

PUMY-P SERIES

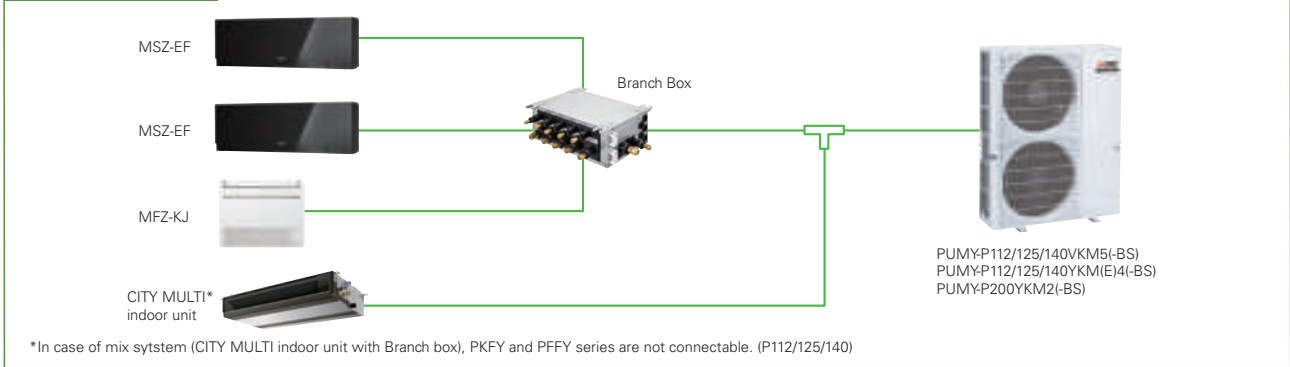
Air conditioning system supports replacement work by simplifying the installation process. Ideal for supporting renewal needs at small offices and stores, home offices, etc.



R410A

PUMY-P112/125/140VKM5(-BS)
PUMY-P112/125/140YKM(E)4(-BS)
PUMY-P200YKM2(-BS)

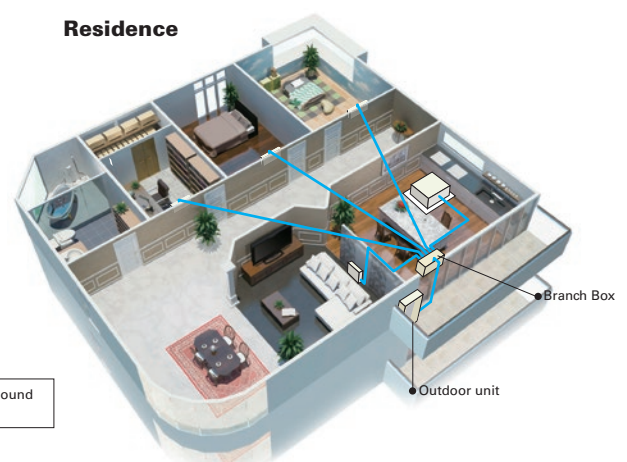
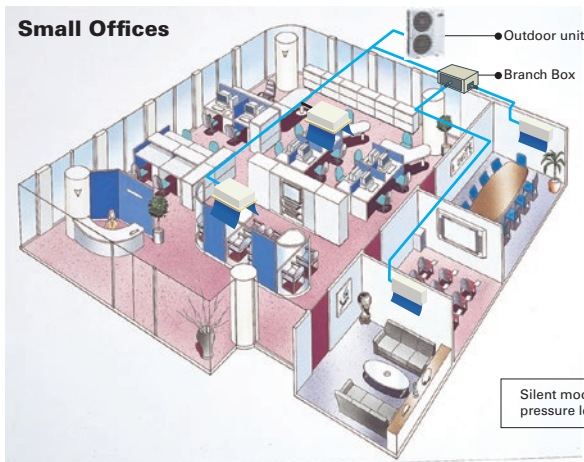
EXAMPLE SYSTEM



The two-pipe zoned system designed for Heat Pump Operation

PUMY series make use of a two-pipe refrigerant system, which allows for system changeover from cooling to heating, ensuring that a constant indoor climate is maintained in all zones. The compact outdoor unit utilizes R410A refrigerant and an INVERTER-driven compressor to use energy effectively.

With a wide range of indoor unit line-up in connection with a flexible piping system, PUMY series can be configured for all applications. Up to 12 indoor units can be connected with up to 130% connected capacity to maximize engineer's design options. This feature allows easy air conditioning in each area with convenient individual controllers.



P112/125/140	Refrigerant Piping Length	Total Length	Maximum Meters				
			Only City Multi ^{*1} Indoor Unit	Only Branch Box Connection	Mixed System (City Multi ^{*1} Indoor Unit + Branch Box)		
					City Multi ^{*1} Indoor Unit	Indoor Unit + Branch Box	
		300	150	240 (2 Branch boxes) / 300 (1 Branch box)			
		Maximum Allowable Length	150 (175 equivalent)	80	85 (95 equivalent)	80	
		Farthest Indoor From First Branch	30	55	30	55	
	Vertical Differentials Between Units	Indoor/Outdoor (Outdoor higher)	50	50	50		
		Indoor/Outdoor (Outdoor Lower)	40 ^{*2}	40	40		
		Indoor/Indoor	15 ^{*3}	15 ^{*3}	15 ^{*3}		
	P200	Refrigerant Piping Length	Total Length	150	150		
			Maximum Allowable Length	80 (90 equivalent)	80	80 (90 equivalent)	80
			Farthest Indoor From First Branch	30	55	30	55
	Vertical Differentials Between Units	Indoor/Outdoor (Outdoor higher)	50	50	50		
		Indoor/Outdoor (Outdoor Lower)	40	40	40		
		Indoor/Indoor	15 ^{*3}	15 ^{*3}	15 ^{*3}		

*1 Include system with connection kit
*2 In case of including PKFY or PFFY, height between units is 30m.
*3 In case of branch box connection: 12m

30Pa external static pressure* Option (requires PAC-SJ71FM-E)

An external static pressure of 30Pa enables the outdoor unit to be installed on balconies in high-rise building or spaces near louvers.

* PUMY-P112/125/140VKM5(-BS), PUMY-P112/125/140YKM(E)4(-BS) only.
* Noise level will increase when using this function.

30Pa external static pressure fan motor (option)
(PAC-SJ71FM-E)





Model		PUMY-P112VKM5(-BS)	PUMY-P125VKM5(-BS)	PUMY-P140VKM5(-BS)	PUMY-P112YKM4(-BS)	PUMY-P125YKM4(-BS)	PUMY-P140YKM4(-BS)	PUMY-P200YKM2(-BS)	
Power Source		1-phase 220 - 230 - 240V 50Hz			3-phase 380 - 400 - 415V 50Hz				
Cooling Capacity (nominal)	*1 kW	12.5	14.0	15.5	12.5	14.0	15.5	22.4	
	Power Input kW	2.79	3.46	4.52	2.79	3.46	4.52	6.05	
	Current Input A	12.87 - 12.32 - 11.80	15.97 - 15.27 - 14.64	20.86 - 19.95 - 19.12	4.99 - 4.74 - 4.57	5.84 - 5.55 - 5.35	7.23 - 6.87 - 6.62	9.88 - 9.39 - 9.05	
	EER kW/kW	4.48	4.05	3.43	4.48	4.05	3.43	3.70	
Temp. Range of Cooling	Indoor Temp. W.B.	15.0 - 24.0°C	15.0 - 24.0°C	15.0 - 24.0°C	15.0 - 24.0°C	15.0 - 24.0°C	15.0 - 24.0°C	15.0 - 24.0°C	
	Outdoor Temp.*3 D.B.	-5.0 - 52.0°C	-5.0 - 52.0°C	-5.0 - 52.0°C	-5.0 - 52.0°C	-5.0 - 52.0°C	-5.0 - 52.0°C	-5.0 - 52.0°C	
Heating Capacity (nominal)	*2 kW	14.0	16.0	18.0	14.0	16.0	18.0	25.0	
	Power Input kW	3.04	3.74	4.47	3.04	3.74	4.47	5.84	
	Current Input A	14.03 - 13.42 - 12.86	17.26 - 16.51 - 15.82	20.63 - 19.73 - 18.91	5.43 - 5.16 - 4.98	6.31 - 6.00 - 5.78	7.15 - 6.79 - 6.55	9.54 - 9.06 - 8.74	
	COP kW/kW	4.61	4.28	4.03	4.61	4.28	4.03	4.28	
Temp. Range of Heating	Indoor Temp. D.B.	15.0 - 27.0°C	15.0 - 27.0°C	15.0 - 27.0°C	15.0 - 27.0°C	15.0 - 27.0°C	15.0 - 27.0°C	15.0 - 27.0°C	
	Outdoor Temp. W.B.	-20.0 - 15.0°C	-20.0 - 15.0°C	-20.0 - 15.0°C	-20.0 - 15.0°C	-20.0 - 15.0°C	-20.0 - 15.0°C	-20.0 - 15.0°C	
Indoor Unit Connectable	Total Capacity	50 to 130% of outdoor unit capacity							
	Model / Quantity	City Multi	10 - 140 / 9	10 - 140 / 10	10 - 140 / 12	10 - 140 / 9	10 - 140 / 10	10 - 140 / 12	
		Branch Box*5	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8	
	Mixed System	Branch Box 1 unit	City Multi	10 - 140 / 5	10 - 140 / 5	10 - 140 / 5	10 - 140 / 5	10 - 140 / 5	
		Branch Box	15 - 100 / 5	15 - 100 / 5	15 - 100 / 5	15 - 100 / 5	15 - 100 / 5	15 - 100 / 5	
	Branch Box 2 units	City Multi	10 - 140 / 3 or 2**4	10 - 140 / 3	10 - 140 / 3	10 - 140 / 3 or 2**4	10 - 140 / 3		
	Branch Box	15 - 100 / 7 or 8**4	15 - 100 / 8	15 - 100 / 8	15 - 100 / 7 or 8**4	15 - 100 / 8	15 - 100 / 8		
Sound Pressure Level (measured in anechoic room)	dB <A>	49 / 51	50 / 52	51 / 53	49 / 51	50 / 52	51 / 53	56 / 61	
Refrigerant Piping Diameter	Liquid Pipe mm	9.52 Flare						9.52**6 Flare	
	Gas Pipe mm	15.88 Flare						19.1 Flare	
Fan	Type x Quantity	Propeller Fan x 2							
	Air Flow Rate	m ³ /min	110						139
		L/s	1,883						2,316
		cfm	3,884						4,908
Motor Output	kW	0.074 + 0.074						0.20 + 0.20	
Compressor	Type x Quantity	Scroll hermetic compressor x 1							
	Starting Method	Inverter							
	Motor Output	kW	2.9	3.5	3.9	2.9	3.5	3.9	
External Dimensions (H x W x D)	mm	1,338x1,050x330 (+40)							
Weight	kg	123			125				141

*1, *2 Nominal conditions

	Indoor	Outdoor	Piping Length	Level Difference
Cooling	27°C DB / 19°C WB	35°C	7.5m	0m
Heating	20°C DB	7°C DB / 6°C WB	7.5m	0m

*3 10 to 52°C D.B.: When connecting PKFY-P15/20/25/32VBM, PFFY-P20/25/32VKM and PFFY-P20/25/32VLE(R)M, PEFY-P-VMA3, M, S and P series indoor unit.

**4 When connecting 7 indoor units via branch box, connectable City Multi indoor units are 3; connecting 8 indoor units via branch box, connectable indoor units are 2.

**5 At least 2 indoor units must be connected when using branch box.

**6 Liquid pipe diameter: 12.7mm when piping length is more than 60m.

Model		PUMY-P112YKME4(-BS)	PUMY-P125YKME4(-BS)	PUMY-P140YKME4(-BS)	
Power Source		3-phase 380 - 400 - 415V 50Hz			
Cooling Capacity (nominal)	*1 kW	12.5	14.0	15.5	
	Power Input kW	2.79	3.46	4.52	
	Current Input A	4.99 / 4.74 / 4.57	5.84 / 5.55 / 5.35	7.23 / 6.87 / 6.62	
	EER kW/kW	4.48	4.05	3.43	
Temp. Range of Cooling	Indoor Temp. W.B.	15 to 24°C			
	Outdoor Temp.*3 D.B.	-5 to 52°C			
Heating Capacity (nominal)	*2 kW	14.0	16.0	18.0	
	Power Input kW	3.04	3.74	4.47	
	Current Input A	5.43 / 5.16 / 4.98	6.31 / 6.00 / 5.78	7.15 / 6.79 / 6.55	
	COP kW/kW	4.61	4.28	4.03	
Temp. Range of Heating	Indoor Temp. D.B.	15 to 27°C			
	Outdoor Temp. W.B.	-20 to 15°C			
Indoor Unit Connectable	Total Capacity	50 to 130% of outdoor unit capacity			
	Model / Quantity	City Multi	10 - 140 / 9	10 - 140 / 10	
		Branch Box*5	15 - 100 / 8	15 - 100 / 8	
	Mixed System	Branch Box 1 unit	City Multi	10 - 140 / 5	10 - 140 / 5
		Branch Box	15 - 100 / 5	15 - 100 / 5	15 - 100 / 5
	Branch Box 2 units	City Multi	10 - 140 / 3 or 2**4	10 - 140 / 3	
	Branch Box	15 - 100 / 7 or 8**4	15 - 100 / 8	15 - 100 / 8	
Sound Pressure Level (measured in anechoic room)	dB <A>	49 / 51	50 / 52	51 / 53	
Refrigerant Piping Diameter	Liquid Pipe mm	9.52 Flare			
	Gas Pipe mm	15.88 Flare			
Fan	Type x Quantity	Propeller Fan x 2			
	Air Flow Rate	m ³ /min	110		
		L/s	1,833		
		cfm	3,884		
Motor Output	kW	0.074 + 0.074			
Compressor	Type x Quantity	Scroll hermetic compressor x 1			
	Starting Method	Inverter			
	Motor Output	kW	2.9	3.5	3.9
External Dimensions (H x W x D)	mm	1,338x1,050x330 (+40)			
Weight	kg	136			

*1, *2 Nominal conditions

	Indoor	Outdoor	Piping Length	Level Difference
Cooling	27°C DB / 19°C WB	35°C	7.5m	0m
Heating	20°C DB	7°C DB / 6°C WB	7.5m	0m

*3 10 to 52°C D.B.: When connecting PKFY-P15/20/25/32VBM, PFFY-P20/25/32VKM and PFFY-P20/25/32VLE(R)M, PEFY-P-VMA3, M, S and P series indoor unit.

**4 When connecting 7 indoor units via branch box, connectable City Multi indoor units are 3; connecting 8 indoor units via branch box, connectable indoor units are 2.

**5 At least 2 indoor units must be connected when using branch box.

Type	Branch Box			
Model Name	PAC-MK54BC	PAC-MK34BC		
Connectable Number of Indoor Units	Maximum 5	Maximum 3		
Power Supply (from outdoor unit)	~ / N, 220 / 230 / 240 V, 50 Hz, ~ / N, 220 / 230 V, 60 Hz			
Input	kW	0.003		
Running Current	A	0.05 (Max. 6)		
Dimensions	H x W x D	mm 170 x 450 x 280		
Weight	kg	7.4 / 6.7		
Piping Connection (Flare)	Branch (Indoor Side)	Liquid	mm ø6.35 x 5	ø6.35 x 3
		Gas	mm ø9.52 x 4, ø12.7 x 1	ø9.52 x 3
	Main (Outdoor Side)	Liquid	mm ø9.52	ø9.52
		Gas	mm ø15.88	ø15.88

* The piping connection size differs according to the type and capacity of outdoor/indoor units.

Match the piping connection size of branch box with outdoor/indoor unit. If the piping connection size of branch box does not match the piping connection size of outdoor/indoor unit, use optional different-diameter (deformed) joints to the branch box side. (Connect deformed joint directly to the branch box side.)