

PUMY+ecodan

Air-to-Air and Air-to-Water hybrid multi split system

1 unit, 2 roles – Total comfort year-round

Air conditioning and hot water supply matching the needs of each room

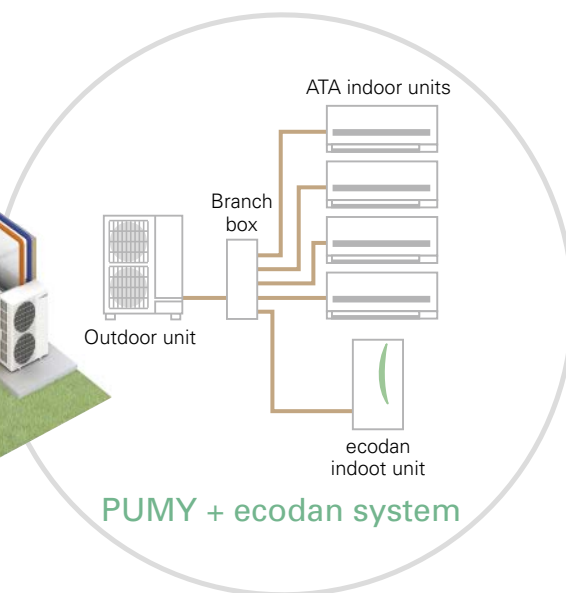
All-in-one outdoor unit (air conditioning, domestic hot water supply and hot water heating)

PUMY for Air-to-Air

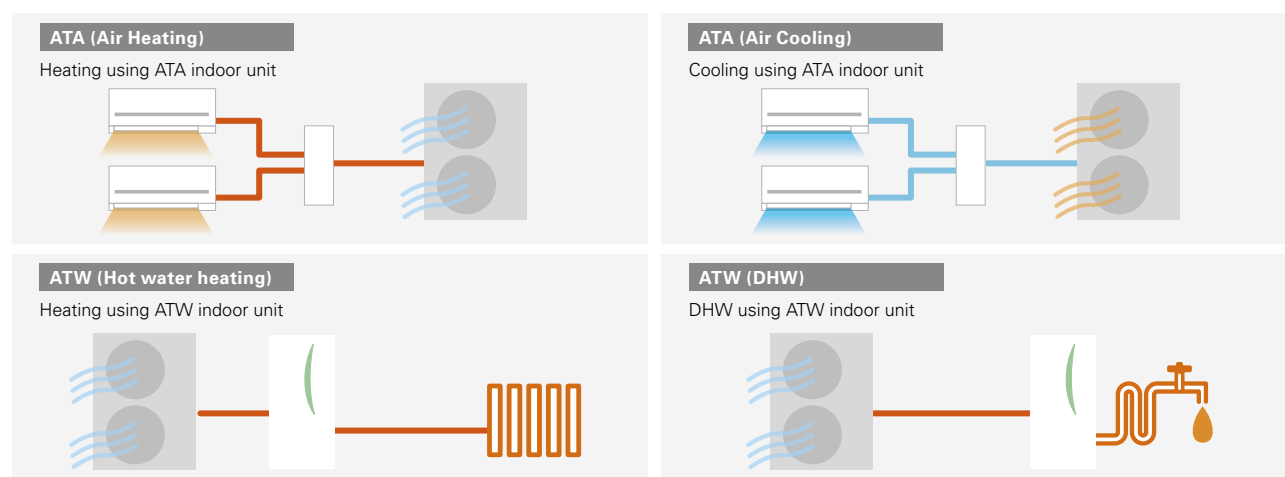
PUMY utilises various indoor units, enabling the air conditioning or heating of multiple rooms, and controls each unit individually.

ecodan for Air-to-Water

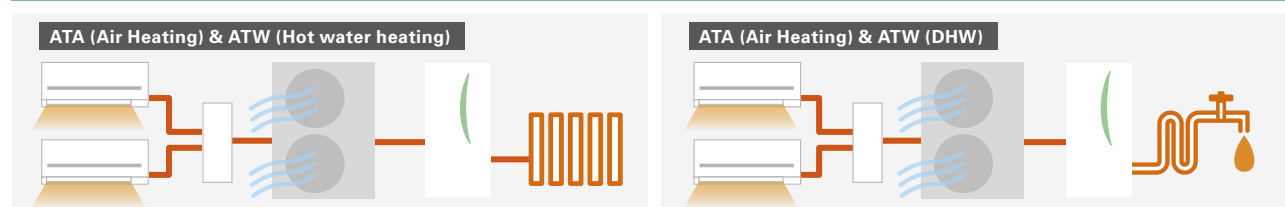
- ✓Domestic hot water (DHW) supply
- ✓Heating for multiple rooms



Main operation patterns



Optional operation patterns* (simultaneous)

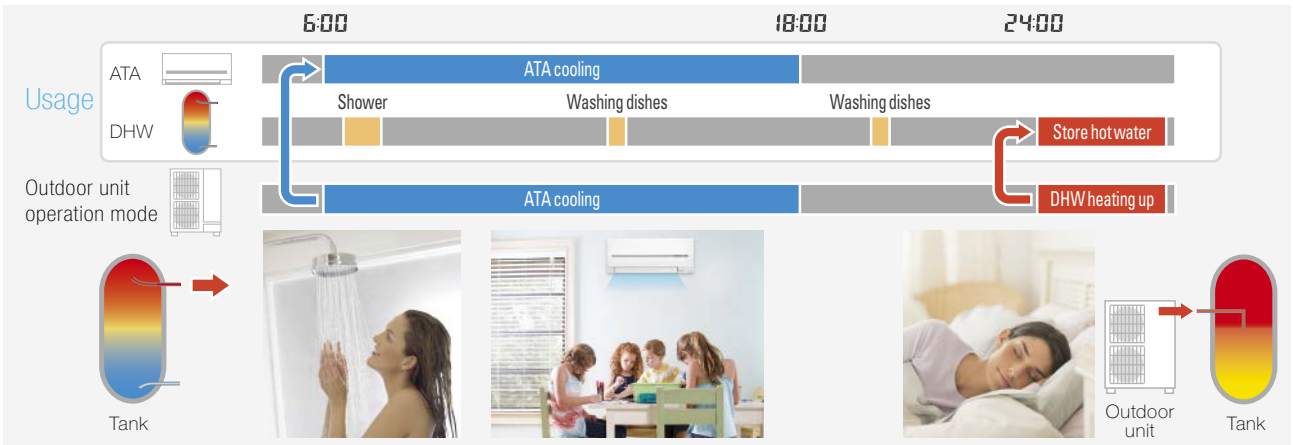


*When using optional simultaneous operation, there are some restrictions, such as connectable indoor units, operation range and DHW flow temp.

Usage pattern All-in-one system solution

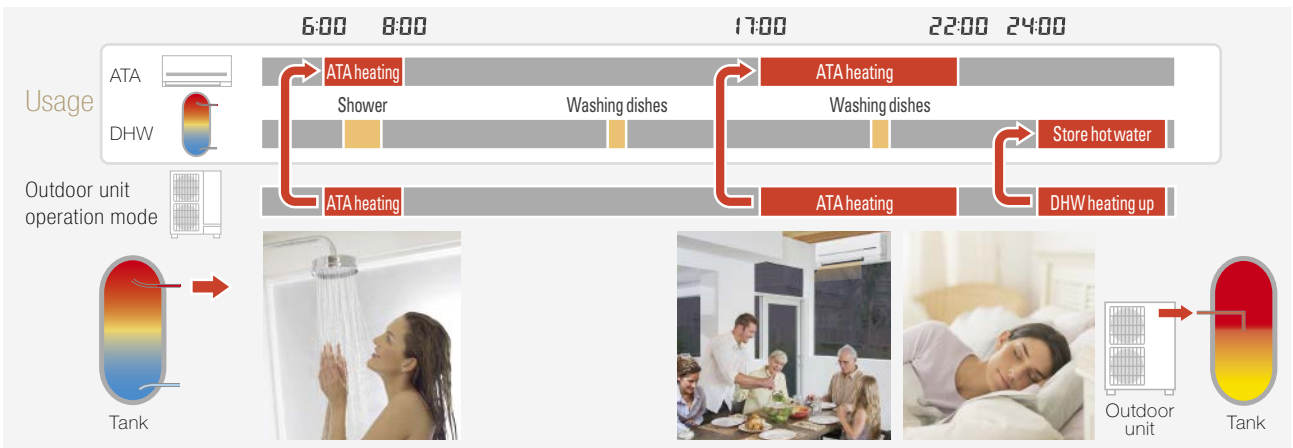
Summer 2-in-1 operation

In summer ATA cooling and DHW are utilized. Keep your room comfortable with ATA cooling during high temperature daytime. Heat pump operates to heat up water stored in the DHW tank when ATA is not operated. The hot water can be utilized for shower and washing dishes during daytime.



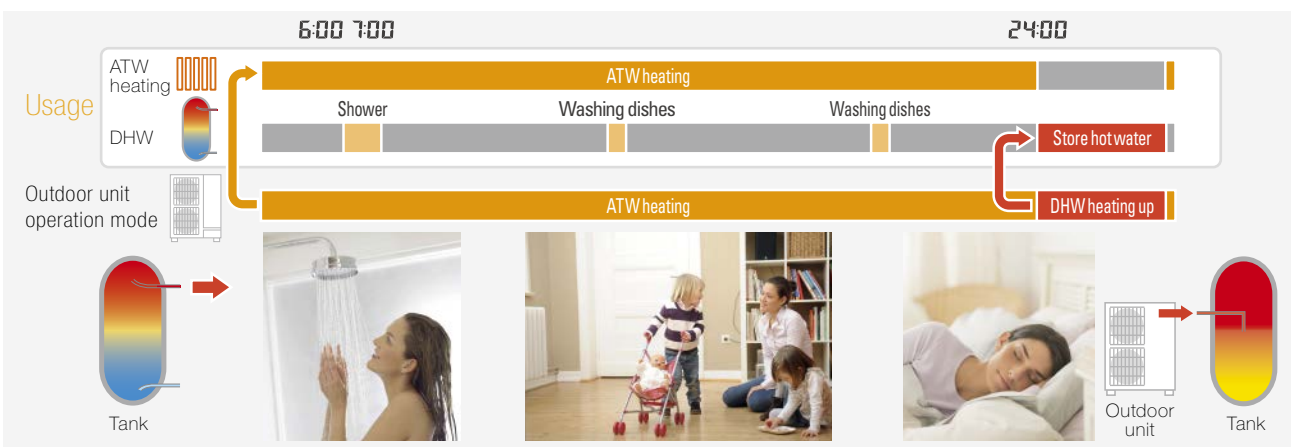
Spring & Autumn 2-in-1 operation

In spring and autumn, ATA heating and DHW are utilized. ATA heating can warm up each room quickly during the low temperature morning and evening. Heat pump operates to heat up water stored in the DHW tank when ATA is not operated. The hot water can be utilized for shower and washing dishes during daytime.



Winter ecodan

In winter ATW heating and DHW are utilized. ATW heating warms home all the day in severe cold weather. ATW heating stops temporarily only when the heat pump operates to heat up water stored in the DHW tank.



Model name				PUMY-P112VKM4(-BS)	PUMY-P125VKM4(-BS)	PUMY-P140VKM4(-BS)	PUMY-P112YKM(E)4(-BS)	PUMY-P125YKM(E)4(-BS)	PUMY-P140YKM(E)4(-BS)	
Power supply				1-phase 220 - 230 - 240V, 50Hz			3-phase 380 - 400 - 415V, 50Hz			
Air-to-Air (ATA)	Cooling (nominal)*1	Capacity	kW	12.5	14.0	15.5	12.5	14.0	15.5	
		Power input	kW	2.79	3.46	4.52	2.79	3.46	4.52	
		EER		4.48	4.05	3.43	4.48	4.05	3.43	
	Temp. range of cooling	Indoor temp.	W.B.	15 - 24°C						
		Outdoor temp.*2	D.B.	-5 - 52°C						
	Heating (nominal)*1	Capacity	kW	14.0	16.0	18.0	14.0	16.0	18.0	
		Power input	kW	3.04	3.74	4.47	3.04	3.74	4.47	
		COP		4.61	4.28	4.03	4.61	4.28	4.03	
Temp. range of heating	Indoor temp.	W.B.	15 - 27°C							
	Outdoor temp.	D.B.	-20 - 15°C							
Air-to-Water (ATW)	Nominal flow rate (for heating)			L/min	35.8					
	Heating*3	A7W35	Capacity	kW	12.5					
			Power input	kW	3.06					
			COP		4.08					
	A2W35	Capacity	kW	10.0						
		Power input	kW	3.50						
		COP		2.86						
	Guaranteed operating range	ATW	Heating	D.B.	-20 - +21°C					
			DHW	D.B.	-20 - +35°C					
			ATA heating + DHW	D.B.	7 - +21°C					
	ATA + ATW	ATA heating + ATW heating *4	D.B.	-10 - +21°C						
		Maximum Outlet water temp.			°C	55				
Outdoor unit	Indoor unit connectable	ATA only	Total capacity		50 to 130% of outdoor unit capacity					
			Model/Quantity	Branch box system	15-100/8	15-100/8	15-100/8	15-100/8	15-100/8	15-100/8
				Mixed system*12	15-140*5/10	15-140*5/10*6	15-140*5/10*6	15-140*5/10	15-140*5/10*6	15-140*5/10*6
	ATA + ATW individual operation	Model/Quantity (including ATW)	Total capacity		ATA : Max 130% of outdoor unit capacity + ATW (EHST20C or EHSC) *7					
			Branch box system	15-100/8	15-100/8	15-100/8	15-100/8	15-100/8	15-100/8	
			Mixed system*12	15-140*5/10	15-140*5/10*6	15-140*5/10*6	15-140*5/10	15-140*5/10*6	15-140*5/10*6	
	ATA + ATW simultaneous operation	Model/Quantity	Total capacity		Max 100% of outdoor unit capacity : ATA + ATW (EHST20C or EHSC) *7					
			ATA*12	15/1*8	15-25/2*9	15-42*11/3*10	15/1*8	15-25/2*9	15-42*11/3*10	
			ATW	ATW (EHST20C or EHSC) / 1						
	Sound pressure level (measured in anechoic room)			dB<A>	49 / 51	50 / 52	51 / 53	49 / 51	50 / 52	51 / 53
	Sound power level (measured in anechoic room)			dB<A>	69 / 71	70 / 72	71 / 73	69 / 71	70 / 72	71 / 73
	Refrigerant piping diameter			Liquid pipe	9.52 flare					
				Gas pipe	15.88 flare					
	Fan	Type x Quantity		Propeller fan x 2						
		Airflow rate		m³/min	110					
		L/s	1,883							
		cfm	3,884							
Compressor	Motor output		0.074 + 0.074							
	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	1,338 x 1,050 x 330 (+40)						
Weight			kg	122			YKM: 125 / YKME: 136			

*1

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

*2 10 to 52°C D.B.: When connecting PKFY-P15/20/25VBM, PFFY-P20/25/32VKM, PFFY-P20/25/32VLE(R)M, PEFY-P*VMA3 or M, S and P series indoor unit.

*3 In the case of ATW single connection. Input to circulation pump is not included.

*4 In the case of simultaneous operation of ATA heating and ATW heating, target flow temperature range is restricted to 45-55°C and when the ambient temp is under 7°C, the flow temp is lowered.

*5 Up to P100 when connecting via branch box.

*6 Up to 11 units when connecting via 2 branch boxes.

*7 Only one ecodan unit can be connected.

*8 Exceptionally, one MSZ-SF15VA or MSZ-AP15VF can be connected.

*9 Exceptionally, two MSZ-SF15VA or MSZ-AP15VF can be connected.

*10 Exceptionally, three MSZ-SF15VA or MSZ-AP15VF can be connected.

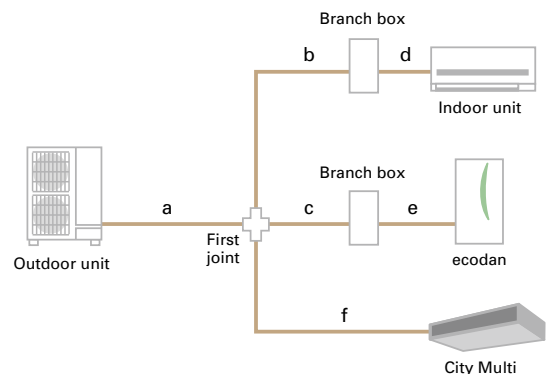
*11 In the case of City Multi connection, maximum is P32.

*12 PKFY and PFFY series are not connectable.

Piping specifications

Total piping length	m	150*	a+b+c+d+e+f
Farthest piping length	m	80	a+b+d or a+c+e
		85	a+f
Total piping length between outdoor unit and branch box	m	55	a+b+c
Total piping length between branch boxes and indoor units	m	95	d+e
Farthest piping length from the first joint	m	30	b or c or f
Farthest piping length after branch box	m	25	d or e
Height difference (Outdoor upside / Outdoor downside)	m	50 / 40	

*When an ecodan is connected, the maximum piping length is 150m.



PUMY+ ecodan compatibility table

ATW branch box connection compatibility table

Series	Type	Model name	Compatibility	Type	Model name	Compatibility	Type	Model name	Compatibility
ATW	Cylinder unit	EHST20C-VM2/6C	●	Hydro box	EHSC-VM2(E)C	●	Branch box	PAC-MK53BC	●
		EHST20C-YM9C	●		EHSC-VM6(E)C	●		PAC-MK33BC	●
		EHST20C-TM9C	●		EHSC-YM9(E)C	●		PAC-MK53BCB	●
		EHST20C-VM2/6EC	●		EHSC-TM9C	●		PAC-MK33BCB	●
		EHST20C-YM9EC	●						
		EHST20C-MHCW	●						

Branch box connection compatibility table

Series	Type	Model name	Compatibility											
			15	18	20	22	25	35	42	50	60	71	100	
M series	Wall-mounted	MSZ-LN•VG					●	●						
		MSZ-AP•VF/VG	●		●		●	●	●	●				
		MSZ-FH•VE2					●	●		●				
		MSZ-EF•VE3		●		●	●	●	●	●				
		MSZ-SF•VA	●		●									
		MSZ-SF•VE3					●	●	●	●				
	MSZ-GF•VE2										●	●		
	Floor-standing	MFZ-KJ•VE2					●	●		●				
	1-way cassette	MLZ-KP•VF					●	●		●				
S series	Ceiling-concealed	SEZ-M•DA(L)					●	●		●	●	●		
	2x2 cassette	SLZ-M•FA					●	●		●				
P series	Ceiling-suspended	PCA-M•KA						●		●	●	●	●	
	4-way cassette	PLA-RP•EA						●		●	●	●	●	
	Ceiling-concealed	PEAD-M•JA(L)								●	●	●	●	

LEV kit connection compatibility table

Series	I/U type	Model name	Compatibility										
			15	18	20	22	25	35	42	50	60	71	
M series	Wall-mounted	MSZ-LN•VG											
		MSZ-AP•VF/VG											
		MSZ-FH•VE2					●	●		●			
		MSZ-EF•VE3		●		●	●	●	●	●			
		MSZ-SF•VA	●		●								
	MSZ-SF•VE3					●	●	●	●				
	Floor-standing	MFZ-KJ•VE2					●	●		●			

Connectable indoor unit capacity

For individual operation ATA+ATW (no simultaneous operation) ATA: Max 130% of outdoor unit capacity + ATW (EHST20C or EHSC)

Outdoor capacity 12.5kW	ATA capacity Max. 1.3kW	ATA capacity Max. 1.3kW	ATA capacity Max. 1.3kW
ATW indoor unit (Cylinder or Hydro box) 11.2kW	ATA capacity Max. 1.3kW	ATA capacity Max. 1.3kW	ATA capacity Max. 1.3kW
Connectable ATA indoor unit total capacity: Max.16.2kW (130%)			
Outdoor capacity 14.0kW	ATA capacity Max. 1.3kW	ATA capacity Max. 1.3kW	ATA capacity Max. 1.3kW
ATW indoor unit (Cylinder or Hydro box) 11.2kW	ATA capacity Max. 1.3kW	ATA capacity Max. 1.3kW	ATA capacity Max. 1.3kW
Connectable ATA indoor unit total capacity: Max.18.2kW (130%)			
Outdoor capacity 15.5kW	ATA capacity Max. 1.3kW	ATA capacity Max. 1.3kW	ATA capacity Max. 1.3kW
ATW indoor unit (Cylinder or Hydro box) 11.2kW	ATA capacity Max. 1.3kW	ATA capacity Max. 1.3kW	ATA capacity Max. 1.3kW
Connectable ATA indoor unit total capacity: Max.20.2kW (130%)			

For simultaneous operation of ATA+ATW Max 100% of outdoor unit capacity: ATA + ATW (EHST20C or EHSC)

Outdoor capacity 12.5kW	ATA capacity Max. 1.3kW	ATA capacity Max. 1.3kW	ATA capacity Max. 1.3kW
ATW indoor unit (Cylinder or Hydro box) 11.2kW	ATA capacity Max. 1.3kW	ATA capacity Max. 1.3kW	ATA capacity Max. 1.3kW
*Exceptionally, one MSZ-SF15VA or MSZ-AP15VF can be connected.			
Outdoor capacity 14.0kW	ATA capacity Max. 1.3kW	ATA capacity Max. 1.3kW	ATA capacity Max. 1.3kW
ATW indoor unit (Cylinder or Hydro box) 11.2kW	ATA capacity Max. 1.3kW	ATA capacity Max. 1.3kW	ATA capacity Max. 1.3kW
*Exceptionally, two units of MSZ-SF15VA or MSZ-AP15VF can be connected.			
Outdoor capacity 15.5kW	ATA capacity Max. 1.3kW	ATA capacity Max. 1.3kW	ATA capacity Max. 1.3kW
ATW indoor unit (Cylinder or Hydro box) 11.2kW	ATA capacity Max. 1.3kW	ATA capacity Max. 1.3kW	ATA capacity Max. 1.3kW
*Exceptionally, three units of MSZ-SF15VA or MSZ-AP15VF can be connected.			

MELCloud (Wi-Fi interface) for ecodan

MELCloud for fast, easy remote control and monitoring of your ecodan

MELCloud is a new Cloud-based solution for controlling ecodan either locally or remotely by computer, tablet or smartphone via the Internet. Setting up and remotely operating your ecodan heating system via MELCloud is simple and straight forward. All you need is wireless computer connectivity in your home or the building where the ecodan is installed and an Internet connection on your mobile or fixed terminal. To set up the system, the router and the ecodan WiFi interface must be paired, and this is done simply and quickly using the WPS button found on all mainstream routers.

You can control and check ecodan via MELCloud from virtually anywhere an Internet connection is available. That means, thanks to MELCloud, you can use ecodan much more easily and conveniently.



* MELCloud uses the MAC-567IF-E interface

Key control and monitoring features

- 1 Turn system on/off
- 2 See status of each of your heating zones & adjust set points
- 3 See the status of your hot water cylinder & boost remotely
- 4 Live weather feed from ecodan location
 - Holiday mode - Set system parameters while away
 - Schedule timer - Set 7 day weekly schedule
 - Frost protection - Set system to run at minimum temperature
 - Error status
- 5 Check energy usage report* *Additional metering hardware is required.

