

Toshiba Carrier VRF Catalog

2021 Edition | North America

We Don't Just Build Units. We Help You Engineer Comfort.

Comfort is a system that works for everyone. At Carrier, we recognize there's no one solution for all HVAC needs, so we've invested in a full range of them, including Variable Refrigerant Flow (VRF) products.

We found a natural partner in Toshiba, the creator of two key technologies for modern VRF. From the world's first inverter in AC in 1980 and the world's first DC twin rotary compressor in 1993 to the Carrier joint venture in 1999, Toshiba's legacy moves in one direction: forward. Designed and engineered specifically for North America, Toshiba Carrier VRF joins two early innovators of variable refrigerant flow for one total system solution.

So you can trade the sourcing of components for the design and redesign of indoor comfort systems—for virtually any application or need.

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Engineered for **North America**

Toshiba Carrier VRF systems have been installed across all 5 climate zones in the U.S.

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- 6
- 12
- 28
- 52
- **68**



A Comfortable Experience...

...Without the Waste

VRF is not just about sophisticated control. It computes the precise amount of refrigerant required by each indoor unit and controls the refrigerant flow accordingly. This avoids over cooling or heating-and adds major operational efficiency.

Variable Refrigerant Flow (VRF) systems allow for the heating and/or cooling of individual zones throughout a building, as opposed to an "all or nothing" temperature setting. The system achieves this customization by adjusting the flow of refrigerant to multiple indoor units connected to one operating system.





It's Hard to Object to **the Flexibility of VRF**

Whether you're looking to maximize comfort in a new building or retrofit an existing one, VRF systems join design flexibility with space and potential energy savings but the only thing occupants notice is the comfort.

It pays to choose wisely—and choose the efficiency of VRF. According to the U.S. Department of Energy (DOE), heating, cooling and ventilation account for 40% of energy costs in the average commercial building.¹





Sustainability and Efficiency

- Enjoy simplified maintenance and efficient operation
- Gain energy savings that contribute to Leadership in Energy and Environmental Design (LEED) certification

Ease of Design

- Connect up to 64 indoor units to one outdoor module
- Maximize limited ceiling space and eliminate need for maintenance rooms and service shafts
- Precisely match building capacity or power requirements

Performance

- Zoned temperature control for ideal comfort
- Simultaneous heating and cooling with heat recovery systems
- Optimum part-load
 performance



¹https://www.pnnl.gov/main/publications/external/technical_reports/PNNL-20955.pdf

Compressor 2

Why VRF

To Heat or to Cool? Or Both?

Perfect for large open spaces, **VRF heat pumps** provide either heating or cooling at a given time. And for buildings with varying temperature zones, **VRF heat recovery systems** can heat and cool different zones at the same time. The heat recovery system reuses energy from one zone, like a sunlit lobby, in a cooler part of the building.

38 Tons

Toshiba Carrier VRF systems now offer heat recovery up to 38 tons meaning serious cooling power for your next project.



Toshiba Carrier 3-Pipe VRF Heat Recovery

Since heat recovery provides simultaneous heating and cooling of different building zones on a single refrigerant piping system, it's ideal for highly zoned areas, areas that require multiple thermal zones or spaces that naturally include high zone diversity. The system also works well for retrofit needs, since it doesn't require ducting. It also offers design flexibility by allocating one flow selector box for each indoor unit.

Your choice of Toshiba Carrier VRF heat recovery will depend on a range of factors specific to your project, including local climate, specific building needs and project type (remodel, retrofit or new construction). The system can be an ideal fit for a variety of verticals, including, but not limited to, hotels, assisted living and office spaces.

Toshiba Carrier **VRF Heat Pump**

VRF heat pumps are ideal for large, open spaces with single common zones, since all indoor units will share the same load. It can also accommodate spaces with limited roof support or unique structural needs when paired with the Toshiba Carrier 40QQ-E rooftop outdoor unit.

The system is an ideal fit for restaurants, retail, places of worship, storage facilities, parking garages and more. Your choice of Toshiba Carrier VRF heat pump systems still depend on factors specific to your project, including local climate, specific building needs and project type (remodel, retrofit, or new construction).





Heat Pump

VRF Heat Recovery and Heat Pump Systems 11





VRF Comfort. **Built on** Toshiba Carrier Confidence.

More Than Just Components. A Total System Solution.

Your choice of VRF system makes a difference. We're invested in advancements that help your VRF system serve the design needs and function of a space—not the other way around. Case in point: we were the first in the industry to offer single-phase VRF heat recovery.

But our commitment extends well beyond setup. When you invest in Toshiba Carrier VRF, you create a system that delivers on the promise of comfort, time after time. Because performance and reliability are the backbone of Toshiba Carrier confidence.

Toshiba Carrier VRF expects the unexpected —and doesn't waste energy on it.



DX Interface

Choose a Compatible Outlook

Why manage multiple vendors when you can have VRF technology that integrates with everything? The DX Interface from Toshiba Carrier allows integration with an air handling unit (AHU) to meet ventilation requirements. Using the DX Interface, Toshiba Carrier VRF integrates with Carrier's market-leading AHUs. If you're already using an AHU from another manufacturer, Toshiba Carrier VRF will integrate with those, too.



Refrigerant Piping

Control Wiring (Field Installed)

Temperature Sensor Wiring



Extreme Temperature Performance

Toshiba Carrier VRF delivers heating down to -13° F and cooling up to 122° F in cooling mode. And there are no "hard shutoffs" when operating outside these temperatures or based on outdoor temperatures.

The system also features dual rotary compressors, which function well in harsh environments, in addition to delivering optimal efficiency at all speeds (and being easy to maintain).

122° F

-13° F

Optimal efficiency in extreme temperatures

Sample Application: Place of Worship

Background

A historic property built in 1915, this place of worship needed a heating and cooling system that would maintain structural integrity of the building and withstand extreme ambient temperatures.

Challenge

The building structure and location presented several design challenges, including:

- Coping with the existing steam heat with radiators
- No cooling in the building
- Property line and security issues
- Low ambient temperatures (-15° F to -20° F common temperature during cool season)

Solution

Three, 10-ton outdoor condensing units were installed indoors. We also created custom-built wood cabinets for the floor consoles to match the historic church's existing woodwork and fit the footprint of the old radiators.



Location Omaha, NE

Results

CO₂ sensors connect to the Toshiba Carrier ERV interface, driving the opening and closing of fresh air dampers in the ductwork based on occupancy to meet ventilation code. When a compressor is running and the outside air temperature is above 50° F, control dampers are driven open and units are vented in the mechanical room. During cold temperatures, outside air intake dampers close and gas unit heaters maintain ambient temperatures in the mechanical room.



Smooth (and Quiet) Operations

Comfort isn't a disruption—so Toshiba Carrier VRF keeps it quiet. Intentionally designed for efficient operations and reduced compressor stress, compressor load stays within 30-80% of full load range. That means the output is as quiet as it is steady and reliable.

Similarly, the outdoor unit's air discharge propeller fan features a unique profile and shape that minimizes air resistance, maximizes power—and reduces sound.

> Stays within **30-80%** of full compressor load range





Even Flow

Control each compressor and maintain consistent overall compressor performance. How? The system's operating sequence rotates between compressors in a single outdoor unit or between outdoor units in a modular system for an even spread of operating hours.

Intelligent Refrigerant Flow

Toshiba Carrier VRF uses over 300 sensors and multiple Pulse Motor Valves (PMV) to pinpoint the needed refrigerant flow for each indoor unit, creating increased efficiency at full or partial building loads.

Contingencies Upon **Contingencies**

From multiple inverter-driven compressors to a three-stage oil monitoring system, Toshiba Carrier VRF systems flag, and correct for, potential disruptions long before they delay anyone's comfort.

The system's design flexibility helps you anticipate structural limitations, confined spacing and industry regulations with sustainable, efficient solutions for heating and cooling.

Taking Rooftop Units to a New Level

The 40QQ-E Rooftop Unit

The Toshiba Carrier VRF 40QQ-E rooftop unit is the first rooftop product line designed using VRF technology. The 40QQ-E features EcoBlue[™] technology, which includes a more compact vane axial fan and a simplified design for better performance. And, options like electric heat with sing-point power connection, horizontal or vertical discharge, economizer and use of existing curb can help you complete a replacement job faster and more costeffectively with less downtime.



Other 40QQ-E benefits include:

- Provides outside air circulation without the full weight of a traditional rooftop unit
- Curb-compatible rooftop unit
- Economizer provides Title 24 compliant outside air circulation
- · Provides flexibility for expansion, if needed

ecoblue technology

Engineer **Flexibility and Visibility** Into Your Basis of Design

As you design, you need flexibility—so our system offers up to 131 feet between indoor units, as well as longer piping distance between indoor and outdoor units. And connect up to 64 indoor units to the outdoor unit to satisfy your specific zoning needs.

Flow Selector



Long piping

> Up to 131 feet between flow selector and

Up to 64 indoor units

indoor units **Indoor Units**

VRoom

Once you've chosen Toshiba Carrier VRF, easily design, layout and prepare VRF systems for quote with our advanced software, VRoom. It's a selection tool designed for engineers with built-in error checking and system performance checks every step of the way. So you enjoy technical support as early as ideation, and issues are consistently easy to identify and resolve from day one.

And that's just the start of how VRoom helps you get going:

- Drag and drop feature for easy selection of indoor units
- Quick edits of indoor unit type, piping length and operating conditions using Excel feature
- Automatic software updates

Contact VRoomhelp@carrier.com for assistance and support.



Why Toshiba Carrier VRF

We're Ready for Implementation When You Are

Carrier didn't invent air-but we did invent modern air conditioning. Our longstanding commitment to convenient comfort is your support system throughout the design and installation of Toshiba Carrier VRF.

The system itself is intentionally designed to make installation simpler. For example, Toshiba Carrier VRF heat recovery systems offer both single "one to one" flow selector boxes to optimize system configuration, meaning you have more options for outdoor unit placement.

In addition, Carrier offers training and support to help the build out of a complete VRF system—with everything from specs to start-up to commissioning.



VRF Startup Assistance

Our assistance program helps you make sure nothing's in the way of a successful start to your heating and cooling operations. Post-installation, but before your system is commissioned or operational, a factory-authorized Carrier HVAC Technician works onsite during normal business hours to assess, and anticipate any issues with, your **VRF** installation.

At a minimum, the technician will do the following:

- Reference engineering and installation manuals to identify and document installation issues that may impact the startup
- Utilize service software to communicate with the VRF system and collect real runtime data for a fixed period of time to insure optimum operation at the time of commissioning
- Verify operating conditions of other system components
- Conduct on-site training for owner/end user personnel

At the conclusion of the engagement, the technician will create and deliver a post-visit Startup Report that includes all insights gleaned to the distributor.

Please contact vrfstartup@carrier.com for factory startup assistance.

Your VRF System Is a Distributor Away

Toshiba Carrier offers a single-source solution through a nationwide network of distributors. It's as easy to find us as it is to work with us. We serve heating and cooling needs in all regions with many experienced, longstanding distributor relationships. Our distributors combine high product knowledge with high levels of training so you can make confident choices when it comes to Toshiba Carrier VRF.



The results speak for themselves:

Our network of experts have successfully installed VRF systems in a wide range of regions and climate zones. Will yours be next?

Distributor Coverage



TOSHIBA Carrier Outdoor

Units





Whether you're building a heat recovery or heat pump system, **Toshiba Carrier VRF** outdoor units are quiet, reliable, and flexible. And up to 64 indoor units can connect to just one outdoor module.

VRF Outdoor Units Overview



			Heat Recovery*			Heat Pump				
_	Single	-phase		3-phase		Single-phase		3-phase		
Tonnage	1 Module	2 Module	1 Module	2 Module	3 Module	1 Module	1 Module	2 Module	3 Module	
3						3				
4						4				
5						5				
6	6		6				6			
8			8				8			
10			10				10			
12		6 + 6	12				12			
14			14				14			
16				8 + 8				8 + 8		
16**				10 + 6				10 + 6		
18				10 + 8				10 + 8		
20				12 + 8				12 + 8		
20**				10 + 10				10 + 10		
22				12 + 10				12 + 10		
24				12 + 12				12 + 12		
24**				14 + 10				14 + 10		
26				14 + 12				14 + 12		
28					10 + 10 + 8			14 + 14		
28**				14 + 14						
30					10 + 10 + 10				10 + 10 + 10	
32					12 + 10 + 10				12 + 10 + 10	
34					12 + 12 + 10				12 + 12 + 10	
34**									14 + 10 + 10	
36					12 + 12 + 12				14 + 12 + 10	
38					14 + 12 + 12				14 + 14 + 10	

*For use with Flow Selector "FS" box and multiport FS box on page 82. **Space Saving model.





Single-Phase Heat Recovery Outdoor Unit (MMYF) 208/230V-1-60



Heat Recovery Outdoor Unit (MMYF) 208/230V-3-60

Standard Model (Single Unit)

Standard Mod	lel (Combina	tion)			
Outdoor Unit I	Model Name	(MMY)		MAP0726FT2P-UL	AP1446FT2P-UL
Nominal Tons				6	12
Quality in M				-	MAP0726FT2P-UL
Combination IV	Iddel (MIMY)			-	MAP0726FT2P-UL
Cooling Capaci	ity ¹ tod Indoor	Nominal	kBtu/h	72	144
Units / Ducted)		Rated	kBtu/h	69	138
Heating Capac	ity ¹	Nominal	kBtu/h	81	162
(with Non-Duc Units / Ducted)	tea maoor	Rated	kBtu/h	77	154
With Non-	Power Supp	lly ²		208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz
Ducted	Occline	Power Consumption ³	kW	4.53	9.92
Indoor Units	Cooling	IEER ⁴	Btu/W*hr	26.6	25.7
Electrical	Unding	Power Consumption ³	kW	5.98	11.69
Characteristics	Heating	SCHE ⁵	Btu/W*hr	30.6	31.3
	Power Supp	lly ²		208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz
With Ducted	Occline	Power Consumption ³	kW	5.11	10.10
Flootrigal	Cooling	IEER ⁴	Btu/W*hr	19.5	20.0
Characteristics	Heating	Power Consumption ³	kW	6.25	11.82
0112120101131103	neaung	SCHE ⁵	Btu/W*hr	26.9	26.6
	Height		in	72.9	72.9
External Dimer	nsions	Width	in	39.0	39.0 x 2
	Depth		in	30.7	30.7
Total Weight	Unit		lb	600	600 x 2
Compressor	Туре			Hermetic Twin Rotary Compressor	Hermetic Twin Rotary Compressor
00110103301	Motor Outpu	ut	kW	2.1 x 2	2.1 x 4
	Motor Outpu	ut	kW	1.0	1.0 x 2
Fan Unit	Air Volume		cfm	5,900	5,900 x 2
	Maximum E	xternal Static Pressure	in WG	0.24	0.24
Refrigerant ⁶ (C	harged Refrig	erant Amount)	lb	24.3	24.3 x 2
Electrical	Unit	MCA ⁷	A	47	47 + 47
Specifications	Unit	Recommended Fuse Size	A	50	50 + 50
		Gas Side (Main Pipe) (Brazing)	in	7/8	1-1/8
Refrigerant	Connecting Port	Liquid Side (Main Pipe) (Flare)	in	1/2	5/8
riping	Diameter	Discharge (Main Pipe) (Flare)	in	3/4	7/8
		Balance Pipe (Flare)	in	3/8	3/8
Operation		Cooling	° F DB	14-122	14-122
Temperature R	ange	Heating	° F WB	-13-60	-13-60
Maximum Num	ber of Conne	cted Indoor Units		12	25
Maximum Cap	acity of Comb	bined Indoor Units ⁸		50-150%	50-150%
Sound Pressur	e Level Coolir	ng / Heating	dB(A)	57/60	60/63

¹Rated conditions:

Cooling: Indoor 80° F dry bulb / 67° F wet bulb, Outdoor 95° F dry bulb. Heating: Indoor 70° F dry bulb, Outdoor 47° F dry bulb / 43° F wet bulb.

²The source voltage must not fluctuate more than $\pm 10\%$.

³Only for outdoor unit.

⁴IEER: Integrated Energy Efficiency Ratio.

⁵SCHE: Simultaneous Cooling & Heating Efficiency.

⁶The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length. ⁷Select wire size based on the larger value of MCA. MCA: Minimum Circuit Amps (Minimum Circuit Amps required for power supply design). In case the diversity exceeds 135%, the type of indoor unit is limited and the maximum number of indoor units is reduced.



The standard pipe 144 type – 228 type

Equivalent piping length 25 ft, Height difference: 0 ft

Outdoor Unit I	Model Name	(MMY)		MAP0726FT9P-UL	MAP0966FT9P-UL	MAP1206FT9P-UL	MAP1446FT9P-UL	MAP1686FT9P-UL
Nominal Tons				6	8	10	12	14
Cooling Capaci	ty ¹	Nominal	kBtu/h	72	96	120	144	168
Units / Ducted)		Rated	kBtu/h	69	92	114	138	160
Heating Capaci	ity ¹	Nominal	kBtu/h	81	108	135	162	189
Units / Ducted)	leu muoor	Rated	kBtu/h	77	103	129	154	180
With Non-	Power Supp	ly ²		208/230V, 3-Phase, 60Hz				
Indoor Units	Cooling	Power Consumption ³	kW	4.53	7.16	9.39	11.03	14.55
Electrical	Cooling	IEER ⁴	Btu/W*hr	26.6	28.3	27.5	25.9	23.3
Characteristics	Heating	Power Consumption ³	kW	5.98	7.66	10.21	11.76	15.05
	пеашу	SCHE⁵	Btu/W*hr	30.6	31.3	34.9	33.6	30.2
	Power Supply ²			208/230V,	208/230V,	208/230V,	208/230V,	208/230V,
With Ducted	1 Ower oup	лу		3-Phase, 60Hz				
Indoor Units	ndoor Units Cooling Power Consumption ³		kW	5.11	7.34	9.05	11.29	14.48
Electrical	oooning	IEER ⁴	Btu/W*hr	19.5	21.4	20.0	20.2	19.2
Characteristics	Heating	Power Consumption ³	kW	6.25	7.61	10.34	12.02	15.38
	nearing	SCHE⁵	Btu/W*hr	26.9	26.7	26.7	29.9	26.9
		Height	in	72.9	72.9	72.9	72.9	72.9
External Dimen	External Dimensions Width		in	39.0	47.6	47.6	63.0	63.0
		Depth	in	30.7	30.7	30.7	30.7	30.7
Total Weight	Unit		lb	600	721	721	882	882
	Type			Hermetic Twin				
Compressor	турс			Rotary Compressor				
	Motor Outp	but kW		2.1 x 2	3.0 x 2	4.0 x 2	5.4 x 2	6.5 x 2
	Motor Output	ut	kW	1.0	1.0	1.0	1.0 x 2	1.0 x 2
Fan Unit	Air Volume		cfm	5,900	7,480	7,700	10,850	10,850
	Maximum E	xternal Static Pressure	in WG	0.24	0.16	0.16	0.16	0.16
Refrigerant ⁶ (Cl	harged Refrig	jerant Amount)	lb	24.3	24.3	24.3	24.3	24.3
Electrical	Unit	MCA ⁷	A	23.3	34.2	45.4	52.1	66.2
Specifications	Unit	Recommended Fuse Size	A	30	40	50	60	70
		Gas Side (Main Pipe) (Brazing)	in	7/8	7/8	1-1/8	1-1/8	1-1/8
Refrigerant	Connecting Port	Liquid Side (Main Pipe) (Flare)	in	1/2	1/2	1/2	5/8	3/4
Tipling	Diameter	Discharge (Main Pipe) (Flare)	in	3/4	3/4	3/4	7/8	7/8
		Balance Pipe (Flare)	in	3/8	3/8	3/8	3/8	3/8
Operation		Cooling	° F DB	14-122	14-122	14-122	14-122	14-122
Temperature R	ange	Heating	° F WB	-13-60	-13-60	-13-60	-13-60	-13-60
Maximum Num	ber of Conne	ected Indoor Units		12	16	21	25	30
Maximum Capa	acity of Comb	pined Indoor Units ⁸		50-150%	50-150%	50-150%	50-150%	50-150%
Sound Pressure	e Level Coolii	ng / Heating	dB(A)	57/60	62/62	63/64	66.5/66.5	66.5/67.0
		· · · · · ·						

¹Rated conditions: Cooling: Indoor 80° F dry bulb / 67° F wet bulb, Outdoor 95° F dry bulb. Heating: Indoor 70° F dry bulb, Outdoor 47° F dry bulb / 43° F wet bulb. ²The source voltage must not fluctuate more than $\pm 10\%$. ³Only for outdoor unit. ⁴IEER: Integrated Energy Efficiency Ratio. ⁵SCHE: Simultaneous Cooling & Heating Efficiency. ⁶The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length. ⁷Select wire size based on the larger value of MCA. MCA: Minimum Circuit Amps (Minimum Circuit Amps required for power supply design). ⁸In case the diversity exceeds 135%, the type of indoor unit is limited and the maximum number of indoor units is reduced.

Outdoor Units | Technical Specifications





The standard pipe 072 type – 120 type

Equivalent piping length 25 ft, Height difference: 0 ft

Heat Recovery Outdoor Unit (MMYF) 208/230V-3-60



Heat Recovery Outdoor Unit (MMYF) 208/230V-3-60

Standard Model (Combination

Standard Mod	lel (Combina	tion)							
Outdoor Unit I	Model Name	(MMY)		AP1926FT9P-UL	AP2166FT9P-UL	AP2406FT9P-UL	AP2646FT9P-UL	AP2886FT9P-UL	AP3126FT9P-UL
Nominal Tons				16	18	20	22	24	26
				MAP0966FT9P-UL	MAP1206FT9P-UL	MAP1446FT9P-UL	MAP1446FT9P-UL	MAP1446FT9P-UL	MAP1686FT9P-UL
Combination N	lodel (MMY)			MAP0966FT9P-UL	MAP0966FT9P-UL	MAP0966FT9P-UL	MAP1206FT9P-UL	MAP1446FT9P-UL	MAP1446FT9P-UL
Cooling Capaci	ity ¹	Nominal	kBtu/h	192	216	240	264	288	312
Units / Ducted)	ted Indoor	Rated	kBtu/h	184	206	230	252	276	298
Heating Capaci	ity ¹	Nominal	kBtu/h	216	243	270	297	324	351
Units / Ducted)		Rated	kBtu/h	206	232	256	282	308	334
With Non-	Power Supp	oly ²		208/230V,	208/230V,	208/230V,	208/230V,	208/230V,	208/230V,
Ducted		Power Consumption ³	k/M	1/ 60	17.22	10.20	22 //	2/ 1/	28 1/
Indoor Units	Cooling		Dtu/M/thr	06.1	24.2	13.23	22.44	24.14	20.14
Electrical		IEEN Downer Consumption3	DLU/W III	20.1	10.00	20.0	20.1	22.0	22.1
Characteristics	Heating		KVV	10.91	10.03	20.30	23.70	20.00	20.90
	-	SCHE	Btu/w^nr	29.5	29.0	29.0	27.7	28.1	26.7
	Power Supp	oly ²		208/230V,	208/230V,	208/230V,	208/230V,	208/230V,	208/230V,
With Ducted				3-Phase, 60Hz	3-Phase, 60Hz	3-Phase, 60Hz	3-Phase, 60Hz	3-Phase, 60Hz	3-Phase, 60Hz
Indoor Units	Cooling	Power Consumption ³	KW	14.91	17.29	19.26	22.01	23.96	28.61
Electrical		IEER ⁴	Btu/W*hr	20.4	20.5	20.8	20.5	20.2	19.7
Characteristics	Heating	Power Consumption ³	kW	15.36	17.09	19.99	22.80	24.97	28.61
	nouting	SCHE ⁵	Btu/W*hr	27.4	27.6	27.7	27.0	25.9	24.7
Height in		in	72.9	72.9	72.9	72.9	72.9	72.9	
External Dimer	nsions	Width	in	47.6 x 2	47.6 x 2	63.0 + 47.6	63.0 + 47.6	63.0 x 2	63.0 x 2
		Depth	in	30.7	30.7	30.7	30.7	30.7	30.7
Total Weight	Unit		lb	721 x 2	721 x 2	882 + 721	882 + 721	882 x 2	882 x 2
	T			Hermetic Twin	Hermetic Twin	Hermetic Twin	Hermetic Twin	Hermetic Twin	Hermetic Twin
Compressor	туре			Rotary Compressor	Rotary Compressor	Rotary Compressor	Rotary Compressor	Rotary Compressor	Rotary Compressor
	Motor Outpu	ut	kW	3.0 x 4	$4.0 \times 2 + 3.0 \times 2$	5.4 x 2 + 3.0 x 2	$5.4 \times 2 + 4.0 \times 2$	5.4 x 4	6.5 x 2 + 5.4 x 2
	Motor Outpu	ut	kW	1.0 x 2	1.0 x 2	1.0 x 3	1.0 x 3	1.0 x 4	1.0 x 4
Fan Unit	Air Volume		cfm	7.480 x 2	7,700 + 7,480	10.850 + 7.480	10.850 + 7.700	10.850 x 2	10.850 x 2
	Maximum F	xternal Static Pressure	in WG	0.16	0.16	0.16	0.16	0.16	0.16
Refrigerant ⁶ (C	harged Refrig	ierant Amount)	lh	24 3 x 2	24 3 x 2	24 3 x 2	24 3 x 2	24 3 x 2	24 3 x 2
Floctrical	na gou nomg	MCA7	Λ	34.2 ± 34.2	45.4 ± 34.2	$521 \pm 3/2$	52.1 ± 45.4	52.1 ± 52.1	66.2 ± 52.1
Specifications	Unit	Pocommondod Euco Sizo	A	10 + 10	40.4 + 04.2 50 + 40	60 + 40	60 + 50	60 + 60	70 + 60
opeemeations		Gas Side	in	1-1/8	1-3/8	1-3/8	1-3/8	1-3/8	1-3/8
Refrigerant	Connecting	Liquid Side	in	3/4	3/4	3/4	7/8	7/8	7/8
Piping	Port Diameter	(Main Pipe) (Flare) Discharge	in	7/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8
		(Iviain Pipe) (Flare)		0/0	0.10	0/0	0/0	0/0	0/0
		Balance Pipe (Flare)	in	3/8	3/8	3/8	3/8	3/8	3/8
Operation		Cooling	°FDB	14-122	14-122	14-122	14-122	14-122	14-122
Temperature R	ange	Heating	° F WB	-13-60	-13-60	-13-60	-13-60	-13-60	-13-60
Maximum Num	ber of Conne	ected Indoor Units		34	38	42	46	50	55
Maximum Capa	acity of Comb	bined Indoor Units ⁸		50-150%	50-150%	50-150%	50-150%	50-150%	50-150%
Sound Pressur	e Level Coolir	ng / Heating	dB(A)	65/65	65.5/66.5	68/68	68.5/68.5	69.5/69.5	69.5/70.0

¹Rated conditions:

Cooling: Indoor 80° F dry bulb / 67° F wet bulb, Outdoor 95° F dry bulb. Heating: Indoor 70° F dry bulb, Outdoor 47° F dry bulb / 43° F wet bulb.

²The source voltage must not fluctuate more than $\pm 10\%$.

³Only for outdoor unit.

⁴IEER: Integrated Energy Efficiency Ratio.

⁵SCHE: Simultaneous Cooling & Heating Efficiency.

⁶The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length. ⁷Select wire size based on the larger value of MCA. MCA: Minimum Circuit Amps (Minimum Circuit Amps required for power supply design). In case the diversity exceeds 135%, the type of indoor unit is limited and the maximum number of indoor units is reduced.

SMMS UPER MODULAR MULTI SYSTEM	e
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The standard pipe 144 type – 240 type

Equivalent piping length 50 ft, Height difference: 0 ft

Outdoor Unit M	Nodel Name	(MMY)		AP3366FT9P-UL	AP3606FT9P-UL	AP3846FT9P-UL	AP4086FT9P-UL	AP4326FT9P-UL	AP4566FT9P-UL
Nominal Tons				28	30	32	34	36	38
				MAP1206FT9P-UL	MAP1206FT9P-UL	MAP1446FT9P-UL	MAP1446FT9P-UL	MAP1446FT9P-UL	MAP1686FT9P-UL
Combination M	odel (MMY)			MAP1206FT9P-UL	MAP1206FT9P-UL	MAP1206FT9P-UL	MAP1446FT9P-UL	MAP1446FT9P-UL	MAP1446FT9P-UL
00111011101101111				MAP0966FT9P-UI	MAP1206FT9P-UI	MAP1206FT9P-UI	MAP1206FT9P-UI	MAP1446FT9P-UI	MAP1446FT9P-UI
Cooling Canaci	tv ¹	Nominal	LD+u/b	000	200	204	400	400	450
(With Non-Duct	ted Indoor	Nominal	KBtu/n	330	360	384	408	432	456
Units / Ducted)		Rated	kBtu/h	320	342	366	390	410	430
Heating Capaci	ty ¹	Nominal	kBtu/h	378	405	432	459	486	513
(With Non-Duct Units / Ducted)	(With Non-Ducted Indoor Linits / Ducted) Rated		kBtu/h	360	386	412	436	462	488
Dowor Supply ²		1.2		208/230V,	208/230V,	208/230V,	208/230V,	208/230V,	208/230V,
With Non-	Power Supp	iy-		3-Phase, 60Hz					
Ducted Indeer Unite	Cooling	Power Consumption ³	kW	29.11	34.26	36.70	39.49	41.28	46.39
Electrical	Cooling	IEER ⁴	Btu/W*hr	23.9	23.3	22.7	21.9	21.4	19.4
Characteristics	Hosting	Power Consumption ³	kW	30.23	33.48	36.34	38.73	40.99	43.60
onaracteristics	neating	SCHE ⁵	Btu/W*hr	26.0	25.1	24.5	23.5	23.2	23.2
	Power Supp	lv ²		208/230V,	208/230V,	208/230V,	208/230V,	208/230V,	208/230V,
With Ducted	1 Ower oupp	ly		3-Phase, 60Hz					
Indoor Units	Cooling	Power Consumption ³	kW	30.20	34.72	37.21	39.70	42.09	45.32
Electrical Characteristics	oooning	IEER ⁴	Btu/W*hr	20.7	20.2	19.8	19.4	19.0	18.9
	Heating	Power Consumption ³	kW	30.63	32.39	35.72	37.84	41.05	43.36
SCHE ⁵		Btu/W*hr	22.4	22.2	21.6	21.1	20.6	20.8	
Height in			72.9	72.9	72.9	72.9	72.9	72.9	
External Dimen	isions	Width	in	47.6 x 3	47.6 x 3	63.0 + 47.6 x 2	63.0 x 2 + 47.6	63.0 x 3	63.0 x 3
		Depth	in	30.7	30.7	30.7	30.7	30.7	30.7
Total Weight	Unit		lb	721 x 3	721 x 3	882 + 721 x 2	882 x 2 + 721	882 x 3	882 x 3
	Type			Hermetic Twin					
Compressor				Rotary Compressor					
	Motor Outpu	it .	KW	4.0 x 4 + 3.0 x 2	4.0 x 6	5.4 x 2 + 4.0 x 4	5.4 x 4 + 4.0 x 2	5.4 X 6	6.5 x 2 + 5.4 x 4
Fee Unit	Motor Outpl	IT	KW	1.0 X 3	1.0 X 3	1.0 X 4	1.0 X 5	1.0 X b	1.0 X b
Fan Unit	Air volume	stornal Ctatia Dragoura	CIIII	7,700 X 2 + 7,480	7,700 X 3	10,850 + 7,700 X Z	10,850 X 2 + 7,700	10,850 X 3	10,850 X 3
Defriments (O			III WG	0.10	0.10	0.10	0.10	0.10	0.10
Reingerant [®] (Ci	nargeo Reirig		di	24.3 X 3					
Electrical	Unit	MUA'	A	45.4 + 45.4 + 34.2	45.4 + 45.4 + 45.4	52.1 + 45.4 + 45.4	52.1 + 52.1 + 45.4	52.1 + 52.1 + 52.1	bb.2 + 52.1 + 52.1
Specifications		Recommended Fuse Size	A	50 + 50 + 40	50 + 50 + 50	60 + 50 + 50	60 + 60 + 50	60 + 60 + 60	70 + 60 + 60
		(Main Pipe) (Brazing)	in	1-3/8	1-5/8	1-5/8	1-5/8	1-5/8	1-5/8
Refrigerant	Connecting Port	Liquid Side (Main Pipe) (Flare)	in	7/8	7/8	7/8	7/8	7/8	7/8
тршу	Diameter	Discharge (Main Pipe) (Flare)	in	1-1/8	1-3/8	1-3/8	1-3/8	1-3/8	1-3/8
		Balance Pipe (Flare)	in	3/8	3/8	3/8	3/8	3/8	3/8
Operation		Cooling	° F DB	14-122	14-122	14-122	14-122	14-122	14-122
Temperature R	ange	Heating	° F WB	-13-60	-13-60	-13-60	-13-60	-13-60	-13-60
Maximum Num	ber of Conne	cted Indoor Units		60	63	64	64	64	64
Maximum Capa	acity of Comb	ined Indoor Units8		50-150%	50-150%	50-150%	50-150%	50-150%	50-150%
Sound Pressure	e Level Coolir	ng / Heating	dB(A)	67.5/68.5	68/69	69.5/70.0	70.5/71.0	71.5/71.5	71.5/71.5

¹Rated conditions: Cooling: Indoor 80° F dry bulb / 67° F wet bulb, Outdoor 95° F dry bulb.

Heating: Indoor 70° F dry bulb, Outdoor 47° F dry bulb / 43° F wet bulb. ²The source voltage must not fluctuate more than $\pm 10\%$. ³Only for outdoor unit. ⁴IEER: Integrated Energy Efficiency Ratio. ⁵SCHE: Simultaneous Cooling & Heating Efficiency. ⁶The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length. ⁷Select wire size based on the larger value of MCA. MCA: Minimum Circuit Amps (Minimum Circuit Amps required for power supply design).

Outdoor Units | Technical Specifications





The standard pipe 072 type – 120 type

Equivalent piping length 25 ft, Height difference: 0 ft

⁸In case the diversity exceeds 135%, the type of indoor unit is limited and the maximum number of indoor units is reduced.

Heat Recovery Outdoor Unit (MMYF) 208/230V-3-60



Space Saving Model (Combination) oor Unit Model Name (MMY) AP192S6FT9P-UL AP336S6FT9P-UL AP240S6FT9P-U 3S6FT9P-UL 24 28 16 20 nal Tons MAP1206FT9P-UL MAP1206FT9P-UL MAP1686FT9P-UL MAP1686FT9P-UL Combination Model (MMY) MAP0726FT9P-UL MAP1206FT9P-UL MAP1206FT9P-UL MAP1686FT9P-UL Cooling Capacity¹ kBtu/h 192 240 288 336 Nominal (With Non-Ducted Indoor Rated kBtu/h 184 230 276 320 Units / Ducted) Heating Capacity¹ Nominal kBtu/h 216 270 324 378 (With Non-Ducted Indoor 308 Rated kBtu/h 206 256 360 Units / Ducted) 208/230V, 3-Phase, 60Hz 208/230V, 208/230V, 208/230V, With Non-Power Supply 3-Phase, 60Hz 3-Phase, 60Hz 3-Phase, 60Hz Ducted Power Consumption³ kW 15.29 20.91 26.12 30.88 Indoor Units Cooling IEER4 Btu/W*hr 22.8 22.4 25.3 21.9 Flectrical 16.36 20.90 Power Consumption kW 26.28 31.66 Characteristics Heating SCHE Btu/W*hr 29.5 29.0 28.1 26.0 208/230V, 208/230V, 208/230V, 208/230V, Power Supply 3-Phase, 60Hz 3-Phase, 60Hz 3-Phase, 60Hz 3-Phase, 60Hz With Ducted Indoor Units Power Consumption³ kW 15.19 20.81 26.99 32.44 Cooling IEER⁴ 20.3 197 19.3 Flectrical Btu/W*hr 19.9 Characteristics Power Consumption³ kW 15.82 20.60 25.67 31.82 Heating SCHE Btu/W*h 27.4 27.7 25.9 22.4 72.9 72.9 72.9 72.9 Height External Dimensions 47.6 x 2 63.0 + 47.6 63.0 x 2 Width 47.6 + 39.0in Depth 30.7 30.7 30.7 30.7 in Total Weight Unit lb 721 + 600 721 x 2 882 + 721 882 x 2 Hermetic Twin Hermetic Twin Hermetic Twin Hermetic Twin Туре Rotary Compressor Rotary Compressor Rotary Compressor Rotary Compressor Compressor Motor Output kW 4.0 x 2 + 2.1 x 2 4.0 x 4 6.5 x 2 + 4.0 x 2 6.5 x 4 Motor Output kW 1.0 x 2 1.0 x 2 1.0 x 3 1.0 x 4 Fan Unit Air Volume cfm 7,700 + 5,900 7,700 x 2 10,850 + 7,700 10,850 x 2 Maximum External Static Pressure in WG 0.16 0.16 0.16 0.16 24.3 x 2 24.3 x 2 24.3 x 2 24.3 x 2 Refrigerant⁶ (Charged Refrigerant Amount) lb Electrical MCA⁷ 45.4 + 23.3 45.4 + 45.4 66.2 + 45.4 66.2 + 66.2 А Unit Specifications Recommended Fuse Size Α 50 + 3050 + 5070 + 5070 + 70Gas Side in 1-1/8 1-3/8 1-3/8 1-3/8 (Main Pipe) (Brazing) Connecting Liquid Side 7/8 7/8 7/8 7/8 Refrigerant in (Main Pipe) (Flare) Port Piping Diameter Discharge in 7/8 1 - 1/81-1/8 1-1/8 (Main Pipe) (Flare) 3/8 3/8 3/8 3/8 Balance Pipe (Flare) in Operation Cooling ° F DB 14-122 14-122 14-122 14-122 Temperature Range ° F WB -13-60 -13-60 -13-60 -13-60 Heating Maximum Number of Connected Indoor Units 34 42 50 60 50-150% 50-150% 50-150% 50-150% Maximum Capacity of Combined Indoor Units Sound Pressure Level Cooling / Heating dB(A) 64.0/65.5 66/67 68.5/67.0 69.5/70.0

¹Bated conditions[.]

Cooling: Indoor 80° F dry bulb / 67° F wet bulb, Outdoor 95° F dry bulb. Heating: Indoor 70° F dry bulb, Outdoor 47° F dry bulb / 43° F wet bulb.

²The source voltage must not fluctuate more than ±10%.

³Only for outdoor unit.

⁴IEER: Integrated Energy Efficiency Ratio.

⁵SCHE: Simultaneous Cooling & Heating Efficiency.

⁶The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length. ⁷Select wire size based on the larger value of MCA. MCA: Minimum Circuit Amps (Minimum Circuit Amps required for power supply design). ⁸In case the diversity exceeds 135%, the type of indoor unit is limited and the maximum number of indoor units is reduced.

Standard Mod	el (Single Ur	nit)						
Outdoor Unit N	/lodel Name	(MMY)		MAP0726FT6P-UL	MAP0966FT6P-UL	MAP1206FT6P-UL	MAP1446FT6P-UL	MAP1686FT6P-UL
Nominal Tons				6	8	10	12	14
Cooling Capaci	ty ¹	Nominal	kBtu/h	72	96	120	144	168
(With Non-Duct Units / Ducted)	ted Indoor	Rated	kBtu/h	69	92	114	138	160
Heating Capaci	ty ¹	Nominal	kBtu/h	81	108	135	162	189
Units / Ducted)		Rated	kBtu/h	77	103	129	154	180
With Non-	Power Supp	ly ²		460V, 3-Phase, 60Hz				
Ducted	Onalian	Power Consumption ³	kW	4.53	7.16	9.39	11.03	14.55
Indoor Units	Cooling	IEER ⁴	Btu/W*hr	26.6	28.3	27.5	25.9	23.3
Electrical	Unation	Power Consumption ³	kW	5.98	7.66	10.21	11.76	15.05
Characteristics	Heating	SCHE ⁵	Btu/W*hr	30.6	31.3	34.9	33.6	30.2
With Ductod Power Su		ly ²		460V, 3-Phase, 60Hz				
With Ducted	Cooling	Power Consumption ³	kW	5.11	7.34	9.05	11.29	14.48
Electrical	COOIIIIg	IEER ⁴	Btu/W*hr	19.5	21.4	20.0	20.2	19.2
Characteristics	Hooting	Power Consumption ³	kW	6.25	7.61	10.34	12.02	15.38
0114140101131103	пеашу	SCHE ⁵	Btu/W*hr	26.9	26.7	26.7	29.9	26.9
		Height	in	72.9	72.9	72.9	72.9	72.9
External Dimensions Width		in	39.0	47.6	47.6	63.0	63.0	
Depth		in	30.7	30.7	30.7	30.7	30.7	
Total Weight	Unit Ib		lb	615	736	736	875	875
	Туре			Hermetic Twin				
Compressor	Туре			Rotary Compressor				
	Motor Outpu	ıt	kW	2.1 x 2	3.0 x 2	4.0 x 2	5.4 x 2	6.5 x 2
	Motor Outpu	ıt	kW	1.0	1.0	1.0	1.0 x 2	1.0 x 2
Fan Unit	Air Volume		cfm	5,900	7,480	7,700	10,850	10,850
	Maximum E	xternal Static Pressure	in WG	0.24	0.16	0.16	0.16	0.16
Refrigerant ⁶ (Cl	narged Refrig	erant Amount)	lb	24.3	24.3	24.3	24.3	24.3
Electrical	Unit	MCA ⁷	A	11.8	17.0	22.0	23.4	29.7
Specifications	UIIIL	Recommended Fuse Size	A	15	20	25	30	35
		Gas Side (Main Pipe) (Brazing)	in	7/8	7/8	1-1/8	1-1/8	1-1/8
Refrigerant	Connecting Port	Liquid Side (Main Pipe) (Flare)	in	1/2	1/2	1/2	5/8	3/4
Piping	Diameter	Discharge (Main Pipe) (Flare)	in	3/4	3/4	3/4	7/8	7/8
		Balance Pipe (Flare)	in	3/8	3/8	3/8	3/8	3/8
Operation		Cooling	° F DB	14-122	14-122	14-122	14-122	14-122
Temperature R	ange	Heating	° F WB	-13-60	-13-60	-13-60	-13-60	-13-60
Maximum Num	ber of Conne	cted Indoor Units		12	16	21	25	30
Maximum Capa	ximum Capacity of Combined Indoor Units ⁸			50-150%	50-150%	50-150%	50-150%	50-150%
Sound Pressure	e Level Coolir	ng / Heating	dB(A)	57/60	62/62	63/64	66.5/66.5	66.5/67.0

¹Bated conditions: Cooling: Indoor 80° F dry bulb / 67° F wet bulb, Outdoor 95° F dry bulb. Heating: Indoor 70° F dry bulb, Outdoor 47° F dry bulb / 43° F wet bulb. ²The source voltage must not fluctuate more than ±10% ³Only for outdoor unit. ⁴IEER: Integrated Energy Efficiency Ratio. ⁵SCHE: Simultaneous Cooling & Heating Efficiency. ⁶The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length. ⁷Select wire size based on the larger value of MCA. MCA: Minimum Circuit Amps (Minimum Circuit Amps required for power supply design). ⁸In case the diversity exceeds 135%, the type of indoor unit is limited and the maximum number of indoor units is reduced.

SMMS 💋

The standard pipe 144 type – 240 type

Equivalent piping length 50 ft, Height difference: 0 ft

Outdoor Units | Technical Specifications





The standard pipe 072 type - 114 type

Equivalent piping length 25 ft, Height difference: 0 ft

Heat Recovery Outdoor Unit (MMYF) 460V-3-60



Heat Recovery Outdoor Unit (MMYF) 460V-3-60

Standard Model (Combination

Outdoor Unit Model Name (UMW) AP120FTGP-UL AP2640FTGP-UL MAP140FTGP-UL	Standard Mod	lel (Combina	tion)							
<table-container> Nomina Nomina U 16 6 0 0 22 24 26 Combination IMAP0366776-UL MAP1446776-UL MAP1446776-UL MAP1466776-UL MAP1466776-UL MAP1466776-UL MAP1466776-UL MAP1466776-UL MAP1466776-UL MAP1466776-UL MAP146776-UL MAP146776-UL</table-container>	Outdoor Unit I	Model Name	(MMY)		AP1926FT6P-UL	AP2166FT6P-UL	AP2406FT6P-UL	AP2646FT6P-UL	AP2886FT6P-UL	AP3126FT6P-UL
	Nominal Tons				16	18	20	22	24	26
Chambane Non-Bit Multi-Y MAP90966FT6P-UL MAP1066FT6P-UL MAP1206FT6P-UL MAP146FT6P-UL MAP1446FT6P-UL MAP1445TEFL MAP1445TEFL M	O				MAP0966FT6P-UL	MAP1206FT6P-UL	MAP1446FT6P-UL	MAP1446FT6P-UL	MAP1446FT6P-UL	MAP1686FT6P-UL
	Combination IV	IODEI (IVIIVIY)			MAP0966FT6P-UL	MAP0966FT6P-UL	MAP0966FT6P-UL	MAP1206FT6P-UL	MAP1446FT6P-UL	MAP1446FT6P-UL
$ \begin{array}{ $	Cooling Capaci	ity ¹ tod Indoor	Nominal	kBtu/h	192	216	240	264	288	312
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Units / Ducted)		Rated	kBtu/h	184	206	230	252	276	298
With Non-Ducted Indoo Units / Ducted Ducte	Heating Capac	ity ¹	Nominal	kBtu/h	216	243	270	297	324	351
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	(With Non-Ducted Indoor		Rated	kBtu/h	206	232	256	282	308	334
	offits / Ducteu)				460V 3-Phase	460V 3-Phase	460V 3-Phase	460V 3-Phase	460V 3-Phase	460V 3-Phase
	With Non-	Power Supp	oly²		60Hz	60Hz	60Hz	60Hz	60Hz	60Hz
$ \begin{array}{ $	Ducted		Power Consumption ³	kW	14.60	17.22	19.29	22.44	24.14	28.14
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Indoor Units	Cooling	IFFR ⁴	Btu/W*hr	26.1	24.2	23.3	23.1	22.8	22.1
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Electrical		Power Consumption ³	kW	15.91	18.63	20.30	23.76	25.50	28.98
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Characteristics	Heating	SCHE ⁵	Rtu/W*hr	29.5	29.0	29.0	27.7	28.1	26.7
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			OONE	Dtu/ W III	460V 3-Phase	/60V/ 3_Phase	/60V/ 3-Phase	/60V/ 3-Phase	460V 3-Phase	460V 3-Phase
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	With Dustod	Power Supp	oly ²		60Hz	60Hz	60Hz	60Hz	60Hz	60Hz
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Indoor Units		Power Consumption ³	k\M	14 91	17 29	19.26	22.01	23.96	28.61
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Flectrical	Cooling	IFER4	Rtu/W*hr	20.4	20.5	20.8	20.5	20.00	10.7
Heating Profestional bioling Form Containingtion FW 13.30 17.30 13.39 22.00 24.37 20.01 External Dimension GMB Containingtion NW 13.00 17.09 72.9 72.0 27.0 27.9 72.9 73.07 30.7	Characteristics		Power Concumption ³		15.26	17.00	10.00	20.0	24.07	29.61
External Dimensions Only Wind 27.9 72.9 7	onaraotonotioo	Heating	CUE5	Rtu/W*br	27.4	27.6	07.7	22.00	24.57	20.01
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Height		Joint	in vice	72.0	72.0	72.0	72.0	23.5	72.0
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	External Dimensions Width		in	12.3 17.6 x 2	12.3 17.6 x 2	62.0 + 47.6	62.0 + 47.6	62 0 v 2	12.3 62.0 x 2	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	LAtemai Dimei	1510115	Donth	in	47.0 X Z	47.0 X Z	20.7	20.7	20.7	20.7
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Total Waight	Unit	Dehili	lli	706 y 0	706 y 0	075 1 726	075 1 726	075 v 0	075 x 0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	TOLAT WEIGHT	Unit		u	/ JO X Z	1 Jon X Z	070 + 750	070 + 750	070 X Z	0/ J X Z
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Compropor	Туре			Potory Compressor	Refinite in Twin	Refinite lite Twill	Refinite in Twill	Potory Comprosor	Potory Compressor
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Compressor	Motor Outp	+	1/1/1						
Fan Unit Air Volume Crim 7.480 x 2 7.700 + 7.480 10.8 x 3 1.0 x 3 1.0 x 4 1.0 x 5 1.0 x 4 1.0 x 5 1.0 x 4 1.0 x 4 1.0 x 4 1.0 x 5 1.0 x 5 1.0 x 5 1.0 x 4 1.0 x 5 1.0 x 5 1.0 x 5 1.0 x 4 1.0 x 4 1.0 x 5 1.0 x 4 1.0 x 4 1.0 x 5 1.0 x 5 1.0 x 5 1.0 x 4 1.0 x 5 1.0 x 5 1.0 x 5 1.0 x 4 1.0 x 5 1.0 x 5 1.0 x 4 1.0 x 5 1.0 x 4 1.0 x 5 1.0 x 4 1.0 x 5		Motor Outp	ut	KVV	3.0 X 4	4.0 X Z + 3.0 X Z	$3.4 \times 2 + 3.0 \times 2$	$3.4 \times 2 + 4.0 \times 2$	0.4 X 4	$0.3 \times 2 + 3.4 \times 2$
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Fon Unit	Nic Volumo	ul	KVV	1.0 X Z	1.U X Z	1.0 X 3	1.0 X 3	1.0 X 4	1.0 X 4
Refrigerant ⁶ Charged Refrigerant Amount) Ib 24.3×2 $23.4 + 12$ $23.4 + 22$ $23.4 + 23.4$ $29.7 + 23.4$	Fan Unit	Air volume	internet Otatia Ducasura		7,480 X Z	7,700 + 7,480	10,850 + 7,480	10,850 + 7,700	10,850 X Z	10,850 X Z
Refrigerant (Charged Retrigerant Amount) Ib 24.3×2 224.3×2 234.3×3 326.3×2	D ()	Maximum E	xternal Static Pressure	IN WG	0.16	0.16	0.16	0.16	0.16	0.16
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Retrigerant [®] (C	narged Retric	jerant Amount)	di	24.3 X 2	24.3 X 2	24.3 X 2	24.3 X 2	24.3 X 2	24.3 X 2
Specifications MM Recommended Fuse Size A $20 + 20$ $25 + 20$ $30 + 20$ $30 + 25$ $30 + 30$ $35 + 30$ Refrigerant Piping Connecting Port Diameter Connecting Port Diameter In 1-1/8 1-3/8 1-1/8 1-1/8 1-1/	Electrical	Unit	MCA ⁷	A	17 + 17	22 + 17	23.4 + 17	23.4 + 22	23.4 + 23.4	29.7 + 23.4
Refrigerant Piping Gas Side (Main Pipe) (Brazing) in 1-1/8 1-3/8 7/8	Specifications	0	Recommended Fuse Size	A	20 + 20	25 + 20	30 + 20	30 + 25	30 + 30	35 + 30
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			Gas Side (Main Pipe) (Brazing)	in	1-1/8	1-3/8	1-3/8	1-3/8	1-3/8	1-3/8
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Refrigerant	Connecting Port	Liquid Side (Main Pipe) (Flare)	in	3/4	3/4	3/4	7/8	7/8	7/8
Balance Pipe (Flare) in 3/8 14-122 <	Piping	Diameter	Discharge (Main Pipe) (Flare)	in	7/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8
Operation Cooling ° F DB 14-122 14-			Balance Pipe (Flare)	in	3/8	3/8	3/8	3/8	3/8	3/8
Temperature Range Heating ° F WB -13-60	Operation		Cooling	° F DB	14-122	14-122	14-122	14-122	14-122	14-122
Maximum Number of Connected Indoor Units 34 38 42 46 50 55 Maximum Capacity of Combined Indoor Units 34 38 42 46 50 55 Maximum Capacity of Combined Indoor Units ⁸ 50 -150%	Temperature R	ange	Heating	° F WB	-13-60	-13-60	-13-60	-13-60	-13-60	-13-60
Maximum Capacity of Combined Indoor Units ⁶ 50-150% 50-150% <td>Maximum Num</td> <td colspan="3">Maximum Number of Connected Indoor Units</td> <td>34</td> <td>38</td> <td>42</td> <td>46</td> <td>50</td> <td>55</td>	Maximum Num	Maximum Number of Connected Indoor Units			34	38	42	46	50	55
Sound Pressure Level Control - 60 100/8 - 65 106/8 - 66 5/68 5 - 66 5/68 5 - 66 5/68 5 - 66 5/68 5 - 66 5/68 5	Maximum Can	Maximum Canacity of Combined Indoor Units ⁸			50-150%	50-150%	50-150%	50-150%	50-150%	50-150%
	Sound Pressur	e Level Cooli	na / Heating	dB(A)	65/65	65 5/66 5	68/68	68 5/68 5	69 5/69 5	69 5/70 0

¹Rated conditions:

Cooling: Indoor 80° F dry bulb / 67° F wet bulb, Outdoor 95° F dry bulb.

Heating: Indoor 70° F dry bulb, Outdoor 47° F dry bulb / 43° F wet bulb. ²The source voltage must not fluctuate more than $\pm 10\%$. ³Only for outdoor unit.

⁴IEER: Integrated Energy Efficiency Ratio.

⁵SCHE: Simultaneous Cooling & Heating Efficiency.

³The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length. ³Select wire size based on the larger value of MCA. MCA: Minimum Circuit Amps (Minimum Circuit Amps required for power supply design). ⁹In case the diversity exceeds 135%, the type of indoor unit is limited and the maximum number of indoor units is reduced.



The standard pipe 144 type – 240 type

Equivalent piping length 50 ft, Height difference: 0 ft

Outdoor Unit	Model Name	(MMY)		AP3366FT6P-UL	AP3606FT6P-UL	AP3846FT6P-UL	AP4086FT6P-UL	AP4326FT6P-UL	AP4566FT6P-UL
Nominal Tons				28	30	32	34	36	38
				MAP1206FT6P-UL	MAP1206FT6P-UL	MAP1446FT6P-UL	MAP1446FT6P-UL	MAP1446FT6P-UL	MAP1686FT6P-UL
Combination M	lodel (MMY)			MAP1206FT6P-UL	MAP1206FT6P-UL	MAP1206FT6P-UL	MAP1446FT6P-UL	MAP1446FT6P-UL	MAP1446FT6P-UL
	,			MAP0966FT6P-UL	MAP1206FT6P-UL	MAP1206FT6P-UL	MAP1206FT6P-UL	MAP1446FT6P-UL	MAP1446FT6P-UL
Cooling Capaci	ty ¹	Nominal	kBtu/h	336	360	384	408	432	456
(With Non-Duc Units / Ducted)	ted Indoor	Rated	kBtu/h	320	342	366	390	412	434
Heating Capaci	ity ¹	Nominal	kBtu/h	378	405	432	459	486	513
(With Non-Ducted Indoor Units / Ducted) Rated		Rated	kBtu/h	360	386	412	436	462	488
	Douvor Cupp	1.2		460V, 3-Phase,					
With Non-	Power Supp	iy-		60Hz	60Hz	60Hz	60Hz	60Hz	60Hz
Ducted	Cooling	Power Consumption ³	kW	29.11	34.26	36.70	39.49	40.14	44.58
Electrical	Cooling	IEER ⁴	Btu/W*hr	23.9	23.3	22.7	21.9	21.4	19.4
Characteristics	Hooting	Power Consumption ³	kW	30.23	33.48	36.34	38.73	40.99	43.60
Unaracteristics	пеация	SCHE⁵	Btu/W*hr	26.0	25.1	24.5	23.5	23.2	23.2
With Ducted	Power Supp	ly²		460V, 3-Phase, 60Hz					
Indoor Units		Power Consumption ³	kW	30.20	34.72	37.21	39.70	42.09	45.32
Electrical	Cooling	IEER ⁴	Btu/W*hr	20.7	20.2	19.8	19.4	19.0	18.9
Characteristics		Power Consumption ³	kW	30.63	32.39	35.72	37.84	41.05	43.36
	Heating	SCHE ⁵	Btu/W*hr	22.4	22.2	21.6	21.1	20.6	20.8
		Height	in	72.9	72.9	72.9	72.9	72.9	72.9
External Dimen	isions	Width	in	47.6 x 3	47.6 x 3	$63.0 + 47.6 \times 2$	63.0 x 2 + 47.6	63.0 x 3	63.0 x 3
External Briter		Depth	in	30.7	30.7	30.7	30.7	30.7	30.7
Total Weight	Unit		lb	736 x 3	736 x 3	875 + 736 x 2	875 x 2 + 736	875 x 3	875 x 3
J	-			Hermetic Twin					
Compressor	Туре			Rotary Compressor					
·	Motor Outpu	ıt	kW	4.0 x 4 + 3.0 x 2	4.0 x 6	5.4 x 2 + 4.0 x 4	5.4 x 4 + 4.0 x 2	5.4 x 6	6.5 x 2 + 5.4 x 4
	Motor Outpu	ıt	kW	1.0 x 3	1.0 x 3	1.0 x 4	1.0 x 5	1.0 x 6	1.0 x 6
Fan Unit	Air Volume		cfm	7,700 x 2 + 7,480	7,700 x 3	10,850 + 7,700 x 2	10,850 x 2 + 7,700	10,850 x 3	10,850 x 3
	Maximum E	xternal Static Pressure	in WG	0.16	0.16	0.16	0.16	0.16	0.16
Refrigerant ⁶ (C	harged Refrig	erant Amount)	lb	24.3 x 3					
Flectrical		MCA ⁷	A	22 + 22 + 17	22 + 22 + 22	23.4 + 22 + 22	23.4 + 23.4 + 22	23.4 + 23.4 + 23.4	29.7 + 23.4 + 23.4
Specifications	Unit	Recommended Fuse Size	A	25 + 25 + 20	25 + 25 + 20	30 + 25 + 25	30 + 30 + 25	30 + 30 + 30	35 + 30 + 30
		Gas Side (Main Pipe) (Brazing)	in	1-3/8	1-5/8	1-5/8	1-5/8	1-5/8	1-5/8
Refrigerant	Connecting Port	Liquid Side (Main Pipe) (Flare)	in	7/8	7/8	7/8	7/8	7/8	7/8
Piping	Diameter	Discharge (Main Pipe) (Flare)	in	1-1/8	1-3/8	1-3/8	1-3/8	1-3/8	1-3/8
		Balance Pipe (Flare)	in	3/8	3/8	3/8	3/8	3/8	3/8
Operation		Cooling	° F DB	14-122	14-122	14-122	14-122	14-122	14-122
Temperature R	ange	Heating	° F WB	-13-60	-13-60	-13-60	-13-60	-13-60	-13-60
Maximum Num	ber of Conne	cted Indoor Units		60	63	64	64	64	64
Maximum Capa	Maximum Capacity of Combined Indoor Units ⁸				50-150%	50-150%	50-150%	50-150%	50-150%
Sound Pressure	e Level Coolir	ng / Heating	dB(A)	67.5/68.5	68/69	69.5/70.0	70.5/71.0	71.5/71.5	71.5/71.5
			,						

¹Rated conditions: Cooling: Indoor 80° F dry bulb / 67° F wet bulb, Outdoor 95° F dry bulb. Heating: Indoor 70° F dry bulb, Outdoor 47° F dry bulb / 43° F wet bulb. ²The source voltage must not fluctuate more than $\pm 10\%$. ³Only for outdoor unit. ⁴IEER: Integrated Energy Efficiency Ratio. ⁵SCHE: Simultaneous Cooling & Heating Efficiency.

⁶The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length. ⁷Select wire size based on the larger value of MCA. MCA: Minimum Circuit Amps (Minimum Circuit Amps required for power supply design). ⁸In case the diversity exceeds 135%, the type of indoor unit is limited and the maximum number of indoor units is reduced.

Outdoor Units | Technical Specifications





The standard pipe 072 type – 114 type

Equivalent piping length 25 ft, Height difference: 0 ft

Heat Recovery Outdoor Unit (MMYF) 460V-3-60



Space Saving Model (Combination) oor Unit Model Name (MMY) AP336S6FT6P-UL AP192S6FT6P-UL S6FT6P-UL 24 28 16 20 nal Tons MAP1206FT6P-UL MAP1206FT6P-UL MAP1686FT6P-UL MAP1686FT6P-UL Combination Model (MMY) MAP0726FT6P-UL MAP1206FT6P-UL MAP1206FT6P-UL MAP1686FT6P-UL Cooling Capacity¹ kBtu/h 192 240 288 336 Nominal (With Non-Ducted Indoor Rated kBtu/h 184 230 276 320 Units / Ducted) Heating Capacity kBtu/h 216 270 324 378 Nominal (With Non-Ducted Indoor 308 Rated kBtu/h 206 256 360 Units / Ducted) 460V, 3-Phase, 60Hz 460V, 3-Phase, 60Hz 460V, 3-Phase, 60Hz With Non-Power Supply 460V, 3-Phase, 60Hz Power Consumption Ducted kW 15.29 20.91 26.12 30.88 Cooling Indoor Units IEER4 Btu/W*hr 25.3 22.8 22.4 21.9 Electrical kW 16.36 20.90 26.28 31.66 Power Consumption Characteristics Heating SCHF⁵ 29.0 28.1 Btu/W*hi 29.5 26.0 460V, 3-Phase, 60Hz 460V, 3-Phase, 60Hz 460V, 3-Phase, 60Hz 460V, 3-Phase, 60Hz Power Suppl With Ducted kW 20.81 Power Consumption³ 15.19 26.99 32.44 Indoor Units Cooling IEER4 Btu/W*hr 20.3 19.7 19.3 19.9 Electrical 25 67 Power Consumption kW 15.82 20.60 31 82 Characteristics Heating SCHE Btu/W*hi 27.4 27.7 25.9 22.4 72.9 72.9 72.9 72.9 Height in External Dimensions Width 47.6 + 39.0 47.6 x 2 63.0 + 47.6 63.0 x 2 in Depth 30.7 30.7 30.7 30.7 in Total Weight Unit 736 + 615 736 x 2 875 + 736 875 x 2 lb Hermetic Twin Hermetic Twin Hermetic Twin Hermetic Twin Туре Rotary Compressor Rotary Compressor Rotary Compressor **Rotary Compressor** Compressor Motor Output kW 4.0 x 2 + 2.1 x 2 4.0 x 4 $6.5 \times 2 + 4.0 \times 2$ 6.5 x 4 Motor Output kW 1.0 x 2 1.0 x 2 1.0 x 3 1.0 x 4 Fan Unit Air Volume cfm 7,700 + 5,900 7,700 x 2 10,850 + 7,700 10,850 x 2 in WG Maximum External Static Pressure 0.16 0.16 0.16 0.16 24.3 x 2 24.3 x 2 24.3 x 2 24.3 x 2 Refrigerant⁶ (Charged Refrigerant Amount) lb Electrical MCA 22 + 11.8 22 + 22 29.7 + 22 29.7 + 29.7 Unit Specifications Recommended Fuse Size А 25 + 1525 + 2535 + 2535 + 35Gas Side in 1-1/8 1-3/8 1-3/8 1-3/8 (Main Pipe) (Brazing) Connecting Liquid Side Refrigerant 7/8 7/8 7/8 7/8 in Port (Main Pipe) (Flare) Piping Diameter Discharge 1-1/8 7/8 1-1/8 1-1/8 in (Main Pipe) (Flare) 3/8 3/8 Balance Pipe (Flare) 3/8 3/8 in Operation Cooling ° F DB 14-122 14-122 14-122 14-122 Temperature Range Heating ° F WB -13-60 -13-60 -13-60 -13-60 Maximum Number of Connected Indoor Units 34 42 50 60 50-150% 50-150% 50-150% 50-150% Maximum Capacity of Combined Indoor Units Sound Pressure Level Cooling / Heating dB(A) 64/65.5 66/67 68.5/67 69.5/70

¹Bated conditions[.]

Cooling: Indoor 80° F dry bulb / 67° F wet bulb, Outdoor 95° F dry bulb. Heating: Indoor 70° F dry bulb, Outdoor 47° F dry bulb / 43° F wet bulb.

²The source voltage must not fluctuate more than ±10%.

³Only for outdoor unit.

⁴IEER: Integrated Energy Efficiency Ratio. ⁵SCHE: Simultaneous Cooling & Heating Efficiency.

⁶The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length. ⁷Select wire size based on the larger value of MCA. MCA: Minimum Circuit Amps (Minimum Circuit Amps required for power supply design). ⁸In case the diversity exceeds 135%, the type of indoor unit is limited and the maximum number of indoor units is reduced.

144 type – 240 type

The standard pipe

Equivalent piping length 50 ft, Height difference: 0 ft

Single-Phase Heat Pump Outdoor Unit (MCY7) 208/230V-1-60

Stanuaru mou	ei (Sillyle Ol	mu)				
Outdoor Unit N	lodel Name	(MMY)		MAP0367HS-UL	MAP0487HS-UL	MAP0607HS-UL
Nominal Tons				3	4	5
Cooling Capacit (With Non-Duct Units / Ducted)	ty ¹ ed Indoor	Nominal	kBtu/h	36	48	60
Heating Capacit (With Non-Duct Units / Ducted)	ty ¹ ed Indoor	Nominal	kBtu/h	40	54	66
	Power Supp	ly ²		208/230V, 1Phase, 60Hz	208/230V, 1Phase, 60Hz	208/230V, 1Phase, 60Hz
With Non-	Cooling	Power Consumption ³	kW	2.29	3.71	5.26
Ducted	Cooling	EER ⁴	Btu/W*hr	15.7	12.95	11.4
Floctrical	Heating	Power Consumption ³ kW		2.79	3.95	5.16
Characteristics	COP ⁵		Btu/W*hr	4.20	4.01	3.75
(Nominal) ¹	SEER ⁶			22.7	21.0	20.5
(Horrinal)	HSPF ⁷			11.5	11.5	11.5
	Power Supp	ly ²		208/230V, 1Phase, 60Hz	208/230V, 1Phase, 60Hz	208/230V, 1Phase, 60Hz
With Ducted Indoor Units	Cooling	Power Consumption ³	kW	2.76	4.87	5.76
	Cooling	EER ⁴	Btu/W*hr	13.05 9.85		10.40
Electrical	Hooting	Power Consumption ³	kW	3.45	5.27	5.34
Characteristics	пеашу	COP ⁵	Btu/W*hr	3.40	3.00	3.62
Nominal) ¹ SE	SEER ⁶			17.70	16.60	17.60
HSPF ⁷				10.5	9.5	11.0
		Height	in	61	61	61
External Dimen	sions	Width	in	39.8	39.8	39.8
		Depth	in	14.6	14.6	14.6
Total Weight	Unit		lb	311	311	311
Comprosoor	Туре			Hermetic Twin Rotary Compressor	Hermetic Twin Rotary Compressor	Hermetic Twin Rotary Compressor
Compressor	Motor Outpu	ıt	kW	3.75	3.75	3.75
Eon Unit	Motor Output	ıt	kW	100 + 100	100 + 100	100 + 100
Fall Ulli	Air Volume		cfm	4,520	4,690	4,850
Refrigerant ⁸ (Ch	narged Refrig	erant Amount)	lb	14.8	14.8	14.8
Electrical	Unit	MCA ⁹	A	36.3	36.3	36.3
Specifications	Unit	Recommended Fuse Size	A	40	40	40
Refrigerant	Connecting	Gas Side (Main Pipe) (Brazing)	in	5/8	5/8	3/4
Piping	Diameter	Liquid Side (Main Pipe) (Flare)	in	3/8	3/8	3/8
Operation		Cooling	° F DB	23-122	23-122	23-122
Temperature Ra	ange	Heating	° F WB	-13-60	-13-60	-13-60
Maximum Num	ber of Conne	cted Indoor Units		6	8	9
Maximum Capa	city of Comb	ined Indoor Units ¹⁰		80-135%	80-135%	50-135%
Cound Drooourr	e Level Coolir	ng / Heating	dB(A)	52/56	54/57	55/58

¹Rated conditions: Cooling: Indoor 80° F dry bulb / 67° F wet bulb, Outdoor 95° F dry bulb. Heating: Indoor 70° F dry bulb. Outdoor 47° F dry bulb / 43° F wet bulb. ²The source voltage must not fluctuate more than $\pm 10\%$. ³Only for outdoor unit. ⁴EER: Energy Efficiency Ratio. ⁵COP: Coefficient of Performance. ⁶SEER: Seasonal Energy Efficiency Ratio. ⁷HSPF: Heating Seasonal Performance Ratio. ⁸The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length. ⁹Select wire size based on the larger value of MCA. MCA: Minimum Circuit Amps (Minimum Circuit Amps required for power supply design). ¹⁰In case the diversity exceeds 135%, the type of indoor unit is limited and the maximum number of indoor units is reduced.

Outdoor Units | Technical Specifications





Heat Pump Outdoor Unit (MMYH) 208/230V-3-60



Heat Pump Outdoor Unit (MMYH) 208/230V-3-60

Standard Model (Combination)

Standard Mod	tdoor Unit Model Name (MMY)							
Naminal Terre	wodel Name	(IVIIVIY)		MAPU720HT9P-UL	MAPU900HT9P-UL	MAPTZUGHT9P-UL	MAP1440H19P-UL	MAPTOSOHT9P-UL
Nominal lons	541			6	8	10	12	14
With Non-Duc	ITY' ted Indoor	Nominal	kBtu/h	72	96	120	144	168
Units / Ducted))	Rated	kBtu/h	69	92	114	138	160
Heating Capac	ity ¹	Nominal	kBtu/h	81	108	135	162	189
Units / Ducted))	Rated	kBtu/h	77	103	129	154	180
With Non-	Power Supp	ly²		208/230V, 3-Phase, 60Hz				
Ducted	Cooling	Power Consumption ³	kW	4.49	7.12	8.65	10.85	14.26
Electrical	Cooling	IEER ⁴	Btu/W*hr	29.0	28.0	25.1	25.6	23.8
Characteristics	Unation	Power Consumption ³	kW	5.17	6.53	9.22	10.68	13.82
GIIdiduleiislius	Heating	COP ⁵	W/W	4.23	4.50	3.99	4.12	3.74
	Davies Curr	Sumal 2		208/230V,	208/230V,	208/230V,	208/230V,	208/230V,
With Ducted	Power Supp	ower Supply ²		3-Phase, 60Hz				
Indoor Units	Cooling	Power Consumption ³	kW	4.69	6.28	8.81	11.09	13.39
Electrical	Cooling	IEER ⁴	Btu/W*hr	22.7	22.3	21.6	20.0	19.0
Characteristics	Usetine	Power Consumption ³	kW	5.47	6.83	9.04	10.47	13.36
	Heating	COP ⁵	W/W	3.79	4.00	3.89	3.91	3.63
		Height	in	72.9	72.9	72.9	72.9	72.9
External Dimensions Width		in	39.0	47.6	47.6	63.0	63.0	
		Depth	in	30.7	30.7	30.7	30.7	30.7
Total Weight	Unit		lb	574	684	684	838	838
Compressor	Туре			Hermetic Twin Botary Compressor				
o o mprococor	Motor Outp	ut	kW	2.1 x 2	3.0 x 2	4.0 x 2	5.4 x 2	6.5 x 2
	Motor Outp	ut	kW	1.0	1.0	1.0	1.0 x 2	1.0 x 2
Fan Unit	Air Volume		cfm	6.700	7.480	7.480	9.760	10.100
	Maximum E	xternal Static Pressure	in WG	0.24	0.16	0.16	0.16	0.16
Refrigerant ⁶ (C	harged Refric	ierant Amount)	lb	25.4	25.4	25.4	25.4	25.4
Flectrical		MCA ⁷	Δ	27.0	36.0	42.0	54.0	69.0
Specifications	Unit	Recommended Fuse Size	A	30.0	40.0	45.0	60.0	75.0
	Connecting	Gas Side (Main Pipe) (Brazing)	in	7/8	7/8	1-1/8	1-1/8	1-1/8
Refrigerant Piping	Port Diameter	Liquid Side (Main Pipe) (Flare)	in	1/2	1/2	1/2	5/8	5/8
		Balance Pipe (Flare)	in	3/8	3/8	3/8	3/8	3/8
Operation		Cooling	° F DB	14-122	14-122	14-122	14-122	14-122
Temperature R	lange	Heating	° F WB	-13-60	-13-60	-13-60	-13-60	-13-60
Maximum Nun	nber of Conne	ected Indoor Units		12	16	21	25	30
Maximum Cap	Maximum Capacity of Combined Indoor Units ⁸			80-150%	80-150%	80-150%	80-150%	80-150%
Sound Pressur	e Level Cooli	na / Heatina	dB(A)	56/58	61/61	61/62	63/64	64/65

¹Rated conditions:

Cooling: Indoor 80° F dry bulb / 67° F wet bulb, Outdoor 95° F dry bulb. Heating: Indoor 70° F dry bulb, Outdoor 47° F dry bulb, 43° F wet bulb. The source voltage must not fluctuate more than $\pm 10\%$.

³Only for outdoor unit.

⁴IEER: Integrated Energy Efficiency Ratio.

⁵COP: Coefficient of Performance.

⁶The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length. ⁷Select wire size based on the larger value of MCA. MCA: Minimum Circuit Amps (Minimum Circuit Amps required for power supply design). ⁸In case the diversity exceeds 135%, the type of indoor unit is limited and the maximum number of indoor units is reduced.



The standard pipe 072 type – 120 type

Equivalent piping length 25 ft, Height difference: 0 ft

Outdoor Unit N	Nodel Name	(MMY)		AP1926HT9P-UL	AP2166HT9P-UL	AP2406HT9P-UL	AP2646HT9P-UL	AP2886HT9P-UL	AP3126HT9P-UL	AP3366HT9P-UL
Nominal Tons				16	18	20	22	24	26	28
				MAP0966HT9P-UL	MAP1206HT9P-UL	MAP1446HT9P-UL	MAP1446HT9P-UL	MAP1446HT9P-UL	MAP1686HT9P-UL	MAP1686HT9P-UL
Combination M	odel (MINY)			MAP0966HT9P-UL	MAP0966HT9P-UL	MAP0966HT9P-UL	MAP1206HT9P-UL	MAP1446HT9P-UL	MAP1446HT9P-UL	MAP1686HT9P-UL
Cooling Capacit	ty ¹ ted Indoor	Nominal	kBtu/h	192	216	240	264	288	312	336
Units / Ducted)		Rated	kBtu/h	184	206	230	252	276	298	320
Heating Capaci (With Non-Duct	ity ¹ ted Indoor	Nominal	kBtu/h	216	243	270	297	324	351	378
Units / Ducted) Rated		Rated	kBtu/h	206	232	256	282	308	334	360
With Non-	Power Supply ²			208/230V, 3-Phase, 60Hz						
Indoor Unite	Cooling	Power Consumption ³	kW	13.97	16.75	18.63	21.56	24.19	27.97	30.27
Flectrical	oooning	IEER ⁴	Btu/W*hr	25.5	24.6	24.1	22.8	22.5	22.1	22.0
Characteristics	Heating	Power Consumption ³	kW	14.50	17.01	19.47	22.09	24.40	27.94	30.70
	moading	COP⁵	W/W	4.05	3.90	3.75	3.65	3.60	3.42	3.35
With Ducted	Power Supp	ly ²		208/230V, 3-Phase, 60Hz						
Indoor Units	Cooling	Power Consumption ³	kW	13.40	15.39	17.46	19.57	22.88	25.94	29.04
Electrical	COUIIIIg	IEER ⁴	Btu/W*hr	20.3	20.3	20.6	20.4	20.0	19.7	19.6
Characteristics	Hosting	Power Consumption ³	kW	13.64	15.91	17.67	19.83	22.33	25.31	28.82
CO		COP ⁵	W/W	4.00	3.93	3.95	3.90	3.81	3.66	3.49
	Height in		in	72.9	72.9	72.9	72.9	72.9	72.9	72.9
External Dimen	isions	Width	in	47.6 x 2	47.6 x 2	63.0 + 47.6	63.0 + 47.6	63.0 x 2	63.0 x 2	63.0 x 2
		Depth	in	30.7	30.7	30.7	30.7	30.7	30.7	30.7
Total Weight	Unit		lb	684 x 2	684 x 2	838 + 684	838 + 684	838 x 2	838 x 2	838 x 2
0	Type			Hermetic Twin Rotary						
Compressor				Compressor						
	Motor Outpu	ıt	kW	3.0 x 4	4.0 x 2 + 3.0 x 2	5.4 x 2 + 3.0 x 2	5.4 x 2 + 4.0 x 2	5.4 x 4	6.5 x 2 + 5.4 x 2	6.5 x 4
	Motor Outpu	ıt	kW	1.0 x 2	1.0 x 2	1.0 x 3	1.0 x 3	1.0 x 4	1.0 x 4	1.0 x 4
Fan Unit	Air Volume		cfm	7,480 x 2	7,480 x 2	9,760 + 7,480	9,760 + 7,480	9,760 x 2	10,100 + 9,760	10,100 x 2
	Maximum E	xternal Static Pressure	in WG	0.16	0.16	0.16	0.16	0.16	0.16	0.16
Refrigerant ⁶ (Ch	harged Refrig	erant Amount)	lb	25.4 x 2						
Electrical	Unit	MCA ⁷	A	36 + 36	42 + 36	54 + 36	54 + 42	54 + 54	69 + 54	69 + 69
Specifications	UIII	Recommended Fuse Size	A	40 + 40	45 + 40	60 + 40	60 + 45	60 + 60	75 + 60	75 + 75
Defrigerent	Connecting	Gas Side (Main Pipe) (Brazing)	in	1-1/8	1-3/8	1-3/8	1-3/8	1-3/8	1-3/8	1-5/8
Piping	Port Diameter	Liquid Side (Main Pipe) (Flare)	in	5/8	3/4	3/4	3/4	3/4	3/4	7/8
		Balance Pipe (Flare)	in	3/8	3/8	3/8	3/8	3/8	3/8	3/8
Operation		Cooling	° F DB	14-122	14-122	14-122	14-122	14-122	14-122	14-122
Temperature Ra	ange	Heating	° F WB	-13-60	-13-60	-13-60	-13-60	-13-60	-13-60	-13-60
Maximum Num	ber of Conne	cted Indoor Units		34	38	42	46	50	55	60
Maximum Capa	Maximum Capacity of Combined Indoor Units ⁸			80-150%	80-150%	80-150%	80-150%	80-150%	80-150%	80-150%
Sound Pressure	e Level Coolir	ng / Heating	dB(A)	64/64	64.0/64.5	65.5/66.0	65.5/66.5	66/67	66.5/67.5	67/68

¹Rated conditions: Cooling: Indoor 80° F dry bulb / 67° F wet bulb, Outdoor 95° F dry bulb. Heating: Indoor 70° F dry bulb, Outdoor 47° F dry bulb / 43° F wet bulb. ²The source voltage must not fluctuate more than $\pm 10\%$. ³Only for outdoor unit. ⁴IEER: Integrated Energy Efficiency Ratio. ⁵COP: Coefficient of Performance.

⁶The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length. ⁷Select wire size based on the larger value of MCA. MCA: Minimum Circuit Amps (Minimum Circuit Amps required for power supply design). ⁸In case the diversity exceeds 135%, the type of indoor unit is limited and the maximum number of indoor units is reduced.

Outdoor Units | Technical Specifications





The standard pipe 144 type – 240 type

Equivalent piping length 50 ft, Height difference: 0 ft

Heat Pump Outdoor Unit (MMYH) **208/230V-3-60**



andard Model (Single Unit) or Unit Model Name (MMY) 566HT9P-UL P4326HT9P-III 6HT9P-III 34 nal Tons 32 36 38 30 MAP1206HT9P-UL MAP1446HT9P-UL MAP1446HT9P-UL MAP1686HT9P-UL MAP1686HT9P-UL Combination Model (MMY) MAP1206HT9P-UL MAP1206HT9P-UL MAP1446HT9P-UL MAP1446HT9P-UL MAP1686HT9P-UL MAP1206HT9P-UL MAP1206HT9P-UL MAP1206HT9P-UL MAP1206HT9P-UL MAP1206HT9P-UL Cooling Capacity¹ (With Non-Ducted Indoor kBtu/h 456 Nominal 360 384 408 432 Rated kBtu/h 342 366 390 412 434 Units / Ducted) Heating Capacity¹ kBtu/h 405 432 459 486 513 Nominal (With Non-Ducted Indoor Rated kBtu/h 386 412 436 462 488 Units / Ducted) 208/230V, 208/230V, 208/230V, 208/230V, 208/230V, With Non-Power Supply² 3-Phase, 60Hz 3-Phase, 60Hz 3-Phase, 60Hz 3-Phase, 60Hz 3-Phase, 60Hz Ducted kW 40 14 44 58 Power Consumption³ 28 67 33 60 36 55 Indoor Units Cooling IFFR⁴ Btu/W*hi 22.4 21.8 21.4 21.3 20.9 Electrical kW 31.33 34.58 36.86 40.22 43.60 Power Consumption Characteristics Heating COP⁵ W/W 3.52 3.40 3.38 3.28 3.20 208/230V 208/230V 208/230V 208/230V 208/230V Power Supply 3-Phase, 60Hz With Ducted 3-Phase, 60Hz 3-Phase, 60Hz 3-Phase, 60Hz 3-Phase, 60Hz kW **Indoor Units** Power Consumption³ 27 32 31 47 33 58 38.35 42.06 Coolina IEER4 Btu/W*hi 19.6 19.1 19.3 Electrical 20.3 19.8 Characteristics kW 29.40 32.52 36.34 39.15 42.27 Power Consumption Heating COP 3 55 3 37 3.32 W/W 3.66 3.26 72.9 72.9 72.9 72.9 72.9 Height in External Dimensions Width 63.0 + 47.6 x 2 63.0 x 2 + 47.6 63.0 x 2 + 47.6 63.0 x 2 + 47.6 47.6 x 3 in Depth 30.7 30.7 30.7 in 30.7 30.7 $838 + 684 \times 2$ 838 x 2 + 684 $838 \times 2 + 684$ Total Weight 838 x 2 + 684 Unit 684 x 3 lb Hermetic Twin Hermetic Twin Hermetic Twin Hermetic Twin Hermetic Twin Туре Rotary Compresso Rotary Compressor Rotary Compressor Rotary Compressor Rotary Compressor Compressor 6.5 x 2 + 5.4 x 2 40x6 54x2 + 40x454x4 + 40x26.5 x 4 + 4.0 x 2 Motor Output kW + 4.0 x 2 kW 1.0 x 3 1.0 x 4 1.0 x 5 Motor Output 1.0 x 5 1.0 x 5 Fan Unit Air Volume cfm 7,480 x 3 9,760 + 7,480 x 2 9,760 x 2 + 7,480 10,100 + 9,760 + 7,480 10,100 x 2 + 7,480 Maximum External Static Pressure in WG 0.16 0.16 0.16 0.16 0.16 Refrigerant⁶ (Charged Refrigerant Amount) 25.4 x 3 lb Electrical MCA7 42 + 42 + 4254 + 42 + 4254 + 54 + 4269 + 54 + 4269 + 69 + 42Δ Unit Specifications Recommended Fuse Size Α 45 + 45 + 45 60 + 45 + 4560 + 60 + 4575 + 60 + 45 75 + 75 + 45 Gas Side 1-5/8 1-5/8 1-5/8 1-5/8 1-5/8 in Connecting (Main Pipe) (Brazing) Refrigerant Port Liquid Side in 7/8 7/8 7/8 7/8 7/8 Piping (Main Pipe) (Flare) Diameter 3/8 3/8 Balance Pipe (Flare) in 3/8 3/8 3/8 Operation Cooling ° F DB 14-122 14-122 14-122 14-122 14-122 °FWB Temperature Range Heating -13-60 -13-60 -13-60 -13-60 -13-60 Maximum Number of Connected Indoor Units 63 64 64 64 64 Maximum Capacity of Combined Indoor Units⁸ 80-150% 80-150% 80-150% 80-150% 80-150% Sound Pressure Level Cooling / Heating 67.5/68.5 dB(A) 66/67 66.5/67.5 68/69 68/69

1Rated conditions:

Cooling: Indoor 80° F dry bulb / 67° F wet bulb, Outdoor 95° F dry bulb. Heating: Indoor 70° F dry bulb, Outdoor 47° F dry bulb / 43° F wet bulb.

²The source voltage must not fluctuate more than $\pm 10\%$.

³Only for outdoor unit.

⁴IEER: Integrated Energy Efficiency Ratio. ⁵COP: Coefficient of Performance.

³ The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length. ³ Select wire size based on the larger value of MCA. MCA: Minimum Circuit Amps (Minimum Circuit Amps required for power supply design). ⁹ In case the diversity exceeds 135%, the type of indoor unit is limited and the maximum number of indoor units is reduced.

SMMS	P	

The standard pipe 072 type – 120 type

Equivalent piping length 25 ft, Height difference: 0 ft

Heat Pump Outdoor Unit (MMYH) **208/230V-3-60**

opace oavilig	tdoor Unit Model Name (MMY)						
Outdoor Unit I	Nodel Name	(MMY)		AP19256H19P-UL	AP24056HT9P-UL	AP28856HT9P-UL	AP40856HT9P-UL
Nominal Tons				16	20		34
				MAP1206H19P-UL	MAP1206H19P-UL	MAP1686H19P-UL	MAP1686H19P-UL
Combination M	odel (MMY)			MAP0726HT9P-UL	MAP1206HT9P-UL	MAP1206HT9P-UL	MAP1206HT9P-UL
				-	-	-	MAP1206HT9P-UL
Cooling Capaci	ty ¹	Nominal	kBtu/h	192	240	288	408
(With Non-Duc	ted Indoor	Rated	kBtu/h	18/	230	276	300
Units / Ducted)	÷.1	natou	KDtu/II	104	230	210	000
With Non-Duc	tod Indoor	Nominal	kBtu/h	216	270	324	459
Units / Ducted)		Rated	kBtu/h	206	256	308	436
Sinto / Duotou)				208/230V.	208/230V.	208/230V	208/230V.
With Non-	Power Supp	0ly²		3-Phase, 60Hz	3-Phase, 60Hz	3-Phase, 60Hz	3-Phase, 60Hz
Ducted	Cooling	Power Consumption ³	kW	14.19	19.29	24.65	37.29
Flootrigal	Cooling	IEER ⁴	Btu/W*hr	25.1	23.6	22.2	21.0
Characteristics	Hooting	Power Consumption ³	kW	14.87	19.74	25.12	37.77
onaracteristics	neating	COP ⁵	W/W	3.95	3.70	3.50	3.30
	Dowor Supr	alw2		208/230V,	208/230V,	208/230V,	208/230V,
With Ducted	rower oup	лу		3-Phase, 60Hz	3-Phase, 60Hz	3-Phase, 60Hz	3-Phase, 60Hz
Indoor Units	Cooling Power Consumption ³		kW	13.87	17.61	23.09	34.87
Electrical	IEER ⁴		Btu/W*hr	19.9	30.3	19.6	19.3
Characteristics	Heating	Power Consumption ³	kW	14.31	17.90	22.64	36.90
	nouting	COP ⁵	W/W	3.83	3.90	3.76	3.32
Height		in	72.9	72.9	72.9	72.9	
External Dimen	isions	Width	in	47.6 + 39.0	47.6 x 2	63.0 + 47.6	63.0 + 47.6 x 2
		Depth	in	30.7	30.7	30.7	30.7
Total Weight	Unit		lb	684 + 574	684 x 2	838 + 684	838 + 684 x 2
Compressor	Туре			Hermetic Twin Rotary Compressor	Hermetic Twin Rotary Compressor	Hermetic Twin Rotary Compressor	Hermetic Twin Rotary Compressor
	Motor Output	ut	kW	4.0 x 2 + 2.1 x 2	4.0 x 4	6.5 x 2 + 4.0 x 2	6.5 x 2 + 4.0 x 4
	Motor Outp	ut	kW	1.0 x 2	1.0 x 2	1.0 x 3	1.0 x 4
Fan Unit	Air Volume		cfm	7,480 + 6,700	7,480 x 2	10,100 + 7,480	10,100 + 7,480 x2
	Maximum E	external Static Pressure	in WG	0.16	0.16	0.16	0.16
Refrigerant ⁶ (Cl	harged Refrig	jerant Amount)	lb	25.4 x 2	25.4 x 2	25.4 x 2	25.4 x 3
Electrical	Unit	MCA ⁷	A	42 + 27	42 + 42	69 + 42	69 + 42 + 42
Specifications	Unit	Recommended Fuse Size	A	45 + 30	45 + 45	75 + 45	75 + 45 + 45
Dofrigorant	Connecting	Gas Side (Main Pipe) (Brazing)	in	1-1/8	1-3/8	1-3/8	1-5/8
Piping	Port Diameter	Liquid Side (Main Pipe) (Flare)	in	5/8	3/4	3/4	7/8
		Balance Pipe (Flare)	in	3/8	3/8	3/8	3/8
Operation		Cooling	° F DB	14-122	14-122	14-122	14-122
Temperature R	ange	Heating	° F WB	-13-60	-13-60	-13-60	-13-60
Maximum Num	ber of Conne	ected Indoor Units		34	42	50	64
Maximum Capa	acity of Comb	bined Indoor Units ⁸		80-150%	80-150%	80-150%	80-150%
Sound Pressure	e Level Cooli	ng / Heating	dB(A)	62.5/63.5	64/65	66/67	67/68

¹Rated conditions: Cooling: Indoor 80° F dry bulb / 67° F wet bulb, Outdoor 95° F dry bulb. Heating: Indoor 70° F dry bulb, Outdoor 47° F dry bulb / 43° F wet bulb.
²The source voltage must not fluctuate more than ±10%.
³Only for outdoor unit.
⁴IEER: Integrated Energy Efficiency Ratio.
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⁶The amount does not consider extra piping length. Refrigerant must be add

⁶The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length. ⁷Select wire size based on the larger value of MCA. MCA: Minimum Circuit Amps (Minimum Circuit Amps required for power supply design). ⁸In case the diversity exceeds 135%, the type of indoor unit is limited and the maximum number of indoor units is reduced.

Outdoor Units | Technical Specifications





The standard pipe 144 type – 240 type

Equivalent piping length 50 ft, Height difference: 0 ft

Heat Pump Outdoor Unit (MMYH) 460V-3-60



Heat Pump Outdoor Unit (MMYH) 460V-3-60

Standard Model (Combination)

Standard Mod	iel (Single Ur	nit)						
Outdoor Unit	Model Name	(MMY)		MAP0726HT6P-UL	MAP0966HT6P-UL	MAP1206HT6P-UL	MAP1446HT6P-UL	MAP1686HT6P-UL
Nominal Tons				6	8	10	12	14
Cooling Capaci	ity ¹	Nominal	kBtu/h	72	96	120	144	168
Units / Ducted)		Rated	kBtu/h	69	92	114	138	160
Heating Capaci	ity ¹	Nominal	kBtu/h	81	108	135	162	189
Units / Ducted)	tea maoor)	Rated	kBtu/h	77	103	129	154	180
With Non-	Power Supp	ly ²		460V, 3-Phase, 60Hz				
Ducted	Onalina	Power Consumption ³	kW	4.49	7.12	8.65	10.85	14.26
Indoor Units	Cooling	IEER ⁴	Btu/W*hr	29.0	28.0	25.1	25.6	23.8
Electrical	11	Power Consumption ³	kW	5.17	6.53	9.22	10.68	13.82
Characteristics	Heating	COP ⁵	W/W	4.23	4.50	3.99	4.12	3.74
	Power Supp	ly ²		460V, 3-Phase, 60Hz				
With Ducted	Occline	Power Consumption ³	kW	4.69	6.28	8.81	11.09	13.39
Indoor Units	Cooling	IEER ⁴	Btu/W*hr	22.7	22.3	21.6	20.0	19.0
Electrical	11	Power Consumption ³	kW	5.47	6.83	9.04	10.47	13.36
GIIdidelelistics	Heating	COP ⁵	W/W	3.79	4.00	3.89	3.91	3.63
		Height	in	72.9	72.9	72.9	72.9	72.9
External Dimer	External Dimensions Width		in	39.0	47.6	47.6	63.0	63.0
Depth		in	30.7	30.7	30.7	30.7	30.7	
Total Weight	Unit	t		574	684	684	838	838
	Tuno			Hermetic Twin				
Compressor	туре			Rotary Compressor				
	Motor Outpu	ıt	kW	2.1 x 2	3.0 x 2	4.0 x 2	5.4 x 2	6.5 x 2
	Motor Outpu	ıt	kW	1.0	1.0	1.0	1.0 x 2	1.0 x 2
Fan Unit	Air Volume		cfm	6,700	7,480	7,480	9,760	10,080
	Maximum E	xternal Static Pressure	in WG	0.24	0.16	0.16	0.16	0.16
Refrigerant ⁶ (C	harged Refrig	erant Amount)	lb	25.4	25.4	25.4	25.4	25.4
Electrical	11.21	MCA ⁷	A	12.9	20.0	23.0	25	31
Specifications	Unit	Recommended Fuse Size	A	15	25	25	30	35
Pofrigoropt	Connecting	Gas Side (Main Pipe) (Brazing)	in	7/8	7/8	1-1/8	1-1/8	1-1/8
Piping	Port Diameter	Liquid Side (Main Pipe) (Flare)	in	1/2	1/2	1/2	5/8	5/8
		Balance Pipe (Flare)	in	3/8	3/8	3/8	3/8	3/8
Operation		Cooling	° F DB	14-122	14-122	14-122	14-122	14-122
Temperature R	lange	Heating	° F WB	-13-60	-13-60	-13-60	-13-60	-13-60
Maximum Nurr	nber of Conne	cted Indoor Units		12	16	21	25	30
Maximum Cap	acity of Comb	ined Indoor Units ⁸		50-150%	50-150%	50-150%	50-150%	50-150%
Sound Pressure	e Level Coolir	ng / Heating	dB(A)	56/58	61/61	61/62	63/64	64/65

¹Rated conditions:

Cooling: Indoor 80° F dry bulb / 67° F wet bulb, Outdoor 95° F dry bulb. Heating: Indoor 70° F dry bulb, Outdoor 47° F dry bulb / 43° F wet bulb. ²The source voltage must not fluctuate more than $\pm 10\%$. ³Only for outdoor unit.

⁴IEER: Integrated Energy Efficiency Ratio.

⁵COP: Coefficient of Performance.

⁶The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length. ⁷Select wire size based on the larger value of MCA. MCA: Minimum Circuit Amps (Minimum Circuit Amps required for power supply design). ⁸In case the diversity exceeds 135%, the type of indoor unit is limited and the maximum number of indoor units is reduced.

Outdoor Unit	Aodel Name	(MMY)		AP1926HT6P-UL	AP2166HT6P-UL	AP2406HT6P-UL	AP2646HT6P-UL	AP2886HT6P-UL	AP3126HT6P-UL	AP3366HT6P-UL
Nominal Tons				16	18	20	22	24	26	28
				MAP0966HT6P-UL	MAP1206HT6P-UL	MAP1446HT6P-UL	MAP1446HT6P-UL	MAP1446HT6P-UL	MAP1686HT6P-UL	MAP1686HT6P-UL
Combination M	odel (MMY)			MAP0966HT6P-UL	MAP0966HT6P-UL	MAP0966HT6P-UL	MAP1206HT6P-UL	MAP1446HT6P-UL	MAP1446HT6P-UL	MAP1686HT6P-UL
Cooling Capaci	ty ¹	Nominal	kBtu/h	192	216	240	264	288	312	336
Units / Ducted)		Rated	kBtu/h	184	206	230	252	276	298	320
Heating Capaci	ity ¹ ted Indoor	Nominal	kBtu/h	216	243	270	297	324	351	378
Units / Ducted)		Rated	kBtu/h	206	232	256	282	308	334	360
With Non-	Power Supp	bly ²		460V,	460V,	460V,	460V,	460V,	460V,	460V,
Ducted	Power Concumption ³		1411/	3-PIIASE, 00HZ	3-PIIASE, DUHZ	3-PHase, 00HZ	3-PIIASE, DUHZ	3-PIIaSe, 00HZ	3-PHase, 60HZ	3-PIIASE, 00HZ
Indoor Units	Cooling		Rtu/W*br	25.5	24.6	24.1	21.30	24.15	27.37	22.0
Electrical		Power Consumption ³		1/ 50	17.01	10 /7	22.0	24.0	22.1	30.70
Characteristics	Heating		10//10/	4.05	2.00	2.75	2 65	24.40	2.1.34	2.25
		UUF	VV/VV	4.00	3.50 460V	3.73 460V	3.03 460V	3.00 460V	3.42 460V	3.33 460V
With Ductod	Power Supp	oly ²		400V, 3-Phase 60Hz	400V, 3-Phase 60Hz	400V, 3-Phase 60Hz	400V, 3-Phase 60Hz	400V, 3-Phase 60Hz	400V, 3-Phase 60Hz	400V, 3-Phase 60Hz
Indoor Unito		Power Concumption ³	L/M	12 /0	15 20	17 /6	10.57	22 22 22	25.04	20.04
Floctrical	Cooling		Rtu/W*br	20.2	20.2	20.6	20.4	22.00	10.7	10.6
Characteristics		ILLIN Power Concumption ³		12.64	15.01	17.67	10.02	20.0	05.01	19.0
Characteristics	Heating		10//10/	10.04	2.02	2.05	19.00	22.00	20.01	20.02
	Loight		VV/VV	4.00	3.93	3.90	3.90	3.01	3.00	3.49
Extornal Dimon	External Dimonsions Width in		in	12.9	12.9 17.6 x 0	12.9 62.0 ± 47.6	12.9 62.0 ± 47.6	12.9 62.0 x 2	72.9 62.0 x 2	12.9 62.0 x 2
External Dimen	1510115	Donth	in	47.0 X Z	47.0 X Z	00.0 + 47.0	00.0 + 47.0	03.0 X Z	03.0 X Z	03.0 X Z
Total Waight	Unit	Dehili	lli	30.7 CQ4 x Q	30.7 CQ4 x Q	30.7	30.7	30.7 020 y 0	30.7	3U.7
Total weight	UIIIL		a	004 X Z	004 X Z	030 + 004	030 + 004	030 X Z	030 X Z	030 X Z
	Tuno			Turin Determ	Turin Determ		Turin Determ		Turin Determ	Tuin Deterry
Compressor	Type			Comprossor	Comproseor	Comprossor	Comproseer	Comproseor	Comproseor	Comprossor
	Motor Outpu	+	1411/	2.0 x 4		5 4 x 2 + 2 0 x 2	5 4 y 2 + 4 0 y 2	5 4 x 4	6 E V 2 L E 4 V 2	COMPLESSO
	Motor Outpu	ut	IAM	1.0 x 2	4.0 X Z + 3.0 X Z	10x2	$3.4 \times 2 + 4.0 \times 2$	1.0 x 4	10×4	1.0 x 4
Eon Unit	Air Volumo	ut	ofm	7 490 x 2	7 490 x 2	0.760 1.7490	0.760 1.7.490	0.760 x 2	10.020 + 0.760	10.020 x 2
Fall Ullit	All Volume	sytornal Statia Dragouro	in WC	7,400 X Z	7,400 X Z	9,700 + 7,400	9,700 + 7,400	9,700 X Z	0.16	0.16
Pofrigorant ⁶ (C	horgod Dofrig	Accillat Static FiesSure	lliwa	0.10 25.4 x 2	0.10 25.4 x 2	0.10 25.4 x 2	0.10 25.4 x 2	0.10 25.4 x 2	25.4 x 2	0.10 25.4 x 2
Fleetricel	lialyeu neiliy		UI	20.4 X 2	20.4 X 2	20.4 X Z	20.4 X Z	20.4 X Z	20.4 X Z	20.4 X Z
Electrical	Unit	MUCA Decommonded Europ Cize	A	20 + 20	23 + 20	20 + 20	20 + 23	20 + 20	31 + 23	31 + 31
Specifications		Recommended Fuse Size	A	25 + 25	25 + 25	30 + 25	30 + 25	30 + 30	35 + 30	35 + 35
Refrigerant	Connecting	(Main Pipe) (Brazing)	in	1-1/8	1-3/8	1-3/8	1-3/8	1-3/8	1-3/8	1-5/8
Piping	Port Diameter	Liquid Side (Main Pipe) (Flare)	in	5/8	3/4	3/4	3/4	3/4	3/4	7/8
		Balance Pipe (Flare)	in	3/8	3/8	3/8	3/8	3/8	3/8	3/8
Operation		Cooling	° F DB	14-122	14-122	14-122	14-122	14-122	14-122	14-122
Temperature R	ange	Heating	° F WB	-13-60	-13-60	-13-60	-13-60	-13-60	-13-60	-13-60
Maximum Num	ber of Conne	ected Indoor Units		34	38	42	46	50	55	60
Maximum Capa	acity of Comb	bined Indoor Units8		50-150%	50-150%	50-150%	50-150%	50-150%	50-150%	50-150%
Sound Pressure	e Level Coolir	na / Heatina	dB(A)	64/64	64/64.5	65.5/66	65.5/66.5	66/67	66.5/67.5	67/68

¹Rated conditions: Cooling: Indoor 80° F dry bulb / 67° F wet bulb, Outdoor 95° F dry bulb. Heating: Indoor 70° F dry bulb, Outdoor 47° F dry bulb, 43° F wet bulb. *The source voltage must not fluctuate more than $\pm 10\%$. ³Only for outdoor unit. ⁴IEER: Integrated Energy Efficiency Ratio. ⁵COP: Coefficient of Performance.

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SMMS

The standard pipe 072 type – 120 type

Equivalent piping length 25 ft, Height difference: 0 ft

Outdoor Units | Technical Specifications





The standard pipe 144 type – 240 type

Equivalent piping length 50 ft, Height difference: 0 ft

Heat Pump Outdoor Unit (MMYH) 460V-3-60



Heat Pump Outdoor Unit (MMYH) 460V-3-60

Space Saving Model (Combinatio

Standard Mod	lel (Single Ur	nit)						
Outdoor Unit	Model Name	(MMY)		AP3606HT6P-UL	AP3846HT6P-UL	AP4086HT6P-UL	AP4326HT6P-UL	AP4566HT6P-UL
Nominal Tons				30	32	34	36	38
				MAP1206HT6P-UL	MAP1446HT6P-UL	MAP1446HT6P-UL	MAP1686HT6P-UL	MAP1686HT6P-UL
Combination M	lodel (MMY)			MAP1206HT6P-UL	MAP1206HT6P-UL	MAP1446HT6P-UL	MAP1446HT6P-UL	MAP1686HT6P-UL
				MAP1206HT6P-UL	MAP1206HT6P-UL	MAP1206HT6P-UL	MAP1206HT6P-UL	MAP1206HT6P-UL
Cooling Capaci	ty ¹	Nominal	kBtu/h	360	384	408	432	456
(With Non-Ducted)	ted Indoor	Rated	kBtu/h	342	366	390	412	434
Heating Capaci	ity ¹	Nominal	kBtu/h	405	432	459	486	513
(With Non-Duc	ted Indoor	Rated	kBtu/h	386	/12	/36	462	/88
Units / Ducted)	Dowor Cupp	hateu	KDtu/II	460V 2 Dhoop 60Hz	460V/2 Dhaqa 60Uz	460V 2 Dhana 60Uz	402 460V/2 Phase 6047	460V/ 2 Dhaqa 60Uz
With Non-	rower Supp	Power Concumption ³	1/1//	400V, 3-FIIdSE, 00HZ	400V, 3-FIIdSE, 00HZ	400V, 3-FIIdSE, 00HZ	400V, 3-FIIdSE, 00HZ	400V, 3-FIIdSE, 00HZ
Indoor Unite	Cooling		RW Rtu/W/*br	20.07	21.0	01.00	40.14	20.0
Flectrical		IEEN Dowor Concumption ³		22.4	21.0	21.4	40.00	42.60
Characteristics	Heating		KVV M//M/	01.00	04.00	0.00	40.22	43.00
011010010110100	Douvor Cupp	100P*	VV/VV	3.32 460V/2 Dhaga 60Uz	3.4U	3.30 400V 2 Dhoop COULT	3.20 460V.2 Dhaga 60Uz	3.2U
With Ducted	Power Supp	Ny ⁻	14/4/	400V, 3-PHASE, 00HZ	400V, 3-PHaSe, 00HZ	400V, 3-PHASE, 00HZ	400V, 3-PHASE, 00HZ	400V, 3-PHase, 00HZ
Indoor Units	Cooling		KW Dtu/W/thr	21.32	31.47	33.30	30.30	42.00
Electrical		IEER'	DLU/W III	20.3	19.0	19.0	19.1	19.3
Characteristics	Heating	Power Consumptions	KVV	29.40	32.52	36.34	39.15	42.27
	Characteristics Heating COP ⁵		VV/VV	3.66	3.55	3.37	3.32	3.26
	Futernal Dimonsiona Width in		in	/2.9	/2.9	/2.9	/2.9	/2.9
External Dimen	ISIONS	Width	in	47.6 x 3	63.0 + 47.6 x 2	63.0 x 2 + 47.6	63.0 x 2 + 47.6	63.0 x 2 + 47.6
		Depth	in	30.7	30.7	30.7	30.7	30.7
Total Weight	Unit		lb	684 x 3	838 + 684 x 2	838 x 2 + 684	838 x 2 + 684	838 x 2 + 684
	Type			Hermetic Twin	Hermetic Twin	Hermetic Twin	Hermetic Twin	Hermetic Twin
Compressor	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			Rotary Compressor	Rotary Compressor	Rotary Compressor	Rotary Compressor	Rotary Compressor
	Motor Outpu	ut	kW	4.0 x 6	5.4 x 2 + 4.0 x 4	5.4 x 4 + 4.0 x 2	6.5 x 2 + 5.4 x 2 + 4.0 x 2	6.5 x 4 + 4.0 x 2
	Motor Outpu	ut	kW	1.0 x 3	1.0 x 4	1.0 x 5	1.0 x 5	1.0 x 5
Fan Unit	Air Volume		cfm	7,480 x 3	9,760 + 7,480 x 2	9,760 x 2 + 7,480	10,080 + 9,760 + 7,480	10,080 x 2 + 7,480
	Maximum E	xternal Static Pressure	in WG	0.16	0.16	0.16	0.16	0.16
Refrigerant ⁶ (Cl	harged Refrig	erant Amount)	lb	25.4 x 3	25.4 x 3	25.4 x 3	25.4 x 3	25.4 x 3
Electrical	11.21	MCA ⁷	A	23 + 23 + 23	25 + 23 + 23	25 + 25 + 23	31 + 25 + 23	31 + 31 + 23
Specifications	Unit	Recommended Fuse Size	A	25 + 25 + 25	30 + 25 + 25	30 + 30 + 25	35 + 30 + 25	35 + 35 + 25
Defrivement	Connecting	Gas Side (Main Pipe) (Brazing)	in	1-5/8	1-5/8	1-5/8	1-5/8	1-5/8
Piping	Port Diameter	Liquid Side (Main Pipe) (Flare)	in	7/8	7/8	7/8	7/8	7/8
		Balance Pipe (Flare)	in	3/8	3/8	3/8	3/8	3/8
Operation		Cooling	° F DB	14-122	14-122	14-122	14-122	14-122
Temperature R	ange	Heating	° F WB	-13-60	-13-60	-13-60	-13-60	-13-60
Maximum Num	ber of Conne	cted Indoor Units		63	64	64	64	64
Maximum Capa	acity of Comb	pined Indoor Units ⁸		50-150%	50-150%	50-150%	50-150%	50-150%
Sound Pressure	e Level Coolir	na / Heating	dB(A)	66/67	66.5/67.5	67.5/68.5	68/69	68/69
		5	()					

¹Rated conditions:

Cooling: Indoor 80° F dry bulb / 67° F wet bulb, Outdoor 95° F dry bulb.

Heating: Indoor 70° F dry bulb, Outdoor 47° F dry bulb / 43° F wet bulb. ²The source voltage must not fluctuate more than $\pm 10\%$. ³Only for outdoor unit.

⁴IEER: Integrated Energy Efficiency Ratio.

⁵COP: Coefficient of Performance.

⁶The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length. ⁷Select wire size based on the larger value of MCA. MCA: Minimum Circuit Amps (Minimum Circuit Amps required for power supply design). ⁸In case the diversity exceeds 135%, the type of indoor unit is limited and the maximum number of indoor units is reduced.

The standard pipe 072 type – 120 type

Equivalent piping length 25 ft, Height difference: 0 ft

Nemial Dis image of the second s	Outdoor Unit I	Model Name	(MMY)		AP192S6HT6P-UL	AP240S6HT6P-UL	AP288S6HT6P-UL	AP408S6HT6P-UL
Mark 1000 <	Nominal Tons				16	20	24	34
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $					MAP1206HT6P-UL	MAP1206HT6P-UL	MAP1686HT6P-UL	MAP1686HT6P-UL
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Combination N	lodel (MMY)		-	MAP0726HT6P-UL	MAP1206HT6P-UL	MAP1206HT6P-UL	MAP1206HT6P-UL
Conting Capacity Mominal KBu/h 192 240 288 408 With Non-Ducted Indoor Units / Ducted Indoor Units Electrical Contrag Copies Mominal KBu/h (KBU/H) KBu/h (KBU/H) 192 2400 / 3-Phase, 60Hz 460V, 3-Phase, 60Hz <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>MAP1206HT6P-UL</td>					-	-	-	MAP1206HT6P-UL
	Cooling Capaci	ty ¹	Nominal	kBtu/h	192	240	288	408
Heating Capacity (with Non-Duct Mith Non-Duck Mith	(With Non-Duc Units / Ducted)	ted Indoor	Rated	kBtu/h	184	230	276	390
Number of During 2 Duri	Heating Capac	ity ¹ ted Indoor	Nominal	kBtu/h	216	270	324	459
With Non- Index Units Indoor Units Electrical Characteristics Power Supply ² 460V, 3-Phase, 60Hz 24.65 37.29 Electrical Characteristics FEH ⁴ Btu/Whr 25.1 23.6 22.2 21.0 Vith Ducidal Indoor Units Electrical Indoor Units Power Consumption ³ W/W 14.87 19.74 25.12 37.77 Vith Ducidal Indoor Units Power Consumption ³ W/W 3.95 3.70 3.50 3.30 Cooling Power Consumption ³ W/W 13.87 17.61 23.09 34.87 Electrical Electrical Power Consumption ³ W/W 13.87 17.61 23.09 3.32 Electrical Characteristics Power Consumption ³ W/W 13.87 17.61 23.00 3.76 33.22 Electrical Characteristics Image: Consumption ³ W/W 13.81 17.9 72.9 72.9 72.9 72.9 72.9 72.9 72.9 72.9 72.9 72.9 72.9 </td <td>Units / Ducted)</td> <td></td> <td>Rated</td> <td>kBtu/h</td> <td>206</td> <td>256</td> <td>308</td> <td>436</td>	Units / Ducted)		Rated	kBtu/h	206	256	308	436
	With Non-	Power Supp	lly ²		460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz
	Ducted	Cooling	ing Power Consumption ³		14.19	19.29	24.65	37.29
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Indoor Units	ocomig	IEER ⁴	Btu/W*hr	25.1	23.6	22.2	21.0
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Electrical	Heating	Power Consumption ³	kW	14.87	19.74	25.12	37.77
	Characteristics		COP ⁵	W/W	3.95	3.70	3.50	3.30
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	With Ducted	Power Supp	lly ²		460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Indoor Units	Cooling	Power Consumption ³	kW	13.87	17.61	23.09	34.87
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Electrical	ocomig	IEER ⁴	Btu/W*hr	19.9	30.3	19.6	19.3
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Characteristics	Heating	Power Consumption ³	kW	14.31	17.90	22.64	36.90
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		COP ⁵		W/W	3.83	3.90	3.76	3.32
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Height With		in	72.9	72.9	72.9	72.9
$ \begin{array}{ c c c c c c } \hline \begin{tabular}{ c c c c c } \hline \begin{tabular}{ c c c c c c c } \hline \begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	External Dimer	isions	Width	in	47.6 + 39.0	47.6 x 2	63.0 + 47.6	63.0 + 47.6 x 2
$ \begin{array}{ c c c c c } \hline Total Weight & Unit I Init Image & Ib & 664 + 574 & 664 \times 2 & 838 + 684 & 288 + 684 \times 2 \\ \hline Type & Hermetic Twin \\ \hline Type & Hermetic Twin \\ \hline Rotary Compressor & Rotary Compressor & Rotary Compressor \\ \hline Rotary Compressor & Rotary Compressor & Rotary Compressor \\ \hline Rotary Compressor & Im & KW & 1.0 \times 2 & 1.0 \times 4 & 1.0 \times 3 & 1.0 \times 4 \\ \hline Rotary Compressor & Im & KW & 1.0 \times 2 & 1.0 \times 2 & 1.0 \times 3 & 1.0 \times 4 \\ \hline Rotary Compressor & Im & KW & 1.0 \times 2 & 1.0 \times 2 & 1.0 \times 3 & 1.0 \times 4 \\ \hline Rotary Compressor & Im & KW & 1.0 \times 2 & 1.0 \times 3 & 1.0 \times 4 & 1.0 $			Depth	in	30.7	30.7	30.7	30.7
$ \begin{array}{ c c c c c } \hline \begin{tabular}{ c c c c c c c } \hline \begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	Total Weight	Unit		lb	684 + 574	684 x 2	838 + 684	838 + 684 x 2
$ \begin{array}{ c c c c c c c } \hline \begin{tabular}{ c c c c c c c } \hline \begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	0	Туре			Hermetic Twin	Hermetic Twin	Hermetic Twin	Hermetic Twin
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Compressor	Mahau Outer		1.34/	Rotary Compressor	Rotary Compressor	Rotary Compressor	Rotary Compressor
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		Motor Outpl	J[KVV	4.0 X Z + Z.1 X Z	4.0 X 4	0.5 X Z + 4.0 X Z	0.5 X 2 + 4.0 X 4
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Face Unit	Niotor Outpu	Jt	KVV	1.U X Z	1.0 X Z	I.U X 3	1.0 X 4
Refrigerant ⁶ (Charged Refrigerant Refrigerant ⁶ (Charged Refrigerant Refrigerant ⁶ (Charged Refrigerant Amount) Ib 25.4×2	Fan Unit	Air volume	internet Otatia Decarry	CIIII	7,480 + 6,700	7,480 X 2	10,080 + 7,480	10,080 + 7,480 X2
Refrigerant (charged Refrigerant Amount) 10 25.4×2 $31 + 23 + 23$	D (()) (()	Waximum E	xternal Static Pressure	in wa	0.16	0.16	0.16	0.16
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Reirigerant [®] (C	nargeo Reirig	erant Amount)	di	25.4 X Z	25.4 X Z	25.4 X 2	25.4 X 3
Specifications Recommended Fuse Size A $25 + 20$ $25 + 25$ $35 + 25$ $35 + 25 + 25$ Refrigerant Piping Connecting Port Diameter Gas Side (Main Pipe) (Flare) in $1 - 1/8$ $1 - 3/8$ $1 - 3/8$ $1 - 3/8$ $1 - 5/8$ Operation Port Diameter Liquid Side (Main Pipe) (Flare) in $5/8$ $3/4$ $3/4$ $3/4$ $3/8$ $3/8$ Operation Temperature Range Cooling ° F DB $14 - 122$ $14 $	Electrical	Unit	MCA'	A	23 + 12.9	23 + 23	31 + 23	31 + 23 + 23
$ \begin{array}{ c c c c c c c c } \hline Refrigerant \\ \hline Piping \\ \hline Port \\ Diameter \\ \hline Port \\ Balance Pipe (Flare) \\ \hline Heating \\ \hline Port \\$	Specifications		Recommended Fuse Size	A	25 + 20	25 + 25	35 + 25	35 + 25 + 25
	Refrigerant	Connecting	(Main Pipe) (Brazing)	in	1-1/8	1-3/8	1-3/8	1-5/8
Balance Pipe (Flare) in 3/8 3/8 3/8 3/8 Operation Cooling ° F DB 14-122 14-122 14-122 14-122 Temperature Range Heating ° F WB -13-60 -13-60 -13-60 Maximum Number of Connected Indoor Units 34 42 50 64 Maximum Capacity of Combined Indoor Units ⁸ 80-150% 80-150% 80-150% 80-150% Sound Pressure Level Cooling / Heating dB(A) 62.5/63.5 64/65 66/67 67/68	Piping	Port Diameter	Liquid Side (Main Pipe) (Flare)	in	5/8	3/4	3/4	7/8
Operation Cooling ° F DB 14-122 14-122 14-122 14-122 Temperature Range Heating ° F WB -13-60 -13-60 -13-60 Maximum Number of Connected Indoor Units 34 42 50 64 Maximum Capacity of Combined Indoor Units ⁸ 80-150% 80-150% 80-150% 80-150% Sound Pressure Level Cooling / Heating dB(A) 62.5/63.5 64/65 66/67 67/68			Balance Pipe (Flare)	in	3/8	3/8	3/8	3/8
Temperature Range Heating ° F WB -13-60 -13-60 -13-60 -13-60 Maximum Number of Connected Indoor Units 34 42 50 64 Maximum Capacity of Combined Indoor Units ⁸ 80-150% 80-150% 80-150% 80-150% Sound Pressure Level Cooling / Heating dB(A) 62.5/63.5 64/65 66/67 67/68	Operation		Cooling	° F DB	14-122	14-122	14-122	14-122
Maximum Number of Connected Indoor Units 34 42 50 64 Maximum Capacity of Combined Indoor Units ⁸ 80-150% 80-150% 80-150% 80-150% Sound Pressure Level Cooling / Heating dB(A) 62.5/63.5 64/65 66/67 67/68	Temperature R	ange	Heating	° F WB	-13-60	-13-60	-13-60	-13-60
Maximum Capacity of Combined Indoor Units® 80-150% 80-150% 80-150% 80-150% Sound Pressure Level Cooling / Heating dB(A) 62.5/63.5 64/65 66/67 67/68	Maximum Num	ber of Conne	cted Indoor Units		34	42	50	64
Sound Pressure Level Cooling / Heating dB(A) 62.5/63.5 64/65 66/67 67/68	Maximum Cap	acity of Comb	ined Indoor Units8		80-150%	80-150%	80-150%	80-150%
	Sound Pressur	e Level Coolir	ng / Heating	dB(A)	62.5/63.5	64/65	66/67	67/68

¹Rated conditions: Cooling: Indoor 80° F dry bulb / 67° F wet bulb, Outdoor 95° F dry bulb. Heating: Indoor 70° F dry bulb, Outdoor 47° F dry bulb / 43° F wet bulb. ²The source voltage must not fluctuate more than $\pm 10\%$. ³Only for outdoor unit. ⁴IEER: Integrated Energy Efficiency Ratio. ⁵COP: Coefficient of Performance. ⁶The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length. ⁷Select wire size based on the larger value of MCA. MCA: Minimum Circuit Amps (Minimum Circuit Amps required for power supply design).

Outdoor Units | Technical Specifications





The standard pipe 144 type – 240 type

Equivalent piping length 50 ft, Height difference: 0 ft

⁸In case the diversity exceeds 135%, the type of indoor unit is limited and the maximum number of indoor units is reduced.

Flow Selector and Branching Joints



*Only group operation is possible with 1 (or 2) remote controller(s) **Multi-port flow selector box requires separate power supply Connection cable kit: BBC-CBK15FE

Model Name	RBM- BY55FUL	RBM- BY105FUL	RBM- BY205FUL	RBM- BY305FUL	RBM- HY1043FUL	RBM-H Y2043FUL	RBM- HY1083FUL	RBM- HY2083FUL	RBM- BT14FUL	RBM- BT24FUL
		Y-sh Branchi	nape ing Joint			Bra Hea	nch ders		Outdoor Un Pipi	it Connection ng Kit
		2002							1 and	
Appearance		444	22	\$ ~	LL/J				-	
Usage Branches					Max. 4	branches	Max. 8	branches		
Total Usage* (kBtu/H)	Below 61	61 or more and below 134.5	134.5 or more and below 239	239 or more	Below 134.5	134.5 or more	Below 134.5	134.5 or more	Below 247	247 or more

*Classification according to indoor unit capacity code

Heat Pump Branchi	ng Joints									
Model Name	RBM- BY55UL	RBM- BY105UL	RBM- BY205UL	RBM- BY305UL	RBM- HY1043UL	RBM-H HY2043UL	RBM- Hy1083UL	RBM- HY2083UL	RBM- BT14UL	RBM- BT24UL
		Y-shape Bra for Using	nching Joint g 2 Pipes			Bra Hea		Outdoor Unit Connection Piping Kit		
Appearance		1441	928	2		(4 branch	headers)		-	••••
Usage Branches					Max. 4 I	oranches	Max. 8 t	oranches		
Total Usage* (kBtu/H)	Below 61	61 or more and below 134.5	134.5 or more and below 239	239 or more	Below 136	136 or more	Below 136	136 or more	Below 247	247 or more

*Classification according to indoor unit capacity code





Indoor Units

VRF Indoor Units Overview



			Non-Duct	ed Models		
Cooling Capacity kBtu/h (Ton)	Standard 4-Way Cassette	Compact 4-Way Cassette	High Wall	Underceiling	Floor Console (Recessed)	Floor Console (Exposed)
7,500 (0.6)	•	•	•		•	•
9,500 (0.8)	•	•	•		•	٠
12,000 (1)	٠	•	•		•	٠
15,000 (1.25)	•	•	•		•	٠
18,000 (1.5)	٠	•	•	•	•	٠
24,000 (2)	•		•	•	•	٠
30,000 (2.5)	٠			•		
36,000 (3)	•			•		
42,000 (3.5)	٠					
48,000 (4)	٠			•		
54,000 (4.5)	•					



			Ducted	Models		
Cooling Capacity kBtu/h (Ton)	Slim Ducted	Medium Static Ducted	High Static Ducted	Vertical AHU	Outside Air	Rooftop Unit
7,500 (0.6)	•	•				
9,500 (0.8)	•	•				
12,000 (1)	•	٠		٠		
15,400 (1.25)	•	•				
18,000 (1.5)	•	•		٠		
21,000 (1.75)		•				
24,000 (2)		٠	٠	٠		
30,000 (2.5)		•	٠	٠		
36,000 (3)		٠	٠	٠		٠
42,000 (3.5)		•		٠		
48,000 (4)		٠	٠	۰	٠	٠
54,000 (4.5)		•	٠			
60,000 (5)				٠		٠
72,000 (6)			٠		٠	
96,000 (8)			٠		٠	

We offer a variety of indoor options to fit every need, space and layout. But no matter which you choose, you'll be met with high comfort and quiet operation.











4-Way Cassette



MMU-AP***4HPUL

- Four louvers that can each be positioned at different angles
- Customized airflow control
- Built-in condensate lift mechanism (Up to 26")



Model Name (MM	MU-)		AP0074HPUL	AP0094HPUL	AP0124HPUL	AP0154HPUL	AP0184HPUL	AP0244HPUL	AP0304HPUL	AP0364HPUL	AP0424HPUL	AP0484HPUL	AP0544HPUL
Cooling Capacity		kBtu/h	7.5	9.5	12.0	15.4	18.0	24.0	30.0	36.0	42.0	48.0	54.0
Sensible Cooling C	apacity	kBtu/h	5.8	7.1	8.6	12.0	12.8	16.5	20.6	24.7	29.4	33.6	37.8
Heating Capacity		kBtu/h	8.5	10.5	13.5	17.0	20.0	27.0	34.0	40.0	47.5	54.0	60.0
Electrical	Power Supply		230V (208/230V), 1-Phase, 60Hz										
onaractoristics	Power Consumption	kW	0.021	0.021	0.023	0.026	0.026	0.036	0.043	0.088	0.112	0.112	0.112
Appearance	Main Unit		Zinc Hot Dipping Steel Plate										
Арреагансе	Ceiling Panel		White (2.5GY 9.0/9.5)										
External	Height	in	10.1 (1.2)	10.1 (1.2)	10.1 (1.2)	10.1 (1.2)	10.1 (1.2)	10.1 (1.2)	10.1 (1.2)	12.6 (1.2)	12.6 (1.2)	12.6 (1.2)	12.6 (1.2)
Dimensions Main Unit	Width	in	33.1 (37.4)	33.1 (37.4)	33.1 (37.4)	33.1 (37.4)	33.1 (37.4)	33.1 (37.4)	33.1 (37.4)	33.1 (37.4)	33.1 (37.4)	33.1 (37.4)	33.1 (37.4)
(Ceiling Panel)*	Depth	in	33.1 (37.4)	33.1 (37.4)	33.1 (37.4)	33.1 (37.4)	33.1 (37.4)	33.1 (37.4)	33.1 (37.4)	33.1 (37.4)	33.1 (37.4)	33.1 (37.4)	33.1 (37.4)
Total Weight (Ceilin	ng Panel)*	lb	42 (10)	42 (10)	46 (10)	46 (10)	46 (10)	48 (10)	48 (10)	59 (10)	59 (10)	60 (10)	60 (10)
	Standard Air Flow (High / Mid / Low)	cfm	470/430/400	470/430/400	550/490/460	550/480/440	550/480/440	670/540/490	730/630/510	1160/840/630	1250/840/670	1250/840/670	1250/890/720
Fan Unit	Motor Output	W	60	60	60	60	60	60	60	150	150	150	150
	Motor Type		DC										
	Gas Side	in	3/8	3/8	3/8	1/2	1/2	5/8	5/8	5/8	5/8	5/8	5/8
	Liquid Side	in	1/4	1/4	1/4	1/4	1/4	3/8	3/8	3/8	3/8	3/8	3/8
Connecting Pipe	Drain Port (Nominal Dia.)	in	VP25 (Polyvinyl Chloride Tube: External Dia. 1-1/4 Internal Dia. 1)										
Sound Pressure Le (High / Mid / Low) ¹	Sound Pressure Level (High / Mid / Low) ¹ d		32.5/30.5/ 29.0	32.5/30.5/ 29.0	34.0/31.5/ 29.5	35/33/ 31	35/33/ 31	38/33/ 31	41.0/36.5/ 34.0	46.0/40.5/ 36.5	48.5/40.5/ 37.5	48.5/40.5/ 37.5	48.5/40.5/ 33

	wotor output	**	00	
	Motor Type		DC	
	Gas Side	in	3/8	
Connecting Pipe	Liquid Side	in	1/4	
	Drain Port (Nominal Dia.)	in	VP25 (Polyvinyl Chloride Tube: Dia, 1-1/4 Internal Dia, 1)	VP

Power Supply

Height

Width

Depth

Power Consumption

Standard Air Flow

(High / Mid / Low)

Sound Pressure Level (High / Mid / Low)1

*Figures in parentheses are for ceiling panels.

Model Name (MMU-)

Sensible Cooling Capacity

Cooling Capacity

Heating Capacity

Characteristics

External Dimensions

Main Unit (Ceiling Panel)*

Total Weight (Ceiling Panel)*

Electrical

Appearance

Fan Unit

¹The actual values in an operating enviroment are generally higher than the indicated values due to the contribution from ambient noise.

dB(A)

kBtu/h

kBtu/h

kBtu/h

kW

in

in

in

lb

cfm

*Figures in parentheses are for ceiling panels.

The actual values in an operating enviroment are generally higher than the indicated values due to the contribution from ambient noise.

Options



Required Parts



Ceiling Panel RBC-U32PGP-UL

Required Parts



Ceiling Panel RBC-UM11PG(W)UL

Compact 4-Way Cassette

AP0071MH2UL

7.5

5.8

8.5 230V (208/230V),

1-Phase, 60Hz

0.034 Zinc Hot Dipping

Steel Plate 10.6 (1.1)

22.6 (27.6)

22.6 (27.6)

35 (7)

320/270/220

60 DC 3/8

38.5/35.0/31.0

MMU-AP***1MH2UL

- Perfect for grid-system ceiling
- Matches standard architectural modules-less need to cut ceiling tiles
- Includes 4-Way Cassette features listed on previous page
- Slim design is only 10.6 inches in height, even with an electrical box located inside the unit
- Installation is easy using the panel adjust pocket
- Available for ceilings up to 11.5 feet in height
- Drain-checking hole makes it possible to check the drain pan through the side case
- The built-in condensate lift is up to 24.7 inches

AP0091MH2UL	AP0121MH2UL	AP0151MH2UL	AP0181MH2UL
9.5	12.0	15.4	18.0
6.7	8.3	10.6	11.5
10.5	13.5	17.0	20.0
230V (208/230V), 1-Phase, 60Hz	230V (208/230V), 1-Phase, 60Hz	230V (208/230V), 1-Phase, 60Hz	230V (208/230V), 1-Phase, 60Hz
0.036	0.038	0.041	0.052
Zinc Hot Dipping Steel Plate	Zinc Hot Dipping Steel Plate	Zinc Hot Dipping Steel Plate	Zinc Hot Dipping Steel Plate
10.6 (1.1)	10.6 (1.1)	10.6 (1.1)	10.6 (1.1)
22.6 (27.6)	22.6 (27.6)	22.6 (27.6)	22.6 (27.6)
22.6 (27.6)	22.6 (27.6)	22.6 (27.6)	22.6 (27.6)
35 (7)	35 (7)	35 (7)	35 (7)
330/280/220	330/300/240	390/330/280	450/380/310
60	60	60	60
DC	DC	DC	DC
3/8	3/8	1/2	1/2
1/4	1/4	1/4	1/4
25 (Polyvinyl Chloride Tube: Dia. 1-1/4 Internal Dia. 1)	VP25 (Polyvinyl Chloride Tube: Dia. 1-1/4 Internal Dia. 1)	VP25 (Polyvinyl Chloride Tube: Dia. 1-1/4 Internal Dia. 1)	VP25 (Polyvinyl Chloride Tube: Dia. 1-1/4 Internal Dia. 1)
40.0/35.5/31.0	40/36/32	42.5/37.5/33.0	46.5/41.5/36.0

High Wall



MMK-AP***7HPUL

- Auto-swing louver provides uniform air distribution and enhanced comfort control • Optional Condensate Drain
- Kit available
- Aesthetically pleasing and blends with any room's interior decor while efficiently heating and cooling the space

Underceiling



Model Name (MMK-)			AP0077HPUL	AP0097HPUL	AP0127HPUL	AP0157HPUL	AP0187HPUL	AP0247HPUL
Cooling Capacity		kBtu/h	7.5	9.5	12.0	15.4	18.0	24.0
Sensible Cooling Capaci	ensible Cooling Capacity		5.6	7.1	9.0	11.6	13.5	18.0
Heating Capacity		kBtu/h	8.5	10.5	13.5	17.0	20.0	27.0
Electrical	ctrical Power Supply		230V (208/230V), 1-Phase, 60Hz					
Gnaracteristics	Power Consumption	kW	0.015	0.016	0.017	0.028	0.032	0.050
Appearance			Munsell 2.5GY 9.0/0.5					
5 I I D' I	Height	in	11.6	11.6	11.6	12.6	12.6	12.6
External Dimensions Main Unit	Width	in	31.5	31.5	31.5	41.4	41.4	41.4
	Depth	in	9.1	9.1	9.1	9.9	9.9	9.9
Total Weight		lb	27	27	27	36	36	36
	Standard Air Flow (High / Mid / Low)	cfm	283/226/159	300/232/159	318/241/159	494/406/324	530/424/324	706/530/353
Fan Unit	Motor Output	W	30	30	30	30	30	30
	Motor Type		DC	DC	DC	DC	DC	DC
	Gas Side	in	3/8	3/8	3/8	1/2	1/2	5/8
Connecting	Liquid Side	in	1/4	1/4	1/4	1/4	1/4	3/8
Pipe	Drain Port (Nominal Dia.)	in	VP16 (Polyvinyl Chloride Tube: Dia. 0.87 Internal Dia. 0.63)					
Sound Pressure Level (H	ligh / Mid / Low)1	dB(A)	35/30/27	36/31/27	37/32/27	40/36/32	41/37/32	45/39/33

¹The actual values in an operating enviroment are generally higher than the indicated values due to the contribution from ambient noise.

Model Name (MMC-)			AP0188HPUL	AP0248HPUL	AP0308HPUL	AP0368HPUL	AP0488HPUL
Cooling Capacity		kBtu/h	18.0	24.0	30.0	36.0	48.0
Sensible Cooling Capacity	1	kBtu/h	13.5	18.0	22.5	27.0	36.0
Heating Capacity		kBtu/h	20.0	27.0	34.0	40.5	54.0
Electrical	Power Supply		230V (208/230V), 1-Phase, 60Hz				
Unaracteristics	Power Consumption	kW	0.034	0.067	0.067	0.083	0.083
Appearance			Munsell N9.1				
5 I I D' I	Height	in	9.3	9.3	9.3	9.3	9.3
External Dimensions Main Unit	Width	in	37.5	50.0	50.0	62.5	62.5
indir one	Depth	in	27.2	27.2	27.2	27.2	27.2
Total Weight		lb	58	69	69	89	89
	Standard Air Flow (High / Mid / Low)	cfm	565/424/318	848/600/441	848/600/441	1095/795/600	1095/900/706
Fan Unit	Motor Output	W	94	94	94	139	139
	Motor Type		DC	DC	DC	DC	DC
	Gas Side	in	1/2	5/8	5/8	5/8	5/8
Connectina	Liquid Side	in	1/4	3/8	3/8	3/8	3/8
Pipe	Drain Port (Nominal Dia.)	in	VP20 (Polyvinyl Chloride Tube: Dia. 1 Internal Dia. 0.79)				
Sound Pressure Level (Hig	gh / Mid / Low) ¹	dB(A)	38/35/32	43/36/33	43/36/33	44/38/32	44/41/35

¹The actual values in an operating enviroment are generally higher than the indicated values due to the contribution from ambient noise.

Required Parts



Wireless Controller (Included)

Options



MMC-AP***8HPUL

- Airflow angle is automatically set to the most suitable setting according to cooling or heating needs
- Optional Condensate Drain Kit available
- Automatic swing mode enables airflow to reach all areas of the room to create a comfortable ambiance
- Outside air knockout



Auxiliary Outside Air Flange TCB-FF101URUL

Floor Console (Recessed)



MML-AP***4BH2UL

- Installed inside a wall or custom-built cabinet to match interior space design
- Optional Condensate Drain Kit available

Model Name (MML-)			AP0074BH2UL	AP0094BH2UL	AP0124BH2UL	AP0154BH2UL	AP0184BH2UL	AP0244BH2UL
Cooling Capacity		kBtu/h	7.5	9.5	12.0	15.4	18.0	24.0
Sensible Cooling Capacit	ensible Cooling Capacity		4.7	5.4	7.3	9.5	11.2	15.2
Heating Capacity		kBtu/h	8.5	10.5	13.5	17.0	20.0	27.0
Electrical	Power Supply		230V (208/230V), 1-Phase, 60Hz					
Characteristics	Power Consumption (208V)	kW	0.047	0.047	0.047	0.095	0.095	0.104
	Power Consumption (230V)	kW	0.056	0.056	0.056	0.114	0.114	0.120
Appearance			Zinc Hot Dipping Steel Plate					
	Height	in	23.6	23.6	23.6	23.6	23.6	23.6
External Dimensions Main Unit	Width	in	29.3	29.3	29.3	41.1	41.1	41.1
	Depth	in	8.7	8.7	8.7	8.7	8.7	8.7
Total Weight		lb	50.7	50.7	50.7	68.3	68.3	68.3
	Standard Air Flow (High / Mid / Low)	cfm	270/240/180	270/240/180	270/240/180	440/350/290	440/350/290	560/470/380
Fan Unit	Motor Output	W	19	19	19	70	70	70
	Motor Type		DC	DC	DC	DC	DC	DC
	Gas Side	in	3/8	3/8	3/8	1/2	1/2	5/8
Connecting	Liquid Side	in	1/4	1/4	1/4	1/4	1/4	3/8
Pipe	Drain Port (Nominal Dia.)	in	0.8" (Polyvinyl Chloride Tube)					
Sound Pressure Level	208V	dB(A)	40/36/33	40/36/33	40/36/33	40/36/33	40/36/33	47/42/35
(High / Mid / Low)1	230V	dB(A)	42/39/36	42/39/36	42/39/36	42/39/36	42/39/36	49/44/37

¹The actual values in an operating enviroment are generally higher than the indicated values due to the contribution from ambient noise.

Floor Console (Exposed)



Model Name (MML-)			AP0074H2UL	AP0094H2UL	AP0124H2UL	AP0154H2UL	AP0184H2UL	AP0244H2UL
Cooling Capacity		kBtu/h	7.5	9.5	12.0	15.4	18.0	24.0
Sensible Cooling Capacit	iy	kBtu/h	4.7	5.4	7.3	9.5	11.2	15.2
Heating Capacity		kBtu/h	8.5	10.5	13.5	17.0	20.0	27.0
Electrical	Power Supply		230V (208/230V), 1-Phase, 60Hz					
Characteristics	Power Consumption (208V)	kW	0.049	0.049	0.080	0.080	0.098	0.098
	Power Consumption (230V)	kW	0.058	0.058	0.093	0.093	0.113	0.113
Appearance			Silky Shade (Munsell 1Y 8.5/9.5)					
	Height	in	24.8	24.8	24.8	24.8	24.8	24.8
External Dimensions Main Unit	Width	in	37.4	37.4	37.4	37.4	37.4	37.4
indiri onic	Depth	in	9.1	9.1	9.1	9.1	9.1	9.1
Total Weight		lb	81.6	81.6	81.6	81.6	88.2	88.2
	Standard Air Flow (High / Mid / Low)	cfm	280/250/210	280/250/210	530/460/380	530/460/380	640/550/460	640/550/460
Fan Unit	Motor Output	W	19	19	45	45	70	70
	Motor Type		DC	DC	DC	DC	DC	DC
	Gas Side	in	3/8	3/8	3/8	1/2	1/2	5/8
Connecting	Liquid Side	in	1/4	1/4	1/4	1/4	1/4	3/8
Pipe	Drain Port (Nominal Dia.)	in	0.8" (Polyvinyl Chloride Tube)					
Sound Pressure Level	208V	dB(A)	39/38/35	39/38/35	47/44/40	47/44/40	51/46/41	51/46/41
(High / Mid / Low)1	230V	dB(A)	42/40/38	42/40/38	50/46/42	50/46/42	53/48/43	53/48/43

¹The actual values in an operating enviroment are generally higher than the indicated values due to the contribution from ambient noise.

Indoor Units | Technical Specifications

MML-AP***4H2UL

- Installed flush against a wall typically under a window or in a room with an exterior wall
- Optional Condensate Drain Kit available

Slim Ducted (Low Profile)



AP0074SPH2UL

MMD-AP***4SPH2UL

- Quiet, powerful operation
- Only 8.3 inches in height allows for greater application flexibilty
- Three-step static pressure setup
- Concealed installation within a ceiling void

AP0124SPH2UL

- Outside air intake available
- Includes drain pump
- No filters provided with the unit

AP0154SPH2UL

• Can be used with any style of air diffuser

AP0184SPH2UL

Concealed	Ducted	(Me
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Model Name (MMD	-)		AP0076BHPUL	AP0096BHPUL	AP0126BHPUL	AP0156BHPUL	AP0186BHPUL	AP0216BHPUL	AP0246BHPUL	AP0306BHPUL	AP0366BHPUL	AP0426BHPUL	AP0486BHPUL	AP0546BHPUL
Cooling Capacity		kBtu/h	7.5	9.5	12.0	15.4	18.0	21.0	24.0	30.0	36.0	42.0	48.0	54.0
Sensible Cooling Capa	acity	kBtu/h	5.6	7.1	9.0	11.6	13.5	15.8	18.0	22.5	27.0	31.5	36.0	40.5
Heating Capacity		kBtu/h	8.5	10.5	13.5	17.0	20.0	24.0	27.0	34.0	40.0	47.5	54.0	60.0
Electrical	Power Supply		230V (208/230V) 1-Phase, 60Hz											
	Power Consumption (230V)	kW	0.07	0.09	0.09	0.13	0.14	0.21	0.21	0.22	0.33	0.33	0.34	0.34
Appearance			Zinc Hot Dipping Steel Plate											
External Dimensiona	Height	in	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
Main Unit	Width	in	27.6	27.6	27.6	39.4	39.4	55.2	55.2	55.2	55.2	55.2	55.2	55.2
Main Onit	Depth	in	29.6	29.6	29.6	29.6	29.6	29.6	29.6	29.6	29.6	29.6	29.6	29.6
Total Weight		lb	56	56	56	73	73	93	93	93	93	93	93	93
	Standard Air Flow (High / Mid / Low)	cfm	318/265/ 212	395/329/ 263	395/329/ 263	589/489/ 394	624/489/ 394	706/583/ 512	706/583/ 512	742/653/ 547	1,130/954/ 812	1,130/954/ 812	1,177/1,024/ 883	1,177/1,024/ 883
	Motor Output	W	150	150	150	150	150	150	150	150	150	150	150	150
Fan Unit	Motor Type		DC											
Tan onic	External Static Pressure (Default)	in WG	0.4	0.4	0.4	0.4	0.4	0.6	0.6	0.6	0.6	0.6	0.6	0.6
	External Static Pressure	in WG	0.6	0.6	0.6	0.6	0.6	0.8	0.8	0.8	0.6	0.8	0.8	0.8
	Gas Side	in	3/8	3/8	3/8	1/2	1/2	5/8	5/8	5/8	5/8	5/8	5/8	5/8
	Liquid Side	in	1/4	1/4	1/4	1/4	1/4	3/8	3/8	3/8	3/8	3/8	3/8	3/8
Connecting Pipe	Drain Port (Nominal Dia.)	in	VP25 (Polyvinyl Chloride Tube: External Dia. 1-1/4 Internal Dia. 1)											
Sound Pressure Level	(High / Mid / Low) ¹	dB(A)	36/31/27	37/32/29	37/32/29	38/35/29	39/35/29	41/36/33	41/36/33	41/36/33	45/39/36	45/39/36	46/40/37	46/40/37

¹The actual values in an operating enviroment are generally higher than the indicated values due to the contribution from ambient noise.

Options





Auxiliary Outside Air Flange TCB-FF101URUL

Zoning Duct Flange TCB-SF160C6BPE

Cooling Capacity		kBtu/h	7.5	9.5	12.0	15.4	18.0
Sensible Cooling Capacit	iy	kBtu/h	6.1	7.1	8.3	10.9	12.5
Heating Capacity		kBtu/h	8.5	10.5	13.5	17.0	20.0
Electrical	Power Supply		230V (208/230V), 1-Phase, 60Hz	230V (208/230V), 1-Phase, 60Hz	230V (208/230V), 1-Phase, 60Hz	230V (208/230V), 1-Phase, 60Hz	230V (208/230V), 1-Phase, 60Hz
Characteristics	Power Consumption	kW	0.043	0.043	0.048	0.061	0.071
Appearance			Zinc Hot Dipping Steel Plate	Zinc Hot Dipping Steel Plate			
	Height	in	8.3	8.3	8.3	8.3	8.3
External Dimensions Main Unit	Width	in	33.3	33.3	33.3	33.3	33.3
indir one	Depth	in	25.4	25.4	25.4	25.4	25.4
Total Weight		lb	49	49	49	51	51
	Standard Air Flow (High / Mid / Low)	cfm	318/276/235	318/276/235	353/306/265	406/353/306	459/400/341
	Motor Output	W	60	60	60	60	60
Fan Unit	Motor Type		DC	DC	DC	DC	DC
	External Static Pressure (Standard)	in WG	0.08	0.08	0.08	0.08	0.08
	External Static Pressure (Max) ¹	in WG	0.14-0.20	0.14-0.20	0.14-0.20	0.14-0.20	0.14-0.20
	Gas Side	in	3/8	3/8	3/8	1/2	1/2
Connecting	Liquid Side	in	1/4	1/4	1/4	1/4	1/4
Pipe	Drain Port (Nominal Dia.)	in	VP25 (Polyvinyl Chloride Tube: Dia. 1-1/4 Internal Dia. 1)	VP25 (Polyvinyl Chloride Tube: Dia. 1-1/4 Internal Dia. 1)	VP25 (Polyvinyl Chloride Tube: Dia. 1-1/4 Internal Dia. 1)	VP25 (Polyvinyl Chloride Tube: Dia. 1-1/4 Internal Dia. 1)	VP25 (Polyvinyl Chloride Tube Dia. 1-1/4 Internal Dia. 1)
Sound Pressure Level	Bottom Return	dB(A)	39/36/33	39/36/33	41/38/35	41.0/38.5/35.0	44.5/41.0/37.5
(High / Mid / Low) ²	Rear Return	dB(A)	31/30/28	31/30/28	32.5/31.5/28.5	34.5/33.5/30.0	37/34/32

AP0094SPH2UL

¹Without filter ²The actual values in an operating enviroment are generally higher than the indicated values due to the contribution from ambient noise.

Options

odel Name (MMD-)



Auxiliary Outside Air Flange TCB-FF101URUL

edium Static)

MMD-AP***6BHPUL

- External static pressure can be raised as high as 0.8 inches WG, so all areas of the room can be reached for even temperature distribution, no matter how complex the layout
- Kit that raises the drain piping up to 24.3 inches from the drain port

174.4 -







TCB-SF80C6BPE TCB-SF56C6BPE

High Static Ducted



MMD-AP*HPUL**

- Compatible with external static pressures up to 1.0 inches WG
- Filters provided with the unit (Except 6 & 8 ton)
- Switchable static pressure • Built-in condensate lift (24.3") (Except 6 & 8 ton)

Vertical Air Handling Unit (AHU)



Model Name (M	MD-)		AP0246HPUL	AP0306HPUL	AP0366HPUL	AP0486HPUL	AP0546HPUL	AP0726HP-UL	AP0966HP-UL
Cooling Capacity		kBtu/h	24.0	30.0	36.0	48.0	54.0	72.0	96.0
Sensible Cooling (Capacity	kBtu/h 19.2 24.0 28.8 38.4		38.4	43.2	60.0	80.6		
Heating Capacity		kBtu/h	27.0	34.0	40.0	54.0	60.0	81.0	108.0
Electrical	Power Supply lectrical Power Consumption (208V)		230V (208/230V), 1-Phase, 60Hz						
Characteristics	Power Consumption (208V)	kW	0.255	0.295	0.35	0.385	0.435	0.54	0.79
	Power Consumption (230V)	kW	0.255	0.295	0.35	0.385	0.435	0.54	0.79
Appearance			Zinc Hot Dipping Steel Plate						
External	Height	in	11.8	11.8	11.8	11.8	11.8	17.6	17.6
Dimensions	Width	in	39.4	39.4	55.2	55.2	55.2	55.1	55.1
Main Unit	Depth	in	29.6	29.6	29.6	29.6	29.6	35.4	35.4
Total Weight		lb	80	80	98	98	98	218	218
	Standard Air Flow (High / Mid / Low)	cfm	706/571/471	883/795/706	1,130/918/789	1,236/1,024/836	1,413/1,200/977	2,236/1,883/1,471	2,825/2,471/2,059
	Motor Output	W	250	250	350	350	350	1,000	1,000
	Motor Type		DC						
Fan Unit	External Static Pressure ¹ Factory Setting (208V/230V)	in WG	0.8	0.8	0.8	0.8	0.8	0.603	0.603
	External Static Pressure 208V ² (High Tap / Mid Tap / Low Tap)	in WG	0.2-1.0 (7Step)	0.2-1.0 (7 steps)	0.2-1.0 (7 steps)				
	External Static Pressure 230V ² (High Tap / Mid Tap / Low Tap)	in WG	0.2-1.0 (7Step)	0.2-1.0 (7 steps)	0.2-1.0 (7 steps)				
	Gas Side	in	5/8	5/8	5/8	5/8	5/8	7/8	7/8
Connecting	Liquid Side	in	3/8	3/8	3/8	3/8	3/8	1/2	1/2
Pipe	Drain Port (Nominal Dia.)	in	VP25 (Polyvinyl Chloride Tube: Dia. 1-1/4 Internal Dia. 1)						
Sound Pressure	208V	dB(A)	45/39/36	46/41/37	48/42/35	49/43/36	50/44/38	44/40/36	46/42/38
Level (High / Mid / Low) ³	230V	dB(A)	45/39/36	46/41/37	48/42/35	49/43/36	50/44/38	44/40/36	46/42/38

¹The ESP is set by changing the fan motor wire tap.

²The actual values in an operating enviroment are generally higher than the indicated values due to the contribution from ambient noise.

Options



Filter Kit TCB-LK801D-E

Filter Kit TCB-LK1401D-E



Zoning Duct Flange TCB-SF56C6BPE

Model Name (MMD-)			AP0120VHG2UL	AP0180VHG2UL	AP0240VHG2UL	AP0300VHG2UL	AP0360VHG2UL	AP0420VHG2UL	AP0480VHG2UL	AP0600VHG2UL
Cooling Capacity kBtu/h		12.0	18.0	24.0	30.0	36.0	42.0	48.0	60.0	
Sensible Cooling Capacity kBtu/h		9.1	13.6	17.7	22.8	26.6	31.9	35.5	44.4	
Heating Capacity		kBtu/h	13.5	20.0	27.0	34.0	40.0	45.0	54.0	67.0
Electrical Power Supply			230V (208/230V), 1-Phase, 60Hz							
	Power Consumption	kW	0.120	0.174	0.174	0.296	0.410	0.386	0.496	0.938
Appearance			Grey							
	Height	in	46.9	46.9	46.9	51.9	51.9	55.9	55.9	57.9
External Dimensions Main Unit	Width	in	17.7	17.7	17.7	20.2	20.2	22.2	22.2	24.2
	Depth	in	22.3	22.3	22.3	25.3	25.3	27.3	27.3	31.3
Total Weight		lb	130	164	164	170	170	200	200	253
	Standard Air Flow (High / Mid / Low)	cfm	480/440/340	670/640/600	760/660/600	1,000/990/950	1,200/1,150/1,050	1,400/1,340/1,260	1,600/1,510/1,420	2,000/1,830/1,640
	Motor	HP	1/3	1/3	1/3	1/2	1/2	3/4	3/4	1
Fan Unit	Motor Type		EC							
	External Static Pressure (Standard)	in WG	0.3	0.3	0.3	0.5	0.5	0.5	0.5	0.5
	External Static Pressure (Max)	in WG	0.5	0.5	0.5	0.8	0.8	0.8	0.8	0.8
	Gas Side	in	3/8	1/2	5/8	5/8	5/8	5/8	5/8	5/8
Connecting Pine	Liquid Side	in	1/4	1/4	3/8	3/8	3/8	3/8	3/8	3/8
	Drain Port (Nominal Dia.)	in	3/4" FPT							
Sound Pressure Level (Hi	gh / Mid / Low)1	dB(A)	41/38/37	41/39/38	41/39/38	43/42/40	45/44/42	46/45/43	48/47/45	52/51/47

¹The actual values in an operating environment are generally higher than the indicated values due to the contribution from ambient noise (discharge only).

Optional

Model Name (MMD-)		AP0120VHG2UL	AP0180VHG2UL	AP0240VHG2UL	AP0300VHG2UL	AP0360VHG2UL	AP0420VHG2UL	AP0480VHG2UL	AP0600VHG2UL
	TCB-HT101VDGUL	•	۰	۰	٠	٠	٠	۰	٠
Electrical Heater (2081//2401/)	TCB-HT301VDGUL	•	٠	•	•	•	٠	٠	•
	TCB-HT501VDGUL	•	٠	•	•	•	•	•	•
	TCB-HT601VDGUL		٠	•	•	•	٠	•	•
	TCB-HT801VDGUL			•	•	•	•	•	•
	TCB-HT951VDGUL				•	٠	•	٠	•
	TCB-PL2S241VDGUL	•	٠	•					
Planum with 2" MEDV 8 Eiltor	TCB-PL2S361VDGUL				•	•			
	TCB-PL2S481VDGUL						•	•	
	TCB-PL2S601VDGUL								•
	TCB-FB2F241VDGUL	•	•	•					
Filterbox with 2" MERV 8 Filter	TCB-FB2F361VDGUL				•	•			
	TCB-FB2F481VDGUL						•	•	
	TCB-FB2F601VDGUL								•

MMD-AP***VHG2UL

- Multi-position installation option
- Energy-efficient ECM operation ensures proper performance across a wide range of duct static pressure, maximizing cooling and heating capacities
- All sizes of the units are multiposition ready for upflow or horizontal applications
- Units can also be suspended from roof or ceiling joints
- 1 inch filter rack

Outside Air



MMD-AP***1HF2UL

- Controls discharge air temperature
- Energy-efficient DC fan motor
- CFM ranges from 600 to 1,200 for a wide array of outside air applications

Model Name (MMD-)			AP0481HF2UL	AP0721HF2UL	AP0961HF2UL
Cooling Capacity		kBtu/h	48.0	72.0	96.0
Heating Capacity		kBtu/h	30.0	47.0	59.0
Electrical	Power Supply		230V (208/230V), 1-Phase, 60Hz	230V (208/230V), 1-Phase, 60Hz	230V (208/230V), 1-Phase, 60Hz
Characteristics	Power Consumption (208V)	kW	0.31	0.56	0.64
	Power Consumption (230V)	kW	0.34	0.58	0.66
Esternal Dimensiona	Height	in	19.5	19.5	19.5
Main Unit	Width	in	35.4	55	55
	Depth	in	49.8	49.8	49.8
Total Weight		lb	212	349	349
	Standard Air Flow (High / Mid / Low)	cfm	636	989	1237
Fan Unit	Motor Output	W	160	160 x 2	160 x 2
	Motor Type		AC	AC	AC
0	Gas Side	in	5/8	7/8	7/8
Pipe	Liquid Side	in	3/8	1/2	1/2
	Drain Port (Nominal Dia.)	in	1-1/4 OD: 1.0 ID (Polyvinyl Chloride Tube)	1-1/4 OD: 1.0 ID (Polyvinyl Chloride Tube)	1-1/4 OD: 1.0 ID (Polyvinyl Chloride Tube)
Sound Pressure Level	208V	dB(A)	44/43/36	47/46/40	47/45 (H/L)
(High / Mid / Low)1	230V	dB(A)	46/45/42	48/47/46	50/49 (H/L)
Operating Range for	Cooling ²	°F	41-115	41-115	41-115
SMMS-e	Heating ³	°F	23-109	23-109	23-109

Sensible Cooling Capacity kBtu/h 35.2 kBtu/h Heating Capacity 38.0 208/230V, Power Supply 1-Phase, 60Hz Electrical MCA Α Characteristics 8 MOCP А 15 Appearance Painted Grey 33-3/8 Height in External Dimension Width in 74-3/8 Main Unit Depth in 46-5/8 Total Weight lb 364 Standard Rated Air Flow cfm 1.050 (Cooling) Standard Rated Air Flow 1,050 cfm Fan Unit (Heating) 1.10 Motor HP Motor Type EC Gas Side in 5/8 Connecting Liquid Side in 3/8 Pipe Drain Port (Nominal Dia.) in 3/4 Sound Pressure Level (High / Mid / Low)1 dB(A) 76/73/68

kBtu/h

¹The actual values in an operating enviroment are generally higher than the indicated values due to the contribution from ambient noise. ²When supply air temperature is "setting temperature + 5.4° F" or less. Outside Air unit operates as FAN mode. ³When supply air temperature is "setting temperature - 5.4° F" or over. Outside Air unit operates as FAN mode.

¹The actual values in an operating enviroment are generally higher than the indicated values due to the contribution from ambient noise.

Rooftop Unit

Model Name (40QQ-)

Cooling Capacity

ecoblue technology

030ABA3-0A0

36.0



40QQ-***ABA*-0A0

- Features EcoBlue[™] technology, which includes a more compact vane axial fan and simplified design for better performance
- Lightweight compared to standard rooftop unit
- Direct drive (multi-speed / torque) ECM motor
- Single point electrical connection
- Non-corrossive composite condensate pan
- Access panels with easy grip handles
- 2 inch disposable return air filters

18ABA3-0A0	060ABA3-0A0	030ABA6-0A0	048ABA6-0A0	060ABA6-0A0
48.0	60.0	36.0	48.0	60.0
33.6	42.0	35.2	33.6	42.0
52.0	66.0	38.0	52.0	66.0
208/230V, Phase, 60Hz	208/230V, 460V, 460V, 4 1-Phase, 60Hz 3-Phase, 60Hz 3-Phase, 60Hz 3-Phase, 60Hz		460V, 3-Phase, 60Hz	
8	11	11 2 2 3		3
15	15 15 15		15	
ainted Grey	Painted Grey	Painted Grey	Painted Grey	Painted Grey
41-3/8	41-3/8	33-3/8	41-3/8	41-3/8
74-3/8	74-3/8 74-3/8 74-3/8		74-3/8	74-3/8
46-5/8	46-5/8	46-5/8 46-5/8 46-5/8 46-5/8		46-5/8
388	401 364 388 401		401	
1,350	1,750 1,050 1,350		1,350	1,750
1,750	1,750	1,050	1,750	1,750
1.08	1.46	1.10	1.08	1.46
EC	EC	EC	EC	EC
5/8	5/8 5/8 5/8 5/8		5/8	
3/8	3/8	3/8 3/8 3/8 3/8		3/8
3/4	3/4	3/4 3/4 3/4 3/4		3/4
76/73/66	77/73/66 76/73/68		76/73/66	77/73/66



Controls Ind and Accessories



Remote Controls



RBC-AMS54E-UL

Wired Remote Controller

The Wired Remote Controller (programmable) is a low voltage thermostat mounted on the wall that maintains room temperature by controlling system operation.

- Backlit
- Fan speed
- Clock setting
- Schedule timer
- Dual set-point
- 1° F temperature indication
- Set temperature range limiting
- Service check mode
- Compatible with Toshiba Carrier RAV and VRF System



Remote Controls



BMS-SM1280HTLUL



BMS-CT5120UL

Touchscreen Central Controller

The Touchscreen Central Controller is a line voltage controller mounted on the wall with a touch screen LCD display panel. This controller enables the customer to control and monitor the operation of the VRF system.

- Grouping based on floor, unit, area, tenant and level
- Operating Mode, Turning ON / OFF
- Master Scheduler–Weekly, five special days, monthly
- Alarm display with history
- Web browser monitoring and control (for Intranet PC)
- Up to two concurrent users can be connected
- Additional digital input / output device available
- Maximum of 512 indoor units can be connected
- Ability to display language in English, Spanish or French







Central Remote Control

70 VRF Heat Recovery and Heat Pump Systems





• Set view functionality to show general indoor settings on main screen

Smart Manager With Web

The Smart Manager is a line voltage controller mounted on the wall that enables the customer to control and monitor the operation of the VRF system by using an onsite computer.

- List view function allows all indoor units to be displayed on one screen
- Advanced operation and master schedule functions with ability to be set on calendar
- Up to four concurrent users can be connected
- Up to 32 user accounts can be programmed with different levels of
- access (at least one must be administrator level)
- Energy monitoring and report creation functions available
- Thin profile controller and separate power supply unit enables easy installation

- Individual control (ON / OFF, operating mode, etc.)
- Manages up to 128 units (max: 2 x 64 indoor units)
- Flexible grouping in zones
- External input / output control (input: ON / OFF signal;
- output: Error signal)

Additional Remote Controls

Additional Remote Controls



Simple Wired Remote Control

The Simple Wired Remote Control is mounted on the wall, allowing remote sensing of room temperature along with user interface with the system.

- Start / Stop
- Temperature setting
- Airflow changing
- Check code display



The Stand-Alone Receiver is a combination of a wall / ceiling mounted receiver and a handheld wireless remote that allows a user to interface with the unit.

- Vertical AHU

TCB-AX32UL



TCB-TC41LUL

Remote Sensor

The Remote Sensor is mounted on the wall, allowing remote sensing of room temperature without any user interface with the system.

- Prevents overcooling or overheating of the space
- Power supply from indoor unit



- Start / Stop

- Timer function

Stand-Alone Receiver

• For 4-Way Cassette, Compact 4-Way Cassette, Underceiling, Concealed Duct, Slim Duct and Includes Wireless Remote Control Kit

Wireless Remote Control

- Changing mode
- Temperature setting
- Airflow changing
- Control by two 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

Additional Remote Controls



TCB-1FTH1GUL





RBC-AX32UW-UL



RBC-AX33C-UL

Integral Receiver (For Underceiling)

The Integral Receiver is a combination of a mounted receiver on an underceiling indoor unit and handheld wireless remote that allows a user to interface with the unit.

The Integral Receiver is a combination of a mounted receiver on an

- ON / OFF
- Operating modes: auto, heat, dry, cool, and fan
- Fan modes: auto, high, medium and low
- Louver setting
- Timer function
- Error display





4-way cassette indoor unit and handheld wireless remote that allows a user to interface with the unit. • ON / OFF • Operating modes: auto, heat, dry, cool, and fan • Fan modes: auto, high, medium and low Louver setting



Integral Receiver (For 4-Way Cassette)



Network Controls



OPN-MTCC

i-Vu[®] Interface

The i-Vu[®] Building Automation System brings your system into sharp focus with a 360° view of your building's entire operation. With its ability to communicate with the Toshiba Carrier VRF system, other HVAC systems and ancillary system components, i-Vu gives you a real-time consolidated view of occupant comfort, energy usage and other operating conditions.

- Regardless of the control type or equipment manufacturer, the i-Vu Building Automation System is your connection for seamless, comprehensive and flexible control of all systems in your building
- Easy to install and commission
- Pre-engineered, pre-loaded control programs simplify system set-up and minimize the need for field programming
- Intuitive, graphic-rich i-Vu user interface keeps you connected to your facility from any web-enabled device or locally through a wallmounted touchscreen
- Unique graphics for individual system components give users total insight and control



BMS-IFBN640TLUL

BACNet[®] Interface

The BACNet Interface is a BACNet controller which enables the communication between the building automation system (BAS) and Toshiba Carrier VRF unit. This allows the customer to control the Toshiba Carrier VRF system from a centralized location. The BACNet system uses object signals to provide the following functions:

Controller

- Fan speed
- Louver







- ON / OFF
- Operation mode
- Temperature setting
- Permit/prohibit local remote controller

Monitorina

- ON / OFF
- Operation mode
- Temperature setting
- Fan speed
- Louver
- Room temperature
- Permit / prohibit local remote controller
- Error code
- Error status



Network Controls

TCB-IFLN642TLUL

LonWorks[®] LN Interface

The LonWorks Interface manages the system as a Lon device to communicate with the customer'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:

Controller

- ON / OFF
- Operation mode
- Temperature setting
- Fan speed
- Louver
- Permit prohibit local remote controller

M	onitoring	
•	ON / OFF	

- - Permit prohibit local remote
- Operation mode • Temperature
- setting
 - Error code

controller

- Error status
- Louver

• Fan speed

Room temperature

Network Controls



- - to 32 tons

The ERV Control Interface is used to connect and operate third-party Energy Recovery Ventilation. The third-party ERV ON / OFF and fan speed is controlled using the Toshiba Carrier Wired Controller, which is connected to the Toshiba Carrier VRF system.

- ON / OFF





TCB-IF**1GUL RBM-A***1GUL

TCB-IFVN1UL

DX Interface

DX Interface enables integration of any third-party heat pump air handling unit (AHU) into the Toshiba Carrier VRF systems.

Two Types of Controls • Return Air (RA) control • Supply Air (0-10V) control

For Return Air (RA) Control

• Single (normal) coil AHU up to 16 tons • Split face coil AHU up

For Supply Air (0-10V) Control

• Single (normal) coil AHU up to 16 tons

ERV Control Interface

- Two-step airflow (high or low)
- Scheduling setting
- Ventilation air volume change by external input like
- CO2 sensor, motion sensor, etc.
- Individual, group or central control option

Benchmark Tools

VRoom Selection Software

The Toshiba Carrier VRoom Selection Tool application has been designed to allow you to easily select VRF systems. It enables engineers to easily design, lay out and prepare VRF systems for quote.

- Automatic software updates
- Sleek drag-and-drop interface
- Table edit features for quick editing of multiple units
- Quick global edits for wired controllers

Contact VRoomhelp@carrier.com for assistance and support.



TCB-DK01SS-E

Dyna Doctor

Dyna Doctor is a service tool that provides a graphical view of Toshiba Carrier system operation. Dyna Doctor allows users to run reports and analyze system functionality. Dyna Doctor software can be downloaded for free from hvacpartners.com, but a special connector to communicate with the Toshiba Carrier VRF system is required to use this service tool.



Application Controls



TCB-PCNT31TLUL

Size: 3.3 × 2.0 (in.) Install optional P.C. board in E-parts of the indoor unit.

Remote Location ON / OFF Control Box

Start and stop of the air conditioner is possible by an external signal and indication of operation / alarm externally

Size: 7.9 × 6.7 × 2.6 (in.)



RAV Network Adapter

Link adapter for "1:1 model" to enable connection to VRF system network.

• Super digital inverter • Used only for light commercial products

Centr BMS-	al Remote Control CM1281TLUL



۲h-白 Remote Controller

Monitoring

- ON / OFF status (for indoor unit)
- Alarm status (system and indoor unit stop)
- ON / OFF command
- Air conditioner can be turned ON / OFF by the external signals
- The external ON / OFF signals will initiate the signals shown below



TCC-LINI

Indoor unit



Application Controls



TCB-PCDM4UL Size: 2.8 × 3.3 (in.)

Power Peak-Cut Control

Feature The upper limit capacity of the outdoor unit is restricted based on the outdoor power peak selected setting

Function

Two control settings are selectable by setting SW07 on the interface P.C. board of the header outdoor unit



External Master ON / OFF Control

The outdoor unit can control start or stop to receive the external signal

Night Operation Control (Sound reduction)

Sound level can be reduced by restricting the compressor and fan speeds

Operation Mode

Selection Control

This control can restrict the selectable operation mode

Snowfall Fan Control

The outdoor fan will operate to prevent snow buildup



TCB-PCIN4UL

Size: 2.9 × 3.1 (in.)

Error / Operation Output Control

Enables external output of error and operation signals

Operating Rate Output

External output of system operating rates enables remote monitoring of operating conditions

Compressor Operation Output

Enables external signal output for each compressor that is in operation within any given outdoor unit—this feature provides a practical method for calculating total operating times for each compressor





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Toshiba Carrier VRF

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