

# MMY-MAP\_6HT8P

## SMMS-e



Toshiba's latest generation all inverter VRF system has continued to evolve and includes many new intelligent and innovative features that maximise end user comfort and system efficiencies.

### Excellence

- Toshiba's in-house designed DC twin rotary compressor with outstanding capacity under partial load driven to improve efficiency and comfort.
- Incorporating Toshiba's latest inverter control, enables the precise modulation of the compressor, ensuring maximum performance and energy savings.
- 2 heat exchangers: outstanding 4-side heat exchanger + sub cooling heat exchanger to optimized efficiency.
- Precise refrigerant control ensures each indoor unit receives precisely the right amount of refrigerant.

### Expansion

- 8 outdoor unit model line-up that can be installed in a variety of combinations, of up to a capacity of 60 HP.
- A complete range of indoor unit styles and capacity ranges, meets the demands of the customer and the room configuration.

### Enhancement

- With up to 1km total piping length; 235m in equivalent length and 70m of height difference, the system is fully adaptable for all types of projects.
- Revolutionary hands-free Wave Tool technology that allows contactless commissioning and diagnoses to be carried out using a smartphone application.

SCOP MAX



3.70

CAPACITY



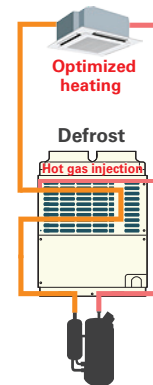
8HP > 60HP

OPERATION



-25°C > +46°C

Toshiba's new continuous heating function helps to maintain the indoor room temperature and end user comfort.



### SMMS-e Physical data

Outdoor unit	CO	MMY-	MAP0806T8P-E	MAP1006T8P-E	MAP1206T8P-E	MAP1406T8P-E	MAP1606T8P-E	MAP1806T8P-E	MAP2006T8P-E	MAP2206T8P-E
Outdoor unit	HP	MMY-	MAP0806HT8P-E	MAP1006HT8P-E	MAP1206HT8P-E	MAP1406HT8P-E	MAP1606HT8P-E	MAP1806HT8P-E	MAP2006HT8P-E	MAP2206HT8P-E
Air flow	m <sup>3</sup> /h		9700	9700	12200	12200	12600	17300	17900	18500
Air flow	l/s		2694	2694	3389	3389	3500	4806	4972	5139
Sound Power Level	dB(A)	H	74	74	82	82	83	83	84	84
Sound pressure level	dB(A)	H	56	58	61	62	64	61	62	62
Sound Power Level	dB(A)	C	74	74	80	80	81	81	82	83
Sound pressure level	dB(A)	C	55	57	59	60	62	60	61	61
External Static pressure available	Pa		60	60	50	50	40	50	40	40
Dimensions (h x w x d)	mm		1830x990x780	1830x990x780	1830x990x780	1830x1210x780	1830x1210x780	1830x1600x780	1830x1600x780	1830x1600x780
Weight	kg	HP	242	242	242	300	300	371	371	371
Weight	kg	CO	241	241	241	299	299	370	370	370
Compressor type	Hermetic		Twin Rotary	Twin Rotary	Twin Rotary	Twin Rotary	Twin Rotary	Twin Rotary	Twin Rotary	Twin Rotary
Refrigerant charge R410A	kg	A	11.5/10.5	11.5/10.5	11.5/10.5	11.5/11.5	11.5/11.5	11.5/11.5	11.5/11.5	11.5/11.5
Gas line type - diameter			Brazed - 3/4"	Brazed - 7/8"	Brazed - 1-1/8"	Brazed - 1-1/8"	Brazed - 1-1/8"	Brazed - 1-1/8"	Brazed - 1-1/8"	Brazed - 1-1/8"
Liquid line type - diameter			Flare - 1/2"	Flare - 1/2"	Flare - 1/2"	Flare - 5/8"	Flare - 5/8"	Flare - 5/8"	Flare - 5/8"	Flare - 3/4"
Farthest piping equivalent length	m		235	235	235	235	235	235	235	235
Farthest piping actual length	m		190	190	190	190	190	190	190	190
Maximum pipe length <sup>4</sup>	m		1000	1000	1000	1000	1000	1000	1000	1000
Maximum lift (above/below) <sup>5</sup>	m		40/70	40/70	40/70	40/70	40/70	40/70	40/70	40/70
Operating range - db <sup>6</sup>	°C	C	-10/46	-10/46	-10/46	-10/46	-10/46	-10/46	-10/46	-10/46
Operating range - wb <sup>7</sup>	°C	H	-25/15.5	-25/15.5	-25/15.5	-25/15.5	-25/15.5	-25/15.5	-25/15.5	-25/15.5
Power supply	V-ph-Hz		380/415-3-50	380/415-3-50	380/415-3-50	380/415-3-50	380/415-3-50	380/415-3-50	380/415-3-50	380/415-3-50

1) based on an indoor air temperature of 27°C db/19°C wb and an outdoor air temperature of 35°C db 2) based on an indoor air temperature of 20°C db and an outdoor air temperature of 7°C db/6°C wb 3) if outdoor units are combined, refer to the installation manual 4) Less than 34HP : 300m. Total charging refrigerant is 140kg or less. 5) Indoor above condition: If the height difference between indoor units exceeds 3 m, set 30 m or less. Indoor below condition: If the height difference between indoor units exceeds 3 m, set 50 m or less. Also extension up till 90m is possible. Be sure to refer the Engineering Databook for details of these conditions and requirements. 6) The unit operates down to an outdoor temperature of -10°C, however cooling performance may decline considerably when total operating capacity of indoor units is less than 4HP while ambient temperature is below -5°C. 7) The unit operates down to an outdoor temperature of -25°C, however considerable performance decrease will be expected below -20°C. Consider installation location/surroundings and system design when expected to operate between -20°C and -25°C.

may decline considerably when total operating capacity of indoor units is less than 4HP while ambient temperature is below -5°C. Consider installation location/surroundings and system design when expected to operate below -5°C. On single outdoor unit only. No height difference between units.

**SMMS-e Performances**




















Outdoor unit	CO HP	MMY- MAP0806HT8P-E	MAP1006HT8P-E	MAP1206HT8P-E	MAP1406HT8P-E	MAP1606HT8P-E	MAP1806HT8P-E	MAP2006HT8P-E	MAP2206HT8P-E
Outdoor unit	HP	MAP0806HT8P-E	MAP1006HT8P-E	MAP1206HT8P-E	MAP1406HT8P-E	MAP1606HT8P-E	MAP1806HT8P-E	MAP2006HT8P-E	MAP2206HT8P-E
		8 HP	10 HP	12 HP	14 HP	16 HP	18 HP	20 HP	22 HP
<b>Cooling capacity<sup>1)</sup></b>	<b>kW</b>	<b>22.4</b>	<b>28.0</b>	<b>33.5</b>	<b>40.0</b>	<b>45.0</b>	<b>50.4</b>	<b>56.0</b>	<b>61.5</b>
Power input	kW C	5.54	7.69	10.00	12.30	14.30	14.60	17.30	23.20
EER	W/W	4.04	3.64	3.35	3.25	3.15	3.45	3.24	2.65
SEER		6.24	6.15	6.03	5.69	5.33	6.01	5.74	5.07
Running current	A C	8.8	12.1	15.5	19.5	22.4	22.9	26.8	35.6
<b>Heating capacity<sup>2)</sup></b>	<b>kW</b>	<b>25.0</b>	<b>31.5</b>	<b>37.5</b>	<b>45.0</b>	<b>50.0</b>	<b>56.0</b>	<b>63.0</b>	<b>64.0</b>
Power input	kW H	5.53	7.41	9.65	11.20	12.90	14.10	17.00	17.10
COP	W/W	4.52	4.25	3.89	4.02	3.88	3.97	3.71	3.74
SCOP		3.24	3.54	3.67	3.57	3.70	3.59	3.60	3.49
Running current	A H	8.8	11.6	15.0	17.8	20.2	22.1	26.1	26.5
Maximum overcurrent protection <sup>3)</sup>	A	25	25	32	40	40	50	63	63

1) based on an indoor air temperature of 27°C db/19°C wb and an outdoor air temperature of 35°db. 2) based on an indoor air temperature of 20°C db and an outdoor air temperature of 7°db/6°C wb. 3) if outdoor units are combined, refer to the installation manual. 4) Less than 34HP: 300m. Total charging refrigerant is 140kg or less. 5) Indoor above condition: If the height difference between indoor units exceeds 3 m, set 30 m or less. Indoor below condition: If the height difference between indoor units exceeds 3 m, set 50 m or less. Also Extension up till 90m is possible. Be sure to refer the Engineering Databook for details of these conditions and requirements. 6) The unit operates down to an outdoor temperature of -10°C, however cooling performance may decline considerably when total operating capacity of indoor units is less than 4HP while ambient temperature is below -5°C. Consider installation location/surroundings and system design when expected to operate below -5°C. On single outdoor unit only. No height difference between units. 7) The unit operates down to an outdoor temperature of -25°C, however considerable performance decrease will be expected below -20°C. Consider installation location/surroundings and system design when expected to operate between -20°C and -25°C.








Note : Use engineering Data Book for specific details.

C: cooling mode. H: heating mode

**SMMS-e Capacity table - Standard model**

Capacity	Combination	Model	Cooling capacity	Heating capacity	EER	SEER	COP	SCOP	Max indoor connectivity	
8 HP	8	MMY-MAP0806HT8P-E/TR	22.4	25	4.04	6.24	4.52	3.64	18	
10 HP	10	MMY-MAP1006HT8P-E/TR	28	31.5	3.64	6.15	4.25	3.54	22	
12 HP	12	MMY-MAP1206HT8P-E/TR	33.5	37.5	3.35	6.03	3.89	3.67	27	
14 HP	14	MMY-MAP1406HT8P-E/TR	38.4	45	3.25	5.69	4.02	3.57	31	
16 HP	16	MMY-MAP1606HT8P-E/TR	45	50	3.15	5.33	3.88	3.7	36	
18 HP	18	MMY-MAP1806HT8P-E/TR	50.4	56	3.45	6.01	3.97	3.59	40	
20 HP	20	MMY-MAP2006HT8P-E/TR	56	62	3.24	5.74	3.71	3.6	45	
22 HP	22	MMY-MAP2206HT8P-E/TR	61.5	63	2.65	5.07	3.74	3.49	49	
24 HP	12 + 12	MMY-AP2416HT8P-E/TR	67	75	3.35	6.03	3.88	3.67	52	
26 HP	14 + 12	MMY-AP2616HT8P-E/TR	73.5	82.5	3.3	5.85	3.97	3.62	58	
28 HP	16 + 12	MMY-AP2816HT8P-E/TR	78.5	87.5	3.23	5.65	3.89	3.69	63	
30 HP	16 + 14	MMY-AP3016HT8P-E/TR	85	95	3.19	5.5	3.94	3.6	64	
32 HP	16 + 16	MMY-AP3216HT8P-E/TR	90	100	3.15	5.33	3.88	3.7	64	
34 HP	18 + 16	MMY-AP3416HT8P-E/TR	95.4	106	3.3	5.69	3.93	3.64	64	
36 HP	20 + 16	MMY-AP3616HT8P-E/TR	101	113	3.2	5.56	3.78	3.64	64	
38 HP	22 + 16	MMY-AP3816HT8P-E/TR	106.5	114	2.84	5.2	3.8	3.59	64	
40 HP	20 + 20	MMY-AP4016HT8P-E/TR	112	126	3.24	5.74	3.71	3.6	64	
42 HP	22 + 20	MMY-AP4216HT8P-E/TR	117.5	127	2.9	5.4	3.72	3.55	64	
44 HP	22 + 22	MMY-AP4416HT8P-E/TR	123	128	2.65	5.07	3.74	3.49	64	
46 HP	16 + 16 + 14	MMY-AP4616HT8P-E/TR	130	145	3.18	5.44	3.92	3.67	64	
48 HP	16 + 16 + 16	MMY-AP4816HT8P-E/TR	135	150	3.15	5.33	3.88	3.7	64	
50 HP	18 + 16 + 16	MMY-AP5016HT8P-E/TR	140.4	156	3.25	5.58	3.91	3.66	64	
52 HP	20 + 16 + 16	MMY-AP5216HT8P-E/TR	146	163	3.18	5.49	3.81	3.66	64	
54 HP	22 + 16 + 16	MMY-AP5416HT8P-E/TR	151.5	164	2.92	5.24	3.82	3.62	64	
56 HP	20 + 20 + 16	MMY-AP5616HT8P-E/TR	157	176	3.21	5.62	3.75	3.62	64	
58 HP	22 + 20 + 16	MMY-AP5816HT8P-E/TR	162.5	177	2.97	5.38	3.77	3.59	64	
60 HP	22 + 22 + 16	MMY-AP6016HT8P-E/TR	168	178	2.77	5.16	3.78	3.55	64	

**SMMS-e Capacity table - High efficiency & high capacity model**

Capacity	Combination	Model	Cooling capacity	Heating capacity	EER	SEER	COP	SCOP	Max indoor connectivity	
20 HP	10 + 10	MMY-AP2026HT8P-E/TR	56	63	3.63	6.15	4.26	3.54	45	
22 HP	12 + 10	MMY-AP2226HT8P-E/TR	61.5	69	3.47	6.11	4.04	3.61	49	
36 HP	12 + 12 + 12	MMY-AP3626HT8P-E/TR	100.5	112.5	3.35	6.03	3.89	3.67	64	
38 HP	14 + 12 + 12	MMY-AP3826HT8P-E/TR	107	120	3.31	5.91	3.93	3.63	64	
40 HP	14 + 14 + 12	MMY-AP4026HT8P-E/TR	113.5	127.5	3.28	5.8	3.98	3.6	64	
42 HP	14 + 14 + 14	MMY-AP4226HT8P-E/TR	120	135	3.25	5.69	4.01	3.57	64	
44 HP	16 + 14 + 14	MMY-AP4426HT8P-E/TR	125	140	3.21	5.56	3.97	3.62	64	
54 HP	20 + 20 + 14	MMY-AP5426HT8P-E/TR	152	171	3.24	5.74	3.78	3.59	64	

BUSINESS