















## 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	28						
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		33		
	MMU-AP0091WH	●	●	1	2.8	3.2						
	MMU-AP0121WH	●	●	1.25	3.6	4						
	MMU-AP0151WH	●	●	1.7	4.5	5	1350			44		
	MMU-AP0181WH	●	●	2	5.6	6.3						
	MMU-AP0241WH	●	●	2.5	7.1	8						
MMU-AP0271WH	●	●	3	8	9	48						
MMU-AP0301WH	●	●	3.2	9	10							
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						
	MMD-AP0151BH	●	●	1.7	4.5	5		700			30	
	MMD-AP0181BH	●	●	2	5.6	6.3						
	MMD-AP0241BH	●	●	2.5	7.1	8						
	MMD-AP0271BH	●	●	3	8	9		1000			39	
	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							
Concealed duct, high static pressure 	MMD-AP0181H	●	●	2	5.6	6.3	380	850	660	50		
	MMD-AP0241H	●	●	2.5	7.1	8						
	MMD-AP0271H	●	●	3	8	9						
	MMD-AP0361H	●	●	4	11.2	12.5		1200			56	
	MMD-AP0481H	●	●	5	14	16						
	MMD-AP0721H	●	●	8	22.4	25						
MMD-AP0961H	●	●	10	28	31.5	470	1380	1250	155			
Slim Duct 	MMD-AP0071SPH	●	●	0.8	2.2	2.5	210	845	645	22		
	MMD-AP0091SPH	●	●	1	2.8	3.2						
	MMD-AP0121SPH	●	●	1.25	3.6	4				23		
	MMD-AP0151SPH	●	●	1.7	4.5	5						
	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						
MMC-AP0481H	●	●	5	14	16	1595		33				
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						
	MML-AP0151BH	●	●	1.7	4.5	5		1045			29	
	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		49	
	MMF-AP0361H	●	●	4	11.2	12.5						
	MMF-AP0481H	●	●	5	14	16						
MMF-AP0561H	●	●	6	16	18	65						
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						



MMU-AP(... )MH

## Compact four-way cassette

### Features

The compact four-way cassette has been designed to suit all the standard 600 × 600 mm grid ceilings, to allow simple and easy installation and maintenance. Its sophisticated design fits with any room interior, where design is as important as the functionality. Draught prevention and clean ceiling functions make this unit ideal for the most demanding application.

### Key features

Slim-line dimensions make this cassette suitable for the most demanding installation, where ceiling restrictions apply.

All the capacity sizes have the same physical dimensions so the installation looks much smarter and consistent.

**Easy maintenance:** access to the corner pockets is easy and enables convenient installation and adjustment for perfect ceiling fitting.

The depth of the panel is less than 30 mm making the unit unobtrusive in any condition.



### Technical specifications heat pump

Indoor unit	MMU-	AP0071MH	AP0091MH	AP0121MH	AP0151MH	AP0181MH
Cooling capacity	kW	2.2	2.8	3.6	4.5	5.6
Heating capacity	kW	2.5	3.2	4.0	5.0	6.3
Power consumption	kW	0.034	0.036	0.038	0.041	0.052
Running current	A	0.28	0.30	0.31	0.34	0.42
Starting current	A	0.49	0.52	0.54	0.59	0.73

Indoor unit	MMU-	AP0071MH	AP0091MH	AP0121MH	AP0151MH	AP0181MH
Air flow (h/l)	m <sup>3</sup> /h	552/378	570/378	594/402	660/468	762/522
Air flow (h/l)	l/s	153/105	158/105	165/117	183/130	212/145
Sound pressure level (h/l)	dB(A)	36/28	37/28	37/29	40/30	44/34
Dimensions (H x L x D)	mm	268 × 575 × 575				
Weight	kg	17				
Panel dimensions (H x L x D)	mm	27 × 700 × 700				
Panel weight	kg	3				
Connecting pipe, gas	in	3/8	3/8	3/8	5/8	5/8
Connecting pipe, liquid	in	1/4	1/4	1/4	3/8	3/8
Drain port diameter	mm	25	25	25	25	25
Power supply	V-ph-Hz	220/240-1-50				



MMU-AP(...).H

## Four-way cassette

### Features

This four-way cassette includes Toshiba state-of-the-art technology. With the industry's most advanced high-lift drain pipe provided as standard, it offers the ideal solution for small commercial applications where space is limited. Unobtrusive and flexible, this unit blends in with any room interior décor and is ideal for both new and refurbishment projects.

### Key features

**Clean Ceiling:** the innovative air flow control and the new panel design prevent dust from accumulating around the air outlet of the ceiling.

**Clean unit:** both the louvre and the grille are easily removed and washed.

**Flexible installation:** ideal for sites with limited space above the ceiling, the unit features a high-lift drain pipe (850 mm).

**Easy maintenance:** Corner pockets in all four panel corners allow convenient access to the adjustment controls behind the panel.

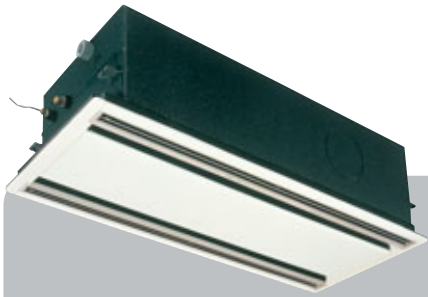
Simplified multi-drop wiring connections.



### Technical specifications heat pump

Indoor unit	MMU-	AP0091H	AP0121H	AP0151H	AP0181H	AP0241H	AP0271H	AP0301H	AP0361H	AP0481H	AP0561H
Cooling capacity	kW	2.8	3.6	4.5	5.6	7.1	8.0	9.0	11.2	14.0	16.0
Heating capacity	kW	3.2	4.0	5.0	6.3	8.0	9.0	10.0	12.5	16.0	18.0
Power consumption	kW	0.02		0.022	0.026	0.032		0.048	0.07	0.11	0.112
Running current	A	0.17		0.19	0.21	0.24		0.35	0.59	0.81	0.83
Starting current	A	0.30		0.33	0.36	0.42		0.59	0.87	1.23	1.26

Indoor unit	MMU-	AP0091H	AP0121H	AP0151H	AP0181H	AP0241H	AP0271H	AP0301H	AP0361H	AP0481H	AP0561H
Air flow (h/l)	m <sup>3</sup> /h	800/680		930/780	1050/800	1200/820		1320/850	1680/1070	2040/1130	2090/1230
Air flow (h/l)	l/s	222/189		258/217	292/222	333/278		367/236	467/297	567/314	580/342
Sound pressure level (h/l)	dB(A)	30/27		31/27	32/28	34/28		37/30	40/33	44/34	45/34
Dimensions (H x L x D)	mm	256 x 840 x 840		256 x 840 x 840		256 x 840 x 840			319 x 840 x 840		
Weight	kg	20		22		23			28		
Panel dimensions (H x L x D)	mm	35 x 950 x 950		35 x 950 x 950		35 x 950 x 950			35 x 950 x 950		
Panel weight	kg	4.5		4.5		4.5			4.5		
Air filter		Standard filter fitted (long-life filter)									
Connecting pipe											
Gas	in	3/8		1/2		5/8			5/8		
Liquid	in	1/4		1/4		3/8			3/8		
Drain port diameter	mm	25		25		25			25		
Power supply	V-ph-Hz	220/240-1-50		220/240-1-50		220/240-1-50			220/240-1-50		



MMU-AP(... )WH

## Two-way cassette

### Features

With its very compact size, this two-way cassette is the best solution for small rooms. Slim and easy to install, it fits discreetly into any room interior. In addition, thanks to its silent operation, this model creates a very pleasant, quiet and comfortable environment.

### Key features

Slim design, with an 8 mm high ceiling panel.

**Low noise level:** it operates at only 30 dB(A) (sizes 2.2 to 5.6 kW).

**Unique Air flow control:** the air current is balanced between two directions, for maximum comfort.

**Flexible installation:** the condensate drain pump raises drain piping up to 500 mm.

### Enhanced Indoor Air Quality:

Standard long-life filters.

Fresh air intake: ensures constant air renewal.



### Technical specifications heat pump

Indoor unit	MMU-	AP0071WH	AP0091WH	AP0121WH	AP0151WH	AP0181WH	AP0241WH	AP0271WH	AP0301WH
Cooling capacity	kW	2.2	2.8	3.6	4.5	5.6	7.1	8.0	9.0
Heating capacity	kW	2.5	3.2	4.0	5.0	6.3	8.0	9.0	10.0
Power consumption	kW	0.070			0.072		0.105		0.106
Running current	A	0.31			0.32		0.46		0.47
Starting current	A	0.47			0.60		0.89		0.98

Indoor unit	MMU-	AP0071WH	AP0091WH	AP0121WH	AP0151WH	AP0181WH	AP0241WH	AP0271WH	AP0301WH
Air flow (h/l)	m <sup>3</sup> /h	570/450			780/600		1140/720		1260/960
Air flow (h/l)	l/s	158/125			217/167		317/200		350/267
Sound pressure level (h/l)	dB(A)	34/30			35/30		38/33		40/34
Dimensions (H x L x D)	mm	398 x 830 x 550			398 x 1350 x 550		398 x 1350 x 550		
Weight	kg	33			44		48		
Panel dimensions (H x L x D)	mm	8 x 1000 x 650			8 x 1520 x 650		8 x 1520 x 650		
Panel weight	kg	8			11		11		
Air filter		Standard filter fitted (long-life filter)							
Connecting pipe									
Gas	in	3/8			1/2		5/8		
Liquid	in	1/4			1/4		3/8		
Drain port diameter	mm	25			25		25		
Power supply	V-ph-Hz	220/240-1-50			220/240-1-50		220/240-1-50		



## One-way cassette

### Features

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

### Key features

**Compact hi-tech design:** 235 × 850 × 400 mm (sizes 2.2 to 3.6).

**Flexible installation:** ideal for sites where above ceiling space is limited, the unit features a high-lift drain pipe (350 mm).

**Low noise level:** it operates at only 34 dB(A) (sizes 2.2 to 3.6).

MMU-AP(...)YH/SH



### Technical specifications heat pump

Indoor unit	MMU-	AP0071YH	AP0091YH	AP0121YH	AP0152SH	AP0182SH	AP0242SH
Cooling capacity	kW	2.2	2.8	3.6	4.5	5.6	7.1
Heating capacity	kW	2.5	3.2	4	5	6.3	8
Power consumption	kW	0.053			0.042	0.046	0.075
Running current	A	0.24			0.34	0.37	0.62
Starting current	A	0.6			0.51	0.52	0.53

Indoor unit	MMU-	AP0071YH	AP0091YH	AP0121YH	AP0152SH	AP0182SH	AP0242SH
Air flow (h/l)	m <sup>3</sup> /h	540/420			750/630	780/660	1140/810
Air flow (h/l)	l/s	150/117			208/175	216/183	317/225
Sound pressure level (h/l)	dB(A)	42/34			37/32	38/34	45/37
Dimensions (H x L x D)	mm	235 × 850 × 400			20 × 1230 × 800		
Weight	kg	22			21	21	22
Panel dimensions (H x L x D)	mm	18 × 1050 × 470			20 × 1230 × 800		
Panel weight	kg	3.5			5.5		
Air filter		Standard filter fitted (long-life filter)					
Connecting pipe							
Gas	in	3/8			1/2		5/8
Liquid	in	1/4			1/4		3/8
Drain port diameter	mm	25			25		25
Power supply	V-ph-Hz	220/240-1-50			220/240-1-50		220/240-1-50



MMD-AP(...)BH

## Standard ducted unit

### Features

The discreet standard ducted unit can easily be installed in ceiling voids or false ceilings, and operates very quietly. Whatever the shape of the room, this flexible model ensures a uniform temperature and air distribution, and enhances the Indoor Air Quality for optimum user comfort.

### Key features

**Space-saving design:** only 320 mm in height.

**Low noise level:** at low fan speed, it operates at only 26 dB(A).

**Flexible installation:** ideal for sites with restriction on the space above ceiling level, the unit features a high-lift drain pipe (270 mm).

Uniform air distribution.

### Enhanced Indoor Air Quality:

Wide range of filters.

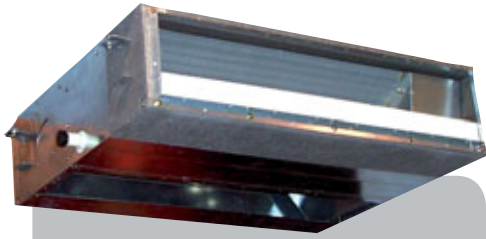
Fresh air intake: ensures a constant air renewal.



### Technical specifications heat pump

Indoor unit	MMD-	AP0071BH	AP0091BH	AP0121BH	AP0151BH	AP0181BH	AP0241BH	AP0271BH	AP0301SH	AP0361BH	AP0481BH	AP0561BH
Cooling capacity	kW	2.2	2.8	3.6	4.5	5.6	7.1	8.0	9.0	11.2	14.0	16.0
Heating capacity	kW	2.5	3.2	4.0	5.0	6.3	8.0	9.0	10.0	12.5	16.0	18.0
Power consumption	kW	0.033		0.039		0.050	0.060		0.071	0.107	0.128	
Running current	A	0.29		0.34		0.43	0.52		0.61	0.83	0.98	
Starting current	A	0.50		0.59		0.75	0.9		1.05	1.44	1.7	

Indoor unit	MMD-	AP0071BH	AP0091BH	AP0121BH	AP0151BH	AP0181BH	AP0241BH	AP0271BH	AP0301SH	AP0361BH	AP0481BH	AP0561BH	
Air flow (h/l)	m <sup>3</sup> /h	480/340		570/400		650/480		780/540		1140/870		1260/870	
Air flow (h/l)	l/s	133/94		158/111		180/133		217/150		317/242		350/242	
Sound pressure level (h/l)	dB(A)	30/26		31/27		31/27		32/28		33/29		34/29	
Dimensions (H x L x D)	mm	320 x 550 x 800			320 x 700 x 800			320 x 1000 x 800			320 x 1350 x 800		
Weight	kg	28			32			43			55		
Panel dimensions (H x L x D)	mm	9 x 630 x 500			9 x 780 x 500			9 x 1080 x 500			9 x 1430 x 500		
Panel weight	kg	3.5			4			6			7		
External static pressure	Pa	40 (max 100)											
Connecting pipe, gas	in	3/8			1/2			5/8			5/8		
Connecting pipe, liquid	in	1/4			1/4			3/8			3/8		
Drain port diameter	mm	25			25			25			25		
Power supply	V-ph-Hz	220/240-1-50			220/240-1-50			220/240-1-50			220/240-1-50		



## Slim duct

### Features

Whether installed in a ceiling void or in a false ceiling, Toshiba new slim-duct offers the ultimate technology, with exceptional energy savings, high performance and easy installation. This ultra flexible, invisible and silent unit creates a pleasant and comfortable environment for a wide range of applications, such as hotels, offices, shops, etc.

MMD-AP(...)-SPH



### Key features

**Very slim design:** only 210 mm in height, for easier and more flexible installation.

**Very low noise level:** it can operate at only 24 dB(A).

**Flexible installation:** ideal for sites with restriction on the space above ceiling level, the unit features a high-lift drain pipe (850 mm).

**Perfect comfort throughout the room:** can be used with any kind of air diffuser.

**Unobtrusive:** concealed installation within a ceiling void.

### Technical specifications heat pump

Indoor unit	MMD-	AP0071SPH	AP0091SPH	AP0121SPH	AP0151SPH	AP0181SPH
Cooling capacity	kW	2.2	2.8	3.6	4.5	5.6
Heating capacity	kW	2.5	3.2	4.0	5.0	6.3
Power consumption	kW	0.039	0.039	0.043	0.045	0.054
Running current	A	0.3	0.30	0.31	0.32	0.39
Starting current	A	0.51	0.51	0.54	0.56	0.68

Indoor unit	MMD-	AP0071SPH	AP0091SPH	AP0121SPH	AP0151SPH	AP0181SPH
Air Flow (h/l)	m <sup>3</sup> /h	540/400		600/450	690/520	780/580
Air Flow (h/l)	l/s	150/111		167/125	192/144	217/161
Sound pressure level, rear suction (h/l)	dB(A)	28/24		29/25	32/28	33/29
Sound pressure level, bottom suction (h/l)	dB(A)	36/30		38/32	39/33	40/36
Dimensions (H x L x D)	mm	210 × 845 × 645			210 × 845 × 645	
Weight	kg	22			23	
External static pressure	Pa	4 steps: 10 – 20 – 35 – 50				
Connecting pipe, gas	in	3/8			1/2	
Connecting pipe, liquid	in	1/4				
Drain port diameter	mm	25				
Power supply	V-ph-Hz	220/240-1-50				



MMD-AP(...)H

## High static pressure ducted unit

### Features

This is Toshiba's most powerful ducted unit delivering air flows up to 1400 l/s (5040 m<sup>3</sup>/h). Unobtrusive, flexible and compact, it can be installed easily and discretely in any interior. This model is the ideal solution for both new and restored buildings.

### Key features

Easy installation.

Inspection hole enables easy access and maintenance.

**Wide range of options available:** vaporizing humidifiers, long-life filters, etc.

Static pressure can be set to 3 levels (68,6, 137 and 196 Pa).



### Technical specifications heat pump

Indoor unit	MMD-	AP0181H	AP0241H	AP0271H	AP0361H	AP0481H	AP0721H	AP0961H
Cooling capacity	kW	5.6	7.1	8.0	11.2	14.0	22.4	28.0
Heating capacity	kW	6.3	8.0	9.0	12.5	16.0	25.0	31.5
Power consumption	kW	0.184	0.299		0.368	0.414	1.200	1.260
Running current	A	0.81	1.35		1.63	1.84	5.25	5.52
Starting current	A	1.3	3.5		4.1	4.8	13.6	14.8

Indoor unit	AP0181H	AP0241H	AP0271H	AP0361H	AP0481H	AP0721H	AP0961H
Air flow (h/l)	1080/720	1580/1060		1920/1280	2520/1680	4320/2880	5040/3360
Air flow (h/l)	300/200	439/295		533/355	700/467	1200/800	1400/933
Sound pressure level (h/l)	37	40				49	50
Dimensions (H x L x D)	380 x 850 x 660				380 x 1200 x 660		470 x 1380 x 1250
Weight	50	52		56	67	150	
Air filter	Option or field supply						
External static pressure	3 steps: 68.6 – 137 – 196 (137Pa factory setting)						
Connecting pipe							
Gas	1/2	5/8		5/8		7/8	
Liquid	1/4	3/8		3/8		1/2	
Drain port diameter	25	25		25		25	
Power supply	220/240-1-50		220/240-1-50		220/240-1-50		220/240-1-50





## Ceiling-suspended unit

### Features

The installation of this ceiling-suspended unit is very easy. It creates a very pleasant and relaxing environment, diffusing rapidly and uniformly the required temperature, in cooling and heating modes. This model is the best solution for ceilings that do not have voids. It can be used for a wide range of applications, but is particularly recommended for refurbishment projects.

### Key features

**Easy and fast installation:** simplified unit suspension.

**Space-saving unit:** Ideal for sites where above ceiling space is limited. the unit features a high-lift drain pipe (600 mm).

**Optimum louvre control:** air flow angle is automatically set to the most suitable setting according to your cooling or heating needs, and an automatic swing mode enables air flow to reach all areas in the room.

### Piping flexibility:

Refrigerant piping: 3 possibilities (top, rear or right side of the unit). Drain piping: 2 possibilities.

MMC-AP(... )H



### Technical specifications heat pump

Indoor unit	MMC-	AP0151H	AP0181H	AP0241H	AP0271H	AP0361H	AP0481H
Cooling capacity	kW	4,5	5,6	7,1	8,0	11,2	14,0
Heating capacity	kW	5,0	6,3	8,0	9,0	12,5	16,0
Power consumption	kW	0,033	0,038	0,050		0,091	0,110
Running current	A	0,29	0,32	0,42		0,78	0,84
Starting current	A	0,43	0,48	0,62		1,17	1,25

Indoor unit	MMC-	AP0151H	AP0181H	AP0241H	AP0271H	AP0361H	AP0481H
Air flow (h/l)	m <sup>3</sup> /h	720/540	780/540	1110/840		1650/1200	1800/1320
Air flow (h/l)	l/s	200/150	217/150	308/233		458/333	500/367
Sound pressure level (h/l)	dB(A)	35/30	36/30	38/33		41/35	43/37
Dimensions (H x L x D)	mm	210 x 910 x 680		210 x 1180 x 680		210 x 1595 x 680	
Weight	kg	22		26		34	
Air filter		Standard filter fitted (long-life filter)					
Connecting pipe							
Gas	in	1/2		5/8		5/8	
Liquid	in	1/4		3/8		3/8	
Drain port diameter	mm	20		20		20	
Power supply	V-ph-Hz	220/240-1-50		220/240-1-50		220/240-1-50	



## Compact high-wall

### Features

This compact high-wall is perfect for rooms with limited floor space, such as offices, small shops or hotel rooms. The unit is compact (only 275 × 790 × 208 mm) and light-weight (11 kg). This high-wall also achieves outstanding sound level performances.

MMK-AP(... )H



### Key features

**New compact and modern design:** Only 45 litres volume, the best in its class.

New rounded shape and grille, for a more attractive design.

**Light unit:** 11 kg – reduced by 40% less than average equivalent units compared to the previous model.

**Clean unit:** the panel is easily detachable for fast grille and filters cleaning.

**Low noise level:** it operates at only 29 dB(A).

Auto-swing mechanism.

### Technical specifications heat pump

Indoor unit	MMK-	AP0072H	AP0092H	AP0122H
Cooling capacity	kW	2.2	2.8	3.6
Heating capacity	kW	2.5	3.2	4
Power consumption	kW	0.017	0.018	0.019
Running current	A	0.17	0.18	0.19
Starting current	A	0.22	0.23	0.24

Indoor unit	MMK-	AP0072H	AP0092H	AP0122H
Air flow (h/l)	m <sup>3</sup> /h	480/360	510/360	540/360
Air flow (h/l)	l/s	133/100	142/100	150/100
Sound pressure level (h/l)	dB(A)	35/29	36/29	37/29
Dimensions (H x L x D)	mm	275 × 790 × 208	275 × 790 × 208	275 × 790 × 208
Weight	kg	11	11	11
Connecting pipe, gas	in	3/8	3/8	3/8
Connecting pipe, liquid	in	1/4	1/4	1/4
Drain port diameter	mm	16	16	16
Power supply	V-ph-Hz	220/240-1-50	220/240-1-50	220/240-1-50



## High-wall unit

### Features

This classic high-wall is elegant and slim; it can easily blend in with any room interior. Total comfort is granted, thanks also to the 70° directional auto-swing louver that provide uniform air distribution.

### Key features

#### Aesthetic and compact design:

Elegant design.

Slim: only 210 mm, for an easy and discreet installation.

Easy installation, with its auxiliary piping.

#### Piping flexibility:

Refrigerant piping: 3 possibilities (top, rear or right side of the unit).

**Top for comfort:** 70° directional auto-swing louver for optimum air distribution.

MMK-AP(... )H



### Technical specifications heat pump

Indoor unit	MMK-	AP0151H	AP0181H	AP0241H
Cooling capacity	kW	4.5	5.6	7.1
Heating capacity	kW	5.0	6.3	8.0
Power consumption	kW	0.037		0.040
Running current	A	0.32		0.35
Starting current	A	0.42		0.47

Indoor unit	MMK-	AP0151H	AP0181H	AP0241H
Air flow (h/l)	m <sup>3</sup> /h	780/600		1200/900
Air flow (h/l)	l/s	217/167		333/250
Sound pressure level (h/l)	dB(A)	42/35		42/35
Dimensions (H x L x D)	mm	368 x 1055 x 210		368 x 1430 x 210
Weight	kg	19		25
Air filter		Standard filter fitted (long-life filter)		
Connecting pipe				
Gas	in	1/2		5/8
Liquid	in	1/4		3/8
Drain port diameter	mm	20		20
Power supply	V-ph-Hz	220/240-1-50		220/240-1-50



## Floor-mounted console

### Features

Ideal for refurbishment projects or small spaces.

Installed at floor level, this unit is compact and offers a wide choice of installation and user settings, including reverse air distribution.

### Key features

#### Optimum piping flexibility:

Refrigerant piping: four possibilities (top, rear, left or right side of the unit).

Drain piping: four possibilities (top, rear, left or right side of the unit).

**Top for comfort:** Air distribution can be easily reversed to meet the occupant's preference.

Wide choice of installation settings.

**Compact unit:** 630 × 950 × 230 mm, for more flexible installations and space savings.

MMI-AP(...)H



### Technical specifications heat pump

Indoor unit	MML-	AP0071H	AP0091H	AP0121H	AP0151H	AP0181H	AP0241H
Cooling capacity	kW	2.2	2.8	3.6	4.5	5.6	7.1
Heating capacity	kW	2.5	3.2	4.0	5.0	6.3	8.0
Power consumption	kW	0.056		0.092		0.102	
Running current	A	0.26		0.43		0.47	
Starting current	A	0.6		0.8		1.1	

Indoor unit	MML-	AP0071H	AP0091H	AP0121H	AP0151H	AP0181H	AP0241H
Air flow (h/l)	m <sup>3</sup> /h	480/360		900/650		1080/780	
Air flow (h/l)	l/s	133/100		250/181		300/217	
Sound pressure level (h/l)	dB(A)	39/35		45/38		49/39	
Dimensions (H x L x D)	mm	630 × 950 × 230					
Weight	kg	37				40	
Connecting pipe, gas	in	3/8			1/2		5/8
Connecting pipe, liquid	in	1/4			1/4		3/8
Drain port diameter	mm	20					
Power supply	V-ph-Hz	220/240-1-50			220/240-1-50		



MML-AP(...)BH

## Concealed chassis unit

### Features

This chassis is compact and slim, it's very easy to install and to conceal behind a decorative panel to blend with any room interior. Ideal for office and other commercial buildings with large fluctuation in load, the unit fits perfectly specialist applications such as libraries and hospitals.

### Key features

#### Very compact design:

Height: only 600 mm, ideal for perimeter walls.

Depth: 200 mm, the unit can be installed along the wall ensuring space saving.

**Low noise level:** it operates at only 32 dB(A).

#### Easy maintenance:

Removable split front panel.

Easy access to the drain pan on the right side of the unit.



### Technical specifications heat pump

Indoor unit	MML-	AP0071BH	AP0091BH	AP0121BH	AP0151BH	AP0181BH	AP0241BH
Cooling capacity	kW	2.2	2.8	3.6	4.5	5.6	7.1
Heating capacity	kW	2.5	3.2	4.0	5.0	6.3	8.0
Power consumption	kW	0.056		0.090		0.095	
Running current	A	0.25		0.45		0.46	
Starting current	A	0.6		0.8		1.0	

Indoor unit	MML-	AP0071BH	AP0091BH	AP0121BH	AP0151BH	AP0181BH	AP0241BH	
Air flow (h/l)	m <sup>3</sup> /h	460/300			740/490		950/640	
Air flow (h/l)	l/s	128/83			206/136		264/178	
Sound pressure level (h/l)	dB(A)	36/32					42/33	
Dimensions (H x L x D)	mm	600 x 745 x 220			600 x 1045 x 220			
Weight	kg	21			29			
Connecting pipe, gas	in	3/8			1/2		5/8	
Connecting pipe, liquid	in	1/4			1/4		3/8	
Drain port diameter	mm	20			20	20	20	
Power supply	V-ph-Hz	220/240-1-50		220/240-1-50		220/240-1-50		



MMF-AP(...)H

## Floor standing

### Features

This system is particularly suitable to air condition large rooms with low ceilings such as restaurants or lofts. The units offer high air flow rates and superior air throw values. Their wide air distribution angle permits air conditioning of larger rooms.

### Key features

#### Reduced footprint

Two sizes, 0.128 m<sup>2</sup> up to 8 kW and 0.243 m<sup>2</sup> up to 16 kW.

#### High air flows

From 180 l/s to 600 l/s (660 m<sup>3</sup>/h to 2160 m<sup>3</sup>/h).

#### Wide air distribution angle

Up to 150°.

#### Large capacity range

Cooling capacities from 4.5 kW to 16 kW and heating capacities from 5 kW to 18 kW.



### Technical specifications heat pump

Indoor unit	MMF-	AP0151H	AP0181H	AP0241H	AP0271H	AP0361H	AP0481H	AP0561H
Cooling capacity	kW	4.5	5.6	7.1	8.0	11.2	14.0	16.0
Heating capacity	kW	5	6.3	8.0	9.0	12.5	16.0	18.0
Power consumption	kW	0.15		0.19		0.28	0.35	
Running current	A	0.67		0.88		1.29	1.60	
Starting current	A	0.9		1.1		1.7	2.1	

Indoor unit	MMF-	AP0151H	AP0181H	AP0241H	AP0271H	AP0361H	AP0481H	AP0561H
Air flow (h/l)	m <sup>3</sup> /h	900/660		1200/840		1920/1380	2160/1560	
Air flow (h/l)	l/s	250/183		333/233		533/105	600/433	
Sound pressure level (h/l)	dB(A)	46/38		49/40		51/44	54/46	
Dimensions (H x L x D)	mm	1750 x 600 x 210		1750 x 600 x 210		1750 x 600 x 390		
Weight	kg	48		49		65		
Air filter		Standard filter fitted (long-life filter)						
Connecting pipe								
Gas	in	1/2			5/8			5/8
Liquid	in	1/4			3/8			3/8
Drain port diameter	mm	20		20		20		
Power supply	V-ph-Hz	220/240-1-50		220/240-1-50		220/240-1-50		



MMD-AP(...)HFE



## New fresh air intake

### Features

This new unit offers the possibility to introduce into the building external fresh air and to control air discharge temperature. It is the ideal solution for schools, hospitals and offices, together with other buildings that require fresh air ventilation.

Fresh air intake units are for Toshiba's SMMS VRF systems of 18 HP or more.

### Key features

Pre-heat, pre-cool functions

Compact dimensions.

TCC-Link control connection.

Humidity control option.

### Technical specifications heat pump

Indoor unit	MMD	AP0481HFE	AP0721HFE	AP0961HFE
Cooling capacity	kW	14,0	22,4	28,0
Heating capacity	kW	8,9	13,9	17,4
Power consumption	kW	0,28	0,45	0,52
Power factor	%	85	78	83
Running current	A	1,43	2,52	2,73
Starting current	A	3,5	7,0	7,0
Air flow (h/l)	m <sup>3</sup> /h (l/s)	1188/756 (330/210)	1848/1176 (513/327)	2310/1470 (642/408)
Sound level (h/m/l)	dB(A)	41/43/45	44/45/46	44/45/46
Dimensions (H x L x D)	mm	492 × 892 × 1262	492 × 1392 × 1262	492 × 1392 × 1262
Weight	kg	93	144	144
Air filter		Option or field supply		
External static pressure (h/m/l)	Pa	230/210/170	180/165/140	205/190/160
Connecting pipe, gas - liquid	in	5/8 - 3/8	7/8 - 1/2	7/8 - 1/2
Drain port diameter	in	1	1	1
Operating range, cooling/heating	°C	5 to 43/-5 to 43	5 to 43/-5 to 43	5 to 43/-5 to 43
Power supply	V-ph-Hz	220/240-1-50		



## Air-to-air heat exchangers

### Features

The air-to-air heat exchangers can be integrated with the air conditioning system. They use exhaust air to pre-condition the incoming air, thus reducing the cooling or heating load and the overall size of the required air conditioning system. A range of electric heaters is available, together with controls that enable integration with both split and VRF indoor units.

### Key features

Five models available with air flow ranges from 70 to 280 l/s (250-1000 m<sup>3</sup>/h).

**Fresh air ventilation:** increasingly required in rooms with no window access.

**Temperature and humidity:** changed by the entering fresh air.

Recycles 20-50% of the energy lost by ventilation.

Improved energy efficiency, particularly during extremes of heat and cold.

Recovers up to 75% heat from exhaust air.

### Technical specifications heat pump

Model		VN-250TE	VN-350TE	VN-500TE	VN-800TE	VN-1KTAE
Air flow (h/l)	m <sup>3</sup> /h – l/s	250/170 – 70/48	350/280 – 98/78	500/370 – 140/104	800/650 – 224/182	1000/810 – 218/227
Temperature exchange efficiency (h/l)	%	75/77	75/77	75/77	75/77	75/77
Sound pressure level (h/l)						
Heat reclaim mode	dB(A)	28/21	32/26	34/25	39/32	38.5/31
Bypass mode	dB(A)	28/22.5	32/26	34/26.5	38.5/33	39/31.5
Operating range	°C	–10 to 40°C	–10 to 40°C	–10 to 40°C	–10 to 40°C	–10 to 40°C
Power Input (h/l)						
Heat reclaim mode	W	119/79	154/117	214/151	347/302	445/332
Bypass mode	W	119/79	151/113	210/145	337/297	438/326
Enthalpy exchange efficiency (h/l)						
Heating	%	70/73	69/71	67/71	71/74	71/73
Cooling	%	63/66	66/69	62/67	65/68	65/68
Max. external static pressure (h/l)	Pa	90/37	95/42	105/38	140/70	90/35
Dimensions (H x L x D)	mm	270 x 599 x 882	270 x 804 x 882	270 x 904 x 962	388 x 884 x 1322	388 x 1134 x 1322
Weight	kg	29	37	43	71	83
Duct diameter	mm	150	150	200	250	250
Filtration efficiency grade (EU3)	%	82	82	82	82	82
Power supply	V-ph-Hz	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50
Maximum relative humidity	%	85	85	85	85	85