

# PUMY-P SERIES

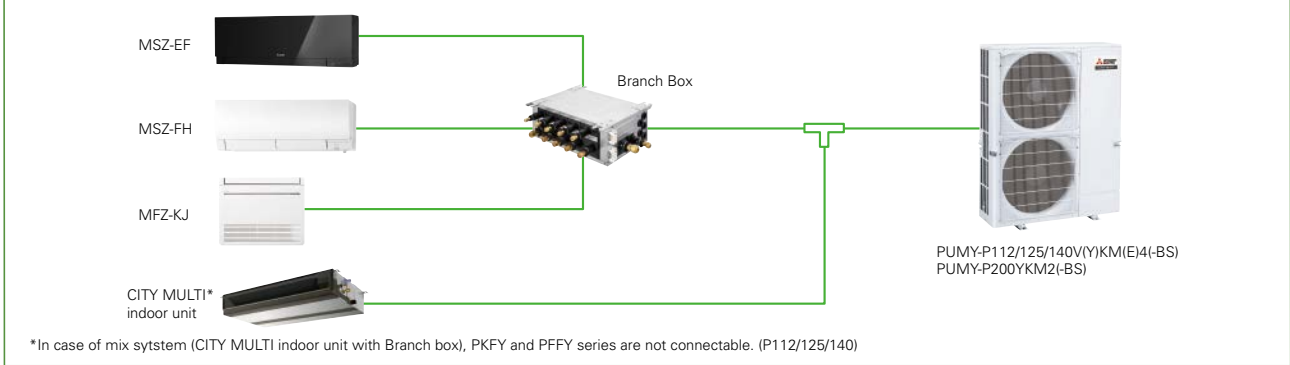
Air conditioning system supports replacement work by simplifying the installation process. Ideal for supporting renewal needs at small offices and stores, home offices, etc.



**R410A**

PUMY-P112/125/140VKM4(-BS)  
PUMY-P112/125/140YKM(E)4(-BS)  
PUMY-P200YKM2(-BS)

## EXAMPLE SYSTEM

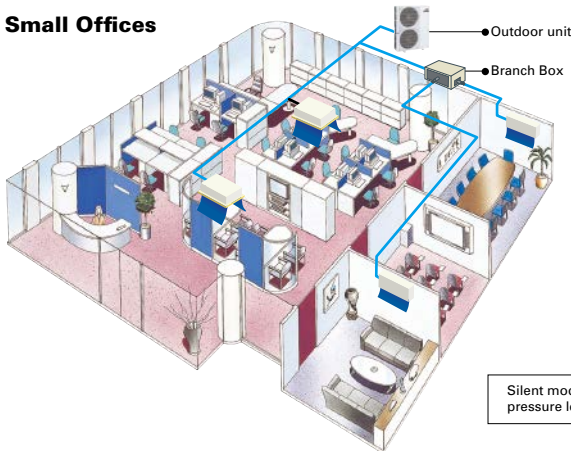


## The two-pipe zoned system designed for Heat Pump Operation

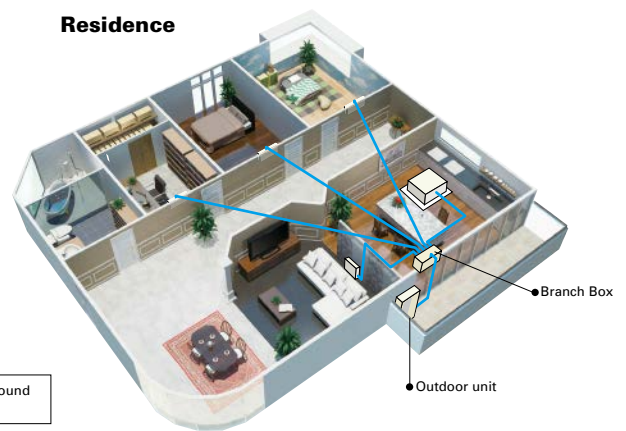
PUMY series make use of a two-pipe refrigerant system, which allows for system changeover from cooling to heating, ensuring that a constant indoor climate is maintained in all zones. The compact outdoor unit utilizes R410A refrigerant and an INVERTER-driven compressor to use energy effectively.

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.

### Small Offices



### Residence



		Maximum Meters			
		Only City Multi <sup>*1</sup> Indoor Unit	Only Branch Box Connection	Mixed System (City Multi <sup>*1</sup> Indoor Unit + Branch Box)	
				City Multi <sup>*1</sup> Indoor Unit	Indoor Unit + Branch Box
P112/125/140	Refrigerant Piping Length	Total Length	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 <sup>*2</sup>	40	40
		Indoor/Indoor	15 <sup>*3</sup>	15 <sup>*3</sup>	15 <sup>*3</sup>
P200	Refrigerant Piping Length	Total Length	150	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 <sup>*3</sup>	15 <sup>*3</sup>	15 <sup>*3</sup>

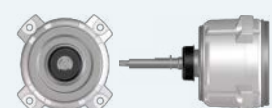
\*1 Include system with connection kit  
\*2 In case of including PKFY or PFFY, height between units is 30m.  
\*3 In case of branch box connection: 12m

## 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-P112/125/140VKM4(-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-P112VKM4(-BS)			PUMY-P125VKM4(-BS)			PUMY-P140VKM4(-BS)			PUMY-P112YKM4(-BS)			PUMY-P125YKM4(-BS)			PUMY-P140YKM4(-BS)			PUMY-P200YKM2(-BS)				
<b>Power Source</b>	1-phase 220 - 230 - 240V 50Hz									3-phase 380 - 400 - 415V 50Hz													
<b>Cooling Capacity (nominal)</b>	<b>*1 kW</b>	12.5			14.0			15.5			12.5			14.0			15.5			22.4			
	<b>Power Input kW</b>	2.79			3.46			4.52			2.79			3.46			4.52			6.05			
	<b>Current Input A</b>	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			
	<b>EER kW/kW</b>	4.48			4.05			3.43			4.48			4.05			3.43			3.70			
<b>Temp. Range of Cooling</b>	<b>Indoor Temp. W.B.</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			
	<b>Outdoor Temp.*3 D.B.</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			
<b>Heating Capacity (nominal)</b>	<b>*2 kW</b>	14.0			16.0			18.0			14.0			16.0			18.0			25.0			
	<b>Power Input kW</b>	3.04			3.74			4.47			3.04			3.74			4.47			5.84			
	<b>Current Input A</b>	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			
	<b>COP kW/kW</b>	4.61			4.28			4.03			4.61			4.28			4.03			4.28			
<b>Temp. Range of Heating</b>	<b>Indoor Temp. D.B.</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			
	<b>Outdoor Temp. W.B.</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			
<b>Indoor Unit Connectable</b>	<b>Total Capacity</b>	50 to 130% of outdoor unit capacity																					
	<b>Model / Quantity</b>	City Multi	15 - 140 / 9			15 - 140 / 10			15 - 140 / 12			15 - 140 / 9			15 - 140 / 10			15 - 140 / 12			15 - 200 / 12		
	<b>Mixed System</b>	<b>Branch Box 1 unit</b>	Branch Box*5	15 - 100 / 8			15 - 100 / 8			15 - 100 / 8			15 - 100 / 8			15 - 100 / 8			15 - 100 / 8				
			City Multi	15 - 140 / 5			15 - 140 / 5			15 - 140 / 5			15 - 140 / 5			15 - 140 / 5			15 - 200 / 5				
<b>Branch Box 2 units</b>		Branch Box	15 - 100 / 5			15 - 100 / 5			15 - 100 / 5			15 - 100 / 5			15 - 100 / 5			15 - 100 / 5					
		City Multi	15 - 140 / 3 or 2**4			15 - 140 / 3			15 - 140 / 3			15 - 140 / 3 or 2**4			15 - 140 / 3			15 - 200 / 3					
<b>Sound Pressure Level (measured in anechoic room)</b>	<b>dB &lt;A&gt;</b>	49 / 51			50 / 52			51 / 53			49 / 51			50 / 52			51 / 53			56 / 61			
	<b>Refrigerant Piping Diameter</b>	<b>Liquid Pipe mm</b>	9.52 Flare															9.52**6 Flare					
	<b>Gas Pipe mm</b>	15.88 Flare																					
<b>Fan</b>	<b>Type x Quantity</b>	Propeller Fan x 2																					
	<b>Air Flow Rate</b>	<b>m<sup>3</sup>/min</b>	110															139					
		<b>L/s</b>	1,883																				
		<b>cfm</b>	3,884																				
<b>Motor Output kW</b>	0.074 + 0.074																						
<b>Compressor</b>	<b>Type x Quantity</b>	Scroll hermetic compressor x 1																					
	<b>Starting Method</b>	Inverter																					
	<b>Motor Output kW</b>	2.9			3.5			3.9			2.9			3.5			3.9			5.3			
<b>External Dimensions (H x W x D)</b>	<b>mm</b>	1,338x1,050x330 (+40)																					
<b>Weight</b>	<b>kg</b>	122									125									141			

\*1,\*2 Nominal conditions

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

\*3 10 to 52°C D.B.: When connecting PKFY-P15/20/25VBM, 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)													
<b>Power Source</b>	3-phase 380 - 400 - 415V 50Hz																			
<b>Cooling Capacity (nominal)</b>	<b>*1 kW</b>	12.5			14.0			15.5												
	<b>Power Input kW</b>	2.79			3.46			4.52												
	<b>Current Input A</b>	4.99 / 4.74 / 4.57			5.84 / 5.55 / 5.35			7.23 / 6.87 / 6.62												
	<b>EER kW/kW</b>	4.48			4.05			3.43												
<b>Temp. Range of Cooling</b>	<b>Indoor Temp. W.B.</b>	15 to 24°C																		
	<b>Outdoor Temp.*3 D.B.</b>	-5 to 52°C																		
<b>Heating Capacity (nominal)</b>	<b>*2 kW</b>	14.0			16.0			18.0												
	<b>Power Input kW</b>	3.04			3.74			4.47												
	<b>Current Input A</b>	5.43 / 5.16 / 4.98			6.31 / 6.00 / 5.78			7.15 / 6.79 / 6.55												
	<b>COP kW/kW</b>	4.61			4.28			4.03												
<b>Temp. Range of Heating</b>	<b>Indoor Temp. D.B.</b>	15 to 27°C																		
	<b>Outdoor Temp. W.B.</b>	-20 to 15°C																		
<b>Indoor Unit Connectable</b>	<b>Total Capacity</b>	50 to 130% of outdoor unit capacity																		
	<b>Model / Quantity</b>	City Multi	15 - 140 / 9			15 - 140 / 10			15 - 140 / 12											
	<b>Mixed System</b>	<b>Branch Box 1 unit</b>	Branch Box*5	15 - 100 / 8			15 - 100 / 8			15 - 100 / 8										
			City Multi	15 - 140 / 5			15 - 140 / 5			15 - 140 / 5										
<b>Branch Box 2 units</b>		Branch Box	15 - 100 / 5			15 - 100 / 5			15 - 100 / 5											
		City Multi	15 - 140 / 3 or 2**4			15 - 140 / 3			15 - 140 / 3											
<b>Sound Pressure Level (measured in anechoic room)</b>	<b>dB &lt;A&gt;</b>	49 / 51			50 / 52			51 / 53												
	<b>Refrigerant Piping Diameter</b>	<b>Liquid Pipe mm</b>	9.52 Flare															9.52 Flare		
	<b>Gas Pipe mm</b>	15.88 Flare																		
<b>Fan</b>	<b>Type x Quantity</b>	Propeller Fan x 2																		
	<b>Air Flow Rate</b>	<b>m<sup>3</sup>/min</b>	110															139		
		<b>L/s</b>	1,833																	
		<b>cfm</b>	3,884																	
<b>Motor Output kW</b>	0.074 + 0.074																			
<b>Compressor</b>	<b>Type x Quantity</b>	Scroll hermetic compressor x 1																		
	<b>Starting Method</b>	Inverter																		
	<b>Motor Output kW</b>	2.9			3.5			3.5			3.9									
<b>External Dimensions (H x W x D)</b>	<b>mm</b>	1,338x1,050x330 (+40)																		
<b>Weight</b>	<b>kg</b>	136																		

\*1,\*2 Nominal conditions

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

\*3 10 to 52°C D.B.: When connecting PKFY-P15/20/25VBM, 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				
<b>Model Name</b>	PAC-MK53BC		PAC-MK33BC		
<b>Connectable Number of Indoor Units</b>	Max. 5		Max. 3		
<b>Power Supply</b>	<b>Source</b>	Outdoor power supply, Branch Box / Outdoor separate power supply			
	<b>Outdoor (V/Phase/Hz)</b>	1-phase, 220/230/240V, 50Hz, 1-phase, 220V, 60Hz			
<b>Total Input</b>	kW				
<b>Operating Current</b>	A				
<b>Dimensions</b>	H x W x D mm				
<b>Weight</b>	kg				
<b>Piping (diameter)</b>	<b>Branch [Indoor Side]</b>	Liquid	mm		
		Gas	mm		
	<b>Main [Outdoor Side]</b>	Liquid	mm		
		Gas	mm		
<b>Connection Method</b>	Flared		Brazed		
<b>Wiring</b>	<b>to Indoor Unit</b>	3-wire + Earth wire			
	<b>to Outdoor Unit</b>	3-wire + Earth wire			