



CAPACITY OPERATION



8HP > 54HP

-25°C > +46°C

The SHRM-e, full Inverter heat recovery 3-pipe VRF, is the ultimate simultaneous heating & cooling solution for business applications.

Features

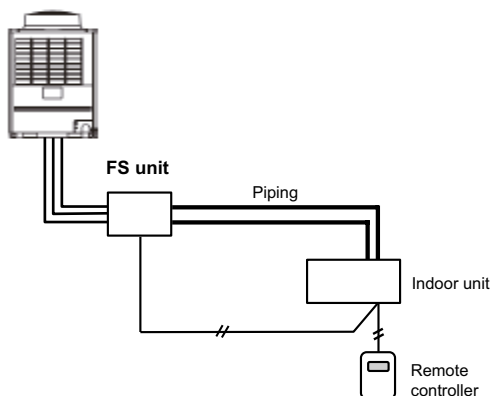
Outdoor unit		MMY- MAP0806FT8P-UK	MAP1006FT8P-UK	MAP1206FT8P-UK	MAP1406FT8P-UK	MAP1606FT8P-UK	MAP1806FT8P-UK	MAP2006FT8P-UK		
Capacity range	HP	8	10	12	14	16	18	20		
Cooling capacity <sup>1</sup>	Rated	kW	22.4	28.0	33.5	40.0	45.0	50.4	56.0	
	Max	kW	22.4	28.0	33.5	40.0	45.0	50.4	56.0	
Heating capacity <sup>2</sup>	Rated	kW	25.0	31.5	37.5	45.0	50.0	56.5	58.0	
	Max	kW	25.0	31.5	37.5	45.0	50.0	56.5	58.0	
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		
Efficiency	EER rated	W/W	3.76	3.51	3.43	3.14	3.23	3.15	3.01	
	EER 50% load	W/W	7.32	7.035	6.162	5.666	6.233	6.79	5.091	
	SEER	η/std	239.8%/6.07	238.2%/6.03	234.6%/5.94	221.4%/5.61	225.8%/5.72	232.6%/5.89	222.6%/5.64	
Efficiency	COP rated	W/W	4.15	3.97	3.85	3.81	3.69	3.67	3.52	
	COP 50% load	W/W	5.92	5.60	5.38	5.48	5.28	5.02	4.79	
	COP -7°C 100% load	W/W	3.35	3.20	3.03	3.05	2.91	2.96	2.77	
	SCOP	η/std	142.6%/3.64	138.2%/3.53	145.4%/3.71	139.8%/3.57	137%/3.50	140.6%/3.59	140.6%/3.59	
Electrical characteristic	Running current	A	C	9.4	12.5	15.5	19.9	21.8	25.1	29.2
	Power input	kW	C	5.95	7.98	9.77	12.74	13.93	16.00	18.60
	Running current	A	H	8.6	11.1	13.8	16.5	19.1	21.5	24.7
	Power input	kW	H	5.40	7.05	8.70	10.50	12.20	13.73	15.91
Dimensions (h x w x d)	mm	1830 x 990 x 780	1830 x 990 x 780	1830 x 1210 x 780	1830 x 1210 x 780	1830 x 1600 x 780	1830 x 1600 x 780	1830 x 1600 x 780		
Weight	kg		263		316		377			
Compressor	Type		Hermetic Twin Rotary							
	Motor output	kW	2.3x2	3.1x2	3.9x2	4.8x2	5.8x2	6.5x2	7.6x2	
Fan unit	Type		Propeller fan							
	Motor output	W	1	1	1	1	2	2	2	
	Air volume	m <sup>3</sup> /h		9700		12200		17300	17900	
External static pressure available	Pa		60	60	50	40	40	40		
R410A refrigerant charge	kg/CO <sub>2</sub> Eq		11/23	11/23	11/23	11/23	11/23	11/23		
Power supply wiring	MCA	A	21.5	26.1	31	35.8	40.6	44.9	49.3	
	MCOP	A	25.0	32.0	40.0	50.0	50.0	50.0	63.0	
Pipe connection	Suction line type - Diameter		Brazed - 7/8"	Brazed - 7/8"	Brazed - 1-1/8"	Brazed - 1-1/8"	Brazed - 1-1/8"	Brazed - 1-1/8"	Brazed - 1-1/8"	
	Discharge line type - Diameter		Brazed - 3/4"	Brazed - 3/4"	Brazed - 3/4"	Brazed - 7/8"	Brazed - 7/8"	Brazed - 7/8"	Brazed - 7/8"	
	Liquid line type - Diameter		Flare - 1/2" or 3/8"	Flare - 1/2" or 3/8"	Flare - 1/2" or 3/8"	Flare - 5/8" or 1/2"	Flare - 3/4" or 1/2"	Flare - 3/4" or 5/8"	Flare - 3/4" or 5/8"	
	Balance diameter		Flare - 3/8"	Flare - 3/8"	Flare - 3/8"	Flare - 3/8"	Flare - 3/8"	Flare - 3/8"	Flare - 3/8"	
Connectivity	Max. number of connected indoor units		18	22	27	31	36	40	41	
	Diversity ratio	Min/Max				50/135%				
Sound pressure level	Cooling	dB(A)	C	59	59	60	62	61	61	
	Heating	dB(A)	H	61	61	62	64	62	62	
Sound power level	Cooling	dB(A)	C	80	80	80	81	83	83	
	Heating	dB(A)	H	82	82	82	83	84	84	
Operation temperature range	Cooling	CDB	C				-10/46			
	Heating	CWB	H				-25/15.5			

C = Cooling mode H = Heating mode  
Connected indoor units : MMY-UP\*\*\*1HP-E

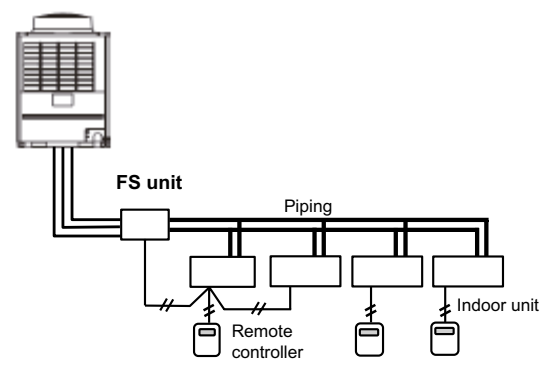
Reduced liquid pipe size can be used for the less local refrigerant charge saving case. \* Real length of main piping (L1) varies 15m - 50m by outdoor units capacity.  
- Refrigerant saving case will cause the following conditions. \* Height difference between outdoor to indoor units(H1) is 30m or less

Installation flexibility

< In case of connecting one indoor unit >



< In case of connecting one group operation of indoor units and two indoor units >



### Capacity table - Standard model

Capacity	Combination	Modèle	Cooling capacity	Heating capacity	EER	SEER	COP	SCOP	Max indoor connectivity	
8 HP	8	MMY-MAP0806FT8P-E	22,4	25	3,76	6,07	4,14	3,64	18	
10 HP	10	MMY-MAP1006FT8P-E	28	31,5	3,51	6,03	3,97	3,53	22	
12 HP	12	MMY-MAP1206FT8P-E	33,5	37,5	3,43	5,94	3,85	3,71	27	
14 HP	14	MMY-MAP1406FT8P-E	40	45	3,14	5,61	3,8	3,57	31	
16 HP	16	MMY-MAP1606FT8P-E	45	50	3,26	5,72	3,68	3,5	36	
18 HP	18	MMY-MAP1806FT8P-E	50,4	56,5	3,15	5,89	3,67	3,59	40	
20 HP	20	MMY-MAP2006FT8P-E	56	58	3,01	5,64	6,52	3,59	41	
22 HP	12 + 10	MMY-AP2216FT8P-E	61,5	69	3,47	5,99	3,9	3,63	49	
24 HP	14 + 10	MMY-AP2416FT8P-E	68	76,5	3,29	5,81	3,8	3,56	51	
26 HP	14 + 12	MMY-AP2616FT8P-E	73,5	82,5	3,27	5,77	3,83	3,63	58	
28 HP	14 + 14	MMY-AP2816FT8P-E	80	90	3,15	5,61	3,81	3,57	63	
30 HP	16 + 14	MMY-AP3016FT8P-E	85	95	3,2	5,67	3,74	3,54	64	
32 HP	18 + 14	MMY-AP3216FT8P-E	90,4	101,5	3,15	5,77	3,1	3,58	64	
34 HP	18 + 16	MMY-AP3416FT8P-E	95,4	106,5	3,19	5,81	3,68	3,55	64	
36 HP	18 + 18	MMY-AP3616FT8P-E	100,8	113	3,15	5,89	3,68	3,59	64	
38 HP	20 + 18	MMY-AP3816FT8P-E	106,4	114,5	3,08	5,76	3,59	3,59	64	
40 HP	20 + 20	MMY-AP4016FT8P-E	112	116	3,01	5,64	3,52	3,59	64	
42 HP	14 + 14 + 14	MMY-AP4216FT8P-E	120	135	3,15	5,61	3,81	3,57	64	



Piping rules

		Allowable value	Piping section	
Piping length	Total extension of pipe (Liquid pipe, real length)	Below 34HP	300m	
		34HP or more	1000m (*9)	
	Farthest piping length (*1) (*3)	Equivalent length	200m (*2)	LA + Lc + L1 + L3 + L4 + L5 + L6 + L7 + L8 + L9 + a + b + c + d + e + f + g + h + i + j + k + l + m + n + o + p + q + r + s + t + u
		Real length	180m	LA + Lc + L1 + L3 + L4 + L5 + L6 + L7 + L8 + o
	Equivalent length of farthest piping from 1st branching (*1)	Height difference between IDU >3 m	50m	L3 + L4 + L5 + L6 + L7 + L8 + o
		Height difference between IDU 3 m	65m	
	Equivalent length of farthest piping between outdoor units (*1)		15m	LA + Lc (LA + Lb)
	Max equivalent/real length of main piping (*12)		Height difference between IDU <3 m	100/85m
			Height difference between IDU >3 m	120/100m
	Max. equivalent length of outdoor unit connecting piping		10m	Lc (La, Lb)
Max. real length of indoor unit connecting piping		30m	a + f, a + g, c + h, d + i, e + j, k, l	
Max. equivalent length between branches		50m	L2, L3, L4, L8, L9	
	Maximum real length of terminal branching section to indoor units	Single port type	15m	
		Multi port type	50m (*10) (*11)	
Difference in height	Height between indoor and outdoor units	Upper outdoor unit	70m (*8) (*13)	
		Lower outdoor unit	30m (*6)	
	Height between indoor units	Upper outdoor unit	40m	
		Lower outdoor unit (*4)	15m	
Height between outdoor units (*5)		5m		
In case of 4 series flow selector connection to indoor units	Maximum equivalent length indoor units in group control by one single port flow selector unit		30m	
	Maximum real length between flow selector unit and indoor unit (*2)	Single port type	15m	
		Multi port type	50m	
	Height difference between indoor units in group control by one flow selector unit		0.5m	L6 + L7 + L8 + o
			L7 + m 15m or L7 + L8 + n 15 m	
			s + t, s + u 50m	

- (\*1) : Farthest outdoor unit from the first branch: (C), farthest indoor unit: (o)
- (\*2) : When connecting the multiple indoor units to the single port type flow selector unit, wire the indoor unit to the remote controller to the single port type flow selection unit.
- (\*3) : Allowable values for length equivalent to furthest pipe are shown below and they vary according to performance rank of outdoor unit. 22.4 to 56.0: 180 m, 61.5 to 112: 195 m, 120: 200 m.
- (\*4) : When system capacity is greater than 28 HP, height difference between indoor units is limited to 3 m. If the piping exceeds 3 m with a capacity greater than 28 HP there may be a case of capacity shortage in cooling.
- (\*5) : Ensure that the header unit is installed below all connected follower outdoor unit(s). Possible product failure may occur if header unit is installed above any follower unit(s).
- (\*6) : 40 m is possible for a system that uses only the flow selector unit (multi port type), whose all the indoor units are 3HP or higher, and working ambient temperature is 0 °C or higher.
- (\*8) : If the height difference (H2) between indoor units exceed 3 m, set 50 m or less.
- (\*9) : Total charging refrigerant is 140 kg or less.
- (\*10) : The total piping length in one FS unit in case of branching to 4: 120 m (p + q + r + s + t + u). In case of branching to 6: 180 m.

- (\*11) : Length of whole pipe should be shorter than 50 m in one branch.
- (\*12) : As for 42HP.
- (\*13) : Extension up till 90 m is possible with conditions below
  - Outdoor temperature cooling operation: 10 - 46 (DB)
  - Heating operation: -5 - 15.5 (WB)
  - Simultaneous operation: 7 - 25 (DB)
  - Equivalent length of farthest piping from 1st branching Li < 50 m
  - Real length of main piping L1 < 50 m
  - Height difference between indoor units H2 < 3 m
  - Height difference between FS units < 0.5 m
  - Total capacity of connectable indoor units: 90% - 100%
  - Single CDU, and up to 18HP
  - Minimum capacity of connectable indoor: unit 4HP or larger.

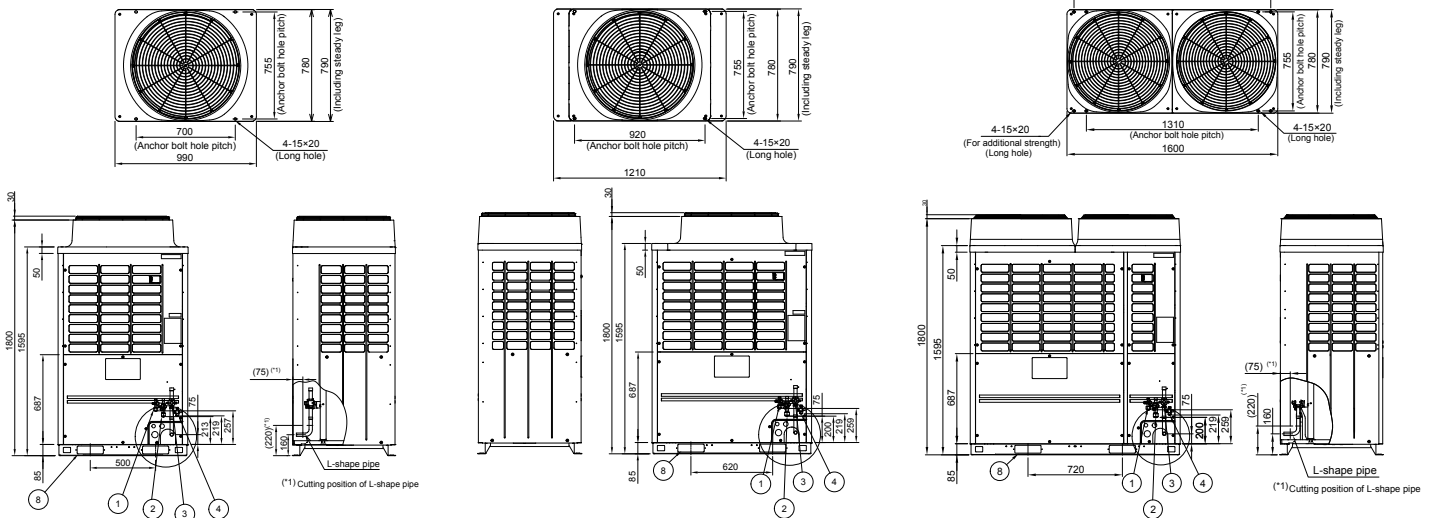
Drawings

Unit: mm

MMY-MAP0806FT8P-E  
MMY-MAP1006FT8P-E

MMY-MAP1206FT8P-E  
MMY-MAP1406FT8P-E

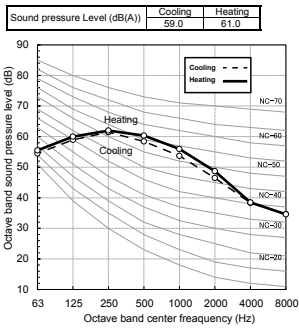
MMY-MAP1606FT8P-E  
MMY-MAP1806FT8P-E  
MMY-MAP2006FT8P-E



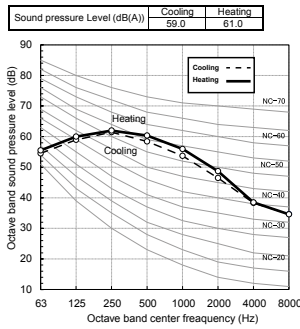
### Sound pressure levels

Unit: dB(A)

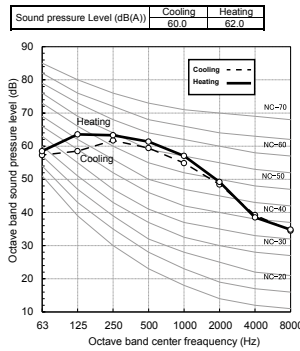
MMY-MAP0806FT8P-E



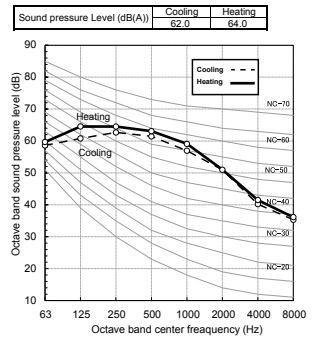
MMY-MAP1006FT8P-E



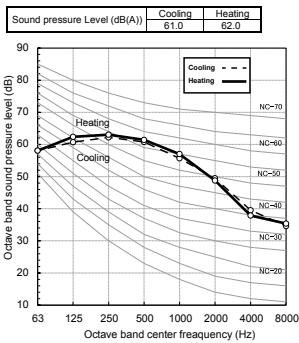
MMY-MAP1206FT8P-E



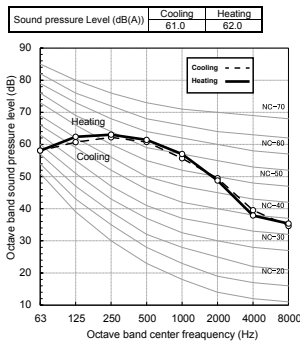
MMY-MAP1406FT8P-E



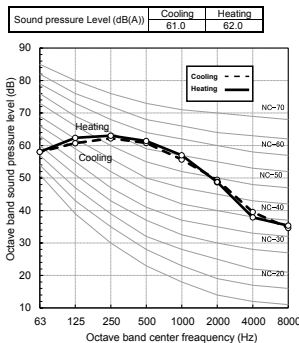
MMY-MAP1606FT8P-E



MMY-MAP1806FT8P-E



MMY-MAP2006FT8P-E



### Night mode sound pressure level

Sound reduction and approximation capacity (reference)

Type	Night operation sound reduction dB (A)	Capacity	
		Cooling	Heating
0806	50	Approx. 85%	Approx. 85%
1006	50	Approx. 70%	Approx. 70%
1206	53	Approx. 80%	Approx. 80%
1406	53	Approx. 70%	Approx. 70%
1606	54	Approx. 65%	Approx. 65%
1806	54	Approx. 60%	Approx. 60%
2006	54	Approx. 55%	Approx. 55%

### Accessories

	Name	Model name	Capacity	Appearance	Dimensions (mm)	Remarks
Branching joints and headers	Y-shape branching joint	RBM-BY55FE	Under 6.4hp			
		RBM-BY105FE	From 6.4 to 14.2hp			
		RBM-BY205FE	From 14.2 to 25.2hp			
		RBM-BY305FE	25.2hp or more			
	4-branching header	RBM-HY1043FE	Under 14.2hp			
		RBM-HY2043FE	From 14.2 to 25.2hp			
8-branching header	RBM-HY1083FE	Under 14.2hp				
	RBM-HY2083FE	From 14.2 to 25.2hp				
Branching joint for connection of outdoor units	RBM-BT14E	Under 26hp				
	RBM-BT24E	26hp or more				
Flow selector	3 series single output FS Box (Powered by IDUs)	RBM-Y1123FE	Under 4hp		190x320x160	1 output - From 1 to 5 IDU per output
		RBM-Y1803FE	From 4 to 6.4hp		200x470x200	1 output - From 1 to 8 IDU per output
		RBM-Y2803FE	From 6.4 to 10hp			1 output - From 1 to 8 IDU per output
	4 series single output FS Box (Up to 50m piping length from FS box to IDU)	RBM-Y1124FE	Under 4hp		180x425x300	1 output - From 1 to 6 IDU per output
		RBM-Y1804FE	From 4 to 6.4hp		180x425x350	1 output - From 1 to 10 IDU per output
		RBM-Y2804FE	From 6.4 to 10hp			1 output - From 1 to 16 IDU per output
	Multiple output	RBM-Y1801F4PE	Up to 6hp per output		215x730x567	4 outputs - From 1 to 10 IDU per output
RBM-Y1801F6PE		Up to 6hp per output	215x1050x567		6 outputs - From 1 to 10 IDU per output	
Connection accessory	RBC-CBK15FE					15m Bus cable for 3 serie FS box
Optional PCB of outdoor unit	Power peak-cut control board	TCB-PCDM4E				limit capacity of the VRF outdoor unit at 85%, 75%, 70% or 60% load or stop it. Dry contact
	External master ON/OFF control board	TCB-PCMO4E				Dry contact
	Output control board	TCB-PCIN4E				