MMY-MUP_1HT8P
SMMS-u

NEW

With new chassis, new compressor, new heat exchanger, the SMMS-u, latest generation of Toshiba VRF, is achiving unrivalled efficiency and comfort level.

CAPACITY

8HP > 120HP

OPERATION

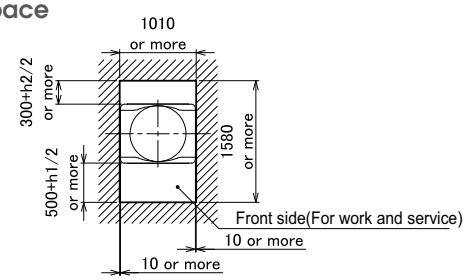
-25°C > +52°C

Features

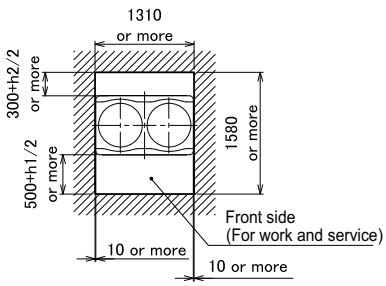
PRELIMINARY DATA

Outdoor unit			MMY-	MUP0801HT8P-E	MUP1001HT8P-E	MUP1201HT8P-E	MUP1401HT8P-E	MUP1601HT8P-E	MUP1801HT8P-E	MUP2001HT8P-E	MUP2201HT8P-E	MUP2401HT8P-E
Capacity range		HP		8 HP	10 HP	12 HP	14 HP	16 HP	18 HP	20 HP	22 HP	24HP
Cooling capacity		kW		22,40	28,00	33,50	40,00	45,00	50,40	56,00	61,50	67,00
Heating capacity +7°C (rated/max)		kW		22.4/25	28/31.5	33.5/37.5	40/45	45/50	50.4/56	56/63	61.5/69	67/70
Heating capacity -7°C		kW		19,8	24,9	29,7	35,6	39,5	44,3	49,8	54,6	55,4
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	380/415-3-50
Efficiency	EER rated	W/W		3,97	3,35	3,24	2,75	3,20	3,17	3,11	3,01	2,77
	EER 50% load	W/W		6,7	6,6	6,4	5,6	6,3	6,2	6,3	6,1	6,0
	SEER	η/std		288.67%/7.44	299.92%/7.73	284.02%/7.32	273.54%/7.05	299.15%/7.71	297.98%/7.68	295.66%/7.62	280.52%/7.23	266.56%/6.87
Efficiency	COP rated	W/W		4,24	3,89	4,31	4,00	3,77	4,02	3,75	3,80	3,53
	COP 50% load	W/W		4,8	4,1	5,0	4,7	4,7	4,6	4,3	4,3	4,0
	COP -7°C 100% load	W/W		3,4	3,1	3,4	3,0	2,9	3,0	2,9	2,9	2,7
	SCOP	η/std		174.6%/4.5	185.46%/4.78	184.3%/4.75	178.48%/4.6	185.85%/4.79	184.3%/4.75	171.88%/4.43	172.27%/4.44	161.8%/4.17
Electrical characteristic	Running current	A	C	9,15	13,40	16,00	22,60	21,60	24,40	27,70	31,40	37,10
	Power input	kW	C	5,64	8,36	10,34	14,55	14,06	15,90	18,01	20,43	24,19
	Running current	A	H	8,56	11,50	12,10	15,50	18,30	19,30	22,90	24,80	29,10
	Power input	kW	H	5,28	7,20	7,77	10,00	11,94	12,54	14,93	16,18	18,98
Dimensions (h x w x d)		mm		1690 x 990 x 780	1690 x 990 x 780	1690 x 990 x 780	1690 x 990 x 780	1690 x 1290 x 780	1690 x 1290 x 780	1690 x 1290 x 780	1690 x 1290 x 780	1690 x 1290 x 780
Weight		kg		228	228	228	228	312	312	334	356	356
Compressor	Type			Hermetic Twin Rotary	Hermetic Twin Rotary	Hermetic Twin Rotary	Hermetic Twin Rotary	Hermetic Triple Rotary	Hermetic Triple Rotary	Hermetic Triple Rotary	Hermetic Twin Rotary	Hermetic Twin Rotary
	Motor output	kW		5,3	6,4	8,2	10,8	11,7	14,0	15,9	9.29x2	10.7x2
Fan unit	Type			Propeller fan								
	Motor output	kW		1,0	1,0	1,0	1,0	2,0	2,0	2,0	2,0	2,0
	Air volume	m3/h		9900	10500	11700	11880	15300	16800	15900	16500	16500
External Static pressure available		Pa		80	80	80	80	80	80	80	80	80
Refrigerant charge R410A		kg		6	6	6	6	9	9	9	9	9
		CO_2 Teq		12,5	12,5	12,5	12,5	18,8	18,8	18,8	18,8	18,8
Power supply wiring	MCA	A		17	23	27	31	34	38	40	57	60
	MCOP	A		20	32	32	40	40	50	50	63	80
Pipe connection	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"	Brazed -1-3/8"
	Liquid line type - diameter			Brazed - 1/2"	Brazed - 1/2"	Brazed - 1/2"	Brazed - 5/8"	Brazed - 5/8"	Brazed - 5/8"	Brazed - 5/8"	Brazed - 3/4"	Brazed - 3/4"
Max. number of connected indoor units				18	22	27	31	36	40	45	49	54
Sound pressure level	Cooling	dB(A)	C	53	55	58	58	60	61	63	63	63
	Heating	dB(A)	H	56	58	62	62	63	67	67	67	67
Sound power level	Cooling	dB(A)	C	75	77	79	79	83	84	86	86	86
	Heating	dB(A)	H	76	77	81	82	86	89	90	90	90
Operatin Temperature range	Cooling	CDB	C	-10/52								
	Heating	CWB	H	-25/15.5								

Installation space



Space required for service



Leave space necessary for running, installation and servicing.

- If there is an obstacle above the outdoor unit, leave a space of 2000 mm or more to the top end of the outdoor unit.
- If there is a wall around the outdoor unit, make sure that its height does not exceed 800 mm.

Also applicable for SMMSe stand alone and SHRME

Capacity table

Capacity HP	Capacity Cooling/Heating in kW	Combination	Modèle	EER/SEER	COP/SCOP	Max indoor connectivity
8	22.4/22.4	8	MMY-MUP0801HT8P-E	3.97/7.44	4.24/4.5	18
10	28/28	10	MMY-MUP1001HT8P-E	3.35/7.73	3.89/4.78	22
12	33.5/33.5	12	MMY-MUP1201HT8P-E	3.24/7.32	4.31/4.75	27
14	40/40	14	MMY-MUP1401HT8P-E	2.75/7.05	4/4.6	31
16	45/45	16	MMY-MUP1601HT8P-E	3.2/7.71	3.77/4.79	36
18	50.4/40.5	18	MMY-MUP1801HT8P-E	3.17/7.68	4.02/4.75	40
20	56/56	20	MMY-MUP2001HT8P-E	3.11/7.62	3.75/4.43	45
22	61.5/61.5	22	MMY-MUP2201HT8P-E	3.01/7.23	3.8/4.44	49
24	67/67	24	MMY-MUP2401HT8P-E	2.77/6.87	3.53/4.17	52
26	73.5/73.5	14 + 12	MMY-UP2611HT8P-E	2.95/4.17	4.14/4.67	58
28	80/80	14 + 14	MMY-UP2811HT8P-E	2.75/7.05	4/4.6	63
30	83.9/83.9	18 + 12	MMY-UP3011HT8P-E	3.2/7.52	4.13/4.75	64
32	89.5/89.5	20 + 12	MMY-UP3211HT8P-E	3.16/7.5	3.94/4.55	65
34	96/96	20 + 14	MMY-UP3411HT8P-E	2.95/7.35	3.85/4.5	66
36	100.5/100.5	24 + 12	MMY-UP3611HT8P-E	2.91/7.01	3.76/4.38	67
38	107/107	24 + 14	MMY-UP3811HT8P-E	2.76/6.93	3.69/4.33	68
40	112/112	20 + 20	MMY-UP4011HT8P-E	3.11/7.62	3.75/4.43	69
42	117.4/117.4	24 + 18	MMY-UP4211HT8P-E	2.93/7.22	3.72/4.43	70
44	123/123	24 + 20	MMY-UP4411HT8P-E	2.91/7.21	3.63/4.3	71
46	128.5/128.5	24 + 22	MMY-UP4611HT8P-E	2.88/7.04	3.65/4.31	72
48	134/134	24 + 24	MMY-UP4811HT8P-E	2.77/6.87	3.53/4.17	73
50	140.5/140.5	24 + 14 + 12	MMY-UP5011HT8P-E	2.86/7.02	3.82/4.44	74
52	147/147	24 + 14 + 14	MMY-UP5211HT8P-E	2.76/6.96	3.77/4.41	75
54	152/152	20 + 20 + 14	MMY-UP5411HT8P-E	3.01/7.49	3.81/4.47	76
56	156.5/156.5	24 + 20 + 12	MMY-UP5611HT8P-E	2.98/7.23	3.75/4.41	77
58	163/163	24 + 20 + 14	MMY-UP5811HT8P-E	2.87/7.19	3.71/4.37	78
60	167.5/167.5	24 + 24 + 12	MMY-UP6011HT8P-E	2.85/6.95	3.66/4.3	79
62	174/174	24 + 24 + 14	MMY-UP6211HT8P-E	2.76/6.92	3.63/4.27	80
64	179/179	24 + 20 + 20	MMY-UP6411HT8P-E	2.97/7.34	3.67/4.34	81
66	184.5/184.5	24 + 22 + 20	MMY-UP6611HT8P-E	2.95/7.21	3.68/4.35	82
68	190/190	24 + 24 + 20	MMY-UP6811HT8P-E	2.86/7.09	3.59/4.26	83
70	195.5/195.5	24 + 24 + 22	MMY-UP7011HT8P-E	2.84/6.98	3.61/4.26	84
72	201/201	24 + 24 + 24	MMY-UP7211HT8P-E	2.77/6.87	3.53/4.17	85
74	207.5/207.5	24 + 24 + 14 + 12	MMY-UP7411HT8P-E	2.83/6.97	3.72/4.36	86
76	214/214	24 + 24 + 14 + 14	MMY-UP7611HT8P-E	2.76/6.93	3.69/4.33	87
78	219/219	24 + 20 + 20 + 14	MMY-UP7811HT8P-E	2.93/7.3	3.72/4.39	88
80	223.5/223.5	24 + 24 + 20 + 12	MMY-UP8011HT8P-E	2.91/7.14	3.68/4.34	90
82	230/230	24 + 24 + 20 + 14	MMY-UP8211HT8P-E	2.84/7.1	3.66/4.32	92
84	234.5/234.5	24 + 24 + 24 + 12	MMY-UP8411HT8P-E	2.83/6.95	3.62/4.26	94
86	241/241	24 + 24 + 24 + 14	MMY-UP8611HT8P-E	2.77/6.91	3.6/4.25	96
88	246/246	24 + 24 + 20 + 20	MMY-UP8811HT8P-E	2.91/7.21	3.63/4.3	98
90	251.5/251.5	24 + 24 + 22 + 20	MMY-UP9011HT8P-E	2.9/7.12	3.64/4.3	100
92	257/257	24 + 24 + 24 + 20	MMY-UP9211HT8P-E	2.84/7.03	3.58/4.24	102
94	262.5/262.5	24 + 24 + 24 + 22	MMY-UP9411HT8P-E	2.82/6.95	3.59/4.24	104
96	268/268	24 + 24 + 24 + 24	MMY-UP9611HT8P-E	2.77/6.87	3.53/4.17	106
98	274.5/274.5	24 + 24 + 24 + 14 + 12	MMY-UP9811HT8P-E	2.82/6.95	3.67/4.31	108
100	281/281	24 + 24 + 24 + 14 + 14	MMY-UP10011HT8P-E	2.76/6.94	3.65/4.3	110
102	286/286	24 + 24 + 20 + 20 + 14	MMY-UP10211HT8P-E	2.89/7.2	3.68/4.34	112
104	290.5/290.5	24 + 24 + 24 + 20 + 12	MMY-UP10411HT8P-E	2.88/7.08	3.65/4.3	114
106	297/297	24 + 24 + 24 + 20 + 14	MMY-UP10611HT8P-E	2.83/7.04	3.63/4.29	116
108	301.5/301.5	24 + 24 + 24 + 24 + 12	MMY-UP10811HT8P-E	2.82/6.93	3.6/4.24	118
110	308/308	24 + 24 + 24 + 24 + 14	MMY-UP11011HT8P-E	2.77/6.9	3.58/4.23	120
112	313/313	24 + 24 + 24 + 20 + 20	MMY-UP11211HT8P-E	2.88/7.13	3.61/4.28	122
114	318.5/318.5	24 + 24 + 24 + 22 + 20	MMY-UP11411HT8P-E	2.87/7.07	3.62/4.28	124
116	324/324	24 + 24 + 24 + 24 + 20	MMY-UP11611HT8P-E	2.82/7	3.57/4.22	126
118	329.5/329.5	24 + 24 + 24 + 24 + 22	MMY-UP11811HT8P-E	2.81/6.93	3.58/4.23	128
120	335/335	24 + 24 + 24 + 24 + 24	MMY-UP12011HT8P-E	2.77/6.87	3.53/4.17	128

MMY-MUP_1HT8P
SMMS-u

Piping rules

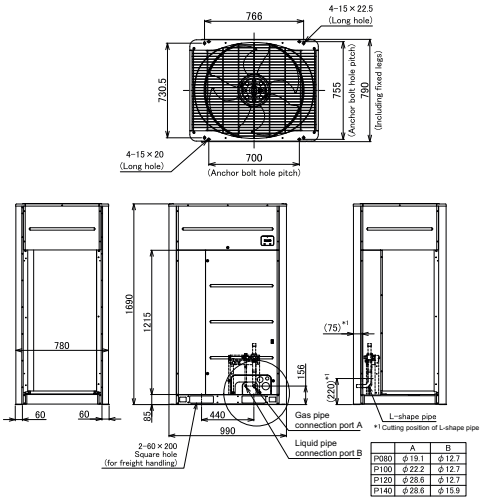
			Allowable value	Piping section
Piping lenght	"Total extension of pipe (Liquide pipe, real lenght)"	Single ODU	500m	LA+LB+LC+La+Lb+Lc+Ld+Le+L1+L2+L3 +L4+L5+L6+L7+a+b+c+d+e+f+g+h+i+j
		Combination ODU	1200m (*6)	
	Fathest piping lenght (*1)	Equivalent lenght	250m	LA+LB+LC+Le+L1+L3+L4+L5+L6+j
		Real lenght	210m	
	Equivalent lenght of farthest piping form 1st branching (*1)		90m (*2)	L3 + L4 + L5 + L6 + j
	Equivalent lenght of farthest piping between outodoor unuits		40m	LA+LB+LC+Le (LA+LB+LC+Ld)
	Max. equivalent lenght of main piping	Equivalent lenght	120m (*3)	L1
		Real lenght	100m (*3)	
	Max. equivalent lenght of outdoor unit connecitng piping		10m	Le (La, Lb, Lc, Ld)
	Max. real lenght of indoor unit connecitng piping		30m	a, b, c, d, e, f, g, h, i, j
	Max. equivalenet lenght between branches		50m	L2, L3, L4, L5, L6, L7
Difference in height	Height between indoor and outdoor units	Upper outdoor unit	70m (*4)(*7)	-
		Lower outdoor unit	40m (*5)(*8)	-
	Height between indoor units		50m (*9)	-
	Height between outdoor units		5m	-

(*1) : (e) is outdoor unit furthest from the 1st branch and (j) is the indoor unit furthest from the 1st branch.
(*2) : If the height difference (H1) between indoor and outdoor unit exceeds 3 m, set 65 m or less.
(*3) : If the max. combined outdoor unit capacity is 54HP or more, then max. equivalent length is 70 m or less (real length is 50 m or less).
(*4) : If the height difference (H2) between indoor units exceeds 3 m, set 50 m or less.
(*5) : If the height difference (H2) between indoor units exceeds 3 m, set 30 m or less.
(*6) : Total charging refrigerant is 140kg or less.
(*7) : Extension up till 110m is possible with conditions below :
-Single outdoor unit system
-Connected ratio of indoor units to outdoor units is below 105%
-Liquid side is been increased 1 size from the standard size
(*8) : Extension up till 110m is possible with conditions below :
-Multiple outdoor unit system
-Connected Ratio of indoor units to outdoor units is below 105%
-Minimum capacity of connecting indoor unit is more than 3HP
(*9) : If the connected ratio of indoor units to outdoor units is more than 105%, set 15 m.

Drawings

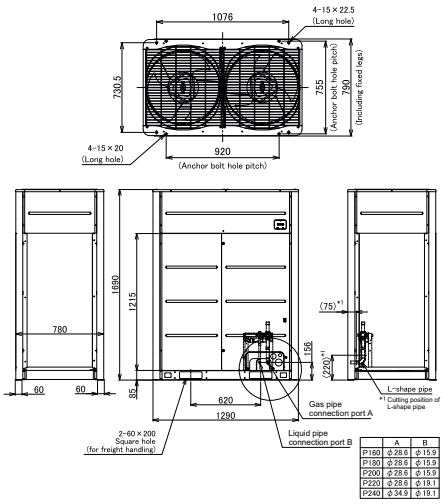
Unit: mm

MMY-MUP0801HT8P-E, MMY-MUP1001HT8P-E
MMY-MUP1201HT8P-E, MMY-MUP1401HT8P-E



	A	B
P080	φ19.1	φ12.7
P100	φ22.2	φ12.7
P120	φ28.6	φ12.7
P140	φ28.6	φ15.9

MMY-MUP1601HT8P-E, MMY-MUP1801HT8P-E, MMY-MUP2001HT8P-E,
MMY-MUP2201HT8P-E, MMY-MUP2401HT8P-E



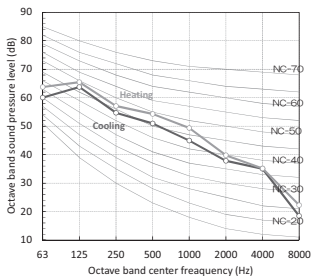
	A	B
P160	φ28.6	φ15.9
P180	φ28.6	φ15.9
P200	φ28.6	φ15.9
P220	φ28.6	φ19.1
P240	φ34.9	φ19.1

Sound pressure levels

Unit: dB(A)

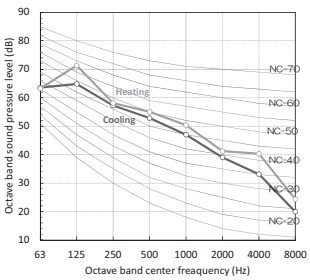
MMY-MUP0801HT8P-E

Sound pressure Level (dB(A))	Cooling	Heating
	53.0	56.0



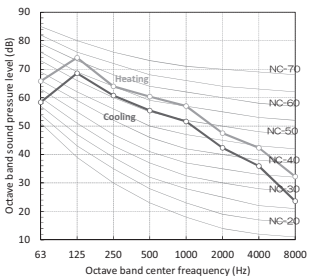
MMY-MUP1001HT8P-E

Sound pressure Level (dB(A))	Cooling	Heating
	55.0	58.0



MMY-MUP1201HT8P-E

Sound pressure Level (dB(A))	Cooling	Heating
	58.0	62.0

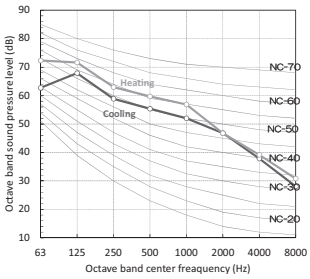


Sound pressure levels

Unit: dB(A)

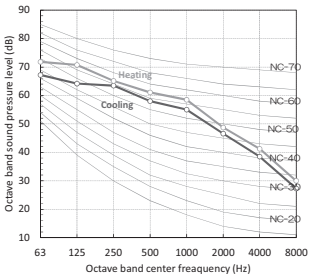
MMY-MUP1401HT8P-E

Sound pressure Level (dB(A))	Cooling	Heating
	58.0	62.0



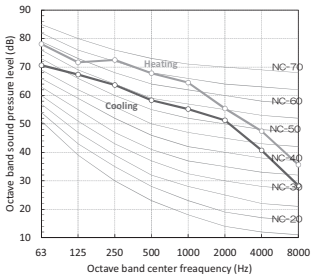
MMY-MUP1601HT8P-E

Sound pressure Level (dB(A))	Cooling	Heating
	60.0	63.0



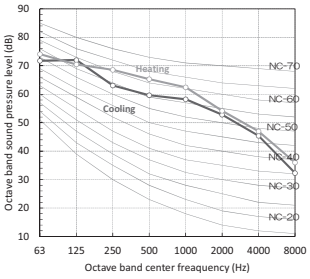
MMY-MUP1801HT8P-E

Sound pressure Level (dB(A))	Cooling	Heating
	61.0	67.0



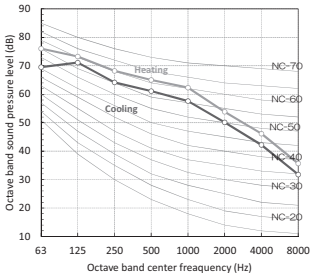
MMY-MUP2001HT8P-E

Sound pressure Level (dB(A))	Cooling	Heating
	63.0	67.0



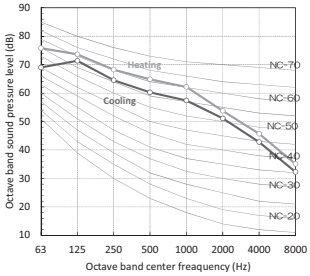
MMY-MUP2201HT8P-E

Sound pressure Level (dB(A))	Cooling	Heating
	63.0	67.0



MMY-MUP2401HT8P-E

Sound pressure Level (dB(A))	Cooling	Heating
	63.0	67.0



Night mode sound pressure levels

Sound reduction and approximation capacity (reference)

type	"Night operation sound reduction dB (A)"	Capacity	
		Cooling	Heating
801	50	85%	80%
1001	50	70%	65%
1201	50	60%	55%
1401	53	70%	65%
1601	53	70%	70%
1801	54	65%	65%
2001	54	60%	60%
2201	54	55%	55%
2401	54	55%	55%

Condition : Cooling : (Indoor 27 deg DB, 19 deg WB) - (Outdoor temperature 25 deg DB)
Heating : (Indoor 20 deg DB) - (Outdoor temperature 7 deg DB, 6 deg WB)

Accessories

	Name	Model name	Capacity	Appearance	Remarks
Branching joints and headers	Y-shape branching joint	RBM-BY55E	under 6.4hp		
		RBM-BY105E	from 6.4 to 14.2hp		
		RBM-BY205E	from 14.2 to 25.2hp		
		RBM-BY305E	from 25.2 to 61.2hp		
		RBM-BY405E	61.2hp or more		
	4-branching header	RBM-HY1043E	under 14.2hp		
		RBM-HY2043E	from 14.2 to 25.2hp		
	8-branching header	RBM-HY1083E	under 14.2hp		
		RBM-HY2083E	from 14.2 to 25.2hp		
	Branching joint for connection of outdoor units	RBM-BT14E	under 26hp		
		RBM-BT24E	from 26hp to 46hp		
		RBM-BT34E	46hp or more		
Optionnal PCB of outoor 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			Operation output : The operation indicator is on while any indoor unit in the system is operating. Error output : The error indicator is on when an error is occurred on even one of the indoor or outdoor units in the system. Dry contact