PUMY+ecodan

Air-to-Air and Air-to-Water Hybrid Multi Split System

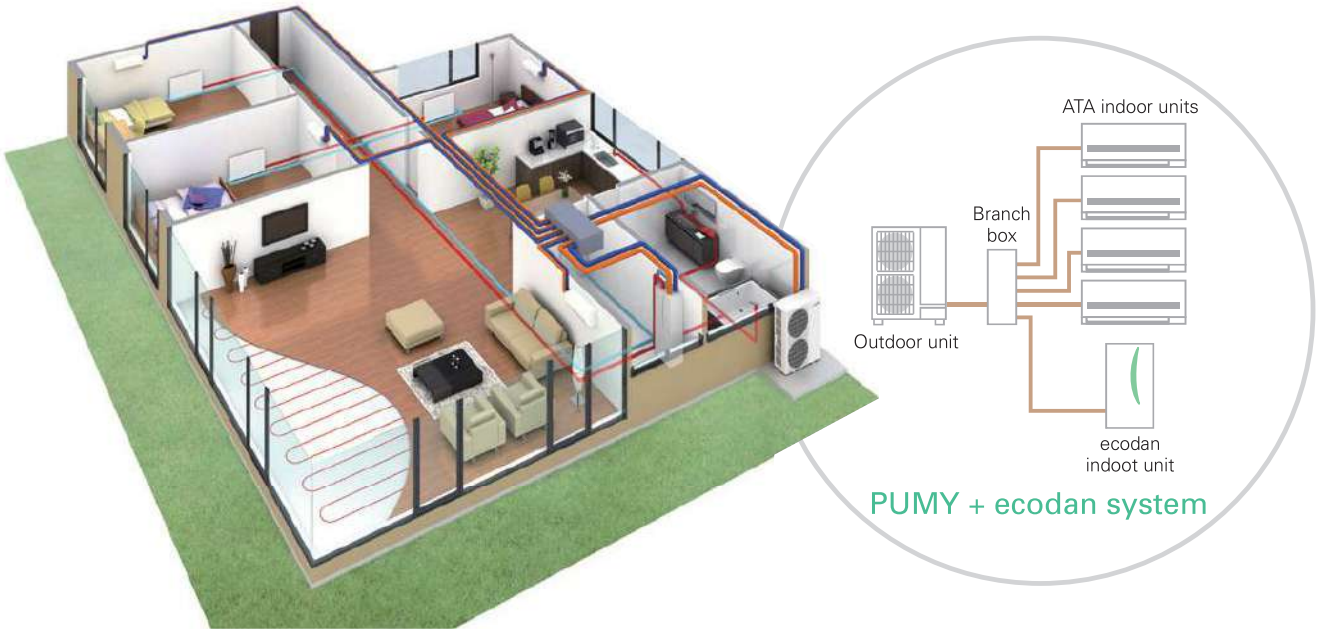
1 Unit, 2 Roles – Total Comfort Year-round

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)

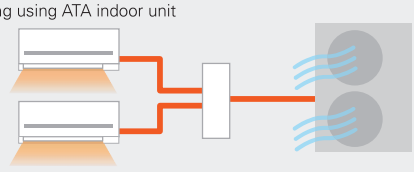
PUMY for Air-to-Air
PUMY utilises various indoor units, enabling the air conditioning or heating of multiple rooms, and controls each unit individually.

ecodan for Air-to-Water
✓Domestic hot water (DHW) supply
✓Heating for multiple rooms

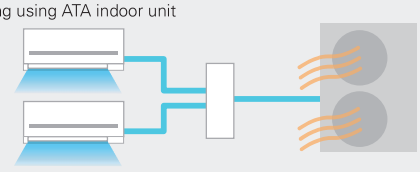


Main Operation Patterns

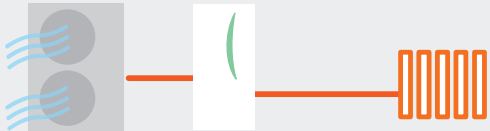
ATA (Air Heating)
Heating using ATA indoor unit



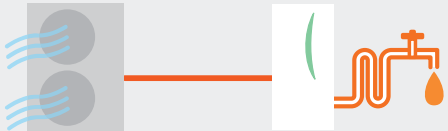
ATA (Air Cooling)
Cooling using ATA indoor unit



ATW (Hot water heating)
Heating using ATW indoor unit



ATW (DHW)
DHW using ATW indoor unit



Optional Operation Patterns* (simultaneous)

ATA (Air Heating) & ATW (Hot water heating)

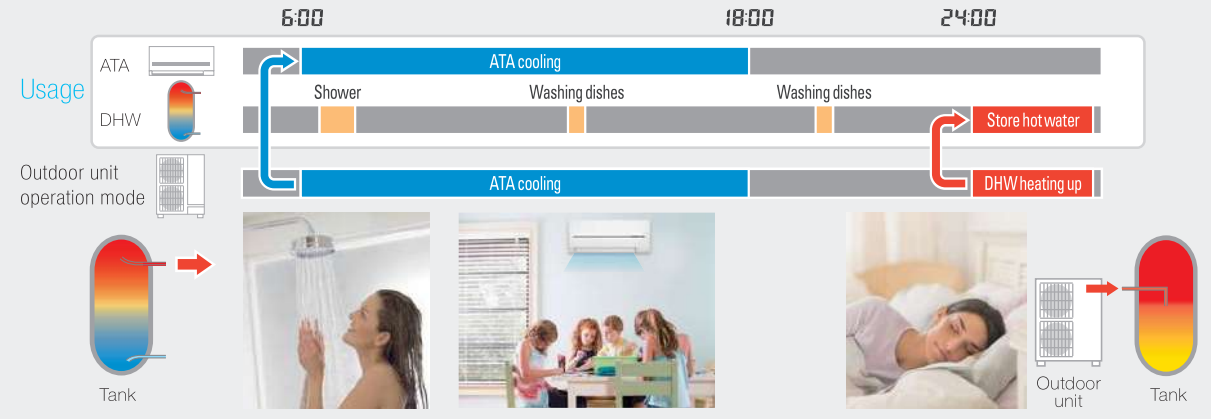
ATA (Air Heating) & ATW (DHW)

*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 utilised. 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 utilised for shower and washing dishes during daytime.

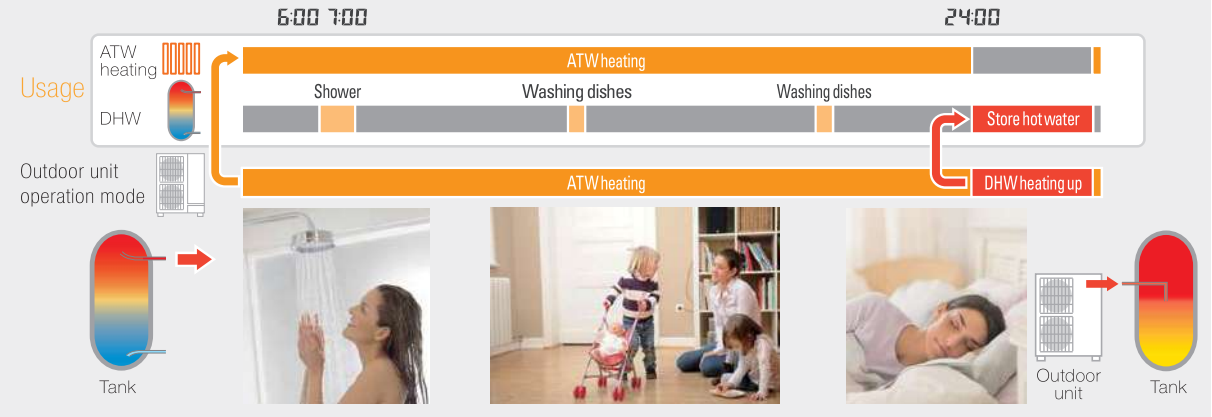


Spring & Autumn 2-in-1 Operation

In spring and autumn, ATA heating and DHW are utilised. 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 utilised for shower and washing dishes during daytime.

Winter ecodan

In winter ATW heating and DHW are utilised. 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.



PUMY+ecodan

Model name						PUMY-P112VKM5(-BS)	PUMY-P125VKM5(-BS)	PUMY-P140VKM5(-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 + ATW	ATA heating + DHW		D.B.	7 - +21°C					
			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	Total capacity			ATA : Max 130% of outdoor unit capacity + ATW (EHST20C or EHSC) *7					
			Model/Quantity (including ATW)	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	Total capacity			Max 100% of outdoor unit capacity : ATA + ATW (EHST20C or EHSC) *7					
			Model/Quantity	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	mm	9.52 flare					
				Gas pipe	mm	15.88 flare					
	Fan	Type × Quantity				Propeller fan × 2					
		Airflow rate			m^3/min	110					
					L/s	1,883					
					cfm	3,884					
		Motor output			kW	0.074 + 0.074					
	Compressor	Type × Quantity				Scroll hermetic compressor × 1					
		Starting method				Inverter					
		Motor output			kW	2.9	3.5	3.9	2.9	3.5	3.9
	External dimensions (H × W × D)				mm	1,338 × 1,050 × 330 (+40)					
	Weight				kg	122			YKM: 125 / YKME: 136		

*1

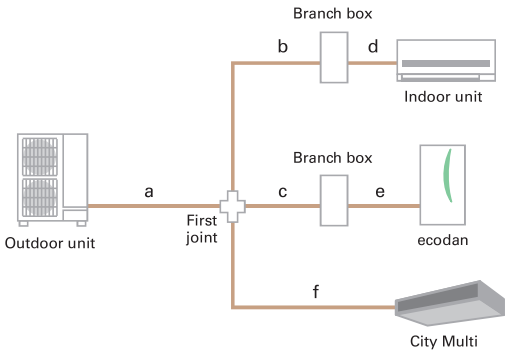
	Indoor	Outdoor	Piping length	Level difference
Cooling	27°C DB / 19°C WB	35°C DB	7.5m	0m
Heating	20°C DB	7°C DB / 6°C WB	7.5m	0m

*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, maxmum 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 betwen 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-VM2/6D	●	Hydro box	EHSC-VM2/6D	●	Branch box	PAC-MK53BC	●
		EHST20C-YM9D	●		EHSC-YM9D	●		PAC-MK33BC	●

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	
ATW indoor unit (Cylinder or Hydro box) 11.2kW	Connectable ATA indoor unit total capacity: Max.16.2kW (130%)

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

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

Outdoor capacity 14.0kW		
ATW indoor unit (Cylinder or Hydro box) 11.2kW	ATA capacity Max. 2.8kW	*Exceptionally, two units of MSZ-SF15VA or MSZ-AP15VF can be connected.

Outdoor capacity 15.5kW		
ATW indoor unit (Cylinder or Hydro box) 11.2kW	ATA capacity Max. 4.3kW	*Exceptionally, three units of MSZ-SF15VA or MSZ-AP15VF can be connected.

Split Type Specifications

Indoor unit

<Cylinder unit (Heating only)>

				Small capacity			
Model name				EHST17D-VM2D	EHST20D-VM2D	EHST20D-YM9D	EHST30D-YM9ED
		Type		Heating only			
		Expansion vessel		✓	✓	✓	–
		Booster heater (2/6/9 kW)		✓	✓	✓	✓
Dimensions		HxWxD	mm	1400x595x680	1600x595x680		2050x595x680
Weight (empty)			kg	93	99	102	117
Control Board Power supply (Phase / V / Hz)				~ /N,230V, 50Hz	~ /N,230V, 50Hz	~ /N,230V, 50Hz	~ /N,230V, 50Hz
Heater	Booster heater	Power supply (Phase / V / Hz)		~ /N,230V, 50Hz	~ /N,230V, 50Hz	3 ~ ,400V, 50Hz	3 ~ ,400V, 50Hz
		Capacity	kW	2	2	3+6	3+6
		Current	A	9	9	13	13
		Breaker size	A	16	16	16	16
Domestic hot water tank	Volume / Material		L / -	170 / Stainless steel	200 / Stainless steel		300 / Stainless steel
Guranteed operating range *1	Ambient		°C	0 - 35 (≦80%RH)			
	Outdoor	Heating	°C	See outdoor unit spec table			
		Cooling	°C	–			
Target temperature range	Heating	Room temperature	°C	10 - 30			
		Flow temperature	°C	20 - 60			
	Coolimg	Room temperature	°C	–			
		Flow temperature	°C	–			
DHW tank performance		Max. hot water temperature	°C	70			
		Water heater energy efficiency class		A^+			A - A^+
Sound pressure level (PWL)			dB (A)	41			

*1 The indoor environment must be frost-free
*2 For the model without booster heater and immersion heater, the maximum allowable hot water temperature is 3℃ lower than maximum outlet water of outdoor unit.
For the maximum outlet water of outdoor unit, refer to outdoor unit data book.

<Cylinder unit (Heating only)>

				Medium capacity				
Model name				EHST20C-VM2D	EHST20C-VM6D	EHST20C-YM9D	EHST30C-VM6ED	EHST30C-YM9ED
		Type		Heating only				
		Expansion vessel		✓	✓	✓	–	–
		Booster heater (2/6/9 kW)		✓	✓	✓	✓	✓
Dimensions		HxWxD	mm	1600x595x680			2050x595x680	
Weight (empty)			kg	110	110	112	122	124
Control Board Power supply (Phase / V / Hz)				~ /N,230V, 50Hz	~ /N,230V, 50Hz	~ /N,230V, 50Hz	~ /N,230V, 50Hz	~ /N,230V, 50Hz
Heater	Booster heater	Power supply (Phase / V / Hz)		~ /N,230V, 50Hz	~ /N,230V, 50Hz	3 ~ ,400V, 50Hz	~ /N,230V, 50Hz	3 ~ ,400V, 50Hz
		Capacity	kW	2	2+4	3+6	2+4	3+6
		Current	A	9	26	13	26	13
		Breaker size	A	16	32	16	32	16
Domestic hot water tank	Volume / Material		L / -	200 / Stainless steel			300 / Stainless steel	
Guranteed operating range *1	Ambient		°C	0 - 35 (≦80%RH)				
	Outdoor	Heating	°C	See outdoor unit spec table				
		Cooling	°C	–				
Target temperature range	Heating	Room temperature	°C	10 - 30				
		Flow temperature	°C	20 - 60				
	Coolimg	Room temperature	°C	–				
		Flow temperature	°C	–				
DHW tank performance		Max. hot water temperature	°C	70				
		Water heater energy efficiency class		A^+			A	
Sound pressure level (PWL)			dB (A)	40				

*1 The indoor environment must be frost-free
*2 For the model without booster heater and immersion heater, the maximum allowable hot water temperature is 3℃ lower than maximum outlet water of outdoor unit.
For the maximum outlet water of outdoor unit, refer to outdoor unit data book.

<Hydro box (Heating only)>

				Small capacity		Medium capacity			Large capacity
Model name				EHSD-VM2D	EHSD-YM9D	EHSC-VM2D	EHSC-VM6D	EHSC-YM9D	EHSE-YM9ED
		Type		Heating only					
		Expansion vessel		✓	✓	✓	✓	✓	–
		Booster heater (2/6/9 kW)		✓	✓	✓	✓	✓	✓
Dimensions		HxWxD	mm	800x530x360					950x600x360
Weight (empty)			kg	43	44	47	48	48	63
Control Board Power supply (Phase / V / Hz)				~ /N,230V, 50Hz	~ /N,230V, 50Hz	~ /N,230V, 50Hz	~ /N,230V, 50Hz	~ /N,230V, 50Hz	~ /N,230V, 50Hz
Heater	Booster heater	Power supply (V / Phase / Hz)		~ /N,230V, 50Hz	3 ~ ,400V, 50Hz	~ /N,230V, 50Hz	~ /N,230V, 50Hz	3 ~ ,400V, 50Hz	3 ~ ,400V, 50Hz
		Capacity	kW	2	3+6	2	2+4	3+6	3+6
		Current	A	9	13	9	26	13	13
		Breaker size	A	16	16	16	32	16	16
Guranteed operating range *1	Ambient		L / -	0 - 35 (≦80%RH)					
	Outdoor	Heating	°C	See outdoor unit spec table					
		Cooling	°C	–					
Target temperature range	Heating	Room temperature	°C	10 - 30					
		Flow temperature	°C	20 - 60					
	Coolimg	Room temperature	°C	–					
		Flow temperature	°C	–					
Sound pressure level (PWL)			dB (A)	41		40			45

*1 The indoor environment must be frost-free.

Split Type Specifications

Indoor unit

<Cylinder unit (Reversible)>				Small capacity		
Model name				ERST17D-VM2D	ERST20D-VM2D	ERST30D-VM2ED
		Type		Heating and Cooling		
		Expansion vessel		✓	✓	
		Booster heater (2/6/9 kW)		✓	✓	✓
Dimensions		HxWxD	mm	1400x595x680	1600x595x680	2050x595x680
Weight (empty)			kg	94	100	115
Control Board Power supply (Phase / V / Hz)				~/N, 230V, 50Hz	~/N, 230V, 50Hz	~/N, 230V, 50Hz
Heater	Booster heater	Power supply (V / Phase / Hz)		~/N, 230V, 50Hz	~/N, 230V, 50Hz	~/N, 230V, 50Hz
		Capacity	kW	2	2	2
		Current	A	9	9	9
		Breaker size	A	16	16	16
Domestic hot water tank	Volume / Material		L / -	170 / Stainless steel	200 / Stainless steel	300 / Stainless steel
Guranteed operating range *1	Ambient		°C	0 - 35 (≦80%RH)		
	Outdoor	Heating	°C	See outdoor unit spec table		
		Cooling	°C	See outdoor unit spec table *2		
Target temperature range	Heating	Room temperature	°C	10 - 30		
		Flow temperature	°C	20 - 60		
	Coolimg	Room temperature	°C	–		
		Flow temperature	°C	5 - 25		
DHW tank performance		Max. hot water temperature	°C	70		
		Water heater energy efficiency class		A^+		A - A^+
Sound pressure level (PWL)			dB (A)	41		

*1 The indoor environment must be frost-free.
*2 During cooling operation at low outdoor temperature (10°C or lower), frozen water may cause damage on plate heat exchanger.

<Cylinder unit (Reversible)>				Medium capacity	
Model name				ERST20C-VM2D	ERST30C-VM2ED
		Type		Heating and Cooling	
		Expansion vessel		✓	
		Booster heater (2/6/9 kW)		✓	✓
Dimensions		HxWxD	mm	1600x595x680	2050x595x680
Weight (empty)			kg	110	122
Control Board Power supply (Phase / V / Hz)				~/N, 230V, 50Hz	~/N, 230V, 50Hz
Heater	Booster heater	Power supply (V / Phase / Hz)		~/N, 230V, 50Hz	~/N, 230V, 50Hz
		Capacity	kW	2	2
		Current	A	9	9
		Breaker size	A	16	16
Domestic hot water tank	Volume / Material		L / -	200 / Stainless steel	300 / Stainless steel
Guranteed operating range *1	Ambient		°C	0 - 35 (≦80%RH)	
	Outdoor	Heating	°C	See outdoor unit spec table	
		Cooling	°C	See outdoor unit spec table *2	
Target temperature range	Heating	Room temperature	°C	10 - 30	
		Flow temperature	°C	20 - 60	
	Coolimg	Room temperature	°C	–	
		Flow temperature	°C	5 - 25	
DHW tank performance		Max. hot water temperature	°C	70	
		Water heater energy efficiency class		A^+	A
Sound pressure level (PWL)			dB (A)	40	

*1 The indoor environment must be frost-free.
*2 During cooling operation at low outdoor temperature (10°C or lower), frozen water may cause damage on plate heat exchanger.

<Hydro box (Reversible)>				Small capacity	Medium capacity	Large capacity	
Model name				ERSD-VM2D	ERSC-VM2D	ERSE-MED	ERSE-YM9ED
		Type		Heating and Cooling			
		Expansion vessel		✓	✓	–	–
		Booster heater (2/6/9 kW)		✓	✓	–	✓
Dimensions		HxWxD	mm	800x530x360		950x600x360	
Weight (empty)			kg	44	48	62	64
Control Board Power supply (Phase / V / Hz)				~/N, 230V, 50Hz	~/N, 230V, 50Hz	~/N, 230V, 50Hz	~/N, 230V, 50Hz
Heater	Booster heater	Power supply (V / Phase / Hz)		~/N, 230V, 50Hz	~/N, 230V, 50Hz	–	3~, 400V, 50Hz
		Capacity	kW	2	2	–	3+6
		Current	A	9	9	–	13
		Breaker size	A	16	16	–	16
Guranteed operating range *1	Ambient		°C	0 - 35 (≦80%RH)			
	Outdoor	Heating	°C	See outdoor unit spec table			
		Cooling	°C	See outdoor unit spec table *2			
Target temperature range	Heating	Room temperature	°C	10 - 30			
		Flow temperature	°C	20 - 60			
	Coolimg	Room temperature	°C	–			
		Flow temperature	°C	5 - 25			
Sound pressure level (PWL)			dB (A)	41	40	45	

*1 The indoor environment must be frost-free
*2 If you use our system in cooling mode at the low ambient temperature (10°C or below), there are some risks of plate heat exchanger breaking by frozen water.

R32

Split Type Specifications

Outdoor unit

					NEW	NEW	NEW	NEW	NEW	NEW	NEW	NEW
					Eco Inverter							
					Standard model				Hyper Heating model		Standard with base heater model	
Model name					SUZ-SWM40VA2	SUZ-SWM60VA2	SUZ-SWM80VA2	SUZ-SWM100VA	SUZ-SHWM40VAH	SUZ-SHWM60VAH	SUZ-SWM80VAH2	SUZ-SWM100VAH
Refrigerant					R32*1							
Dimensions		HxWxD		mm	714x800x285	714x800x285	880x840x330	880x840x330	714x800x285	880x840x330	880x840x330	880x840x330
Weight				kg	39	40	53	53	40	53.5	53.5	53.5
Power supply (V / Phase / Hz)					230 / 1-ph / 50							
Heating	A7W35*2	Nominal		kW	3.0	5.0	6.0	7.5	3.0	5.0	6.0	7.5
		COP			5.11	4.85	5.10	4.85	4.77	4.95	5.10	4.85
	A2W35*2	Nominal		kW	4.0	6.0	7.5	9.0	4.0	6.0	7.5	9.0
		COP			3.90	3.62	3.50	3.12	3.61	3.47	3.31	3.00
Average climate water outlet 35°C*3		Class			A^{+++}	A^{+++}	A^{+++}	A^{+++}	A^{+++}	A^{+++}	A^{+++}	A^{+++}
		ηS			200%	189%	187%	182%	176%	178%	178%	177%
Average climate water outlet 55°C*3		Class			A^{++}	A^{++}	A^{++}	A^{++}	A^{++}	A^{++}	A^{++}	A^{++}
		ηS			135%	136%	135%	134%	126%	128%	130%	129%
DHW 200L Load Profile*4		Class			A^{+}	A^{+}	A^{+}	A^{+}	A^{+}	A^{+}	A^{+}	A^{+}
		ηwh			147%	142%	144%	144%	142%	144%	144%	144%
Max outlet water temperature				°C	60	60	60	60	60	60	60	60
Cooling	A35W7*2	Nominal		kW	4.5	5.0	6.7	7.3	4.5	6.0	6.7	7.3
		EER			3.31	3.18	3.20	3.00	3.33	3.28	3.20	3.00
	A35W18*2	Nominal		kW	5.6	6.0	6.7	8.1	5.6	6.0	6.7	8.1
		EER			4.71	4.65	5.06	4.44	4.70	5.21	5.06	4.44
PWL (Heating)*5				dB(A)	57	60	60	62	58	60	60	62
Max operating current				A	13.5	13.5	17.3	17.3	13.5	17.3	17.3	17.3
Breaker size				A	16	16	20/16*6	20/16*6	16	20/16*6	20/16*6	20/16*6
Piping	Diameter	Liquid/Gas		mm	6.35/12.7	6.35/12.7	6.35/12.7	6.35/12.7	6.35/12.7	6.35/12.7	6.35/12.7	6.35/12.7
	Length	Out-In		m	2-26	2-26	2-46	2-46	2-26	2-46	2-46	2-46
	Height	Out-In		m	Max. 26	Max. 26	Max. 30	Max. 30	Max. 26	Max. 30	Max. 30	Max. 30
Guaranteed Operating Range	Heating			°C	−25°C~24°C	−25°C~24°C	−25°C~24°C	−25°C~24°C	−25°C~24°C	−25°C~24°C	−25°C~24°C	−25°C~24°C
	DHW			°C	−25°C~35°C	−25°C~35°C	−25°C~35°C	−25°C~35°C	−25°C~35°C	−25°C~35°C	−25°C~35°C	−25°C~35°C
	Cooling			°C	10°C~46°C	10°C~46°C	10°C~46°C	10°C~46°C	10°C~46°C	10°C~46°C	10°C~46°C	10°C~46°C

					Power Inverter, Heating only			ZUBADAN, Heating only			
Model name					PUD-SWM80V/YAA	PUD-SWM100V/YAA	PUD-SWM120V/YAA	PUD-SHWM80V/YAA	PUD-SHWM100V/YAA	PUD-SHWM120V/YAA	PUD-SHWM140V/YAA
Refrigerant					R32*1						
Dimensions		HxWxD		mm	1020x1050x480	1020x1050x480	1020x1050x480	1020x1050x480	1020x1050x480	1020x1050x480	1020x1050x480
Weight				kg	101/114	105/118	105/118	102/115	108/121	108/121	110/122
Power supply (V / Phase / Hz)					VAA: 230 / 1-ph / 50, YAA: 400 / 3-ph / 50						
Heating	A7W35*2	Nominal		kW	6.0	8.0	10.0	6.0	8.0	10.0	12.0
		COP			4.76	5.00	4.70	5.03	5.00	4.80	4.70
	A2W35*2	Nominal		kW	8.0	10.0	12.0	8.0	10.0	12.0	14.0
		COP			3.55	3.30	3.24	3.75	3.45	3.30	3.05
Average climate water outlet 35°C*3		Class			A^{+++}	A^{+++}	A^{+++}	A^{+++}	A^{+++}	A^{+++}	A^{+++}
		ηs			178%/176%	178%/177%	177%/176%	181%/179%	180%/178%	179%/177%	179%/177%
Average climate water outlet 55°C*3		Class			A^{++}	A^{++}	A^{++}	A^{++}	A^{++}	A^{++}	A^{++}
		ηs			131%/130%	131%/130%	129%/128%	135%/134%	136%/135%	135%/134%	134%/134%
DHW 200L(L)/300L(XL) Load Profile (Average climate)*4		Class			A^{+} / A	A^{+} / A	A^{+} / A	A^{+} / A	A^{+} / A	A^{+} / A	A^{+} / A
		ηwh			148%/121%	148%/121%	148%/121%	148%/121%	148%/121%	14%/121%	145%/121%
Max outlet water temperature				°C	60	60	60	60	60	60	60
PWL (Heating)*5				dB(A)	56	59	60	56	59	60	62
Max operating current				A	22/8	26/10	28/12	22/8	26/10	28/12	35/12
Breaker size				A	25/16	30/16	32/16	25/16	30/16	32/16	40/16
Piping	Diameter	Liquid/Gas		mm	6.35/12.7	6.35/12.7	6.35/12.7	6.35/12.7	6.35/12.7	6.35/12.7	6.35/12.7
	Length	Out-In		m	2 - 30	2 - 30	2 - 30	2 - 30	2 - 30	2 - 30	2 - 25
	Height	Out-In		m	Max. 30	Max. 30	Max. 30	Max. 30	Max. 30	Max. 30	Max. 25
Guaranteed Operating Range	Heating			°C	−25°C~24°C	−25°C~24°C	−25°C~24°C	−28°C~24°C	−28°C~24°C	−28°C~24°C	−28°C~24°C
	DHW			°C	−25°C~35°C	−25°C~35°C	−25°C~35°C	−28°C~35°C	−28°C~35°C	−28°C~35°C	−28°C~35°C

*1 Refrigerant leakage contribute to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atomosphere. This appliance contains a refrigerant fluid with a GWP equal to 550. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 550 times higher than 1 kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional. The GWP of R32 is 675 in the IPCC 4th Assessment Report.
*2 Air-to-Water values are measured based on EN14511 (Circulation pump input is not included.). *3 ηs values are measured based on EN14825.
*4 ηwh values are measured based on EN16147. *5 Sound power levels are measured based on EN12102. *6 In case of jumper wire cut.

R32

Split type	Small capacity (Under 5kW)*	Medium capacity (6.0kW–14kW)*
ZUBADAN New Generation		 PUD-SHWM 80/100/120/140  PUZ-SHWM 80/100/120/140
POWER INVERTER		 PUD-SWM 80/100/120  PUZ-SWM 80/100/120/140
Eco Inverter	 SUZ-SWM40VA SUZ-SHWM40VA	 SUZ-SWM60VA  SUZ-SWM80/100VA(H) SUZ-SHWM60VAH

*Rated capacity is at conditions A2W35. (according to EN14511)
*SUZ rated capacity is at conditions A7W35.

R32

Split Type Specifications

				NEW	NEW	NEW	NEW	NEW	NEW	NEW	NEW
				Power Inverter				ZUBADAN			
Model name				PUZ-SWM80V/YAA	PUZ-SWM100V/YAA	PUZ-SWM120V/YAA	PUZ-SWM140V/YAA	PUZ-SHWM80V/YAA	PUZ-SHWM100V/YAA	PUZ-SHWM120V/YAA	PUZ-SHWM140V/YAA
Refrigerant			mm	R32*1							
Dimensions		HxWxD	kg	1040x1050x480							
Weight				104.5/113.5	105.5/113.5	112/124.5	113.5/124.5	106/115	106.5/115	113.5/125.5	114.5/126
Power supply (V / Phase / Hz)			kW	VAA: 230 / 1-ph / 50, YAA: 400 / 3-ph / 50							
Heating	A7W35*2	Nominal		6.00	8.00	10.00	12.00	6.00	8.00	10.00	12.00
		COP	kW	5.00	5.00	4.85	4.75	5.05	5.00	4.85	4.80
	A2W35*2	Nominal		8.00	10.00	12.00	14.00	8.00	10.00	12.00	14.00
		COP		3.65	3.45	3.25	3.24	3.75	3.50	3.30	3.24
Average climate water outlet 35°C*3		Class		A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++
		ηs		184%/183%	180%/180%	178%/178%	177%/177%	187%/187%	185%/185%	181%/181%	184%/184%
Average climate water outlet 55°C*3		Class		A++	A++	A++	A++	A++	A++	A++	A++
		ηs		130%/130%	134%/133%	132%/132%	135%/135%	133%/133%	138%/137%	138%/137%	142%/142%
DHW 200(L) Load Profile (Average climate)*4		Class		A+	A+	A+	A+	A+	A+	A+	A+
		ηwh		134%	134%	134%	123%	134%	134%	134%	123%
Max outlet water temperature			°C	60				60			
Cooling	A35W7*2	Nominal	kW	7.10	9.00	10.00	12.50	7.10	9.00	10.00	12.50
		EER		3.20	2.95	2.85	2.60	3.20	2.95	2.85	2.60
	A35W18*2	Nominal	kW	8.00	10.00	12.00	14.00	8.00	10.00	12.00	14.00
		EER		4.90	4.55	4.30	3.62	4.90	4.55	4.30	3.62
PWL (Heating)*5			dB(A)	54	58	58	58	54	58	58	58
Max operating current			A	17/8	22/9	28/12	28/12	19/8	27/9	28/12	35/12
Breaker size			A	20/16	25/16	32/16	32/16	25/16	30/16	32/16	40/16
Piping	Diameter	Gas	mm	ø12.7 (15.88)*6				ø12.7 (15.88)*6			
		Liquid	mm	6.35				6.35			
	Length	Out-In	m	50	50	30*7	30*7	50	50	30*7	30*7
	Height	Out-In	m	30				30			
Guaranteed operation range	Cooling		°C	10°C~52°C				10°C~52°C			
	Heating		°C	-25°C ~24°C				-30°C~24°C			
	DHW		°C	-25°C ~42°C				-30°C ~42°C			

*1 Refrigerant leakage contribute to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 550. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 550 times higher than 1 kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional. The GWP of R32 is 675 in the IPCC 4th Assessment Report.
*2 Air-to-Water values are measured based on EN14511 (Circulation pump input is not included.).
*3 ηs values are measured based on EN14825.
*4 ηwh values are measured based on EN16147.
*5 Sound power levels are measured based on EN12102.
*6 A diameter of 15.88 is necessary for cooling operation. Please refer to our installation manual for details.
*7 Maximum piping length can be up to 50m for heating only operation.

R410A

Split Type Specifications

Outdoor unit

Model name				Power Inverter				
				PUHZ-SW75V/YAA(-BS)	PUHZ-SW100V/YAA(-BS)	PUHZ-SW120V/YHA(-BS)	PUHZ-SW160YKA(-BS)	PUHZ-SW200YKA(-BS)
Refrigerant				R410A*1				
Dimensions		HxWxD	mm	1020×1050×480	1020×1050×480	1350×950×330	1338×1050×330	1338×1050×330
Weight			kg	92/104	114/126	118/130	136	136
Power supply (V / Phase / Hz)				VAA, VHA: 230 / 1-ph / 50, YAA, YHA, YKA: 400 / 3-ph / 50				
Heating	A7W35*2	Nominal	kW	8.0	11.2	16.0	22.0	25.0
		COP		4.40	4.46	4.10	4.20	4.00
	A2W35*2	Nominal	kW	7.5	10.0	12.0	16.0	20.0
		COP		3.40	3.32	3.24	3.11	2.80
Average climate water outlet 35°C*3		Class		A++	A++	A++	A++	A++
		ηs		162/160	167/165	162/162	161	163
Average climate water outlet 55°C*3		Class		A++	A++	A++	A++	A++
		ηs		129/128	130/129	125/125	125	127
DHW 200L(L)/300L(XL) Load Profile (Average climate)*4		Class		A+ / A	A+ / A	A+ / A	–	–
		ηwh		145/120	145/120	138/118	–	–
Max outlet water temperature (°C)				60	60	60	–	–
Cooling	A35W7*2	Nominal	kW	7.1	10.0	12.5	16.0	20.0
		EER		2.70	2.83	2.32	2.76	2.25
	A35W18*2	Nominal	kW	7.1	10.0	14.0	18.0	22.0
		EER		4.43	4.47	4.08	4.56	4.1
PWL (Heating)*5			dB(A)	58	60	72	78	78
Max operating current			A	22.0/11.5	28.0/12.0	29.5/13.0	19.0	21.0
Breaker size			A	25/16	32/16	32/16	25	32
Piping	Diameter	Liquid/Gas	mm	9.52/15.88	9.52/15.88	9.52/15.88	9.52/25.4	12.7/25.4
	Length	Out-In	m	40	75	75	80	80
	Height	Out-In	m	10	10	30	30	30
Guaranteed Operating Range	Heating		°C	–20°C~21°C	–20°C~21°C	–20°C~21°C	–20°C~21°C	–20°C~21°C
	DHW		°C	–20°C~35°C	–20°C~35°C	–20°C~35°C	–20°C~35°C	–20°C~35°C
	Cooling		°C	–15°C~46°C	–15°C~46°C	–15°C~46°C	–15°C~46°C	–15°C~46°C

Model name				ZUBADAN			
				PUHZ-SHW80V/YAA(-BS)	PUHZ-SHW112V/YAA	PUHZ SHW140YHA	PUHZ-SHW230YKA2
Refrigerant				R410A*1			
Dimensions		HxWxD	mm	1020×1050×480	1020×1050×480	1350×950×330	1338×1050×330
Weight			kg	116/128	116/128	134	143
Power supply (V / Phase / Hz)				VAA, VHA: 230 / 1-ph / 50, YAA, YHA, YKA: 400 / 3-ph / 50			
Heating	A7W35*2	Nominal	kW	8.0	11.2	14.0	23.0
		COP		4.65	4.40	4.22	3.65
	A2W35*2	Nominal	kW	8.0	11.2	14.0	23.0
		COP		3.55	3.22	2.96	2.37
Average climate water outlet 35°C*3		Class		A++	A++	A++	A++
		ηs		169/167	171/169	163	164
Average climate water outlet 55°C*3		Class		A++	A++	A++	A++
		ηs		133/132	135/135	127	127
DHW 200L(L)/300L(XL) Load Profile (Average climate)*4		Class		A+ / A	A+ / A	A+ / A	–
		ηwh		145/120	145/120	138/118	–
Max outlet water temperature (°C)				60	60	60	60
Cooling	A35W7*2	Nominal	kW	7.1	10.0	12.5	20.0
		EER		3.31	2.83	2.17	2.22
	A35W18*2	Nominal	kW	7.1	10	12.5	20.0
		EER		4.52	4.74	4.26	3.55
PWL (Heating)*5			dB(A)	59	60	70	75
Max operating current			A	22/13	28/13	13	20
Breaker size			A	25/16	32/16	16	25
Piping	Diameter	Liquid/Gas	mm	9.52/15.88	9.52/15.88	9.52/15.88	12.7/25.4
	Length	Out-In	m	75	75	75	80
	Height	Out-In	m	30	30	30	30
Guaranteed Operating Range	Heating		°C	–28°C~21°C	–28°C~21°C	–28°C~21°C	–25°C~21°C
	DHW		°C	–28°C~35°C	–28°C~35°C	–28°C~35°C	–25°C~35°C
	Cooling		°C	–15°C~46°C	–15°C~46°C	–15°C~46°C	–15°C~46°C

*1 Refrigerant leakage contribute to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atomosphere. This appliance contains a refrigerant fluid with a GWP equal to 550. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 550 times higher than 1 kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional. The GWP of R410A is 2088 in the IPCC 4th Assessment Report.
*2 Air-to-Water values are measured based on EN14511 (Circulation pump input is not included.).
*3 ηs values are measured based on EN14825. *4 ηwh values are measured based on EN16147. *5 Sound power levels are measured based on EN12102.

R410A

Split type	Medium capacity (7.5kW–14kW)		Large capacity (≧16kW)
ZUBADAN New Generation	 PUHZ-SHW80/112AA	 PUHZ-SHW140	 PUHZ-SHW230
POWER INVERTER	 PUHZ-SW75/100AA	 PUHZ-SW120	 PUHZ-SW160/200