

Y (Heat Pump) series



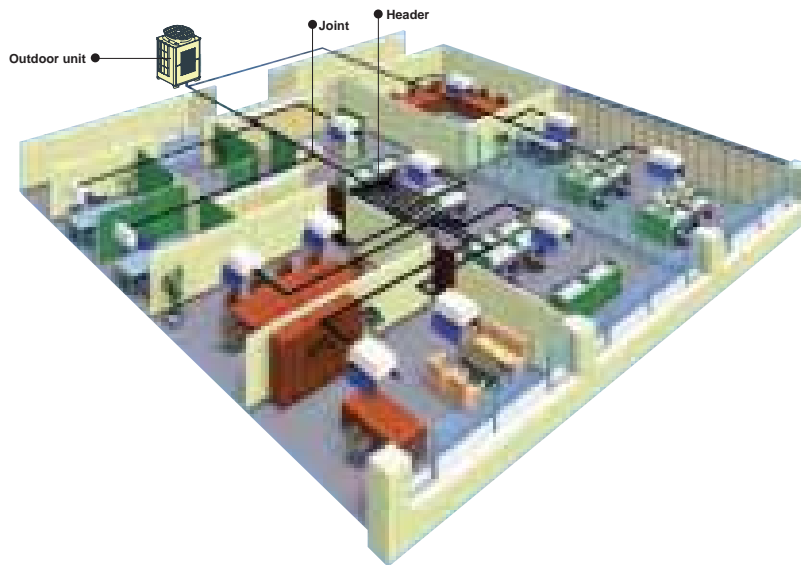
Cooling or Heating

Y series — **PUHY-P YKB-A1(-BS)** **PUHY-EP YLM-A(-BS)**
PUHY-P YSKB-A1(-BS) **PUHY-EP YSLM-A(-BS)**

The two-pipe zoned system designed for Heat Pump Operation

The CITY MULTI Y series (for large applications) 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 line-up of indoor units in connection with a flexible piping system, the CITY MULTI series can be configured for all applications. Up to 50 (Y series) 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.

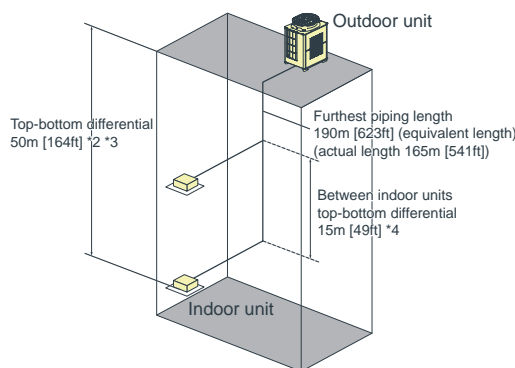
Large Offices (Y series)



System Pipe Lengths

[8-54HP (Y series), (High COP Y series)]

Refrigerant Piping Lengths	Maximum meters [Feet]
Total length.....	1,000 [3,280]
Maximum allowable length.....	165 (190equivalent) [541 (623)] ¹
Farthest indoor from first branch.....	40 [131]* ¹
Vertical differentials between units	Maximum meters [Feet]
Indoor/outdoor (outdoor higher).....	50 [164]* ²
Indoor/outdoor (outdoor lower).....	40 [131]* ³
Indoor/indoor.....	15 [49]* ⁴



¹ 90m [295ft] is available. When the piping length exceeds 40m [131ft], use one size larger liquid pipe starting with the section of piping where 40m [131ft] is exceeded and all piping after that point.
² 90m [295ft] is available depending on the model and installation conditions. For more detailed information, contact your local distributor.
³ 60m [196ft] is available depending on the model and installation conditions. For more detailed information, contact your local distributor.
⁴ 40m [131ft] is available. If the height difference between indoor units exceeds 15m [49ft] (but does not exceed 30m [98ft]), use one-size larger pipes for indoor unit liquid pipes.



Outdoor Unit

OUTDOOR UNIT

S Series

PUMY-P VKM(-BS)



► Specifications

Model		PUMY-P112VKM(-BS)		PUMY-P125VKM(-BS)		PUMY-P140VKM(-BS)		
Power source		1-phase 220-240V 50Hz		1-phase 220-240V 50Hz		1-phase 220-240V 50Hz		
Cooling capacity (Nominal)	*1 kW	12.5		14.0		15.5		
	*1 BTU / h	42,700		47,800		52,900		
	Power input kW	2.79		3.46		4.52		
	Current input A	12.87-12.32-11.80		15.97-15.27-14.64		20.86-19.95-19.12		
EER	kW / kW	4.48		4.05		3.43		
	W.B.	15.0~24.0°C(59~75°F)		15.0~24.0°C(59~75°F)		15.0~24.0°C(59~75°F)		
Temp. range of cooling	Indoor temp.	15.0~24.0°C(59~75°F)		15.0~24.0°C(59~75°F)		15.0~24.0°C(59~75°F)		
	Outdoor temp.	-5.0~46.0°C(23~115°F)		-5.0~46.0°C(23~115°F)		-5.0~46.0°C(23~115°F)		
Heating capacity (Nominal)	*2 kW	14.0		16.0		18.0		
	*2 BTU / h	47,800		54,600		61,400		
	Power input kW	3.04		3.74		4.47		
	Current input A	14.03-13.42-12.86		17.26-16.51-15.82		20.63-19.73-18.91		
COP	kW / kW	4.61		4.28		4.03		
	D.B.	15.0~27.0°C(59~81°F)		15.0~27.0°C(59~81°F)		15.0~27.0°C(59~81°F)		
Temp. range of heating	Indoor temp.	15.0~27.0°C(59~81°F)		15.0~27.0°C(59~81°F)		15.0~27.0°C(59~81°F)		
	Outdoor temp.	-20.0~15.5°C(-4~60°F)		-20.0~15.5°C(-4~60°F)		-20.0~15.5°C(-4~60°F)		
Indoor unit connectable	Total capacity	50~130 % of outdoor unit capacity		50~130 % of outdoor unit capacity		50~130 % of outdoor unit capacity		
	Model / Quantity	P15~P140 / 9		P15~P140 / 10		P15~P140 / 12		
Sound pressure level (measured in anechoic room)	dB <A>	49 / 51		50 / 52		51 / 53		
Refrigerant piping diameter	Liquid pipe mm (in.)	9.52(3/8) Flare		9.52(3/8) Flare		9.52(3/8) Flare		
	Gas pipe mm (in.)	15.88(5/8) Flare		15.88(5/8) Flare		15.88(5/8) Flare		
FAN	Type x Quantity	Propeller Fan x 2		Propeller Fan x 2		Propeller Fan x 2		
	Air flow rate	m³/min	110		110		110	
		L/s	1,833		1,833		1,833	
		cfm	3,884		3,884		3,884	
	Motor output kW	0.06 + 0.06		0.06 + 0.06		0.06 + 0.06		
Compressor	Type x Quantity	Scroll hermetic compressor x 1		Scroll hermetic compressor x 1		Scroll hermetic compressor x 1		
	Starting method	Inverter		Inverter		Inverter		
	Motor output kW	2.9		3.5		3.9		
External finish		Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1		Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1		Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1		
External dimension HxWxD	mm	1,338 x 1,050 x 330 (+25)		1,338 x 1,050 x 330 (+25)		1,338 x 1,050 x 330 (+25)		
	in.	52-11/16 x 41-11/32 x 13 (+1)		52-11/16 x 41-11/32 x 13 (+1)		52-11/16 x 41-11/32 x 13 (+1)		
Protection devices	High pressure protection	High pressure Switch		High pressure Switch		High pressure Switch		
	Inverter circuit (COMP/FAN)	Overcurrent detection, Overheat detection (Heatsink thermistor)		Overcurrent detection, Overheat detection (Heatsink thermistor)		Overcurrent detection, Overheat detection (Heatsink thermistor)		
	Compressor	Compressor thermistor, Over current detection		Compressor thermistor, Over current detection		Compressor thermistor, Over current detection		
	Fan motor	Overheating, Voltage protection		Overheating, Voltage protection		Overheating, Voltage protection		
Refrigerant	Type x original charge	R410A 4.8kg		R410A 4.8kg		R410A 4.8kg		
Net weight	kg (lbs)	123(272)		123(272)		123(272)		
Heat exchanger		Cross Fin and Copper tube		Cross Fin and Copper tube		Cross Fin and Copper tube		
Defrosting method		Reversed refrigerant circuit		Reversed refrigerant circuit		Reversed refrigerant circuit		
Optional parts		Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E		Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E		Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E		

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB(95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

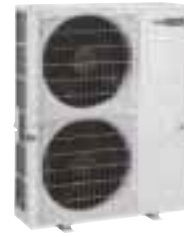
*Nominal condition *1,*2 are subject to ISO 15042.

*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT

S Series

PUMY-P YKM(-BS)



► Specifications

Model		PUMY-P112YKM(-BS)		PUMY-P125YKM(-BS)		PUMY-P140YKM(-BS)		
Power source		3-phase 380-415V 50Hz		3-phase 380-415V 50Hz		3-phase 380-415V 50Hz		
Cooling capacity (Nominal)	*1 kW	12.5		14.0		15.5		
	*1 BTU / h	42,700		47,800		52,900		
	Power input	kW		2.79		3.46		
	Current input	A		4.46-4.24-4.09		5.53-5.26-5.07		
	EER	kW / kW		4.48		4.05		
Temp. range of cooling	Indoor temp.	W.B. 15.0~24.0°C(59~75°F)		15.0~24.0°C(59~75°F)		15.0~24.0°C(59~75°F)		
	Outdoor temp.	D.B. -5.0~46.0°C(23~115°F)		-5.0~46.0°C(23~115°F)		-5.0~46.0°C(23~115°F)		
Heating capacity (Nominal)	*2 kW	14.0		16.0		18.0		
	*2 BTU / h	47,800		54,600		61,400		
	Power input	kW		3.04		3.74		
	Current input	A		4.86-4.62-4.45		5.98-5.68-5.48		
	COP	kW / kW		4.61		4.28		
Temp. range of heating	Indoor temp.	D.B. 15.0~27.0°C(59~81°F)		15.0~27.0°C(59~81°F)		15.0~27.0°C(59~81°F)		
	Outdoor temp.	W.B. -20.0~15.5°C(-4~60°F)		-20.0~15.5°C(-4~60°F)		-20.0~15.5°C(-4~60°F)		
Indoor unit connectable	Total capacity	50~130 % of outdoor unit capacity		50~130 % of outdoor unit capacity		50~130 % of outdoor unit capacity		
	Model / Quantity	P15~P140 / 9		P15~P140 / 10		P15~P140 / 12		
Sound pressure level (measured in anechoic room)		dB <A>		49 / 51		51 / 53		
Refrigerant piping diameter	Liquid pipe	mm (in.) 9.52(3/8) Flare		9.52(3/8) Flare		9.52(3/8) Flare		
	Gas pipe	mm (in.) 15.88(5/8) Flare		15.88(5/8) Flare		15.88(5/8) Flare		
FAN	Type x Quantity		Propeller Fan x 2		Propeller Fan x 2		Propeller Fan x 2	
	Air flow rate	m³/min	110		110		110	
		L/s	1,833		1,833		1,833	
		cfm	3,884		3,884		3,884	
	Motor output	kW		0.06 + 0.06		0.06 + 0.06		
Compressor	Type x Quantity		Scroll hermetic compressor x 1		Scroll hermetic compressor x 1		Scroll hermetic compressor x 1	
	Starting method		Inverter		Inverter		Inverter	
	Motor output	kW		2.9		3.5		
External finish		Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1		Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1		Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1		
External dimension HxWxD	mm	1,338 x 1,050 x 330 (+25)		1,338 x 1,050 x 330 (+25)		1,338 x 1,050 x 330 (+25)		
	in.	52-11/16 x 41-11/32 x 13 (+1)		52-11/16 x 41-11/32 x 13 (+1)		52-11/16 x 41-11/32 x 13 (+1)		
Protection devices	High pressure protection		High pressure Switch		High pressure Switch		High pressure Switch	
	Inverter circuit (COMP./FAN)		Overcurrent detection, Overheat detection (Heatsink thermistor)		Overcurrent detection, Overheat detection (Heatsink thermistor)		Overcurrent detection, Overheat detection (Heatsink thermistor)	
	Compressor		Compressor thermistor, Over current detection		Compressor thermistor, Over current detection		Compressor thermistor, Over current detection	
	Fan motor		Overheating, Voltage protection		Overheating, Voltage protection		Overheating, Voltage protection	
Refrigerant	Type x original charge		R410A 4.8kg		R410A 4.8kg		R410A 4.8kg	
Net weight		kg (lbs)		125(276)		125(276)		
Heat exchanger		Cross Fin and Copper tube		Cross Fin and Copper tube		Cross Fin and Copper tube		
Defrosting method		Reversed refrigerant circuit		Reversed refrigerant circuit		Reversed refrigerant circuit		
Optional parts		Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E		Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E		Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E		

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