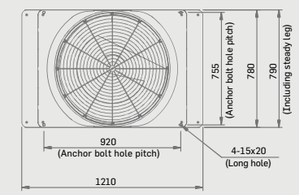
Model: MMY-MAP0806HT8P-ME
MMY-MAP1006HT8P-ME
MMY-MAP1206HT8P-ME

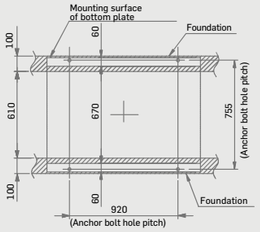


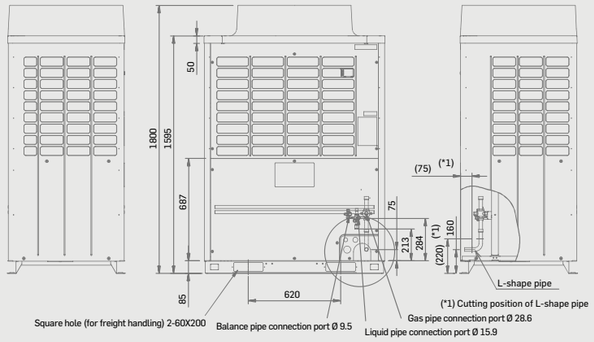


(Unit:mm)

Model: MMY-MAP1406HT8P-ME
MMY-MAP1606HT8P-ME







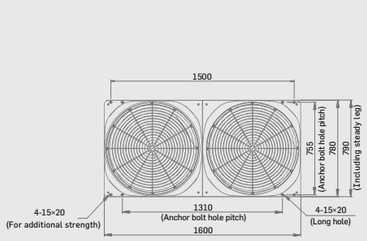
(Unit:mm)

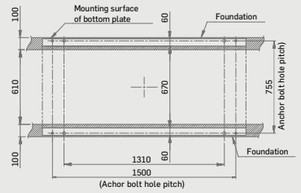


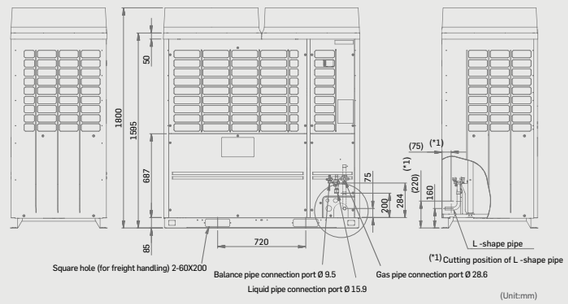
Model: MMY-MAP1806HT8P-ME
MMY-MAP2006HT8P-ME

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.







(Unit:mm)

INDOOR UNITS LINE-UP

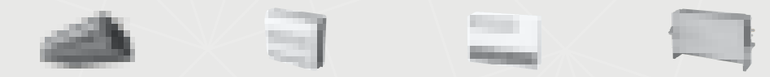




Cooling capacity (HP equivalent)		High static pressure type	Slim duct type	Ceiling type	High wall type (upto 10kw)	Floor standing type
005 type 1.7 kW	(0.6HP)					
007 type 2.2 kW	(0.8HP)		MMD-UP0071SPHY-E		MMK-UP0071HP-AE	
009 type 2.8 kW	(1.0HP)		MMD-UP0091SPHY-E		MMK-UP0091HP-AE	
012 type 3.6 kW	(1.25HP)		MMD-UP0121SPHY-E		MMK-UP0121HP-AE	
015 type 4.5 kW	(1.7HP)		MMD-UP0151SPHY-E	MMC-UP0151HP-E	MMK-UP0151HP-AE	MMF-UP0151H-E
018 type 5.6 kW	(2.0HP)	MMD-UP0181HP-E	MMD-UP0181SPHY-E	MMC-UP0181HP-E	MMK-UP0181HP-AE	MMF-UP0181H-E
024 type 7.1 kW	(2.5HP)	MMD-UP0241HP-E	MMD-UP0241SPHY-E	MMC-UP0241HP-E	MMK-UP0241HP-AE	MMF-UP0241H-E
027 type 8.0 kW	(3.0HP)	MMD-UP0271HP-E	MMD-UP0271SPHY-E	MMC-UP0271HP-E	MMK-UP0271HP-AE	MMF-UP0271H-E
030 type 9.0 kW	(3.2HP)				MMK-UP0301HP-AE	
036 type 11.2 kW	(4.0HP)	MMD-UP0361HP-E		MMC-UP0361HP-E	MMK-UP0361HP-AE(10 kw)	MMF-UP0361H-E
048 type 14.0 kW	(5.0HP)	MMD-UP0481HP-E		MMC-UP0481HP-E		MMF-UP0481H-E
056 type 16.0 kW	(6.0HP)	MMD-UP0561HP-E		MMC-UP0561HP-E		MMF-UP0561H-E
072 type 22.4 kW	(8.0HP)	MMD-UP0721HP-E1				
096 type 28.0 kW	(10HP)	MMD-UP0961HP-E1				



Cooling capacity (HP equivalent)		4-way cassette type	Compact 4-way cassette (620 × 620) type	2-way cassette type	1-way cassette type	Standard duct type
005 type 1.7 kW	(0.6HP)					
007 type 2.2 kW	(0.8HP)		MMU-UP0071MH-E	MMU-UP0071WH-E	MMU-UP0071YHP-E	MMD-UP0071BHP-E
009 type 2.8 kW	(1.0HP)	MMU-UP0091HP-E	MMU-UP0091MH-E	MMU-UP0091WH-E	MMU-UP0091YHP-E	MMD-UP0091BHP-E
012 type 3.6 kW	(1.25HP)	MMU-UP0121HP-E	MMU-UP0121MH-E	MMU-UP0121WH-E	MMU-UP0121YHP-E	MMD-UP0121BHP-E
015 type 4.5 kW	(1.7HP)	MMU-UP0151HP-E	MMU-UP0151MH-E	MMU-UP0151WH-E	MMU-UP0151YHP-E	MMD-UP0151BHP-E
018 type 5.6 kW	(2.0HP)	MMU-UP0181HP-E	MMU-UP0181MH-E	MMU-UP0181WH-E	MMU-UP0181YHP-E	MMD-UP0181BHP-E
024 type 7.1 kW	(2.5HP)	MMU-UP0241HP-E		MMU-UP0241WH-E	MMU-UP0241YHP-E	MMD-UP0241BHP-E
027 type 8.0 kW	(3.0HP)	MMU-UP0271HP-E		MMU-UP0271WH-E	MMU-UP0271YHP-E	MMD-UP0271BHP-E
030 type 9.0 kW	(3.2HP)	MMU-UP0301HP-E		MMU-UP0301WH-E		MMD-UP0301BHP-E
036 type 11.2 kW	(4.0HP)	MMU-UP0361HP-E		MMU-UP0361WH-E		MMD-UP0361BHP-E
048 type 14.0 kW	(5.0HP)	MMU-UP0481HP-E		MMU-UP0481WH-E		MMD-UP0481BHP-E
056 type 16.0 kW	(6.0HP)	MMU-UP0561HP-E		MMU-UP0561WH-E		MMD-UP0561BHP-E
072 type 22.4 kW	(8.0HP)					
096 type 28.0 kW	(10HP)					



Cooling capacity (HP equivalent)		Fresh air intake indoor unit type	Console	Floor standing cabinet type	Floor standing concealed console type
005 type 1.7 kW	(0.6HP)				
007 type 2.2 kW	(0.8HP)		MML-UP0071NHP-E	MML-UP0071H-E	MML-UP0071BH-E
009 type 2.8 kW	(1.0HP)		MML-UP0091NHP-E	MML-UP0091H-E	MML-UP0091BH-E
012 type 3.6 kW	(1.25HP)		MML-UP0121NHP-E	MML-UP0121H-E	MML-UP0121BH-E
015 type 4.5 kW	(1.7HP)		MML-UP0151NHP-E	MML-UP0151H-E	MML-UP0151BH-E
018 type 5.6 kW	(2.0HP)		MML-UP0181NHP-E	MML-UP0181H-E	MML-UP0181BH-E
024 type 7.1 kW	(2.5HP)			MML-UP0241H-E	MML-UP0241BH-E
027 type 8.0 kW	(3.0HP)				
030 type 9.0 kW	(3.2HP)				
036 type 11.2 kW	(4.0HP)				
048 type 14.0 kW	(5.0HP)	MMD-UP0481HFP-E			
056 type 16.0 kW	(6.0HP)				
072 type 22.4 kW	(8.0HP)	MMD-UP0721HFP-E1			
096 type 28.0 kW	(10HP)	MMD-UP0961HFP-E1			
112 type 33.5 kW	(12HP)	MMD-UP1211HFP-E1			
128 type 40.0 kW	(14.3HP)	MMD-UP1281HFP-E1			

4-WAY CASSETTE

MMU-UP 1HP-E



Compact

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

Reliability

- Self-cleaning function and Ag-ion tip for anti-mould in drain cap.
- Built-in high-lift drain pump.

Easy to install

- Compact chassis with only 256mm height (Up to size 30).
- Lightweight unit, for easy and quick installation.

Remote Control



RBC-ASCU11Y-ME

Comfort

- Two louver shape option: straight flow louver and wide flow louver for optimum air distribution.
- Possibility to set three different swing modes providing individual control to maximise end user comfort.
- Wide air flow in all directions.
- Optimal air diffusion up to 4.6m ceiling height!

Technical specifications

Performances

Indoor unit	MMU-	UP0091HP-E	UP0121HP-E	UP0151HP-E	UP0181HP-E	UP0241HP-E	UP0271HP-E	UP0301HP-E	UP0361HP-E	UP0481HP-E	UP0561HP-E
Cooling capacity	kW	2.8	3.6	4.5	5.6	7.1	8.0	9.0	11.2	14.0	16.0
Heating capacity	kW	3.2	4.0	5.0	6.3	8.0	9.0	10.0	12.5	16.0	18.0
Power consumption	kW	0.021	0.021	0.023	0.026	0.036	0.036	0.043	0.088	0.112	0.112
Running current	A	0.23	0.23	0.27	0.29	0.38	0.38	0.43	0.78	0.88	0.88
Starting current	A	0.30	0.30	0.33	0.36	0.42	0.42	0.59	0.87	1.23	1.26

Physical Data

Indoor unit	MMU-	UP0091HP-E	UP0121HP-E	UP0151HP-E	UP0181HP-E	UP0241HP-E	UP0271HP-E	UP0301HP-E	UP0361HP-E	UP0481HP-E	UP0561HP-E
Air Flow (h/m/l)	m^3/h	800/730/680	800/730/680	930/830/790	1050/920/800	1290/920/800	1290/920/800	1320/1100/850	1970/1430/1070	2130/1430/1130	2130/1520/1230
Air Flow (h/m/l)	l/s	222/203/189	222/203/189	258/231/219	292/256/222	358/256/222	358/256/222	367/306/236	547/397/297	592/397/314	592/422/342
Sound pressure level (h/m//l)	dB(A)	30/29/27	30/29/27	31/29/27	32/29/27	35/31/28	35/31/28	38/33/30	43/38/32	46/38/33	46/40/33
Dimensions (HxWxD)	mm	256x840x840	256x840x840	256x840x840	256x840x840	256x840x840	256x840x840	256x840x840	319x840x840	319x840x840	319x840x840
Weight	kg	18	18	20	20	20	20	20	25	25	25
Panel dimensions (HxWxD)	mm	30x950x950	30x950x950	30x950x950	30x950x950	30x950x950	30x950x950	30x950x950	30x950x950	30x950x950	30x950x950
Panel weight	kg	4	4	4	4	4	4	4	4	4	4
Connecting pipe, gas	inch/mm	3/8" φ9.52	3/8" φ9.52	1/2" φ12.7	1/2" φ12.7	5/8" φ15.9	5/8" φ15.9	5/8" φ15.9	5/8" φ15.9	5/8" φ15.9	5/8" φ15.9
Connecting pipe, liquid	inch/mm	1/4" φ6.35	1/4" φ6.35	1/4" φ6.35	1/4" φ6.35	3/8"φ9.52	3/8"φ9.52	3/8"φ9.52	3/8"φ9.52	3/8"φ9.52	3/8"φ9.52
Drain port diameter	mm	25	25	25	25	25	25	25	25	25	25
Power supply		1-phase 50Hz 230V (220–240V) / 1-phase 60Hz 220V (Separate power supply for indoor units required.)									

Comfort

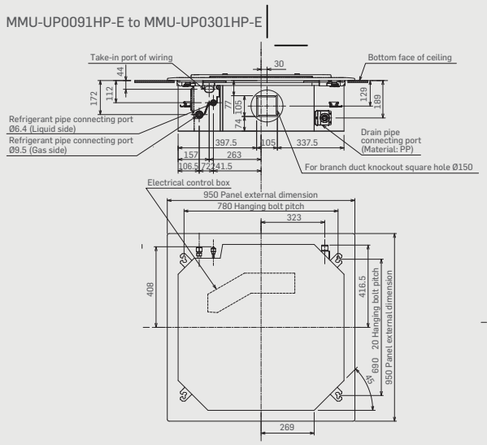
Note 1 : The capacities are measured under the conditions specified by JIS B 8615 based on the reference piping.

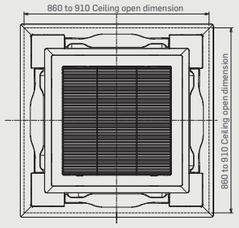
Note 2 : The sound level are measured in an anechoic chamber in accordance with JIS B 8616.
Normally, the values measured in the actual operating environment become larger than the indicated values due to the effects of external sound.

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

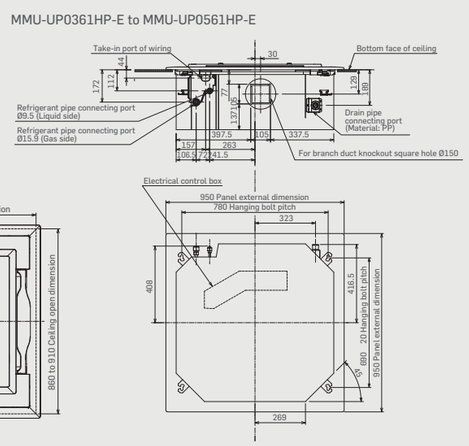
MMU-UP0091HP-E to MMU-UP0561HP-E

MMU-UP0091HP-E to MMU-UP0301HP-E





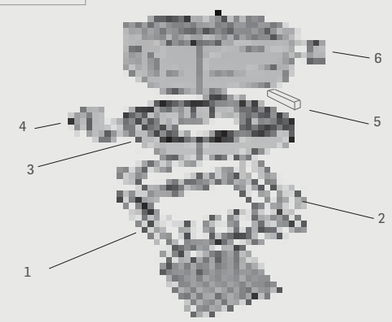
MMU-UP0361HP-E to MMU-UP0561HP-E



(Unit : mm)

Accessories

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



COMPACT 4-WAY CASSETTE (620 × 620)

MMU-UP 1MH-E



Compact

- The compact 4-way cassette has been specially designed for business office applications, where a compact and efficient solution is required.

Reliability

- A Smart flat-panel design with clean lines that will complement any decorative style.
- Fit within the T-bar of grid ceiling: 620mm X 620mm.

Easy to install

- Only 256mm height, this compact chassis is perfectly suited to confined spaces.
- Built-in high-lift drain pump.
  Lightweight unit, for easy and quick installation.

Remote Control



RBC-ASCU11Y-ME



TCB-SIR41UM-E

Comfort

- A user-programmable 5-step flow with individual louver swing control, plus a new “cycle-swing” harmonized louver setting.
- The occupancy motion sensor can be configured to switch the unit into standby mode or completely switched off when no movement is detected, minimizing the energy usage of the system.

Technical specifications

Performances

Indoor unit	MMU-	UP0071MH-E	UP0091MH-E	UP0121MH-E	UP0151MH-E	UP0181MH-E
Cooling capacity	kW	2.2	2.8	3.6	4.5	5.6
Heating capacity	kW	2.5	3.2	4.0	5.0	6.3
Power consumption	kW	0.023	0.025	0.027	0.030	0.052
Running current	A	0.23	0.24	0.25	0.28	0.46
Starting current	A	0.41	0.43	0.44	0.50	0.80

Physical Data

Indoor unit	MMU-	UP0071MH-E	UP0091MH-E	UP0121MH-E	UP0151MH-E	UP0181MH-E
Air Flow (h/m/l)	m^3/h	552/500/462/395/378	570/520/468/395/378	594/550/504/420/402	660/600/552/480/468	840/740/642/540/522
Air Flow (h/m/l)	l/s	153/139/128/110/105	158/144/130/110/105	165/153/140/117/112	183/167/153/133/130	233/206/178/150/145
Sound pressure level (h/m//l)	dB(A)	37/34/33/30/29	38/35/33/30/29	38/36/34/31/30	40/37/35/32/31	47/43/39/36/34
Dimensions (HxWxD)	mm	256x575x575	256x575x575	256x575x575	256x575x575	256x575x575
Weight	kg	15	15	15	15	15
Panel dimensions (HxWxD)	mm	12x620x620	12x620x620	12x620x620	12x620x620	12x620x620
Panel weight	kg	2.5	2.5	2.5	2.5	2.5
Connecting pipe, gas	inch/mm	3/8" φ9.5	3/8" φ9.5	3/8" φ9.5	1/2" φ12.7	1/2" φ12.7
Connecting pipe, liquid	inch/mm	1/4" φ6.4	1/4" φ6.4	1/4" φ6.4	1/4" φ6.4	1/4" φ6.4
Drain port diameter	mm	VP20	VP20	VP20	VP20	VP20
Power supply		1-phase 50Hz 230V (220–240V) / 1-phase 60Hz 220V (Separate power supply for indoor units required.)				

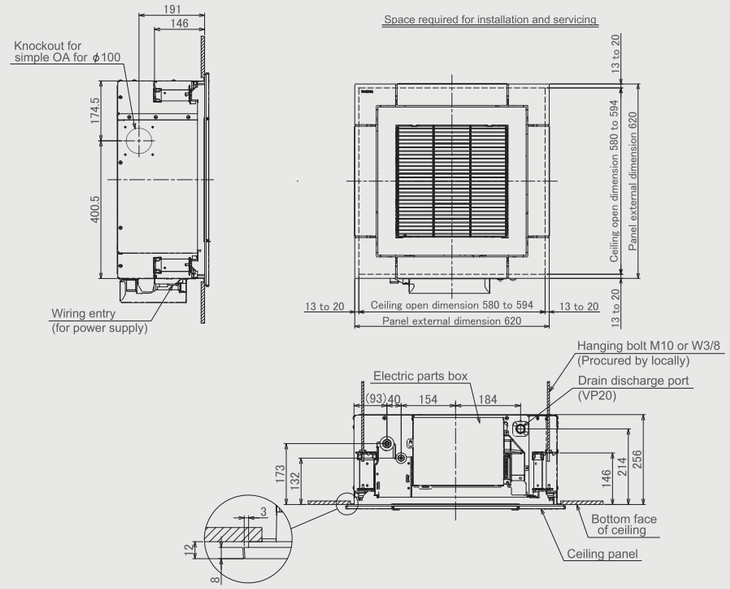
Comfort

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

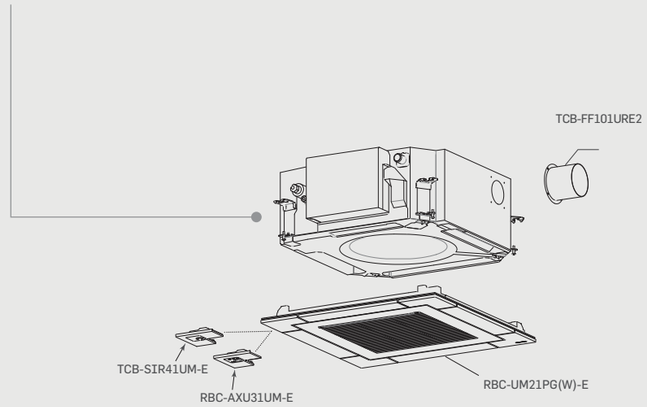
MMU-UP0071MH-E to UP0181MH-E



(Unit: mm)

Accessories

No	Part name	Model name	Applied model	Notes
1	Ceiling panel	RBC-UM21PG(W)-E	MMU-UP___1MH-E	Required accessory
2	Auxiliary fresh air flange	TCB-FF101URE2		For easy fresh air intake by using the knockout hole of indoor unit (dia=100 mm)
3	Wireless Remote Control kit	RBC-AXU31UM-E		"Wireless remote control kit and occupancy sensor cannot be used on the same indoor unit"
4	Occupancy sensor	TCB-SIR41UM-E		



2-WAY CASSETTE

MMU-UP 1WH-E



Slim and compact unit

- Slim, compact, and lightweight, the 2-way cassette has been designed to fit easily and discretel into any room interior.

Design

- The elegant white decoration panel allows the unit to be installed seamlessly into any room.

Easy to install

- Minimal weight (19kg) for units up to 4.5kw.
- Compact dimensions (height 295mm).
- Built-in drain pump.

Remote Control



RBC-ASCU11Y-ME

Comfort

- Maximize airflow distribution with our unique airflow control, which balances the flow of air in two opposite directions. This feature, combined with the unit's ability to intake fresh air, provides the perfect solution for year-round comfort. Enjoy enhanced
- indoor air quality thanks to our standard long-life filters with a wide bent surface that effectively collect dust particles.

Technical specifications

Performances

Indoor unit	MMU-	UP0071WH-E	UP0091WH-E	UP0121WH-E	UP0151WH-E	UP0181WH-E	UP0241WH-E	UP0271WH-E	UP0301WH-E	UP0361WH-E	UP0481WH-E	UP0561WH-E
Cooling capacity	kW	2.2	2.8	3.6	4.5	5.6	7.1	8.0	9.0	11.2	14.0	16.0
Heating capacity	kW	2.5	3.2	4.0	5.0	6.3	8.0	9.0	10.0	12.5	16.0	18.0
Power consumption	kW	0.024/0.024	0.024/0.024	0.024/0.024	0.026/0.026	0.034/0.034	0.045/0.045	0.045/0.045	0.055/0.055	0.081/0.081	0.091/0.091	0.131/0.131
Running current	A	0.21/0.22	0.21/0.22	0.21/0.22	0.21/0.22	0.28/0.29	0.37/0.39	0.37/0.39	0.43/0.46	0.50/0.53	0.57/0.59	0.77/0.81
Starting current	A	0.31/0.32	0.31/0.32	0.31/0.32	0.33/0.35	0.42/0.44	0.57/0.60	0.57/0.60	0.65/0.68	0.76/0.79	0.85/0.89	1.17/1.22

Physical Data

Indoor unit	MMU-	UP0071WH-E	UP0091WH-E	UP0121WH-E	UP0151WH-E	UP0181WH-E	UP0241WH-E	UP0271WH-E	UP0301WH-E	UP0361WH-E	UP0481WH-E	UP0561WH-E
Air Flow (h/m/l)	m^3/h	558/498/450	558/498/450	558/498/450	600/534/450	900/750/618	1050/840/738	1050/840/738	1260/900/780	1740/1434/1182	1800/1482/1230	2040/1578/1320
Air Flow (h/m/l)	l/s	155/138/125	155/138/125	155/138/125	167/148/125	250/208/172	291/233/205	291/233/205	350/250/217	483/398/328	500/412/342	567/438/367
Sound pressure level (h/m//l)	dB(A)	34/32/30	34/32/30	34/32/30	35/33/30	35/33/30	38/35/33	38/35/33	40/37/34	42/39/36	43/40/37	46/42/39
Dimensions (HxWxD)	mm	295x815x570	295x815x570	295x815x570	295x815x570	345x1180x570	345x1180x570	345x1180x570	345x1180x570	345x1600x570	345x1600x570	345x1600x570
Weight	kg	18	18	18	18	26	26	26	26	36	36	36
Panel dimensions (HxWxD)	mm	20x1050x680	20x1050x680	20x1050x680	20x1050x680	20x1415x680	20x1415x680	20x1415x680	20x1415x680	20x1835x680	20x1835x680	20x1835x680
Panel weight	kg	10	10	10	10	14	14	14	14	14	14	14
Connecting pipe, gas	inch/mm	3/8'' φ9.5	3/8'' φ9.5	3/8'' φ9.5	1/2'' φ12.7	1/2'' φ12.7	5/8'' φ15.9	5/8'' φ15.9	5/8'' φ15.9	5/8'' φ15.9	5/8'' φ15.9	5/8'' φ15.9
Connecting pipe, liquid	inch/mm	1/4'' φ6.4	1/4'' φ6.4	1/4'' φ6.4	1/4'' φ6.4	1/4'' φ6.4	3/8'' φ9.5	3/8'' φ9.5	3/8'' φ9.5	3/8'' φ9.5	3/8'' φ9.5	3/8'' φ9.5
Drain port diameter	mm	25	25	25	25	25	25	25	25	25	25	25
Power supply		1-phase 50Hz 230V (220–240V) / 1-phase 60Hz 220V (Separate power supply for indoor units required.)										

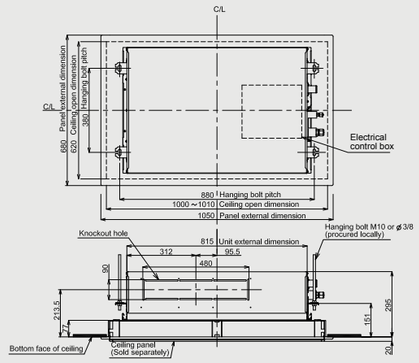
Comfort

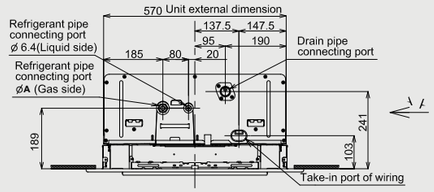
Note 1 : The capacities are measured under the conditions specified by JIS B 8615 based on the reference piping.

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

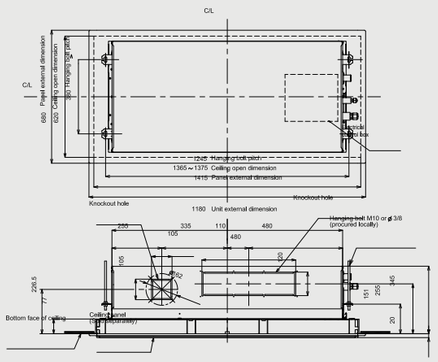
MMU-UP0071WH-E to MMU-UP0151WH-E

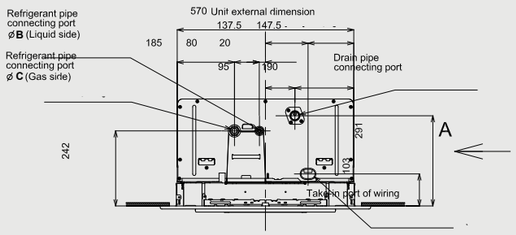




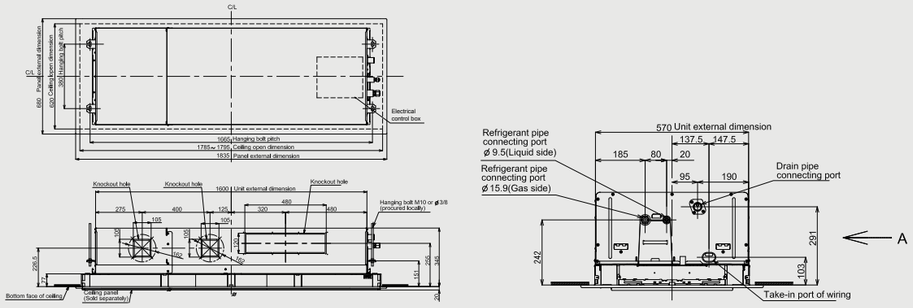
(Unit: mm)

MMU-UP0181WH-E to MMU-UP0301WH-E





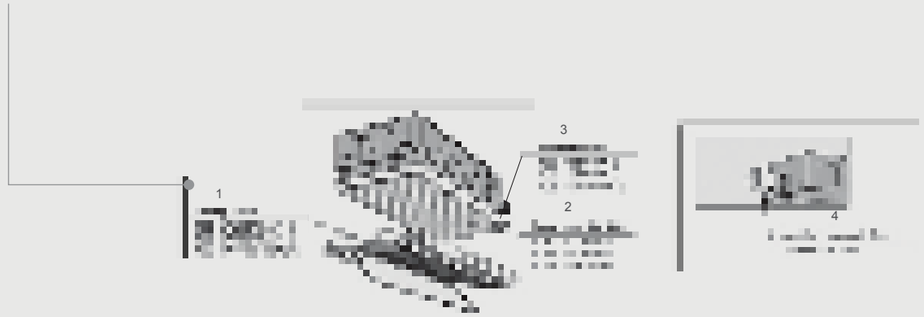
MMU-UP0361WH-E to
MMU-UP0561WH-E



(Unit: mm)

Accessories

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



1-WAY CASSETTE

MMU-UP YHP-E



The perfect choice

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

Design

- New white elegant panel design to match all types of interiors.

Flexibility

- 150mm chassis height adapted to low suspended ceilings conditions (YHP only).

Remote Control



RBC-ASCU11Y-ME

Comfort

- Low noise level down to 25 dB(A) for quiet operation.
- 5-speed fan operation for perfect air flow (YHP only).
- Air purifier available as an option to keep a fresh and clean environment (YHP only).

Technical specifications

Performances

Indoor unit	MMU-	UP0071YHP-E	UP0091YHP-E	UP0121YHP-E	UP0151YHP-E	UP0181YHP-E	UP0241YHP-E	UP0271YHP-E
Cooling capacity	kW	2.2	2.8	3.6	4.5	5.6	7.1	8.0
Heating capacity	kW	2.5	3.2	4.0	5.0	6.3	8.0	9.0
Power consumption	kW	0.017	0.018	0.018	0.025	0.027	0.042	0.05
Running current	A	0.18	0.19	0.20	0.24	0.26	0.34	0.41
Starting current	A	0.22	0.23	0.24	0.28	0.30	0.38	0.45

Physical Data

Indoor unit	MMU-	UP0071YHP-E	UP0091YHP-E	UP0121YHP-E	UP0151YHP-E	UP0181YHP-E	UP0241YHP-E	UP0271YHP-E
Air Flow (h/m/l)	m^3/h	500/390/270	520/410/290	540/420/290	750/630/500	800/650/500	940/760/600	1000/860/720
Air Flow (h/m/l)	l/s	139/108/75	144/114/81	150/117/81	208/175/139	222/181/139	261/211/167	278/239/200
Sound pressure level (h/m//l)	dB(A)	38/34/25	39/35/26	40/36/26	39/36/33	40/37/33	46/42/37	47/44/41
Dimensions (HxWxD)	mm	150x990x450	150x990x450	150x990x450	150x1180x450	150x1180x450	150x1180x450	150x1180x450
Weight	kg	14	14	14	15		16	
Panel dimensions (HxWxD)	mm	30x1220x530	30x1220x530	30x1220x530	30x1410x530	30x1410x530	30x1410x530	30x1410x530
Panel weight	kg	4	4	4	5	5	5	5
Connecting pipe, gas	inch/mm	3/8" φ9.5	3/8" φ9.5	3/8" φ9.5	1/2" φ12.7	1/2" φ12.7	5/8" φ15.9	5/8" φ15.9
Connecting pipe, liquid	inch/mm	1/4" φ6.4	1/4" φ6.4	1/4" φ6.4	1/4" φ6.4	1/4" φ6.4	3/8" φ9.5	3/8" φ9.5
Drain port diameter	mm	25	25	25	25	25	25	25
Power supply		1-phase 50Hz 230V (220–240V) / 1-phase 60Hz 220V (Separate power supply for indoor units required.)						

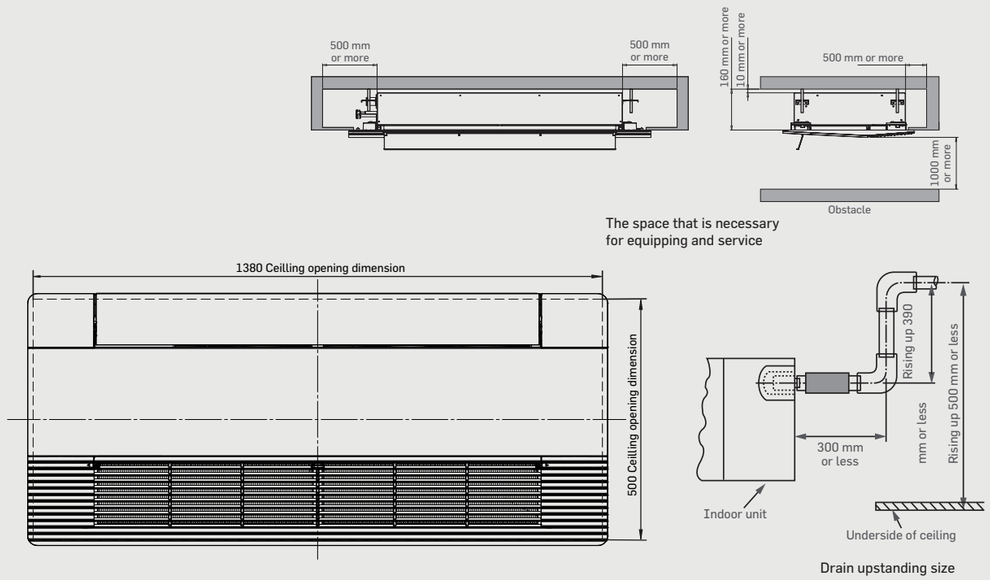
Comfort

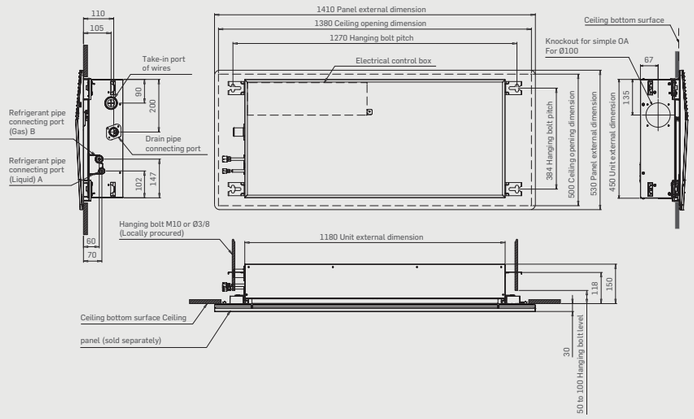
Note 1 : The capacities are measured under the conditions specified by JIS B 8615 based on the reference piping.

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-UP0071YHP-E to UP0271YHP-E



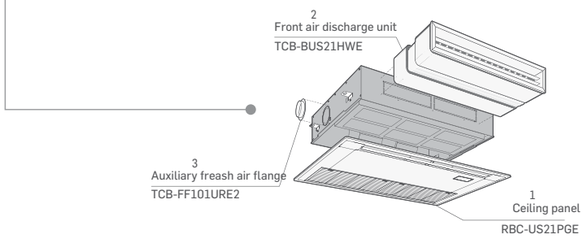


Model MMU-	A	B
UP0151, UP0181	Ø6.35	Ø12.7
UP0241, UP0271	Ø9.52	Ø15.88

(Unit : mm)

Accessories

No	Part name	Model name	Applied model	Note	Remarks
1	Panel	RBC-UY32P-E	MMU-UP_1YHP-E	1-Way cassette panel without receiver	Required accessory
		RBC-US21PGE	MMU-UP_1SH-E		Required accessory
2	Front air discharge unit	TCB-BUS21HWE			
3	Auxiliary fresh air flange	TCB-FF101URE2			For easy fresh air intake by using the knockout hole of indoor unit. (dia.=100 mm)
-	Air purifier kit	TCB-EAPC1UYHP-E	MMU-UP-1YHP-E	Set of Plasma Air Purifier, Dust sensor, Air quality indicator and Wireless receiver	
-	Occupancy sensor	TCB-SIR41UYP-E	MMU-UP-1YHP-E	Occupancy sensor	Cannot match with Wireless receiver Kit
-	Wireless receiver kit	RBC-AX33UYP-E	MMU-UP-1YHP-E	Wireless RC kit	receiver Kit Occupancy sensor



MMU-UP0151SH-E/TR, UP0181SH-E/TR, UP0241SH-

STANDARD DUCT

MMD-UP 1BHP-E



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

Comfort

- External static pressure can be raised up to 150 Pa for extensive ducting.
- Possible to connect a fresh air inlet duct to the unit, to maximise air quality and room air quality.
- Flexible design, allows the inlet air configuration to be configured between the standard rear inlet design or, from the underside of the unit.
- Built-in high-lift drain pump.
- An air discharge spigot is available as an option.

Remote Control

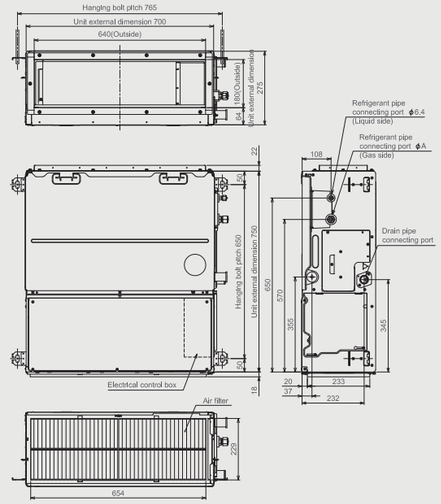


RBC-ASCU11Y-ME

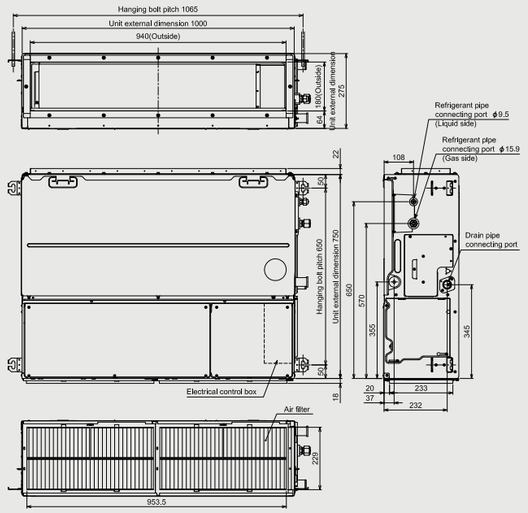
Hidden

- Slimline design, with a depth of just 275mm helps to simply the installation, even when space is limited.
- Superior low-noise operation. Noise output at a low fan equates to just 23 dB(A).

MMD-UP0071BHP-E to UP0181BHP-E



MMD-UP0241BHP-E to UP0301BHP-E



Technical specifications

Performances

Indoor unit	MMU-	UP0071BHP-E	UP0091BHP-E	UP0121BHP-E	UP0151BHP-E	UP0181BHP-E	UP0241BHP-E	UP0271BHP-E	UP0301BHP-E	UP0361BHP-E	UP0481BHP-E	UP0561BHP-E
Cooling capacity	kW	2.2	2.8	3.6	4.5	5.6	7.1	8.0	9.0	11.2	14.0	16.0
Heating capacity	kW	2.5	3.2	4.0	5.0	6.3	8.0	9.0	10.0	12.5	16.0	18.0
Power consumption	kW	0.055	0.060	0.060	0.110	0.110	0.135	0.135	0.160	0.220	0.290	0.290
Running current	A	0.35	0.38	0.38	0.70	0.70	0.80	0.80	0.95	1.29	1.70	1.70
Starting current	A	0.55	0.58	0.58	1.10	1.10	1.20	1.20	1.35	2.09	2.50	2.50

Physical Data

Indoor unit	MMU-	UP0071BHP-E	UP0091BHP-E	UP0121WH-E	UP0151WH-E	UP0181WH-E	UP0241BHP-E	UP0271WH-E	UP0301BHP-E	UP0361BHP-E	UP0481BHP-E	UP0561BHP-E
Air Flow (h/m/l)	m^3/h	540/450/360	570/480/390	570/480/390	920/660/540	920/660/540	1320/1090/870	1320/1090/870	1450/1200/960	1920/1620/1380	2350/1920/1500	2350/1920/1500
Air Flow (h/m/l)	l/s	150/125/100	158/133/108	158/133/108	256/183/150	256/183/150	367/303/242	367/303/242	403/333/267	533/450/383	653/533/417	653/533/417
Sound pressure level (h/m//l)	dB(A)	29/26/23	30/26/23	30/26/23	33/29/25	33/29/25	33/30/27	33/30/27	36/31/27	36/34/31	40/36/33	40/36/33
Dimensions (HxWxD)	mm	275x700x750	275x700x750	275x700x750	275x700x750	275x700x750	275x1000x750	275x1000x750	275x1000x750	275x1400x750	275x1400x750	275x1400x750
Weight	kg	23	23	23	23	23	30	30	30	40	40	40
Panel dimensions (HxWxD)	mm	30	30	30	30	30	40	40	40	50	50	50
Panel weight	kg	150	150	150	150	150	150	150	150	150	150	150
Connecting pipe, gas	inch/mm	3/8''φ9.5	3/8''φ9.5	3/8''φ9.5	1/2'' φ12.7	1/2'' φ12.7	5/8'' φ15.9	5/8'' φ15.9	5/8'' φ15.9	5/8'' φ15.9	5/8'' φ15.9	5/8'' φ15.9
Connecting pipe, liquid	inch/mm	1/4'' φ6.35	1/4'' φ6.35	1/4'' φ6.35	1/4'' φ6.35	1/4'' φ6.35	3/8'' φ9.5	3/8'' φ9.5	3/8'' φ9.5	3/8'' φ9.5	3/8'' φ9.5	3/8'' φ9.5
Drain port diameter	mm	25	25	25	25	25	25	25	25	25	25	25
Power supply		1-phase 50Hz 230V (220–240V) / 1-phase 60Hz 220V (Separate power supply for indoor units required.)										

Comfort

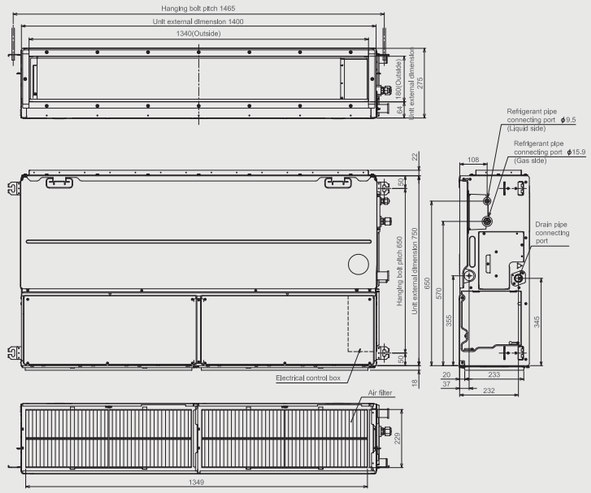
Note 1 : The capacities are measured under the conditions specified by JIS B 8615 based on the reference piping.

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

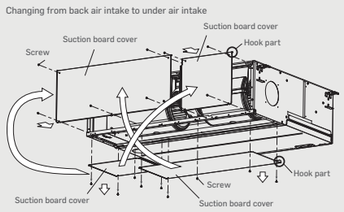
MMD-UP0071BHP-E to UP0181BHP-E

Accessories



(Unit:mm)

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



HIGH STATIC PRESSURE DUCT

MMU-UP YHP-E

MMD-UP0181-0561HP-E



MMD-UP0721-0961HP-E1



This is Toshiba's most powerful ducted unit delivering air flows up to 4800m3/h with an external static pressure of up to 250 Pa.

Design

- This ultra-flexible, invisible, and silent unit creates a pleasant and comfortable environment for a wide range of applications, such as hotels, offices and
- Shops. Diffuser design flexibility to select the right layout for the room shape and end-user requirements.

Healthy

- Renewal of indoor ambient air with the constant fresh air supply via the field-installed fresh air intake connection.
- Long-life filter and air discharge spigot available as an option.
- Built-in high-lift drain pump (sizes 18 to 56).

Remote Control



RBC-ASCU11Y-ME

Adaptability

- Unobtrusive, flexible and compact (298*mm depth), can be installed easily and discretely into any interior, making it the ideal solution for both new and refurbishing projects.
- Static pressure can be set to 7 levels from 50 to 250Pa.

Technical specifications

Performances

Indoor unit	MMU-	UP0181HP-E	UP0241HP-E	UP0271HP-E	UP0361HP-E	UP0481HP-E	UP0561HP-E	UP0721HP-E1	UP0961HP-E1
Cooling capacity	kW	5.6	7.1	8.0	11.2	14.0	16.0	22.4	28.0
Heating capacity	kW	6.3	8.0	9.0	12.5	16.0	18.0	25.0	31.5
Power consumption	kW	0.125	0.140	0.190	0.230	0.300	0.400	0.540	0.790
Running current	A	0.82	0.92	1.16	1.39	1.81	2.48	2.83	3.77
Starting current	A	1.12	1.22	1.46	1.89	2.41	3.08	7.80	7.80

Physical Data

Indoor unit	MMU-	UP0181HP-E	UP0241HP-E	UP0271HP-E	UP0361HP-E	UP0481HP-E	UP0561HP-E	UP0721HP-E1	UP0961HP-E1
Air Flow (h/m/l)	m^3/h	1100/990/900	1200/1050/960	1500/1350/1200	1920/1560/1340	2340/1980/1695	2760/2340/1920	3800/3200/2500	4800/4200/3500
Air Flow (h/m/l)	l/s	306/275/250	333/292/267	417/375/333	533/433/372	650/550/471	767/650/533	1056/889/694	1333/1167/972
Sound pressure level (h/m//l)	dB(A)	37/33/31	38/34/31	43/41/38	41/37/34	44/41/38	46/44/41	44/40/36	46/42/38
Dimensions (HxWxD)	mm	298x1000x750	298x1000x750	298x1000x750	298x1400x750	298x1400x750	298x1400x750	448x1400x900	448x1400x900
Weight	kg	34	34	34	43	43	43	97	97
Panel dimensions (HxWxD)	mm	100	100	100	100	100	100	150	150
Panel weight	kg	200	200	200	200	200	200	250	250
Connecting pipe, gas	inch/mm	1/2'' φ12.7	5/8'' φ15.88	5/8'' φ15.88	5/8'' φ15.88	5/8'' φ15.88	5/8'' φ15.88	7/8'' φ15.88	7/8'' φ22.23
Connecting pipe, liquid	inch/mm	1/4'' φ6.35	3/8'' φ9.52	3/8'' φ9.52	3/8'' φ9.52	3/8'' φ9.52	3/8'' φ9.52	3/8'' φ9.52	φ12.7
Drain port diameter	mm	25	25	25	25	25	25	25	25
Power supply		1-phase 50Hz 230V (220~240V) / 1-phase 60Hz 220V (Separate power supply for indoor units required.)							

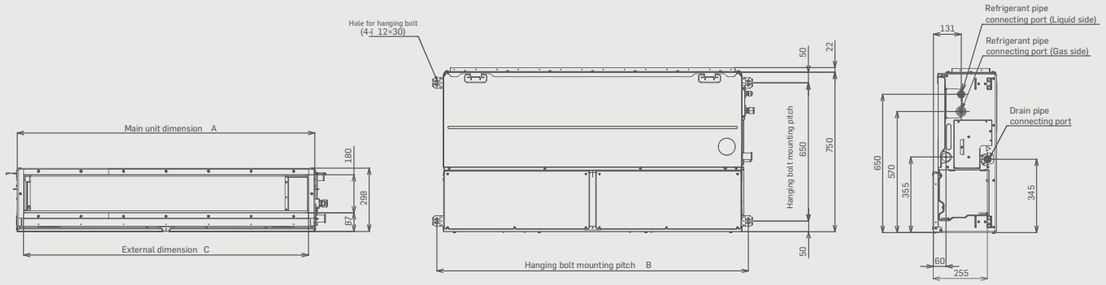
Comfort

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.

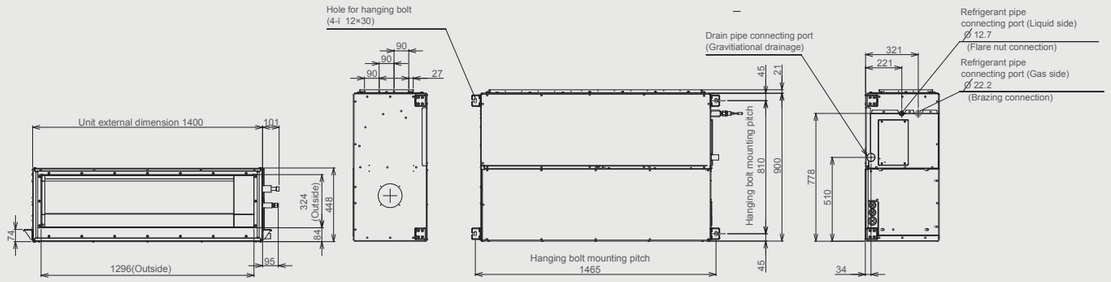
Note : Rated conditions Cooling : Indoor air temperature 27°C DB/19°C WB, Outdoor air temperature 35°C DB
Heating : Indoor air temperature 20°C DB, Outdoor air temperature 7°C DB/6°C WB

MMD-UP0181HP-E to UP0561HP-E



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

MMD-UP0721HP-E 1 to MMD-UP0961HP-E1



(Unit : mm)

Accessories

Type	Model name	Applied model	Appearance	Remarks
Spigot shaped flange	TCB-SF80C6BE	MMD-UP0181/0241/0271HP-E		263x994x175mm / Spigot diameter 200mm
	TCB-SF160C6BE	MMD-UP0361/0481/0561HP-E		263x1394x175mm / Spigot diameter 200mm
Long life filter kit	TCB-LK801D-E	MMD-UP0181/0241/0271HP-E		Flange shaped Mount chassis directly Upside down mounting possible Left and right removable
	TCB-LK1401D-E	MMD-UP0361/0481/0581HP-E		
	TCB-LK2801DP-E	MMD-UP0721/0961HP-E		
Auxiliary fresh air flange	TCB-FF151US-E	UP0181/0241/0271/0361/0481/0581HP-E		
Drain pump kit	TCB-DP40DPE	MMD-AP0721/0961HP-E		

SLIM DUCT

MMD-UP 1SPHY-E



Whatever installed in a ceiling void or suspended ceiling, Toshiba slim duct offers the best compromise between sound level, air flow and chassis dimensions.

Comfort

- Quiet operation with a noise level down to 26 dB(A) perfect for bedrooms.
- 5-speed fan operation for perfect air flow adaptation.

Easy installation

- Built-in drain pump.
- Air suction from rear or bottom.

Remote Control



RBC-ASCU11Y-ME

Flexibility

- Compact chassis with 210mm height and 450mm depth whatever the capacity, for integration in most projects.
- Static pressure up to 50Pa set directly on the duct or by using a wired remote controller.

Technical specifications

Performances

Indoor unit	MMU-	UP0071SPHY-E	UP0091SPHY-E	UP0121SPHY-E	UP0151SPHY-E	UP0181SPHY-E	UP0241SPHY-E	UP0271SPHY-E
Cooling capacity	kW	2.2	2.8	3.6	4.5	5.6	7.1	8.0
Heating capacity	kW	2.5	3.2	4.0	5.0	6.3	8.0	9.0
Power consumption	kW	0.026 / 0.026	0.029 / 0.029	0.031 / 0.031	0.035 / 0.035	0.044 / 0.044	0.067 / 0.067	0.072 / 0.072
Running current	A	0.40 / 0.42	0.42 / 0.44	0.44 / 0.46	0.47 / 0.49	0.53 / 0.56	0.69 / 0.73	0.74 / 0.78
Starting current	A	0.69 / 0.73	0.73 / 0.77	0.77 / 0.81	0.82 / 0.86	0.92 / 0.97	1.21 / 1.27	1.30 / 1.36

Physical Data

Indoor unit	MMU-	UP0071SPHY-E	UP0091SPHY-E	UP0121SPHY-E	UP0151SPHY-E	UP0181SPHY-E	UP0241SPHY-E	UP0271SPHY-E
Air Flow (H/M+/M/L+/L)	m^3/h	540/500/460/430/400	570/530/500/450/420	600/550/520/470/440	690/660/640/590/550	780/760/730/690/650	1080/1010/950/900/860	1140/1060/980/940/910
Sound pressure level (h/m//l)	l/s	150/139/128/119/111	158/147/139/125/117	167/153/144/131/122	192/183/178/164/153	217/211/203/192/181	300/281/264/250/239	317/294/272/261/253
Sound pressure level*, rear suction (H/M+/M/L+/L)	dB(A)	31/30/29/28/26	32/31/29/28/26	33/32/30/29/27	33/31/30/29/28	34/33/32/31/29	36/35/33/32/30	37/36/34/33/32
Sound pressure level*, bottom suction (H/M+/M/L+/L)	dB(A)	41/40/39/38/35	42/41/40/38/36	44/42/40/39/37	42/40/39/38/37	44/43/42/41/39	47/46/44/43/41	48/47/45/44/43
Sound power level* (H/M+/M/L+/L)		52/51/49/47/45	54/52/50/48/46	54/51/50/48/46	52/51/50/49/46	56/55/54/52/51	60/58/56/55/53	61/59/58/56/55
Dimensions (HxWxD)	mm	210x700x450			210x900x450		210x1110x450	
Weight	kg	16			19		22	
External static pressure	Pa	10	10	10	10	10	10	10
Max external static pressure	Pa	50	50	50	50	50	50	50
Connecting pipe, gas	inch/mm	3/8'' φ9.5	3/8'' φ9.5	3/8'' φ9.5	1/2'' φ12.7	1/2'' φ12.7	5/8'' φ15.9	5/8'' φ15.9
Connecting pipe, liquid	inch/mm	1/4'' φ6.4	1/4'' φ6.4	1/4'' φ6.4	1/4'' φ6.4	1/4'' φ6.4	3/8'' φ9.5	3/8'' φ9.5
Drain port diameter	mm	25	25	25	25	25	25	25
Power supply		1-phase 50Hz 230V (220–240V) / 1-phase 60Hz 220V (Separate power supply for indoor units required.)						

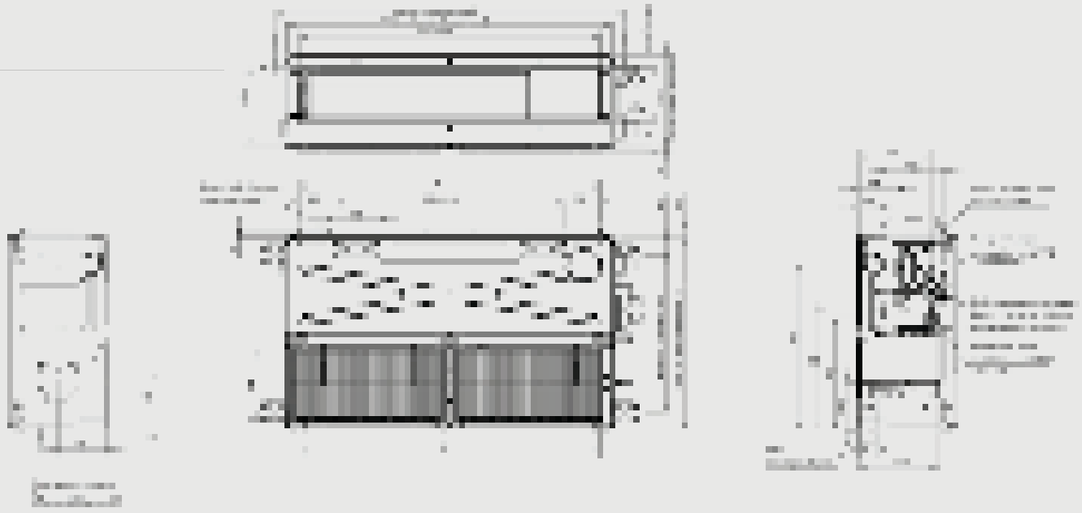
Comfort

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

MMD-UP0071SPHY-E to UP0271SPHY-E

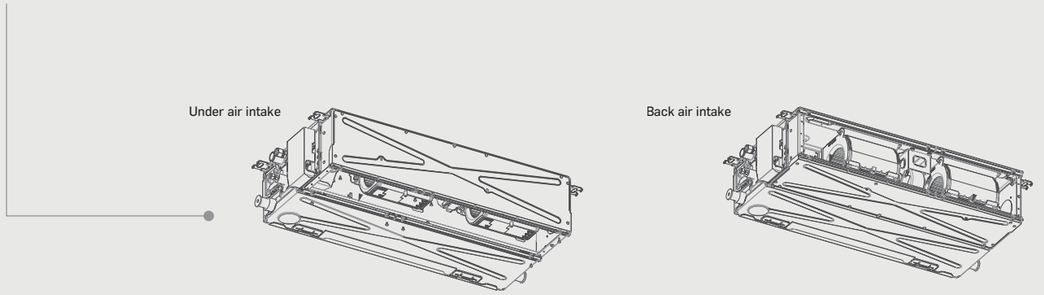


MMD-UP***1SPHY-E	007～012	015～018	024～027
A	650	850	1050
B	700	900	1100
C	770	970	1170
D	5	7	9
E	500	700	900
F	655	855	1055
G	6.4		9.5
H	9.5	12.7	15.9

(Unit: mm)

Accessories

No	Part name	Model name	Applied model	Remarks
1	Auxiliary fresh air flange	TCB-FF101URE2	RBC-UM21PG(W)-E	For fresh air intake by using the knockout hole of indoor unit (dia.=100 mm)



CEILING TYPE

MMC-UP 1HP-E



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

Adaptability

- This design, represents the best possible solution, where there is a lack of space or absence of a ceiling void.
- The simplicity of the design and the installations of the unit, makes it suited for a wide range of applications, but particularly refurbishment projects.

New Designed Wide Flap

- Self-cleaning function, enables the air flow to remain constant and fresh and reduces the frequency of service visits.
- Drain pump available as an option.

Remote Control

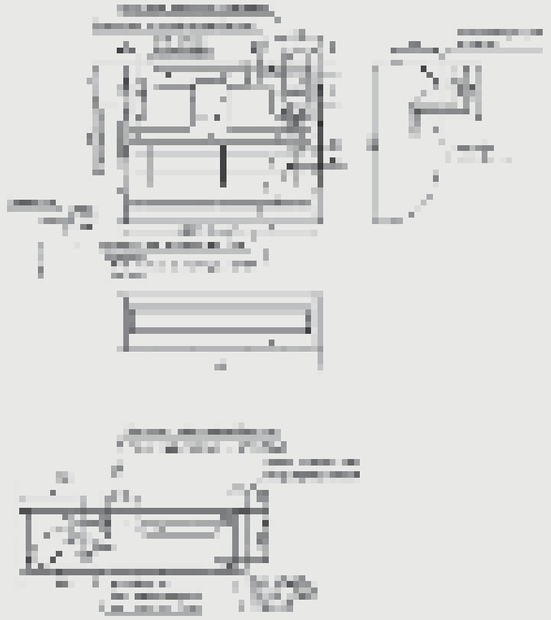


RBC-ASCU11Y-ME

Comfort

- Optimum louver control: air flow angle is automatically set to the most suitable setting according to your cooling or heating needs, and an automatic swing mode enables air flow to reach all areas in the room.
- High air flow distance up to 8m.
- Low noise levels, thanks to high diameter fan and DC motor.

MMC-UP0151HP-E to
MMC-UP0181HP-E



MMC-UP0241HP-E to
MMC-UP0271HP-E



Technical specifications

Performances

Indoor unit	MMU-	UP0151HP-E	UP0181HP-E	UP0241HP-E	UP0271HP-E	UP0361HP-E	UP0481HP-E	UP0561HP-E
Cooling capacity	kW	4.5	5.6	7.1	8.0	11.2	14.0	16.0
Heating capacity	kW	5.0	6.3	8.0	9.0	12.5	16.0	18.0
Power consumption	kW	0.033	0.034	0.067	0.067	0.083	0.083	0.111
Running current	A	0.38	0.39	0.68	0.68	0.80	0.80	1.03
Starting current	A	0.54	0.55	0.97	0.97	1.16	1.16	1.49

Physical Data

Indoor unit	MMU-	UP0151HP-E	UP0181HP-E	UP0241HP-E	UP0271HP-E	UP0361HP-E	UP0481HP-E	UP0561HP-E
Air Flow (h/l)	m^3/h	840/690/540	960/720/540	1440/1020/750	1440/1020/750	1860/1350/1020	1860/1530/1200	2040/1650/1260
Air Flow (h/l)	l/s	233/192/150	267/200/150	400/283/208	400/283/208	517/375/283	517/425/333	567/458/350
Sound pressure level (h/l)	dB(A)	36/34/28	37/35/28	41/36/29	41/36/29	44/38/32	44/41/35	46/42/36
Dimensions (HxWxD)	mm	235x952x690	235x952x690	235x1270x690	235x1270x690	235x1586x690	235x1586x690	235x1586x690
Weight	kg	24	24	30	30	39	39	39
Connecting pipe, gas	inch/mm	1/2'' φ12.7	1/2'' φ12.7	5/8'' φ15.88	5/8'' φ15.88	5/8'' φ15.88	5/8'' φ15.88	5/8'' φ15.88
Connecting pipe, liquid	inch/mm	1/4'' φ6.35	1/4'' φ6.35	3/8'' φ9.52	3/8'' φ9.52	3/8'' φ9.52	3/8'' φ9.52	3/8'' φ9.52
Drain port diameter	mm	20	20	20	20	20	20	20
Power supply		1-phase 50Hz 230V (220–240V) / 1-phase 60Hz 220V (Separate power supply for indoor units required.)						

Comfort

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

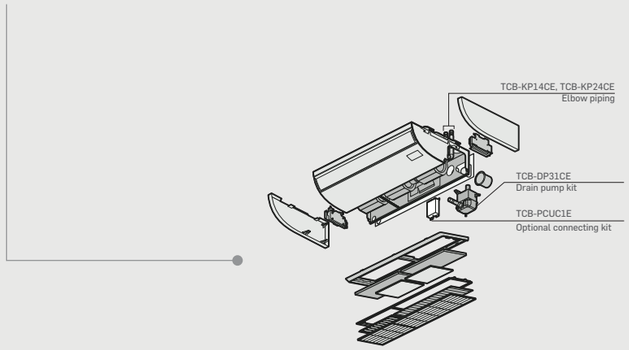
MMC-UP0361HP-E to
MMC-UP0561HP-E



(Unit:mm)

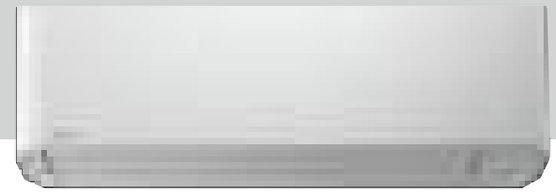
Accessories

No	Part name	Model name	Applied model	Feature	Remark
1	Wireless Remote Controller kit	RBC-AXU31C-E	MMC-UP0151 to 0561HP-E	—	
2	Drain pump kit	TCB-DP31CE	MMC-UP0151 to 0561HP-E	Antibacterial glass is built into drain pump kit	
3	Elbow piping kit	TCB-KP14CPE	MMC-UP0151 to 0181HP-E	It is necessary for installation of drain pump kit	Use with TCB-DP31CE
		TCB-KP24CPE	MMC-UP0241 to 0561HP-E		
4	Option connecting kit	TCB-PCUC2E	MMC-UP0151 to 0561HP-E	For external I/O signal without local relay preparation	



HIGH-WALL TYPE

MMK-UP HP-AE



Elegant and slim

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



Wireless
remote controller

Compact and design

- The unit is compact and lightweight, it is perfect for installation above the doors or in narrow corridors.
- New appearance, simple, elegant with nice led display.

Healthy

- Special fin coating for Healthy & Fresh air.

Technical specifications

Performances

Indoor unit	MMK-	UP0071HP-AE	UP0091HP-AE	UP0121HP-AE	UP0151HP-AE	UP0181HP-AE	UP0241HP-AE	UP0271HP-AE	UP0301HP-AE	UP0361HP-AE
Cooling capacity	kW	2.2	2.8	3.6	4.5	5.6	7.1	8.0	9	11.2
Heating capacity	kW	2.5	3.2	4.0	5.0	6.3	8.0	9.0	10	12.5
Power consumption	kW	0.015	0.016	0.017	0.028	0.032	0.050	0.034	0.054	0.066
Running current	A	0.16	0.17	0.18	0.26	0.29	0.40	0.3	0.5	0.06
Starting current	A	0.20	0.21	0.22	0.35	0.38	0.50	0.34	0.5	0.6

Physical Data

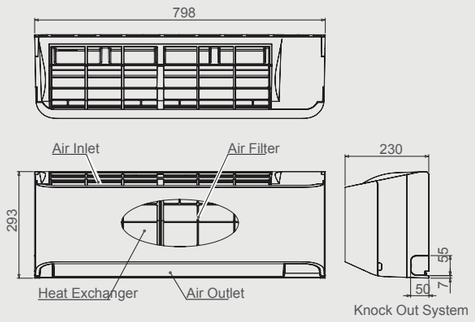
Indoor unit	MMK-	UP0071HP-AE	UP0091HP-AE	UP0121HP-AE	UP0151HP-AE	UP0181HP-AE	UP0241HP-AE	UP0271HP-AE	UP0301HP-AE	UP0361HP-AE
Air Flow (h/m/l)	m^3/h	480/385/270	510/395/270	540/410/270	840/690/550	900/720/550	1200/900/600	1200/1000/800	1500/1300/1100	1650/1350/1250
Air Flow (h/m/l)	l/s	133/107/75	141/110/75	150/114/75	233/192/153	250/200/153	333/250/167	333/277/222	403/361/305	458/375/347
Sound pressure level (h/m//l)	dB(A)	35/33/30/28/25	36/34/31/28/25	37/35/32/28/25	40/38/36/34/32	41/39/37/35/32	45/42/39/36/33	43/41/39	48/44/41	50/45/43
Dimensions (HxWxD)	mm	293x798x230	293x798x230	293x798x230	320x1050x250	320x1050x250	320x1050x250	348x1200x280	348x1200x280	348x1200x280
Weight	kg	11	11	11	16	16	16	21	21	21
Connecting pipe, gas	inch/mm	3/8"φ9.52	3/8"φ9.52	3/8"φ9.52	1/2"φ12.7	1/2"φ12.7	5/8'φ15.88	5/8'φ15.88	5/8'φ15.88	5/8'φ15.88
Connecting pipe, liquid	inch/mm	1/4"φ6.35	1/4"φ6.35	1/4"φ6.35	1/4"φ6.35	1/4"φ6.35	3/8"φ9.53	3/8"φ9.53	3/8"φ9.53	3/8"φ9.53
Drain port diameter	mm	16	16	16	16	16	16	16	16	16
Power supply		1-phase 50Hz 230V (220–240V) / 1-phase 60Hz 220V (Separate power supply for indoor units required.)								

Comfort

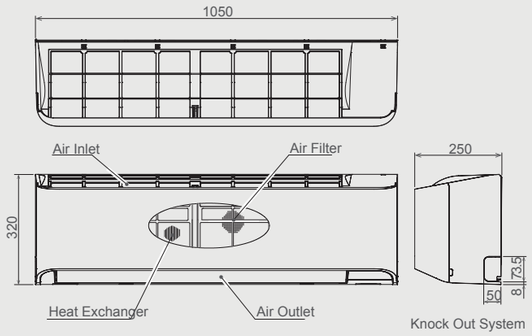
Note 1 : The capacities are measured under the conditions specified by JIS B 8615 based on the reference piping.
Note 2 : The sound level are measured in an anechoic chamber in accordance with JIS B 8616.
Normally, the values measured in the actual operating environment become larger than the indicated 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

MMK- UP0071HP-AE to UP0361HP-AE

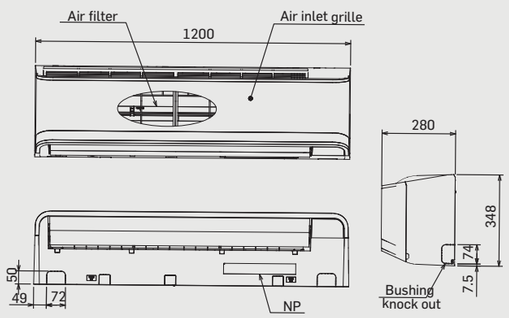
MMK-UP0071HP-AE to MMK-UP0121HP-AE



MMK-UP0151HP-AE to MMK-UP0241HP-AE



MMK-UP0271HP-AE to MMK-UP0361HP-AE



(Unit: mm)



FLOOR STANDING

MMF-UP 1H-E



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

Optimized air flow

- The unit has been designed to have particularly high air flow rates, which correspond into superior air throw values.
- The wide and automatic vertical and horizontal air distribution angles, allow the air flow distribution to reach all areas, even when installed into large rooms.
- High air flows: from 180 l/s to 600 l/s (660 m3/h to 2160 m3/h).
- Wide air distribution angle: up to 150°.

Wide range

- Large capacity range: cooling capacities from 4.5 kW to 16 kW and heating capacities from 5 kW to 18 kW.

Remote Control



RBC-ASCU11Y-ME

Installation everywhere

- The unit can be installed in the corner of the room, in this case the automatic swing angle can be fixed to deliver the air only where it is needed.
- Very small footprint: 0.128 m2 up to 8 kW and 0.243 m2 up to 16 kW.

Technical specifications

Performances

Indoor unit	MMF-	UP0151H-E	UP0181H-E	UP0241H-E	UP0271H-E	UP0361H-E	UP0481H-E	UP0561H-E
Cooling capacity	kW	4.5	5.6	7.1	8.0	11.2	14.0	16.0
Heating capacity	kW	5.0	6.3	8.0	9.0	12.5	16.0	18.0
Power consumption	kW	0.053/0.053	0.053/0.053	0.087/0.087	0.087/0.087	0.133 / 0.133	0.158 / 0.158	0.158 / 0.158
Running current	A	0.37 / 0.38	0.37 / 0.38	0.55 / 0.58	0.55 / 0.58	0.82 / 0.86	0.97 / 1.02	0.97 / 1.02
Starting current	A	0.48 / 0.50	0.48 / 0.50	0.71/ 0.75	0.71/ 0.75	1.06 / 1.11	1.27 / 1.33	1.27 / 1.33

Physical Data

Indoor unit	MMF-	UP0151H-E	UP0181H-E	UP0241H-E	UP0271H-E	UP0361H-E	UP0481H-E	UP0561H-E
Air Flow (h/l)	m^3/h	820/700/600	820/700/600	930/770/640	930/770/640	1660/1420/1170	1760/1480/1350	1760/1480/1350
Air Flow (h/l)	l/s	228/194/167	228/194/167	258/214/178	258/214/178	461/394/325	489/411/375	489/411/375
Sound pressure level (h/l)	dB(A)	46/42/38	46/42/38	50/45/41	50/45/41	51/46/41	53/48/45	53/48/45
Dimensions (HxWxD)	mm	1750x600x210	1750x600x210	1750x600x210	1750x600x210	1750x600x390	1750x600x390	1750x600x390
Weight	kg	46	46	47	47	61	61	61
Connecting pipe, gas	inch/mm	1/2'' φ12.7	1/2'' φ12.7	1/2'' φ15.9	1/2'' φ15.9	1/2'' φ15.9	1/2'' φ15.9	1/2'' φ15.9
Connecting pipe, liquid	inch/mm	1/4'' φ6.4	1/4'' φ6.4	3/8'' φ9.5	3/8'' φ9.5	3/8'' φ9.5	3/8'' φ9.5	3/8'' φ9.5
Drain port diameter	mm	20	20	20	20	20	20	20
Power supply		1-phase 50Hz 230V (220–240V) / 1-phase 60Hz 220V (Separate power supply for indoor units required.)						

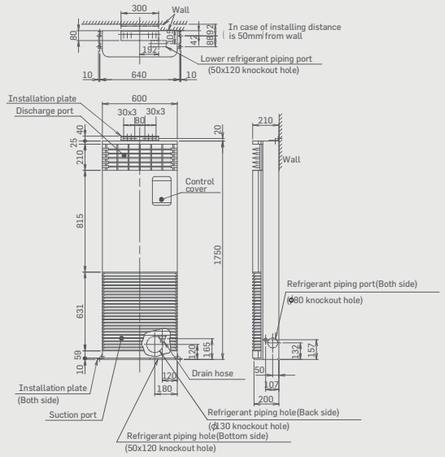
Comfort

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.

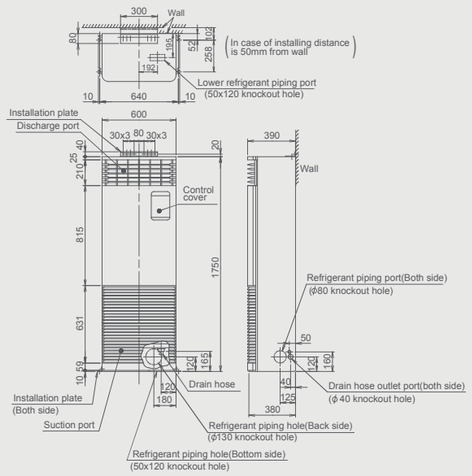
Note : Rated conditions Cooling : Indoor air temperature 27°C DB/19°C WB, Outdoor air temperature 35°C DB
Heating : Indoor air temperature 20°C DB, Outdoor air temperature 7°C DB/6°C WB

MMF-UP0151H-E to MMF-UP0271H-E



(Unit:mm)

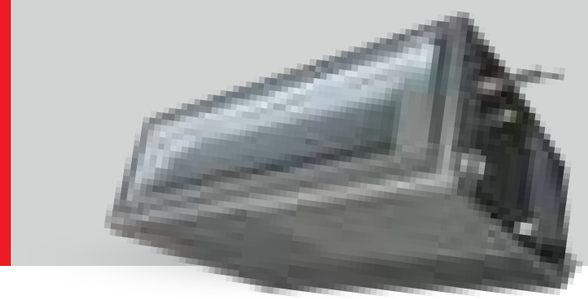
MMF-UP0361H-E to MMF-UP0561H-E



(Unit:mm)

FRESH AIR INTAKE INDOOR UNIT

MMD-UP HFP-E



AHU alternative

- Ideal solution for all buildings that require fresh air ventilation.
- Air flow up to 2,100 m3/h.
- Up to 200Pa available pressure.

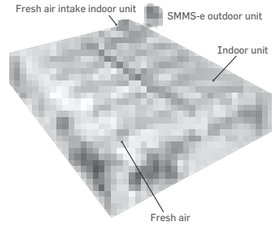
Features

- Compact and lighter chasis.
- Wide air flow range with 5 fan speed.
- Increase in external static pressure settings (7 levels) by DN code.
- High effeciency filters are available (Optional).

Remote Control



RBC-ASCU11Y-ME



Air controller for fresh-air intake

- This indoor unit manages and treats the fresh air intake before it will be distributed into the building.

Technical specifications

Performances

Indoor unit		MMF-	UP0481HFP-E	UP0721HFP-E1	UP0961HFP-E1	UP01211HFP-E1	UP01281HFP-E1
Cooling capacity		kW	14.0	22.4	28.0	33.5	40.0
Heating capacity		kW	8.9	13.9	17.4	20.8	25.2
Power consumption		kW	0.110	0.160	0.200	0.250	0.330
Running current		A	0.77	0.86	1.07	1.30	1.83
Starting current		A	2.01	7.80	7.80	7.8	7.8

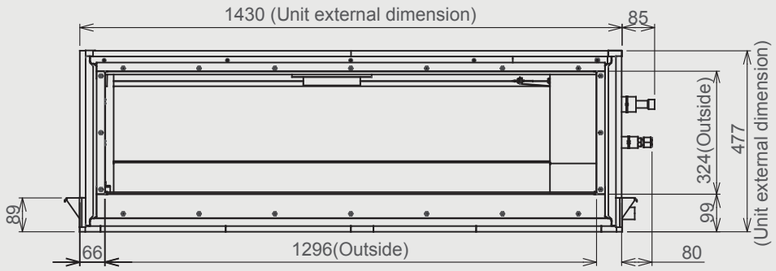
Physical Data

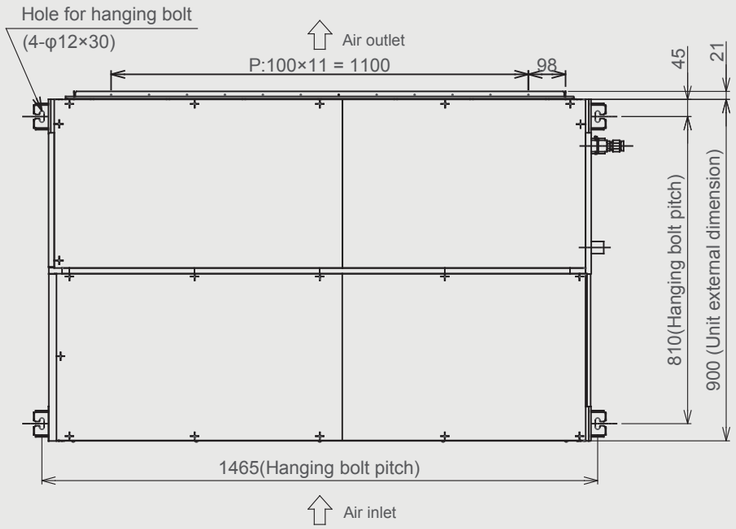
Indoor unit		MMF-	UP0481HFP-E	UP0721HFP-E1	UP0961HFP-E1	UP01211HFP-E1	UP01281HFP-E1
Air Flow (h)		m^3/h	1080/990/930/840/760	1680/1560/1440/1320/1200	2100/1950/1800/1620/1470	2520/2340/2130/1950/1770	3060/2820/2580/2370/2130
Air Flow (h)		l/s	300/275/258/233/211	467/433/400/367/333	583/542/500/450/408		
Sound pressure level		dB(A)	38/37/35/32/31	38/37/36/35/33	39/38/36/35/33	40/39/37/36/34	42/40/38/37/35
Dimensions (HxWxD)		mm	327x1430x750	477x1430x900	477x1430x900	477x1430x900	477x1430x900
Weight		kg	44	99	99	99	99
External static pressure		Pa	50-75-100-125-150-175-200	50-75-100-125-150-175-200	50-75-100-125-150-175-200	50-75-100-125-150-175-200	50-75-100-125-150-175-200
Eexternal static pressure - factory setting		Pa	100	100	100	100	100
Connecting pipe, gas		inch/mm	5/8'' φ15.9	7/8'' φ22.2	7/8'' φ22.2	1 1/8'' φ28.6	1 1/8'' φ28.6
Connecting pipe, liquid		inch/mm	3/8''φ9.5	1/2'' φ12.7	1/2'' φ12.7	1/2'' φ12.7	5/8'' φ15.9
Drain port diameter		mm	25	25	25	25	25
Power supply			1-phase 50Hz 230V (220~240V) / 1-phase 60Hz 220V (Separate power supply for indoor units required.)				
Operation range for SMMS-e	Cooling (*2)	˚C	46(Note 4)				
	Heating (*3)	˚C	-5/46				

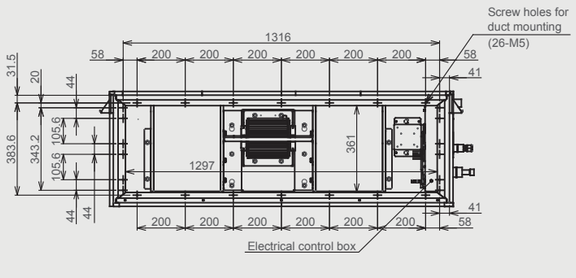
* The setting temperature is 13 - 25˚C (standard FCU.. 18 - 30 ˚C).
* Height difference between Fresh Air Intake Indoor units must be within 5 m.

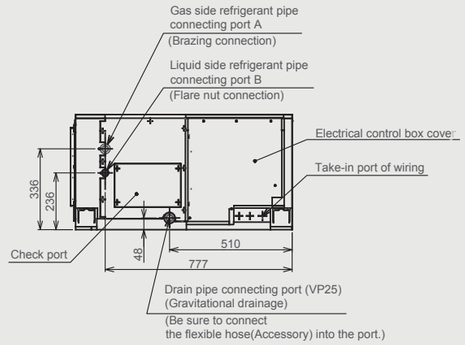
Note 1 : Rated conditions
Cooling : Outdoor air temperature 33˚C DB/28˚C WB setting 18˚C
Heating : Outdoor air temperature 0˚C DB/-2.9˚C WB setting temperature 25˚C
Note 2 : When supply air temperature is "setting temperature + 3˚C" or less, Fresh Air Intake unit operates as FAN mode
Note 3 : When supply air temperature is "setting temperature -3˚C" or over, Fresh Air Intake unit operates as FAN mode
Note 4: All Fresh Air system support up to 46˚C operation
In case the system mixing with AC indoor units, there may have cooling capacity impact over 43˚C

MMD-UP0481HFP-E to UP011281HFP-E1







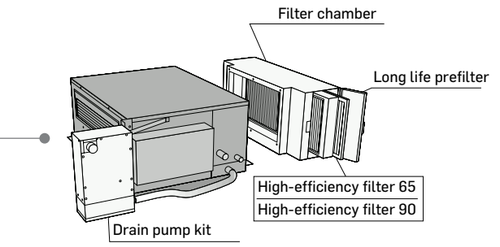


(Unit: mm)

Accessories

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

Appearance	Remarks



CONSOLE

MML-UP 1NHP-E



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



Wireless
remote controller

Technical specifications

Performances

Indoor unit	MML-	UP0071NHP-E	UP0091NHP-E	UP0121NHP-E	UP0151NHP-E	UP0181NHP-E
Cooling capacity	kW	2.2	2.8	3.6	4.5	5.6
Heating capacity	kW	2.5	3.2	4.0	5.0	6.3
Power consumption	kW	0.021	0.021	0.025	0.034	0.052
Running current	A	0.17	0.17	0.19	0.25	0.36
Starting current	A	0.26	0.26	0.30	0.38	0.56

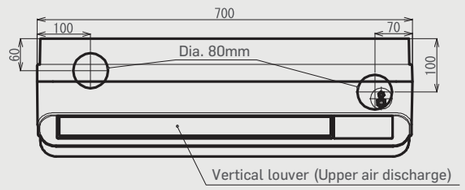
Physical Data

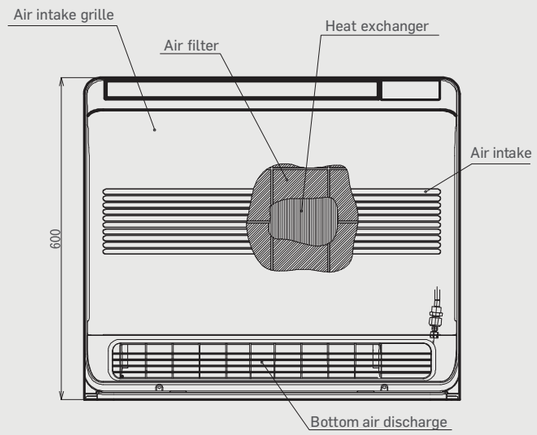
Indoor unit	MML-	UP0071NHP-E	UP0091NHP-E	UP0121NHP-E	UP0151NHP-E	UP0181NHP-E
Air Flow (h/l)	m³/h	510/366/282	510/366/282	552/408/324	624/468/384	726/528/426
Air Flow (h/l)	l/s	142/102/78	142/102/78	153/113/90	173/130/107	202/147/118
Sound pressure level (h/l)	dB(A)	38/32/26	38/32/26	40/34/29	43/37/31	47/40/34
Sound power level (h/l)	dB(A)	53/47/41	53/47/41	55/49/44	58/52/46	62/55/49
Dimensions (HxWxD)	mm	600x700x220	600x700x220	600x700x220	600x700x220	600x700x220
Weight	kg	17	17	17	17	17
Connecting pipe, gas	inch/mm	3/8'' φ9.52	3/8'' φ9.52	3/8'' φ9.52	1/2''	1/2''
Connecting pipe, liquid	inch/mm	1/4'' φ6.35	1/4'' φ6.35	1/4'' φ6.35	1/4'' φ6.35	1/4'' φ6.35
Drain port diameter	mm	16	16	16	16	16
Power supply		1-phase 50Hz 230V (220–240V) / 1-phase 60Hz 220V (Separate power supply for indoor units required.)				

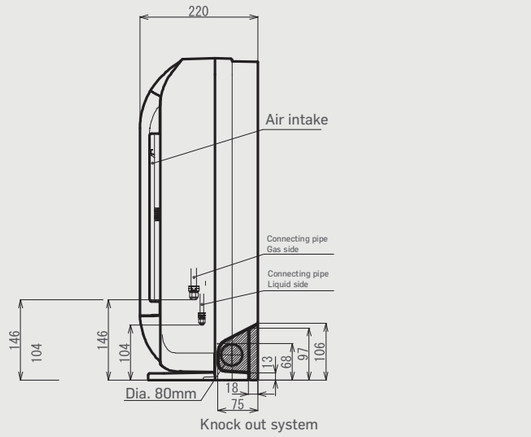
Comfort

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

MML-UP0071NHP-E to UP0181NHP-E







(Unit: mm)



FLOOR STANDING CABINET

MML-UP 1H-E



Simple design

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

Adaptability

- With just one single cabinet size, for all capacity models, allows a single model range to be installed within a building, giving the installation a uniform and clean look.
- Minimum space required for installation and servicing.
- Refrigerant and drain piping with four installation possibilities: top, rear, left or right hand of the unit.

Remote Control



RBC-ASCU11Y-ME

Comfort

- The units have as standard the ability to flow air in a horizontal direction, however with a simple change during the installation process, the unit can be configured, so that the air flow goes in the upward direction, maximising the flexibility of the design.

Technical specifications

Performances

Indoor unit	MML-	UP0071H-E	UP0091H-E	UP0121H-E	UP0151H-E	UP0181H-E	UP0241H-E
Cooling capacity	kW	2.2	2.8	3.6	4.5	5.6	7.1
Heating capacity	kW	2.5	3.2	4.0	5.0	6.3	8.0
Power consumption	kW	0.056 / 0.053	0.056 / 0.053	0.092 / 0.092	0.092 / 0.092	0.102 /0.113	0.102 /0.113
Running current	A	0.26 / 0.25	0.26 / 0.25	0.43 / 0.44	0.43 / 0.44	0.47 / 0.53	0.47 / 0.53
Starting current	A	0.6 / 0.6	0.6 / 0.6	0.8 /0.8	0.80	1.10	1.10

Physical Data

Indoor unit	MML-	UP0071H-E	UP0091H-E	UP0121H-E	UP0151H-E	UP0181H-E	UP0241H-E
Air Flow (h/l)	m^3/h	480/420/360	480/420/360	900/780/650	900/780/650	1080/930/780	1080/930/780
Air Flow (h/l)	l/s	133/117/100	133/117/100	250/217/181	250/217/181	300/258/217	300/258/217
Sound pressure level (h/l)	dB(A)	39/37/35	39/37/35	45/41/38	45/41/38	49/44/39	49/44/39
Dimensions (HxWxD)	mm	630x950x230	630x950x230	630x950x230	630x950x230	630x950x230	630x950x230
Weight	kg	35	35	35	35	38	38
Connecting pipe, gas	inch/mm	3/8'' φ9.5	3/8'' φ9.5	3/8'' φ9.5	1/2'' φ12.7	1/2'' φ12.7	5/8'' φ15.8
Connecting pipe, liquid	inch/mm	1/4'' φ6.4	1/4'' φ6.4	1/4'' φ6.4	1/4'' φ6.4	1/4'' φ6.4	3/8'' φ9.5
Drain port diameter	mm	20	20	20	20	20	20
Power supply		1-phase 50Hz 230V (220–240V) / 1-phase 60Hz 220V (Separate power supply for indoor units required.)					

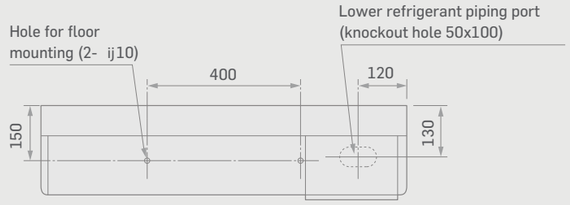
Comfort

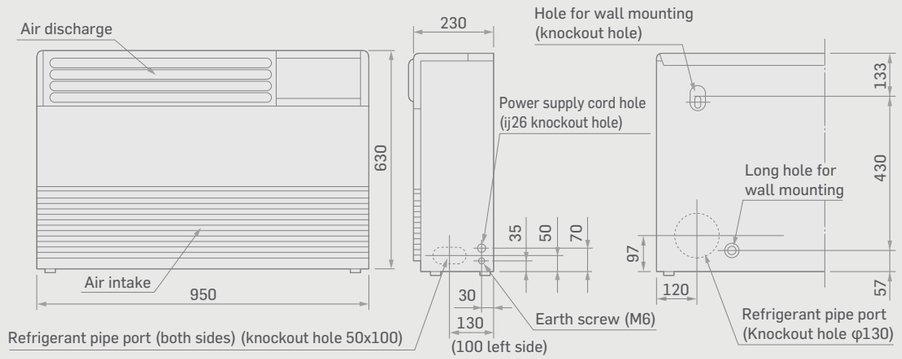
Note 1 : The capacities are measured under the conditions specified by JIS B 8615 based on the reference piping.

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

MML-UP0071H-E to UP0241H-E





(Unit: mm)

FLOOR STANDING CONCEALED

MML-UP 1BH-E



Specialized

- Not only is this unit ideal for office and other commercial buildings, it fits perfectly for specialist applications such as a library or hospital building.

Easy to hidden

- Very compact design, which can be installed under a window sill, that is only 600mm in height.
- With its limited depth of only 220mm, the unit can be installed along the wall ensuring maximum space saving.

Accessibility

- Removable split front panel with immediate access to the main components.

Remote Control



RBC-ASCU11Y-ME

Compact

- This unit has been designed to be fitted easily into a compact space behind a decorative panel, allowing the unit to blend into any room interior. This chassis is compact and slim, it is very easy to install and to conceal behind a decorative panel to blend with any room interior.

Technical specifications

Performances

Indoor unit	MML-	UP0071BH-E	UP0091BH-E	UP0121BH-E	UP0151BH-E	UP0181BH-E	UP0241BH-E
Cooling capacity	kW	2.2	2.8	3.6	4.5	5.6	7.1
Heating capacity	kW	2.5	3.2	4.0	5.0	6.3	8.0
Power consumption	kW	0.056 / 0.058	0.056 / 0.058	0.056 / 0.058	0.090 /0.096	0.090 /0.096	0.095 /0.110
Running current	A	0.25 / 0.27	0.25 / 0.27	0.25 / 0.27	0.45 /0.46	0.45 /0.46	0.46/0.51
Starting current	A	0.6 /0.6	0.6 /0.6	0.6 /0.6	0.8 / 0.8	0.8 / 0.8	1.00 /1.00

Physical Data

Indoor unit	MML-	UP0071BH-E	UP0091BH-E	UP0121BH-E	UP0151BH-E	UP0181BH-E	UP0241BH-E
Air Flow (h/l)	m^3/h	460/400/300	460/400/300	460/400/300	740/600/490	740/600/490	950/790/640
Air Flow (h/l)	l/s	128/111/83	128/111/83	128/111/83	206/167/136	206/167/136	264/219/178
Sound pressure level (h//l)	dB(A)	36/34/32	36/34/32	36/34/32	36/34/32	36/34/32	42/37/33
Dimensions (HxWxD)	mm	600x745x220	600x745x220	600x745x220	600x1045x220	600x1045x220	600x1045x220
Weight	kg	21	21	21	28	28	28
Connecting pipe, gas	inch/mm	3/8'' φ9.5	3/8'' φ9.5	3/8'' φ9.5	1/2'' φ12.7	1/2''φ12.7	5/8'' φ15.9
Connecting pipe, liquid	inch/mm	φ6.4	1/4''	1/4''	1/4''	1/4''	3/8'' φ9.5
Drain port diameter	mm	20	20	20	20	20	20
Power supply		1-phase 50Hz 230V (220–240V) / 1-phase 60Hz 220V (Separate power supply for indoor units required.)					

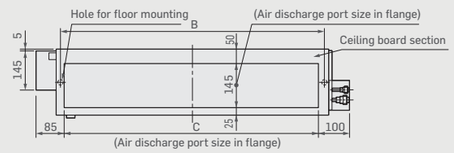
Comfort

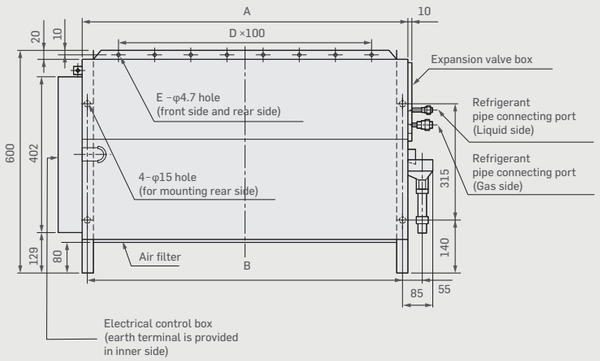
Note 1 : The capacities are measured under the conditions specified by JIS B 8615 based on the reference piping.

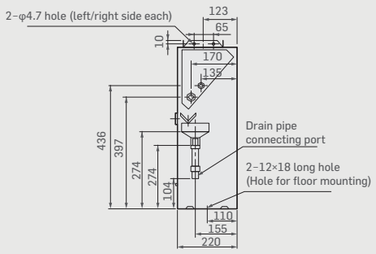
Note 2 : The sound level are measured in an anechoic chamber in accordance with JIS B 8616.
Normally, the values measured in the actual operating environment become larger than the indicated values due to the effects of external sound.

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

MML-UP0071BH-E to UP0241BH-E

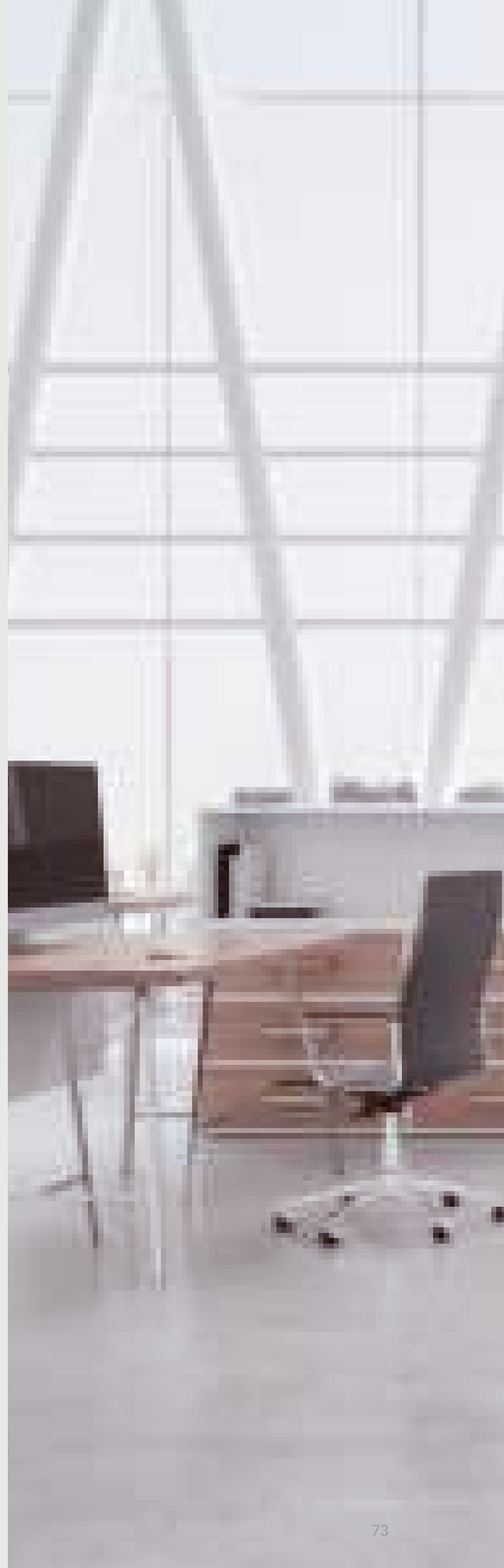




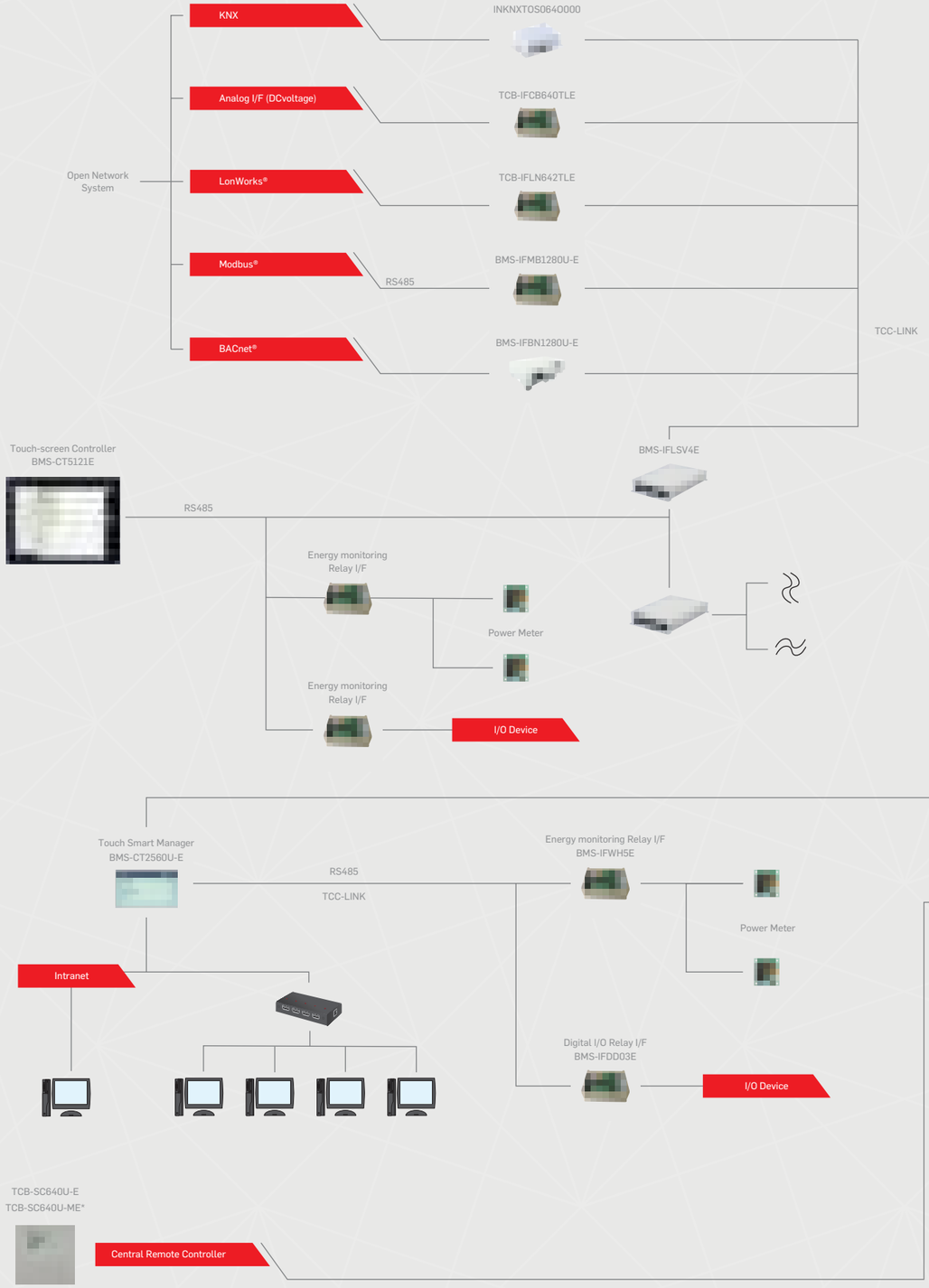


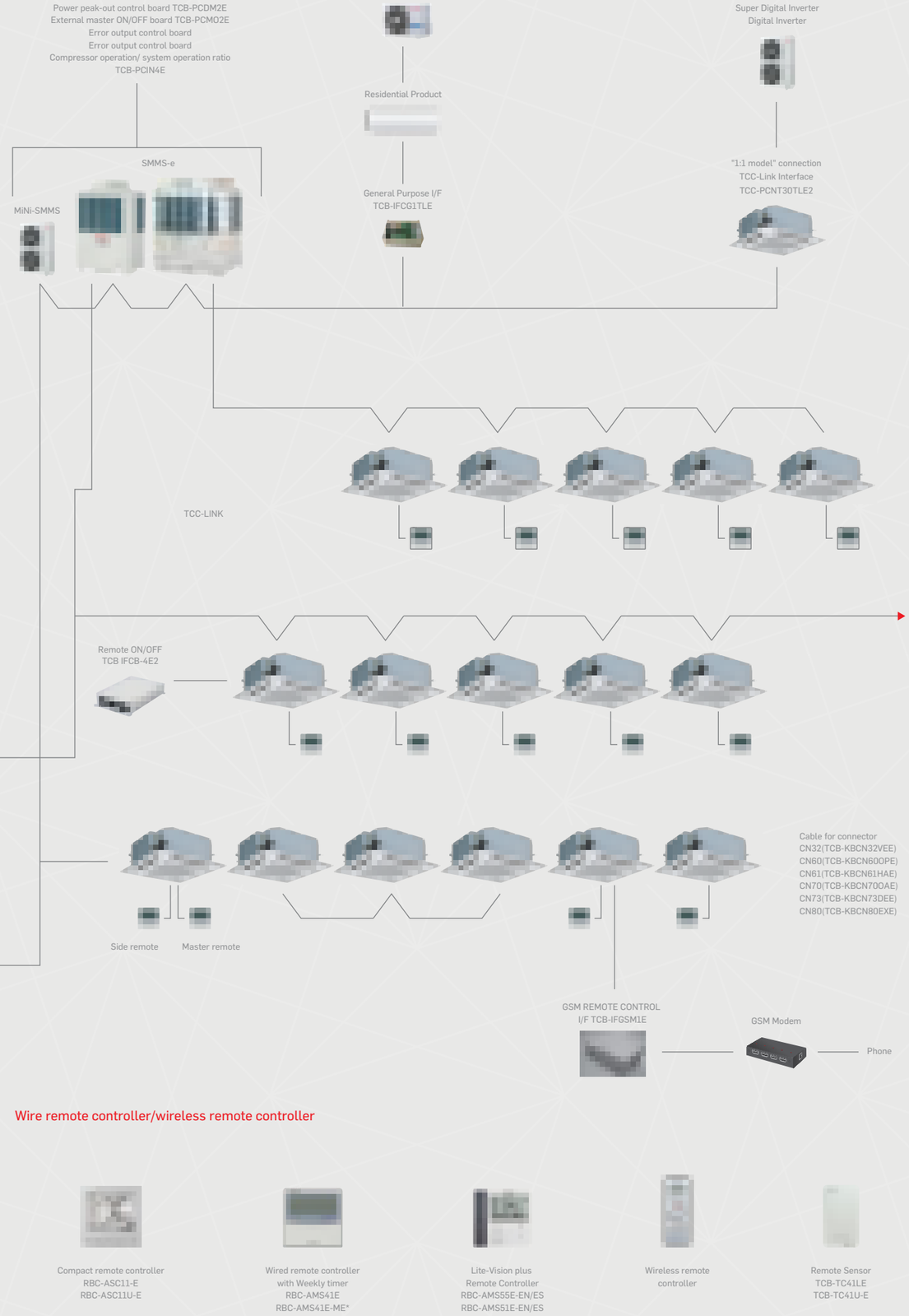
(Unit: mm)

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



Air-conditioning management system on site





Wire remote controller/wireless remote controller

Compact remote controller
RBC-ASC11-E
RBC-ASC11U-E

Wired remote controller with Weekly timer
RBC-AMS41E
RBC-AMS41E-ME*

Lite-Vision plus Remote Controller
RBC-AMS55E-EN/ES
RBC-AMS51E-EN/ES

Wireless remote controller

Remote Sensor
TCB-TC41LE
TCB-TC41U-E

WIRED REMOTE CONTROLLER

Compact Remote controller
RBC-ASC11-E/RBC-ASC11U-E
The new RBC-ASC11*-E 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.

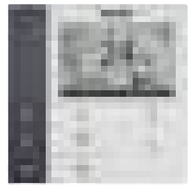


Remote controller with weekly timer
(7-day timer function)
RBC-AMS41E
RBC-AMS41E-ME*
Key Features:
• Clock display • Schedule timer: Possible to program schedule timer (7-day timer) function
Possible to program 8 functions for each day of the week.
* The following items can be set in program: operation time, operation start/stop, operation mode, temperature setting, restriction on button operation.





Compact Remote controller
RBC-ASC11-E/RBC-ASC11U-E
The new RBC-ASC11*-E 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.



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-AXU31-E
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.



RBC-AXU31C-E
Integral receiver (For ceiling)



RBC-AXU31UW-E
Integral receiver (For 2-way air discharge cassette)





CENTRAL REMOTE CONTROLLER

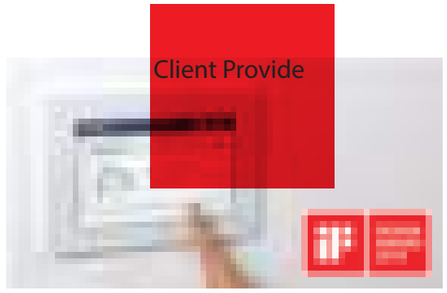
Central remote controller
TCB-SC640U-E
TCB-SC640U-ME*
The TCB-SC640U-E 64-way central controller is TOSHIBA's standard central control solution and can be connected to up to 64 indoor units via the TCC-Link central control network.
Indoor units can be controlled in terms of: individual indoor unit/group, all units in a zone (1 to 10), and all units connected.
Additional features include 4-levels of remote controller permit/prohibit functions.

*ME - Applicable for UAE only

ADVANCE CONTROL SYSTEMS

Touch Smart Manager

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.



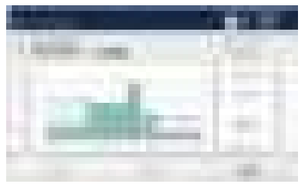
Advance central controller - Touch Smart Manager BMS-CT2560U-E

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

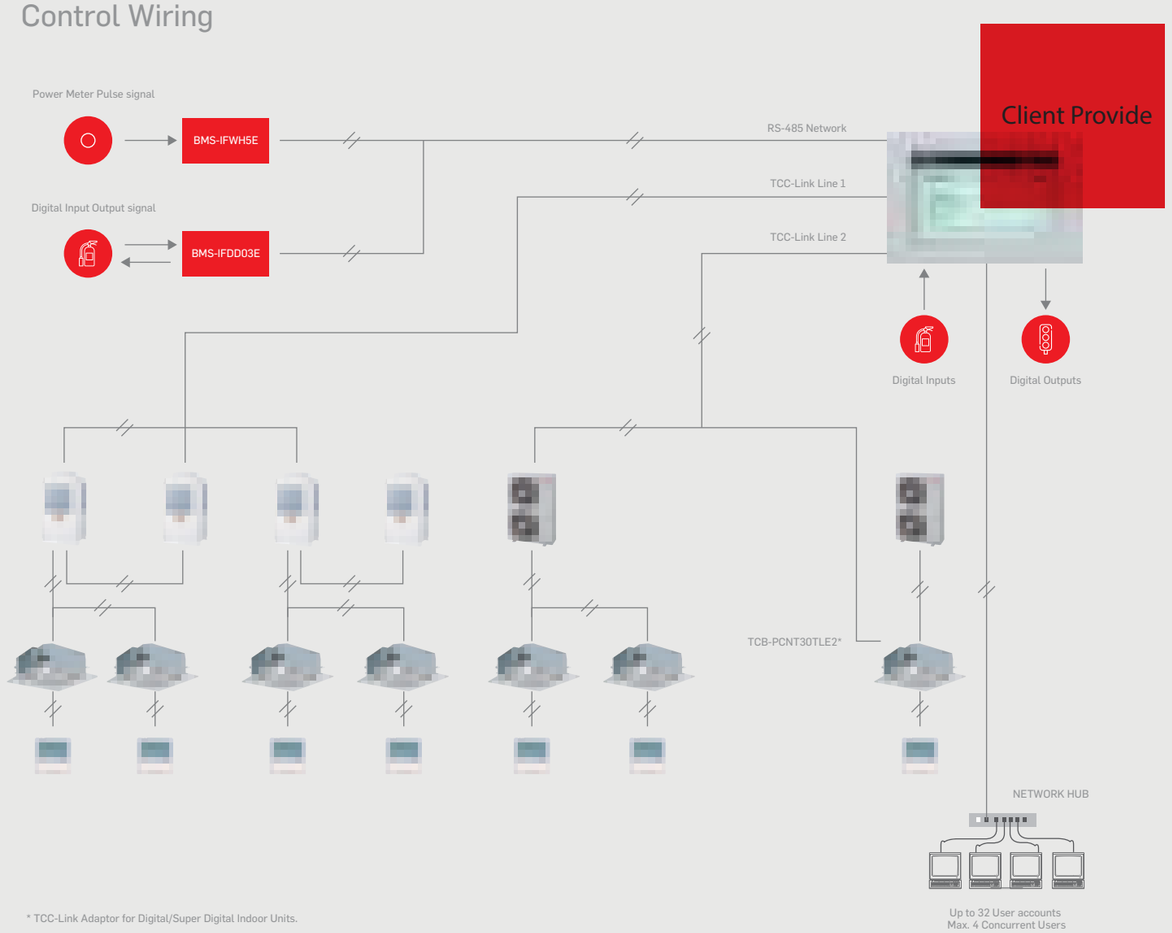


Display the total electric power on a daily/monthly basis on a graph.



Display operating time and sensor information.

Control Wiring



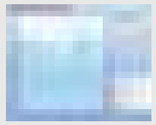
* TCC-Link Adaptor for Digital/Super Digital Indoor Units.

Equipment List

Device	Number of pieces	Description
BMS-CT2560U-E	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

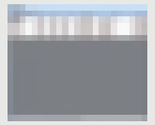
Device	Number of pieces	Description
Power Meter		Digital Energy Meter with Pulse Output (Energy Monitoring Option only)
PC		For Operation Monitoring
Network Hub		For LAN Connection.



Energy consumption history (days)



Energy consumption comparison

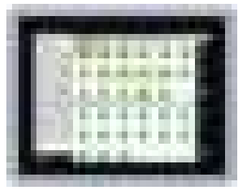


Alarm list



Energy consumption history (Hours)

Advance Control Systems



Touch-screen Controller
BMS-CT5121E

Touch-screen controller

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

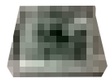
- Operation monitoring
- Operation control
- Operation Schedule
- Error Code
- Alarm List
- Energy monitoring/Billing
- Digital I/O Signal Control
- Web function
- Email alert
- Graphical report
- Building layout



Up to 8
Relay Interface BMS-IFLSV4E
For TCS-NET



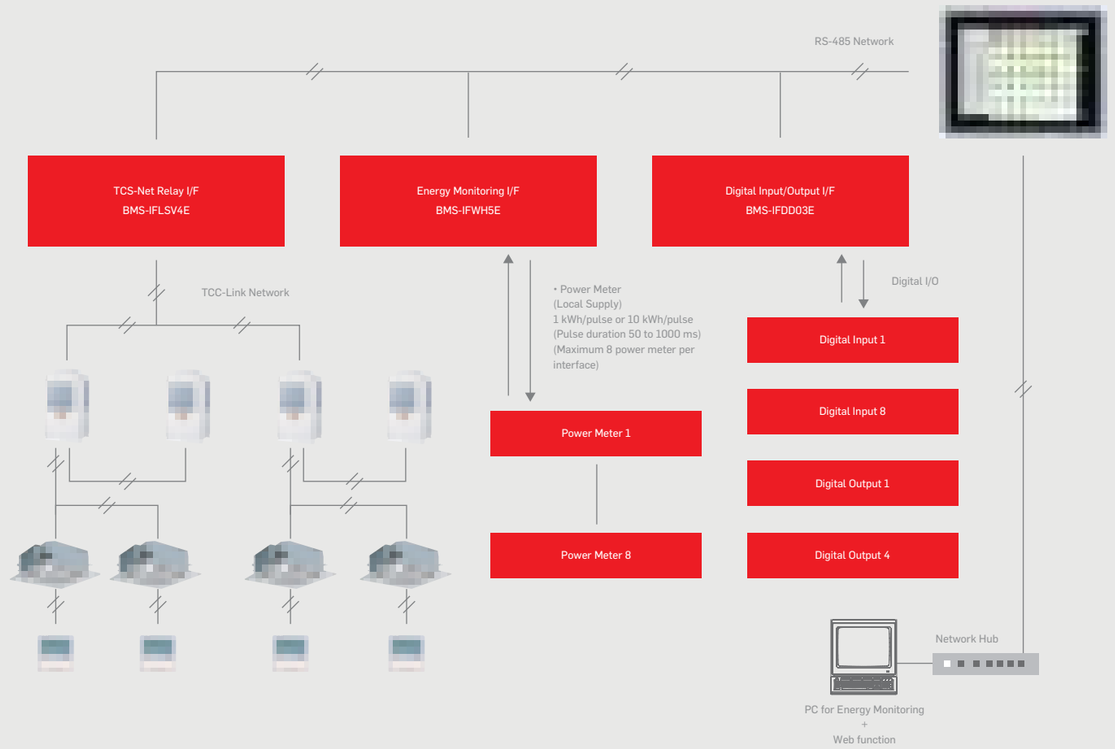
Up to 8
Relay Interface BMS-IFWH5E
For Energy Monitoring
(Optional)



Up to 8
Relay Interface BMS-IFDD03E
For Digital I/O
(Optional)



Control Wiring

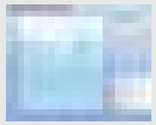


Equipment List

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

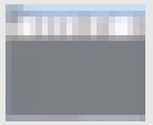
Device	Number of pieces	Description
Power Meter		Digital Energy Meter with Pulse Output (Energy Monitoring Option only)
PC		For Operation Monitoring
Network Hub		For LAN Connection.



Energy consumption history (days)



Energy consumption comparison



Alarm list



Energy consumption history (Hours)

OPEN NETWORK SYSTEMS

BACnet ®

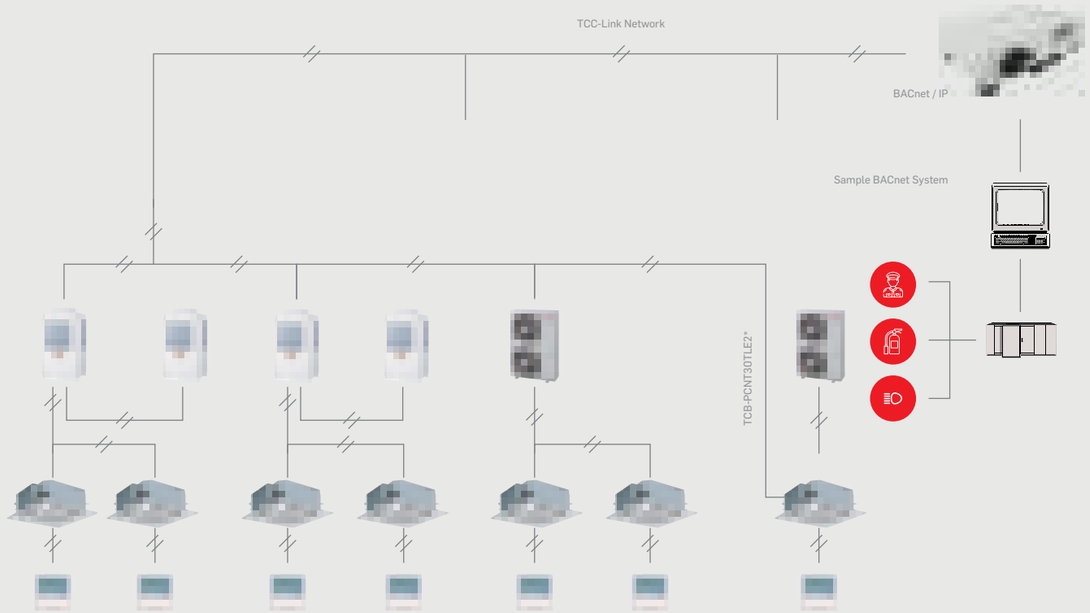
BACnet Interface

The Toshiba BMS-IFBN1280U-E 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.



BAC net/IP Interface
BMS-IFBN1280U-E



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

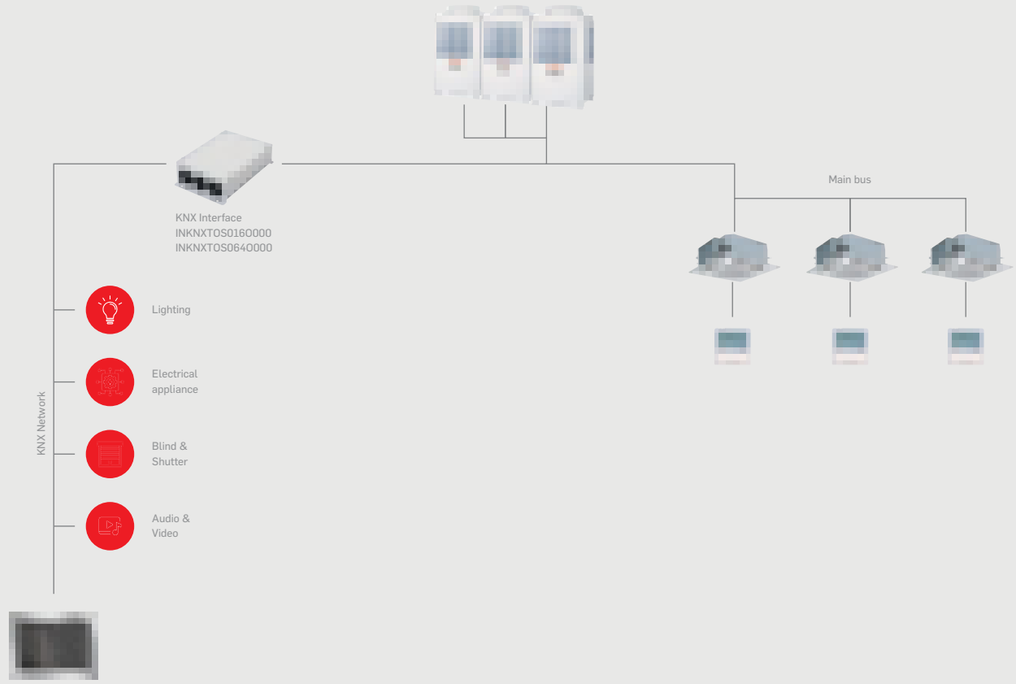
KNX ®

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



KNX/TP Interface
INKNXTOS0160000
INKNXTOS0640000



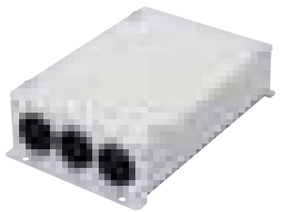
OPEN NETWORK SYSTEMS

LonWorks ®

BACnet Interface

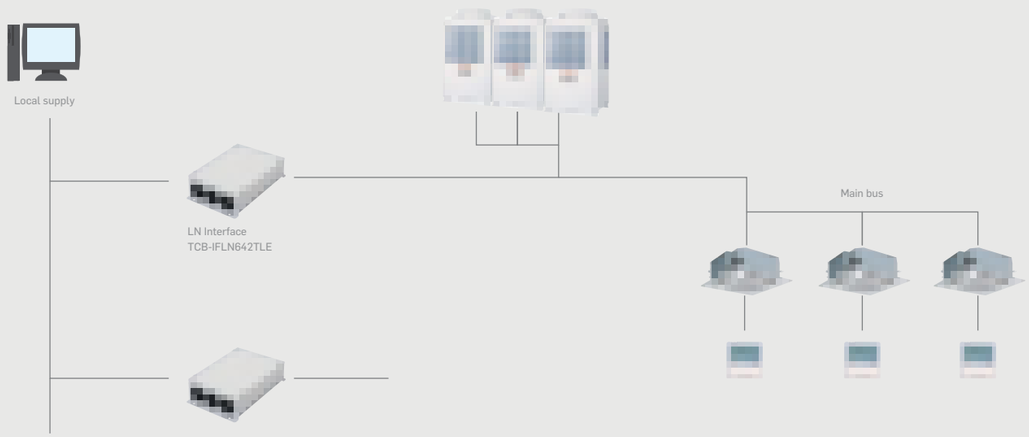
The LonWorks interface manages the SMMS-i air conditioning system as
a Lon device to communicate with the custormer's Building Management
System and to monitor operational status.
A maximum of 64 units are controllable per interface.

SNVT signal
Signals and provides the following functions:
Object signals command
• ON/OFF
• Mode: cool/heat/fan
• Temperature setting
• Central/local



LonWorks Interface
TCB-IFLN642TLE

Monitoring
• ON/OFF
Mode
• Cool/heat/fan/failure
• Temperature setting
• Room temperature
• Central/local, etc.



Modbus ®

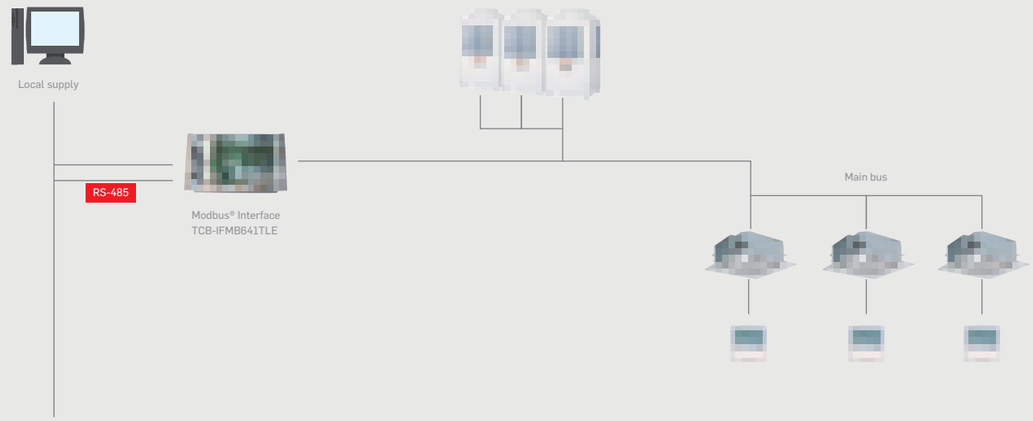
Modbus Interface

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 BMS-IFMB1280U-E, 15 BMS-IFMB1280U-E 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.



Modbus Interface
BMS-IFMB1280U-E



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)

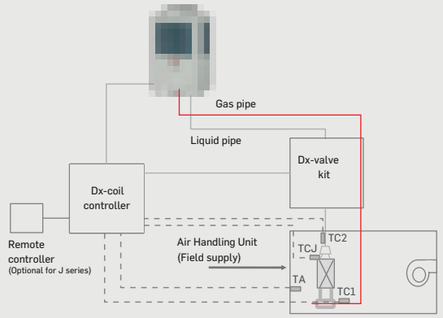
Notes:
- AHU & AHU's Stater panel (Field supply)
- Wired remote control (optional for J-series).

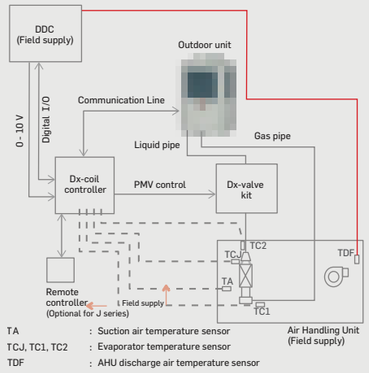
VRF DX coil interface FAHU application

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.





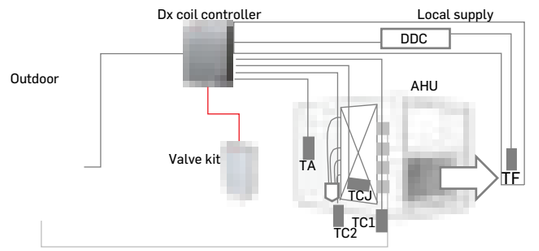
VRF DX coil interface AHU / FAHU application

DDC type : Direct capacity control of Toshiba Carrier VRF outdoor unit by analogue input (0-10V)

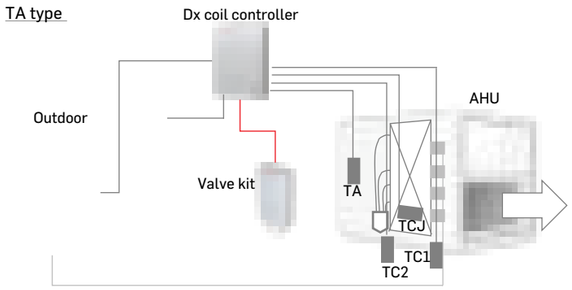
U - Series	Model number	Note
MM-DXC010	TCB-IFDMX01UP-E	All terminal without relay
MM-DXC012	TCB-IFDMR01UP-E	6 D/O terminal with relay
MM-DXV080	RBM-A101UPVA-E	For 8/10/12 HP
MM-DXV140	RBM-A201UPVA-E	For 14/16/18/20 HP
MM-DXV280	TCB-IFDES1001P-E	10m lead wire

*Dx-coil controller contains each TA/TC1/TC2/TCJ/TF sensor with 7.5m lead wire.

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



TA type





Control Devices

Model Number	Reference	Description	Used with
RBC-ASC11E RBC-ASC11U-E	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/ES RBC-AMS51E-EN/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-AXU31C-E	Infra-red Remote Kit	Wireless remote controller	All ceiling units and one-way cassettes (SH series)
TCB-AXU31-E	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-AXU31U-E	Wireless remote unit kit	Wireless remote unit kit for 4-way cassette	4-way cassette indoors.
RBC-AX31UM-E	Wireless remote unit kit	Wireless remote unit kit for compact 4-way cassette	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-TC41U-E	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.
TCB-SC640U-E TCB-SC640U-ME*	64 way control	Enables full control of up to 64 indoor units	All VRF indoor units.
BMS-CT256U-E	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-IFBN1280U-E	BACnet/IP	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
BMS-IFMB1280-E	Modbus Interface	Allows control of 64 indoor units from a Modbus based BMS	All VRF indoor units
INKNXTOS064O000	KNX Interface	Allows control of 64 indoor units from a KNX based BMS/Home Automation.	All VRF indoor units
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	Application Control PC Board	For CN32	All VRF indoor units.
TCB-KBCN60OPE		For CN60	All VRF indoor units.
TCB-KBCN61HAE		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

TOSHIBA

FEEL THE CHANGE

AHI Carrier
A Carrier Joint Venture Company

Office no. 2702, Jafza view 19 Downtown
P.O. Box: 61249 Jebel Ali Freezone
Dubai, U.A.E
Tollfree: 800 TOSHIBA (8674422)
toshibaacuae.com