Air to Water

WATERSTAGE™

FUTURE SOLUTION OF DOMESTIC HEATING

FUJITSU GENERAL LIMITED

WATERSTAGE™ Air to Water Heat Pump

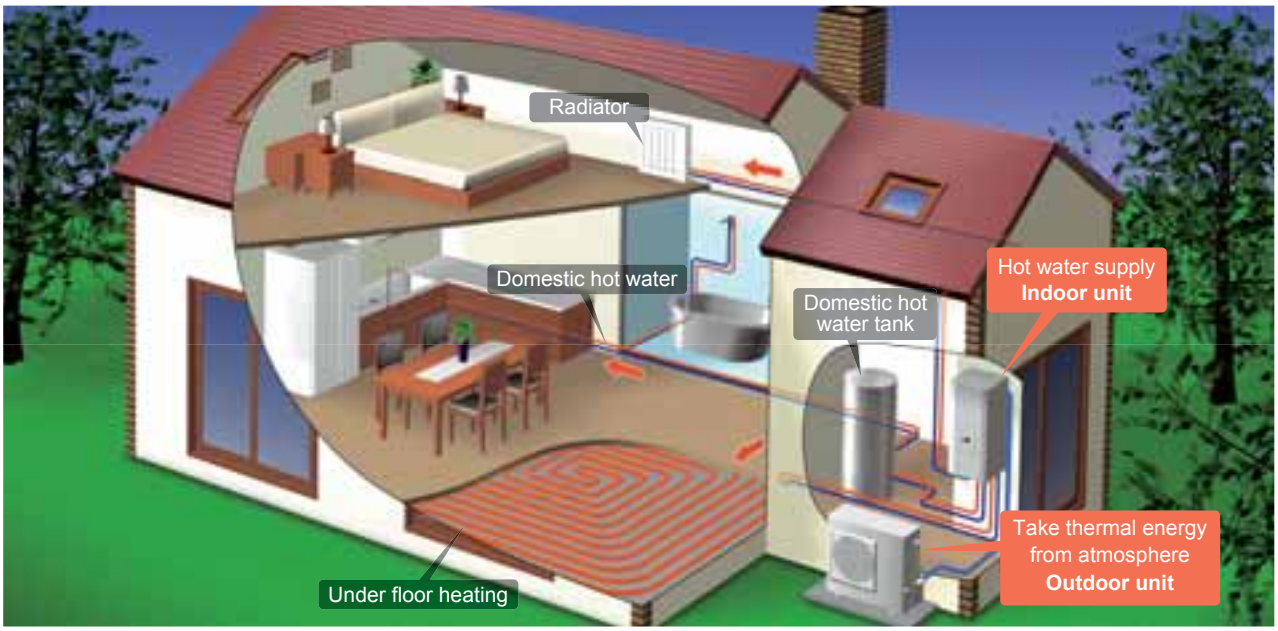
Efficient and comfortable heating solution

WATERSTAGE™ is a safe, comfortable, and efficient water heating system by adopting heat pump technology that utilizes the heat in the air.

This system provides support for space heating and water heating.

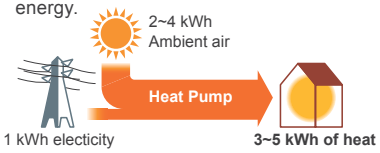
This WATERSTAGE™ uses very little electric energy to efficiently absorb heat from the atmosphere by adopting an inverter heat pump. A small environmental load heat source system can be economically realized by using this heat energy to produce hot water for radiator, floor heating or domestic hot water.

Flexible and comfortable heating solution for new building and refurbishment house

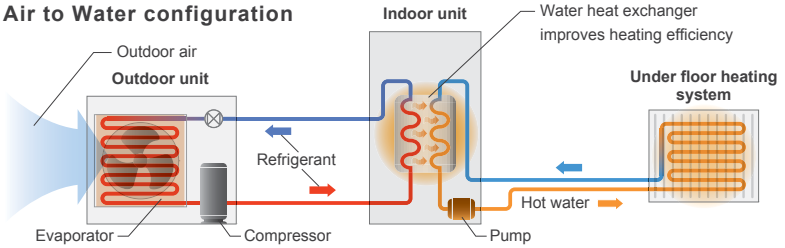


Heat Pump is most efficiency system

Absorbing the free energy from atmosphere. Heat pump system requires only 1kW of electricity to generate 3 to 5 kW thermal energy.



Air to Water configuration



Indoor unit
WSYA050DA
WSYA065DA
WSYA080DA
WSYA095DA
WSYA128DA
WSYA155DA

Outdoor unit

AOYA18LALL
AOYA24LALL

AOYA30LBTL

AOYA45LBTL
AOY54LJBYL

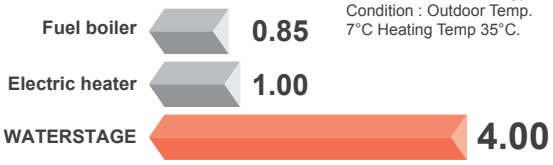
High Efficiency

High COP

Air to water heat pumps work with much more efficiency and save more energy than a traditional heating system.

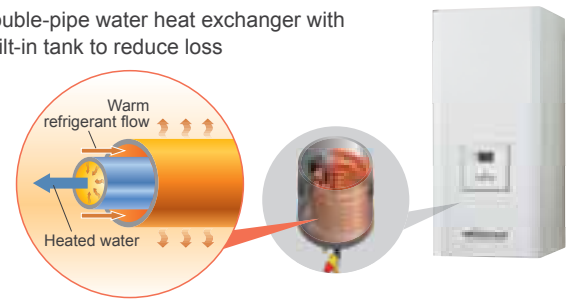
COP (Coefficient of Performance)

*The data refer to 6kW type
Condition : Outdoor Temp.
7°C Heating Temp 35°C.

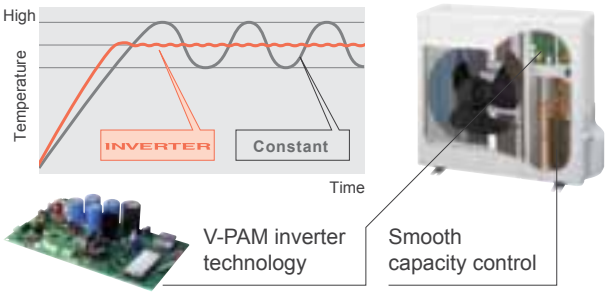


Highly efficient water heat exchanger

Double-pipe water heat exchanger with built-in tank to reduce loss



Technology DC inverter with R410A



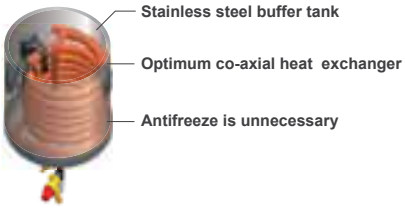
Low ambient temperature performance

Achieves excellent heating performance even at an outdoor air temperature of -15ºC.

High Reliability

High Clean and Durability

- Corrosion protected
- No fouling through heat exchanger construction
- Hot water is permanently available
- Heating until -15°C

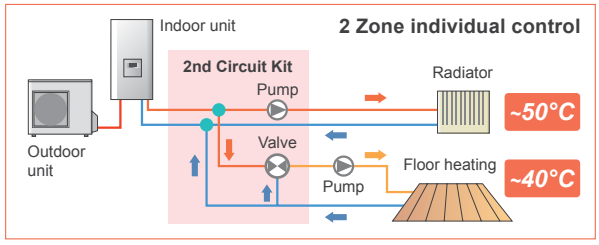


Intelligent Control System

Intelligent regulation

Intelligent operation system of WATERSTAGE system is provided to regulate the efficient and comfortable temperature according to your needs.

- Automatic temperature regulation in accordance with heating curve (depends on terminal and outdoor temperature).
- 2 Zone individual control (2 under floor heating zones or under floor heating + radiator zone, etc.)*



*Optional parts are required.

- Water temperature regulation can be combined with Room thermostat.*
- Additional electric heater control for backup
- Domestic hot water management with hot water tank*
- Boiler docking is possible*
- Cooling operation is possible*
- Swimming pool heating*
- Anti legionella function

Room Thermostat
UTW-C55XA

Smart operation

- Simple design system
- Hourly, Daily, Weekly programming operation
- Holiday operation mode
- Operation status display
- Error display / Error history

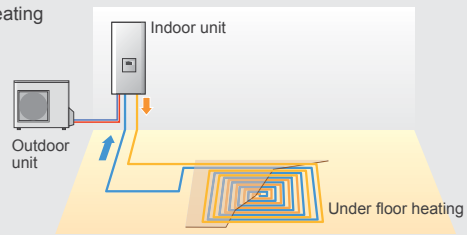
Design Versatility

Installation example

The water heating system can be freely constructed for a wide range of applications from floor heating to hot water showers.

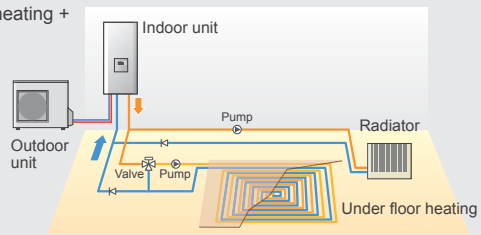
Single heating system

Under floor heating



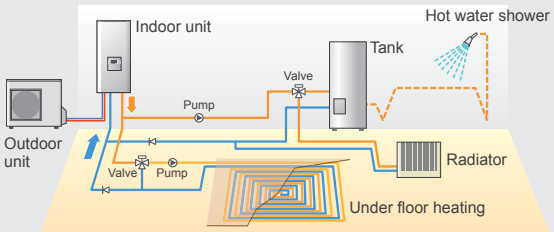
2 system simultaneous heating (Individual control)

Under floor heating + Radiator



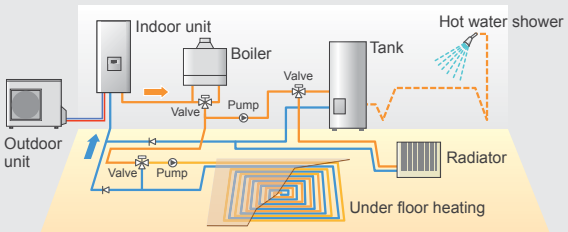
3 types of heat distribution

Under floor heating + Radiator + Sanitary hot water



System for low outdoor air temperatures
(additional heating boiler connection)

Under floor heating + Radiator + Sanitary hot water



Lineup

Capacity range (kW)		5	6	8	10	13	16
Model name	Indoor unit	 WSYA050DA	 WSYA065DA	 WSYA080DA	 WSYA095DA	 WSYA128DA	 WSYA155DA
	Outdoor unit	 AOYA18LALL		 AOYA24LALL	 AOYA30LBTL	 AOYA45LBTL	 AOY54LJBYL

Optional parts

2nd Circuit Kit

UTW-KZSXA

Boiler Connection Kit

UTW-KBSXA

Balancing Vessel

UTW-TEVXA

DHW Kit

UTW-KDWXA

DHW Tank 200L

UTW-T20XA

DHW Tank 300L

UTW-T30XA

High Flow Rate Circulating Pump Kit

UTW-PHFXA

Swimming Pool Kit

UTW-KSPXA

Heat exchanger for swiming pool

UTW-ESPXA

Cooling Kit

UTW-KCLXA

Cooling Kit (High flow rate)

UTW-KCHXA

Remote Control

UTW-C75XA

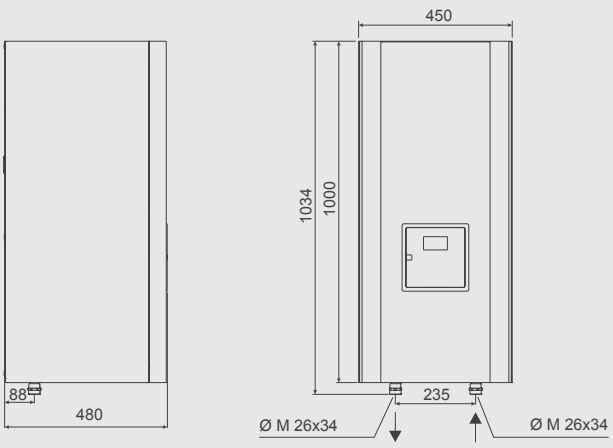
Room Thermostat

UTW-C55XA

Dimensions

Models: WSYA050DA / WSYA065DA / WSYA080DA
WSYA095DA / WSYA128DA / WSYA155DA

(Unit : mm)



Specifications

Capacity range (kW)			5	6	8	10	13	16
+7°C/+35°C floor heating	Heating capacity	W	5000	6500	8000	9500	12800	15500
	Input power		1160	1630	1880	2370	3120	3880
	COP		4.30	4.00	4.25	4.00	4.10	4.00
-7°C/+35°C floor heating	Heating capacity	W	4800	5600	7000	8100	11000	13800
	Input power		1750	2240	2540	3520	3790	5300
	COP		2.75	2.50	2.76	2.30	2.90	2.60
+7°C/+45°C radiators	Heating capacity	W	4150	5400	6200	7900	9700	13300
	Input power		1150	1610	1880	2390	3130	4090
	COP		3.60	3.35	3.30	3.30	3.10	3.25
-7°C/+45°C radiators	Heating capacity	W	4050	5100	5900	7900	8300	11000
	Input power		1720	2320	2620	3590	4610	5370
	COP		2.35	2.20	2.25	2.20	1.80	2.05
Electric heater		W	2 x 1500	2 x 1500	2 x 1500	2 x 3000	2 x 3000	2 x 3000
Indoor unit	Model name		WSYA050DA	WSYA065DA	WSYA080DA	WSYA095DA	WSYA128DA	WSYA155DA
Dimensions H x W x D		mm	1034 x 450 x 480					
Net weight / filld weight		kg	52.5 / 77.5					
Hydaulic characteristics								
Buffer tank capacity		l	25					
Expansion Vessel capacity		l	8					
Water flow rate (min./max.) 4°C < ΔT < 8°C		l/h	540 / 1100	600 / 1400	860 / 1700	1000 / 2050	1380 / 2700	1670 / 3300
Electrical connections								
Power source			1Ø 230V~, 50Hz					
Circuit breaker		A	16	16	16	30	30	30
Outdoor unit	Model name		AOYA18LALL		AOYA24LALL	AOYA30LBTL	AOYA45LBTL	AOY54LJBYL
Power source			1Ø 230V~, 50Hz					
Rated current		A	5.16	7.25	8.27	10.4	13.7	17.1
Circuit breaker		A	16		16	16	25	32
Dimensions H x W x D		mm	578 x 790 x 300		578 x 790 x 315	830 x 900 x 330	1290 x 900 x 330	1290 x 900 x 330
Weight		kg	40		44	64	98	105
Noise level *1		dBA	39		40	55	55	55.5
Operation range		°C	-15~24					
Refrigerant			R410A					
Cooling characteristics								
Connection pipe diameter	Liquid	mm	Ø6.35		Ø6.35	Ø9.52	Ø9.52	Ø9.52
	Gas		Ø12.7		Ø15.88	Ø15.88	Ø15.88	Ø15.88
Refrigerant charge		g	1250		1700	2200	3350	3400
Min. / max. length		m	5 / 15		5 / 15	5 / 20	5 / 20	5 / 20
Max. height difference		m	15		15	20	20	20
Max. pipe length (chargeless)		m	15		15	20	20	20
Additional charge amount per 1m		g	20		20	40	50	40

*1. Sound pressure level measured at distance of 5m from the device and at a height of 1.5m above ground in free field

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