

COMPACT AND LIGHT-WEIGHT

SUPERIOR EER AND COP

QUIET OPERATION

R-410A



DC twin-rotary compressors

MiNi-SMMS VRF Outdoor unit

Features

The MiNi-SMMS system achieves the best performance in a wide variety of light commercial applications including shops, offices and apartments, where unobtrusive appearance and quiet operation are important advantages. The extraordinary flexibility of this Toshiba system is guaranteed. The outdoor unit is compact and light-weight for fast and easy installation. Available in 4, 5 and 6 HP units delivering cooling capacities from 12.1 to 15.5 kW and heating capacities from 12.5 to 18 kW.

PMV Kit

- The PMV kit is an option for super-silent operation, available for hotel rooms and residential applications where low noise levels are critical.
- Ease of installation
- Integral condensate pump
- Low cost

Key features

Best COP (4.61 for 4 HP): represents state-of-art energy saving efficiency.

Wide range: up to 9 indoor units may be connected with a single outdoor unit, from a choice of 13 designs and over 80 sizes.

DC Twin Rotary compressor delivers high efficiency and complete reliability.

Full SMMS indoor and control units available.

The compact design of the outdoor unit (70% smaller overall than standard VRF unit) means it can be easily installed virtually anywhere.

Technical specifications **heat pump**


Outdoor unit		MCY-MAP0401HT	MCY-MAP0501HT	MCY-MAP0601HT
		4 HP	5 HP	6 HP
Cooling capacity	kW	12.1	14.0	15.5
Power input, cooling	kW	2.82	3.47	4.63
EER	W/W	4.29	4.03	3.35
Energy efficiency class, cooling		A	A	A
Running current, cooling	A	13.2	16.1	21.4
Heating capacity	kW	12.5	16.0	18.0
Power input, heating	%	2.71	4.00	4.85
COP	W/W	4.61	4.00	3.71
Energy efficiency class, heating		A	A	A
Running current, heating	A	12.5	18.3	22.2
Peak demand current	A	25	28	31
Air flow	m ³ /h – l/s	5820 – 1617	6120 – 1700	6420 – 1783
Sound pressure level, cooling/heating	dB(A)	49/50	50/52	51/53
Operating range - db, cooling	°C	-5 to 43	-5 to 43	-5 to 43
Operating range - wb, heating	°C	-15 to 15.5	-15 to 15.5	-15 to 15.5
Dimensions (H x L x D)	mm	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320
Weight	kg	117	117	117
Compressor type		Hermetic	Hermetic	Hermetic
Refrigerant charge R410A	kg	7.2	7.2	7.2
Pipework				
Suction line type – diameter	in	Flare – 5/8	Flare – 5/8	Brazing – 3/4
Liquid line type – diameter	in	Flare – 3/8	Flare – 3/8	Flare – 3/8
Maximum equivalent length separation*	m	125	125	125
Maximum actual piping separation*	m	100	100	100
Maximum pipe length*	m	180	180	180
Maximum lift (Indoor unit above/below)	m	20/30	20/30	20/30
Power supply	V-ph-Hz	230-1-50	230-1-50	230-1-50

* When PMV Kit is used: maximum equivalent length separation (80 m); maximum actual piping separation (65 m); maximum pipe length (150 m)













Technical specifications **outdoor units**

Model name		Cooling capacity	Heating capacity	Number of indoor units	Total capacity of connectable indoor units	
				Max.	Min.*	Max.*
MCY-MAP0401HT	4 HP	12.1 kW	12.5 kW	6	3.2 HP	5.2 HP
MCY-MAP0501HT	5 HP	14.0 kW	16.0 kW	8	4.0 HP	6.5 HP
MCY-MAP0601HT	6 HP	15.5 kW	18.0 kW	9	4.8 HP	7.8 HP

Technical specifications **PMV kit**

	Model name	Indoor unit capacity code
	RBM-PMV0901E	0.8 – 1 – 1.25
	RBM-PMV0381E	1.7 – 2 – 2.5

Technical specifications heat pump

Model Type	Model name	MiNi-SMMS	SMMS and SHRM	Capacity code	Cooling cap. (kW)	Heating cap. (kW)	Height (mm)	Length (mm)	Depth (mm)	Weight (kg)	
Four-way cassette 	MMU-AP0091H	●	●	1	2.8	3.2	256	840	840	20	
	MMU-AP0121H	●	●	1.25	3.6	4					
	MMU-AP0151H	●	●	1.7	4.5	5				22	
	MMU-AP0181H	●	●	2	5.6	6.3					
	MMU-AP0241H	●	●	2.5	7.1	8	319	840	840	23	
	MMU-AP0271H	●	●	3	8	9					
	MMU-AP0301H	●	●	3.2	9	10					
	MMU-AP0361H	●	●	4	11.2	12.5					
MMU-AP0481H	●	●	5	14	16						
MMU-AP0561H	●	●	6	16	18						
Compact four-way cassette 	MMU-AP0071MH	●	●	0.8	2.2	2.5	268	575	575	17	
	MMU-AP0091MH	●	●	1	2.8	3.2					
	MMU-AP0121MH	●	●	1.25	3.6	4					
	MMU-AP0151MH	●	●	1.7	4.5	5					
	MMU-AP0181MH	●	●	2	5.6	6.3					
Two-way cassette 	MMU-AP0071WH	●	●	0.8	2.2	2.5	398	830	550	33	
	MMU-AP0091WH	●	●	1	2.8	3.2					
	MMU-AP0121WH	●	●	1.25	3.6	4					
	MMU-AP0151WH	●	●	1.7	4.5	5	1350	550	550	44	
	MMU-AP0181WH	●	●	2	5.6	6.3					
	MMU-AP0241WH	●	●	2.5	7.1	8					
	MMU-AP0271WH	●	●	3	8	9					
MMU-AP0301WH	●	●	3.2	9	10	48					
MMU-AP0361WH	●	●	4	11.2	12.5						
One-way cassette 	MMU-AP0071YH	●	●	0.8	2.2	2.5	235	850	400	22	
	MMU-AP0091YH	●	●	1	2.8	3.2					
	MMU-AP0121YH	●	●	1.25	3.6	4					
	MMU-AP0152SH	●	●	1.7	4.5	5	200	1000	710	21	
	MMU-AP0182SH	●	●	2	5.6	6.3					
MMU-AP0242SH	●	●	2.5	7.1	8	22					
Concealed duct, standard type 	MMD-AP0071BH	●	●	0.8	2.2	2.5	320	550	800	27	
	MMD-AP0091BH	●	●	1	2.8	3.2					
	MMD-AP0121BH	●	●	1.25	3.6	4		700		30	
	MMD-AP0151BH	●	●	1.7	4.5	5					
	MMD-AP0181BH	●	●	2	5.6	6.3		1000		39	
	MMD-AP0241BH	●	●	2.5	7.1	8					
	MMD-AP0271BH	●	●	3	8	9					
	MMD-AP0301SH	●	●	3.2	9	10					
	MMD-AP0361BH	●	●	4	11.2	12.5		1350		51	
	MMD-AP0481BH	●	●	5	14	16					
MMD-AP0561BH	●	●	6	16	18						
MMD-AP0071BH	●	●	0.8	2.2	2.5	380	850		660		50
MMD-AP0241H	●	●	2.5	7.1	8						
MMD-AP0271H	●	●	3	8	9		1200	67			
MMD-AP0361H	●	●	4	11.2	12.5						
MMD-AP0481H	●	●	5	14	16		470	1380		1250	155
MMD-AP0721H	●	●	8	22.4	25						
MMD-AP0961H	●	●	10	28	31.5						
MMD-AP0071SPH	●	●	0.8	2.2	2.5						
MMD-AP0091SPH	●	●	1	2.8	3.2						
MMD-AP0121SPH	●	●	1.25	3.6	4						
MMD-AP0151SPH	●	●	1.7	4.5	5	23					
MMD-AP0181SPH	●	●	2	5.6	6.3						
Ceiling-suspended 	MMC-AP0151H	●	●	1.7	4.5	5	210	910	680	21	
	MMC-AP0181H	●	●	2	5.6	6.3					
	MMC-AP0241H	●	●	2.5	7.1	8		1180		25	
	MMC-AP0271H	●	●	3	8	9					
	MMC-AP0361H	●	●	4	11.2	12.5		1595		33	
MMC-AP0481H	●	●	5	14	16						
High-wall 	MMK-AP0072H	●	●	0.8	2.2	2.5	275	790	208	11	
	MMK-AP0092H	●	●	1	2.8	3.2					
	MMK-AP0122H	●	●	1.25	3.6	4					
High-wall 	MMK-AP0151H	●	●	1.7	4.5	5.0	368	1055	210	19	
	MMK-AP0181H	●	●	2	5.6	6.3					
	MMK-AP0241H	●	●	2.5	7.1	8.0		1430		25	
Floor standing cabinet type 	MML-AP0071H	●	●	0.8	2.2	2.5	630	950	230	37	
	MML-AP0091H	●	●	1	2.8	3.2					
	MML-AP0121H	●	●	1.25	3.6	4					
	MML-AP0151H	●	●	1.7	4.5	5				40	
	MML-AP0181H	●	●	2	5.6	6.3					
	MML-AP0241H	●	●	2.5	7.1	8					
Floor standing concealed type 	MML-AP0071BH	●	●	0.8	2.2	2.5	600	745	220	21	
	MML-AP0091BH	●	●	1	2.8	3.2					
	MML-AP0121BH	●	●	1.25	3.6	4		1045		29	
	MML-AP0151BH	●	●	1.7	4.5	5					
	MML-AP0181BH	●	●	2	5.6	6.3					
	MML-AP0241BH	●	●	2.5	7.1	8					
Tall floor-standing 	MMF-AP0151H	●	●	1.7	4.5	5	1750	600	210	48	
	MMF-AP0181H	●	●	2	5.6	6.3					
	MMF-AP0241H	●	●	2.5	7.1	8					
	MMF-AP0271H	●	●	3	8	9			390	65	
	MMF-AP0361H	●	●	4	11.2	12.5					
	MMF-AP0481H	●	●	5	14	16					
Fresh air intake 	MMD-AP0481HFE		SMMS	5	14	12	380	660	1200	67	
	MMD-AP0721HFE		SMMS	8	22.4	18.7	470	1380	1250	150	
	MMD-AP0961HFE		SMMS	10	28	23.3					