FUJITSU

WATERSTAGE™

Innovative Solution of Domestic Heating

- Split type
- Split DHW Integrated type
- Monobloc type

FUJITSU GENERAL LIMITED

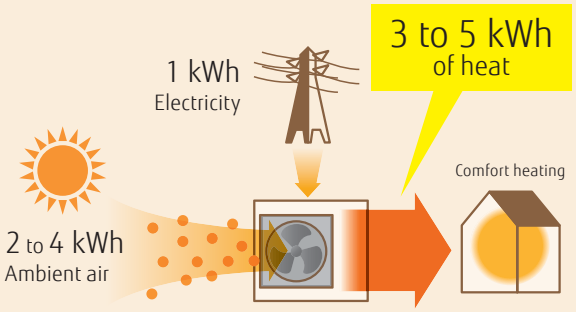
WATERSTAGE™

Fujitsu General “Waterstage” heat pumps are very efficient, regenerative and varied central heating systems, which absorb the energy mainly from the air.

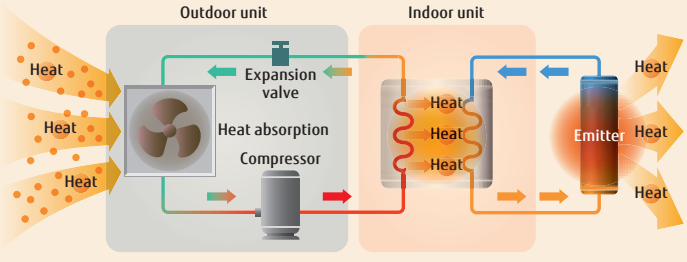
21 Models

What’s a Heat Pump ?

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

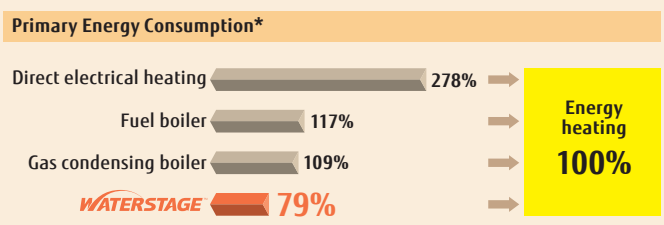


Heat Pump system framework



Primary Energy Usage Reduced Drastically!

Proportion of primary energy into heating energy of 100%



*Electricity loss is different due to power plant. Example efficiency of power plant: 36%

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- SIMPLE INSTALLATION & MAINTENANCE
- INSTALLATION INFORMATION
- SPECIFICATIONS & DIMENSIONS
- MODEL SELECTION SOFTWARE

OVERVIEW

Advantage

Wide Comfort

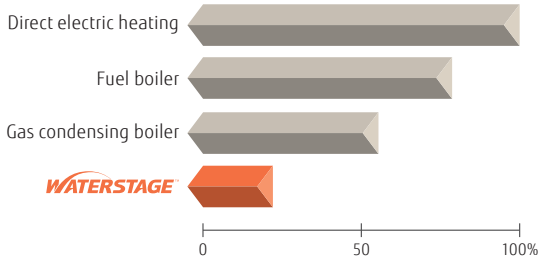
Energy Efficiency standard

Advantage

Less
CO_2 Emissions

This environmentally-friendly system substantially reduces CO_2 emissions compared to conventional gas and hydro carbons combustion.

Average annual CO_2 emissions

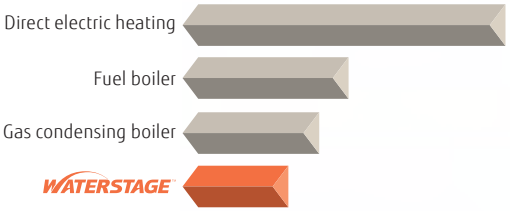


*Calculations based on data provided by European Program-2001` for EU 27
Fuel boiler efficiency: 89%, Gas boiler efficiency: 93%

Low
Running Cost

Running cost is low and economical by high efficiency heat pump technology.

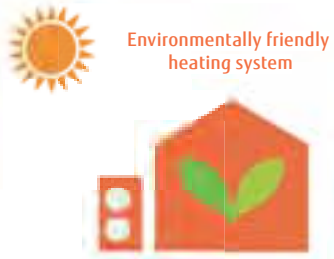
Average annual running cost



*The values may vary depending on installation, location, and operating conditions.

Clean
and Healthy

Since burners are unnecessary, NOx and other harmful substances are not generated.



Easy
Installation and Maintenance

All components are built into compact outdoor unit or hydraulic indoor unit.

Well structured Hydraulic indoor unit.

Sophisticated arrangement of hydraulic units, allows easy piping and maintenance

Wide Comfort

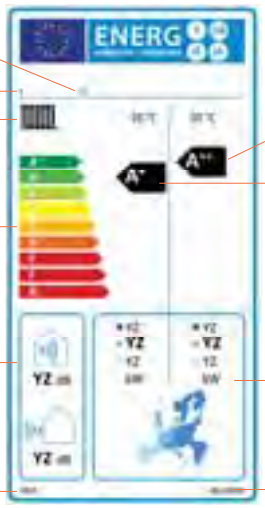
The clean energy delivers "comfort" to all spaces in the home up to the living room, bedrooms, bath and swimming pool.

- Room Heating
- Domestic Hot Water
- Swimming Pool
- Cooling

Energy Efficiency standard

Product labels

For Space heaters



Product identifier
Trade mark
Symbol for space heating
Scale of efficiency class, from A++ (highest efficiency) to G (lowest efficiency)
Sound power level outdoors and (where relevant) indoors
Year when label issued
Efficiency class in low temperature operation
Efficiency class in medium temperature operation
Temperature map of Europe with three climate zones and the rated heat output of each
Number of EU regulation

For Combination heaters

Symbol for hot water heating
Scale of efficiency class, from A (highest efficiency) to G (lowest efficiency) for hot water heating
Optional symbol where operation is possible only in off-peak periods

The Ecodesign Directive Lot1 Regulation 813/2013

New Ecodesign directive defines a regulatory framework for improving the environmental performance of energy-related products(ErP)through design. From 26 September 2015, the Ecodesign Directive will apply to space heaters(including heat pumps and fossil fuel boilers), combination heaters(for both space and water heating),water heaters and water storage tanks.
All these products will have to meet minimum requirements for energy efficiency* and maximum sound power levels.The minimum energy efficiency level will be raised from 26 September 2017 and maximum sound power level will be lowered on 26 September 2018.

*Energy efficiency is represented by seasonal space heating efficiency(ηs). This value is based upon the seasonal coefficient of performance(SCOP).

The Energy Labelling Directive (EU)No 811/213

The energy label aims to help consumers make direct comparisons of energy use, as well as product specific features. On all labels, product identifier, efficiency class, sound power levels and heat output must be displayed. For heat generators, the scale runs from A++ to G(A+++ to D from 2019). There are two different product labels for space heaters and combination heaters.

Seasonal space heating
Energy efficiency class

	Except low temp HP 55°C	low temp HP 35°C
A+++	ηs ≥ 150	ηs ≥ 175
A++	125 ≤ ηs < 150	150 ≤ ηs < 175
A+	98 ≤ ηs < 125	123 ≤ ηs < 150
A	90 ≤ ηs < 98	115 ≤ ηs < 123
B	82 ≤ ηs < 90	107 ≤ ηs < 115
C	75 ≤ ηs < 82	100 ≤ ηs < 107
D	36 ≤ ηs < 75	61 ≤ ηs < 100
E	34 ≤ ηs < 36	59 ≤ ηs < 61
F	30 ≤ ηs < 34	55 ≤ ηs < 59
G	ηs < 30	ηs < 55

EHPA Quality label

FUJITSU GENERAL`s WATERSTAGE* have obtained the EHPA Quality Label** by tests according to the international Standards EN14511 and EN17025. The EHPA Quality Label** is a label that shows the end-consumer a quality heat pump unit on the market.

*: High Power split model
**: Check the validity of label at www.ehpa.org/QL

SG-Ready Label

SG-Ready is a defined standard by BWP***, which makes it possible that the device can be integrated into a smart grid. Heat pumps, which are equipped with the SG-Ready Label, can receive signals from the power grid (and e.g. also from PV systems) about the available (unused renewable) energy (from wind, sun & water). Fujitsu General provides the SG-Ready compatibility to all new Heat Pumps series.

***BWP: the Federal German Heat Pump Association

USAGE INTRODUCTION

Wide range lineup suited for regional characteristics, family structure, and application
We provide various products to meet your needs from High Power via heating-centered series to reasonably-priced compact series

Outdoor temperature -25°C

Outdoor temperature -20°C

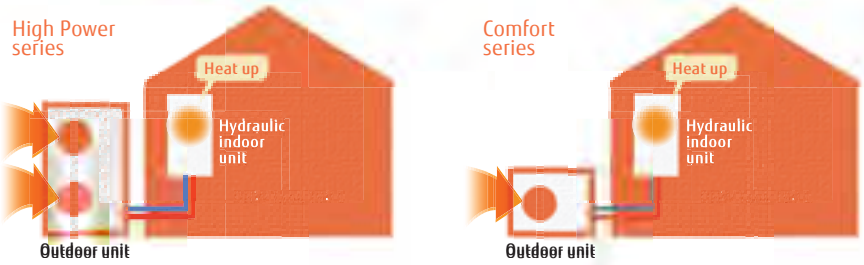
Cold district

S

SPLIT TYPE

Split type with separate outdoor unit and hydraulic indoor unit

For details, see page 10-11, 24-27



SD

SPLIT DHW INTEGRATED TYPE

Split type with DHW tank built-in hydraulic indoor unit

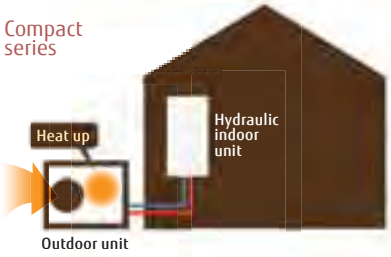
For details, see page 12-13, 28-31

M

MONOBLOC TYPE

All-in-one type without refrigerant piping work

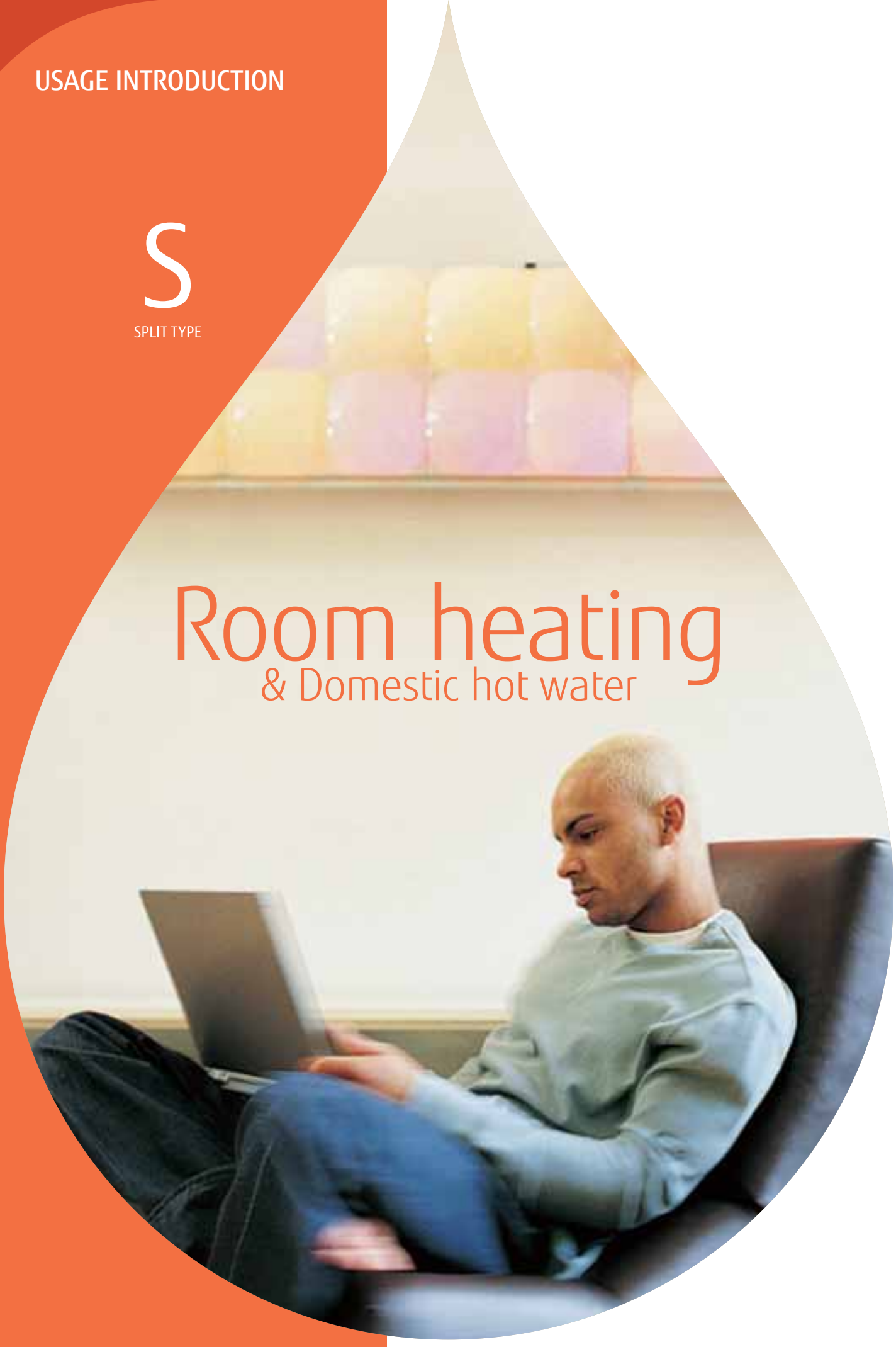
For details, see page 14-15, 32-33

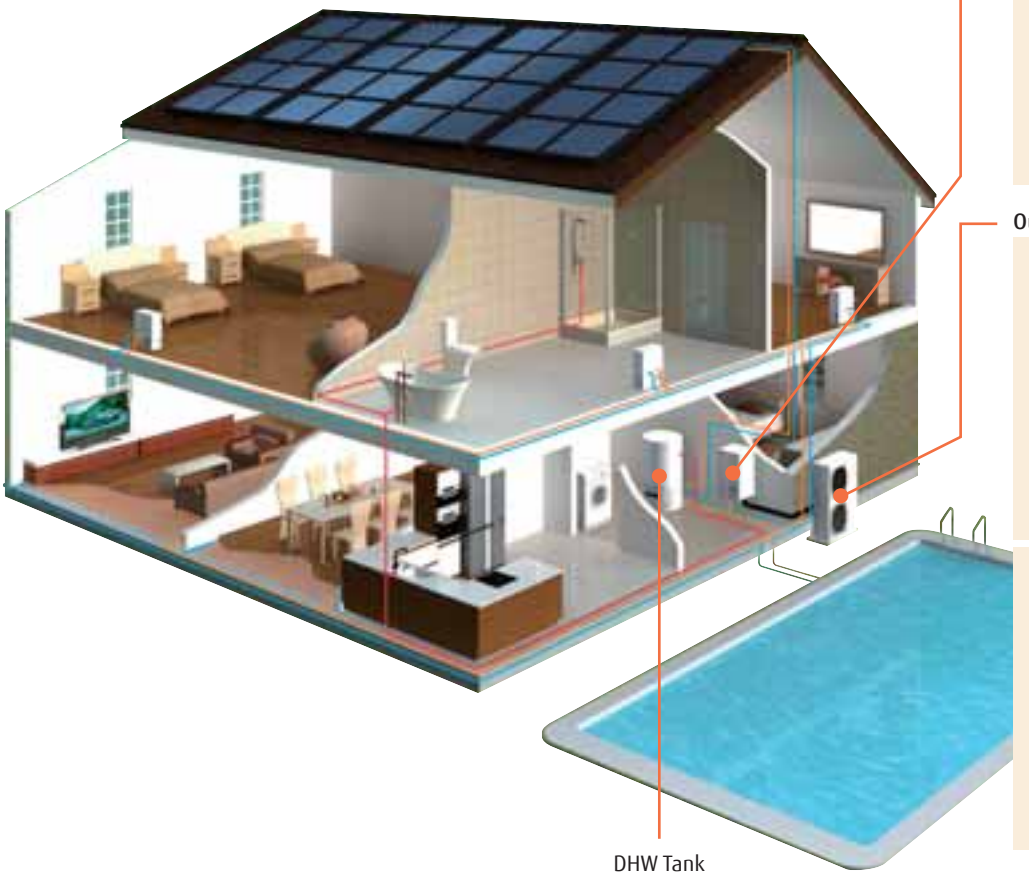


S

SPLIT TYPE

Room heating
& Domestic hot water





DHW Tank
(Option)

Hydraulic indoor unit

All-in-one indoor unit

→24-27 page

Outdoor units

For cold regions
High Power series

→24-25 page

Compact design
Comfort series

→26-27 page

- Outdoor unit and hydraulic indoor unit can be installed freely, so installation is easy.
- Since hydraulic indoor unit is installed inside a house, freezing of circulated water can be prevented.
- A larger heating capacity can be performed flexibly by using more units in cascade connection.

+ Boiler

By combining existing boiler, powerful heating can be performed even at low outdoor temperature.

+ DHW Tank

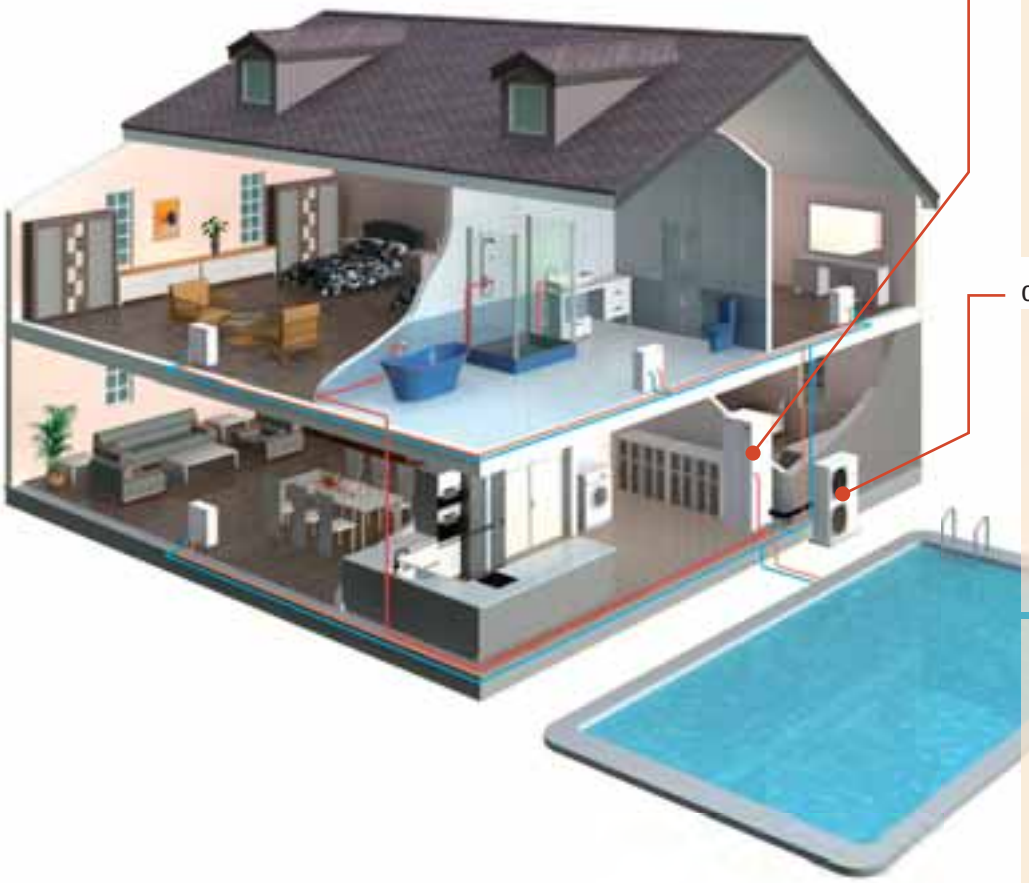
DHW tank (option) can be used to supply hot water by connecting it to the system.

300 Liter

SD

SPLIT DHW INTEGRATED TYPE

Room heating & Domestic hot water



Hydraulic indoor unit

All-in-one indoor unit

→28-31 page

Outdoor units

For cold regions
High Power series

→28-29 page

Compact design
Comfort series

→30-31 page

- Space is saved drastically due to built-in DHW tank.
- Existing boiler can be replaced easily.
- A larger heating capacity can be performed flexibly by using more units in cascade connection.

Stylish space saving solution with built-in DHW tank

Hydraulic indoor unit

DHW tank 190 L

M

MONOBLOC TYPE

Simple setting

Room heating
& Domestic hot water

Hydraulic indoor unit

Smart installation

→32-33 page

Outdoor units

All in one model

→32-33 page

- Outdoor unit and hydraulic indoor unit can be installed anywhere due to compact size.
- Installation work can be performed easily only by connecting hydraulic pipes.
- DHW tank can be connected to indoor side.

Compact Design

Weight
49 kg
5 kW model

+ Boiler

By combining existing boiler, powerful heating can be performed even at low outdoor temperature.

+ DHW Tank

DHW tank (option) can be used to supply hot water by connecting it to the system.

300 Liter

PRODUCT TECHNOLOGY & FEATURES

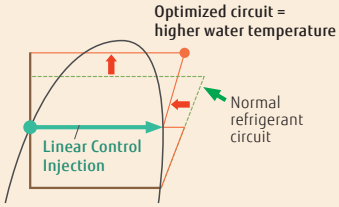
Twin Rotary Compressor

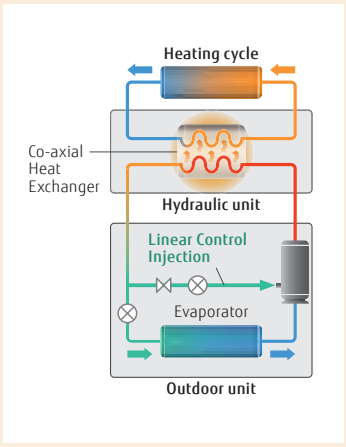
Linear Control Injection Port

Product technology for Outdoor Unit

Twin Rotary Compressor with Linear Control Injection Port

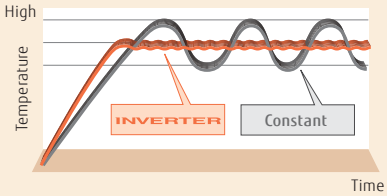
It realizes the high condensing temperature without overheating discharge gas temperature by Linear Control Injection process during compression. Therefore, the condensing temperature rises up higher than normal circuit. A higher hot water temperature is realized by controlling the injection amount according to the usage state.





Accurate temperature control by DC inverter technology

V-PAM inverter technology



S SD

High Durability Co-axial Heat Exchanger

- Corrosion protected
- No flow switch necessary
- Anti-freeze-protection is unnecessary

Product technology for Hydraulic Indoor Unit

High Efficiency Class A Pump

Energy saving pump with constant volume or pressure adjustment function.

Esay Control Hydraulic Indoor Unit Controler

4 Heating mode

Automatic mode
Comfort/Reduce mode switching automatically according to time program

Reduce mode
Constant reduce temperature

Comfort mode
Constant comfort temperature

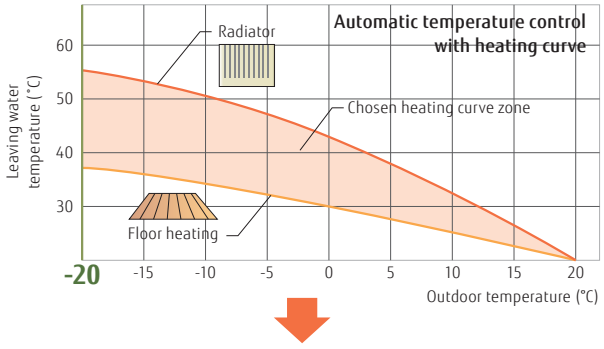
Protection mode
Stand-by mode with anti-frost protection

Comfort Control

A program adjusts the hot water temperature automatically in advance based on the outdoor temperature, so hot water temperature can be controlled so that setting temperature is maintained constantly.

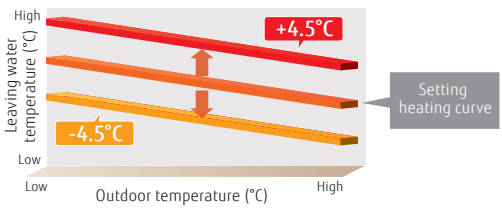
Automatic heating curve operation

Automatic heating curve control based on outdoor temp and setting room temperature.



Heating curve off-set: Adjust setting room temp.

This can be fine adjusted when too warm or too cold.



Quick recovery from defrost operation

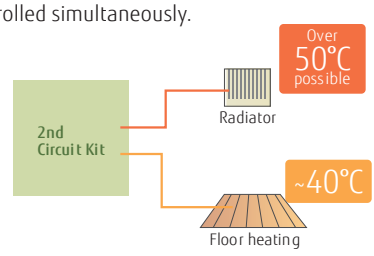
Maintaining the room temperature during defrost operation by boost start operation

Auto-changeover

If the cooling operation function is set, the system can automatically switch to cooling or heating, depending on the outdoor temperature to provide all-season comfortable air conditioning.

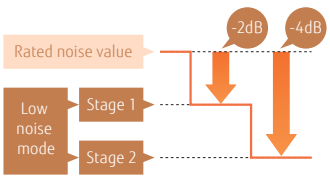
2 Zone Individual Control*

Even if hot water temperature is different in 2 heating systems, they can be controlled simultaneously.



2 Stage Low Noise Mode*

Outdoor unit can be switched to silent mode, depending on the installation environment.
(Valid only for High Power)



Backup heater operation

Backup heater can operates at low outdoor temperature so that comfortable status can be maintained. The backup heater is controlled intelligently just as a security backup for very cold days/ nights and only activated when really necessary.

S SD M

Energy Saving

Programmable timer

- The setting of timer operation can easily be adjusted.
- Changing the heating mode linked with time is possible.

Day-Weekly timer setting

- The day-weekly timer can be set up for up to 3 times per day.
- Allows separate settings for each day of the week.

Holiday timer setting

- The holiday timer can be set up for up to 8 periods
- If you are absent for a long time in the winter, freezing of room can be prevented.

Peak Cut Function*

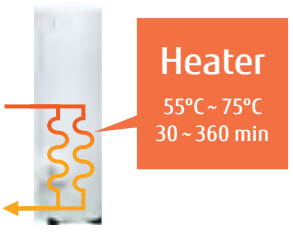
This function performs operation by setting a peak current value and reducing the power consumption.

Mode	The ratio of suppressing the power consumption
1	100%
2	75%
3	50%
4	Almost 0%

Safety Function

Anti-legionella function

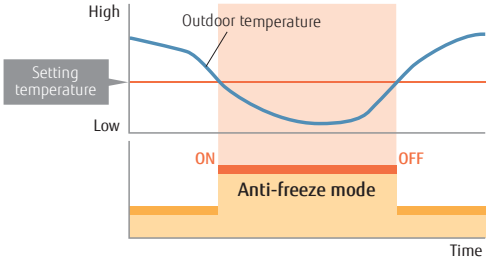
The growth of Legionella in DHW tank is suppressed and safe and clean hot water is supplied at all times.



DHW Tank 300 L

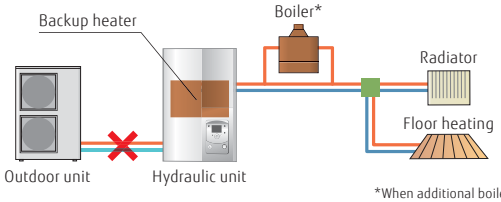
Anti-freeze function

Water circulation and compressor can be automatically performed at low outdoor temperature. Freezing of circulated water can be prevented.



Emergency operation

System can continuously supply hot water by built in back up heater or boiler, as emergency, even if an error is occurred.



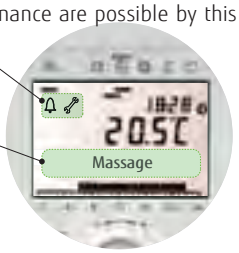
*When additional boiler connected

Error/Maintenance alarm

Quick error handling service and maintenance are possible by this function.

Error Maintenance

- Error history saves 10 errors in memory
- Display telephone NO. of service company



*: Optional parts are required.

PRODUCT LINEUP for various needs

Type		S SPLIT TYPE	
		High Power series	Comfort series
Hydraulic indoor unit		Usable outdoor temperature: -25°C 	Usable outdoor temperature: -20°C 
Outdoor unit		 	 
Capacity range:		11/14 kW 11/14/16 kW	5/6/8 kW 10 kW
System		• 60°C hot water supply even at -20°C coutdoor temperature • Different heating system can be used. Like floor heating, radiators and others.* • Heating and DHW in one system.* • Additional electric heater for backup provided. • Up to two independent control circuits.* • Solar connection for hot water production.* • Cascade connection up to three systems.* • Cooling operation is possible.* Check the validity of label at www.ehpa.org/QL	• 55°C hot water supply even at -10°C outdoor temperature • Different heating system can be used .Like floor heating, radiators and others.* • Heating and DHW in one system.* • Additional electric heater for backup provided. • Up to two independent control circuits.* • Solar connection for hot water production.* • Cascade connection up to three systems.* • Cooling operation is possible.*
Power source		1Ø 230 V/50 Hz	3Ø 400 V/50 Hz	1Ø 230 V/50 Hz
Capacity range	5 kW			■
	6 kW			■
	8 kW			■
	10 kW			■
	11 kW	■	■	
	14 kW	■	■	
	16 kW		■	

SD

SPLIT DHW INTEGRATED TYPE

M

MONOBLOC TYPE

High Power series

Usable outdoor temperature: -25°C

11/14 kW

11/14/16 kW

- 60°C hot water supply even at -20°C outdoor temperature
- Different heating system can be used .Like floor heating, radiators and others.*
- Heating and DHW space saving in one hydraulic indoor unit.
- Additional electric heater for backup provided.
- Up to two independent control circuits.*
- Solar connection for hot water production.*
- Cascade connection up to three systems.*
- Cooling operation is possible.*

1Ø 230 V/50 Hz	3Ø 400 V/50 Hz
■	■
■	■
	■

Comfort series

Usable outdoor temperature: -20°C

5/6/8 kW

10 kW

- 55°C hot water supply even at -10°C outdoor temperature
- Different heating system can be used.Like floor heating, radiators and others.*
- Heating and DHW space saving in one hydraulic indoor unit.
- Additional electric heater for backup provided.
- Up to two independent control circuits.*
- Solar connection for hot water production.*
- Cascade connection up to three systems.*
- Cooling operation is possible.*

1Ø 230 V/50 Hz
■
■
■
■

Compact series

Usable outdoor temperature: -20°C

5 kW

8/10 kW

- 55°C hot water supply even at -20°C outdoor temperature
- Heating and DHW in one system.
- Additional base heater can be connected to prevent from freezing.*
- Cooling operation is possible.

1Ø 230 V/50 Hz
■
■
■

*Optional parts are required.

PRODUCT LINEUP

S

SPLIT TYPE

SG Ready
Smart Heat Pumps

High Power
series

High Power models realizes high heating capacity and high efficiency by newly developed "Linear Control Injection Technology" and "Co-axial Heat Exchanger".
These properties are the key for a reliable heating operation throughout the whole year- even in a strong winter.

FEATURES

Comfort Control
- Automatic heating curve operation
- Auto-changeover
- Cooling operation
- Quick recovery from defrost operation
- Backup heater operation

Energy Saving
- Programmable timer

Safety Function
- Anti-legionella function
- Anti-freeze function
- Emergency operation
- Error/Maintenance alarm

Single Phase power supply

11 kW | 14 kW

Hydraulic indoor unit
WSYG140DG6

Outdoor unit
WOYG112LCTA
WOYG140LCTA

3 Phase power supply

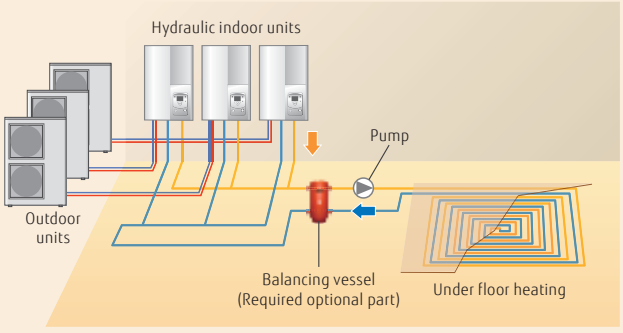
11 kW | 14 kW | 16 kW

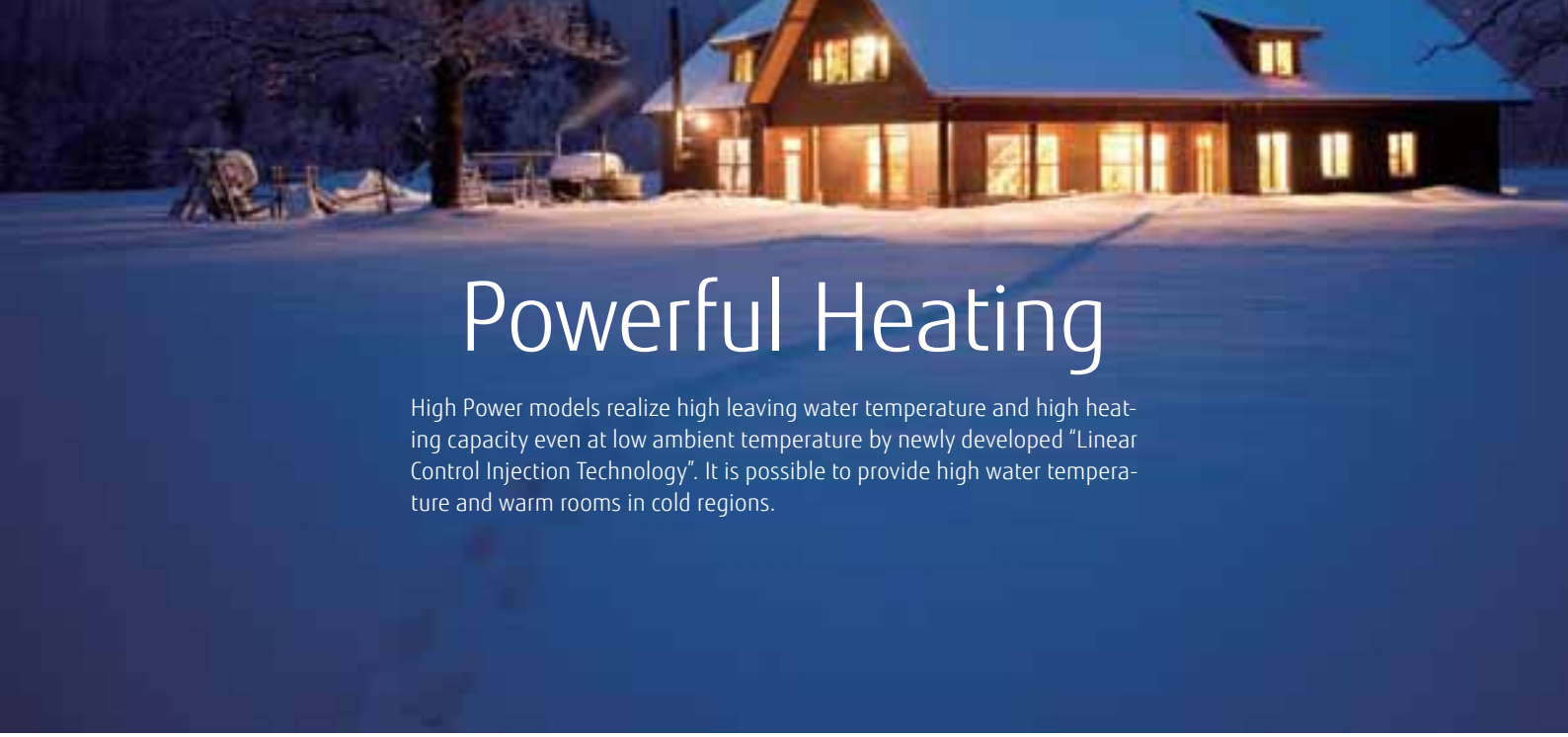
Hydraulic indoor unit
WSYK160DG9

Outdoor unit
WOYK112LCTA
WOYK140LCTA
WOYK160LCTA *

*:Check the validity of label at www.ehpa.org/QL

Cascade connection





Powerful Heating

High Power models realize high leaving water temperature and high heating capacity even at low ambient temperature by newly developed "Linear Control Injection Technology". It is possible to provide high water temperature and warm rooms in cold regions.

High Leaving Water Temperature

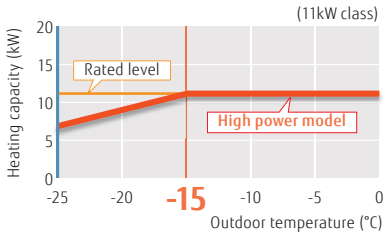
No backup heater*

High leaving water temperature 60°C kept down to -20°C outdoor temperature without using backup heater.

* If you want to raise the hot water supply temperature, backup heater can be used for the auxiliary operation.

Strong & Powerful Heating Capacity

Keeping the rated heating capacity at -15°C outdoor temperature

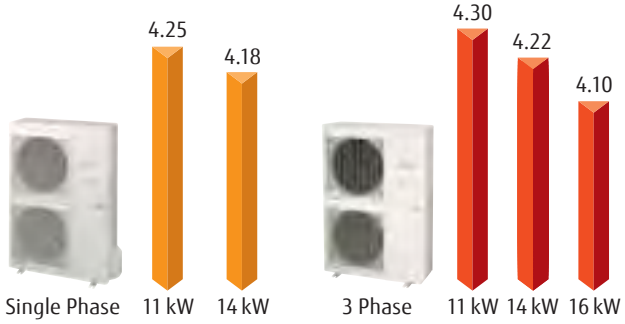


Extended Operation Range Down to -25°C

Improved operation range down to -25°C outdoor temperature

High COP

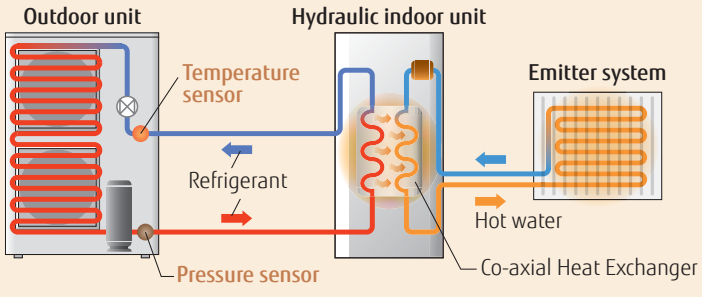
Energy efficiency is improved by the linear Control Injection Technology and the optimization of refrigerant cycle control. High Power model realizes high performance and high efficiency by adopting twin sensors and control technology corresponding to hot water heating.



A7W35 condition

Optimization of refrigerant cycle operation

High Power model realizes high performance and high efficiency by adopting twin sensors and control technology corresponding to hot water heating.



PRODUCT LINEUP

S

SPLIT TYPE

SG Ready Smart Heat Pumps

Comfort
series

For Comfort series, optimized flow temperature control is realized by DC inverter technology.

5 kW | 6 kW | 8 kW

Hydraulic indoor unit
WSYA050DG6
WSYA100DG6

Outdoor unit
WOYA060LFCA
WOYA080LFCA

10 kW

Hydraulic indoor unit
WSYA100DG6

Outdoor unit
WOYA100LFTA

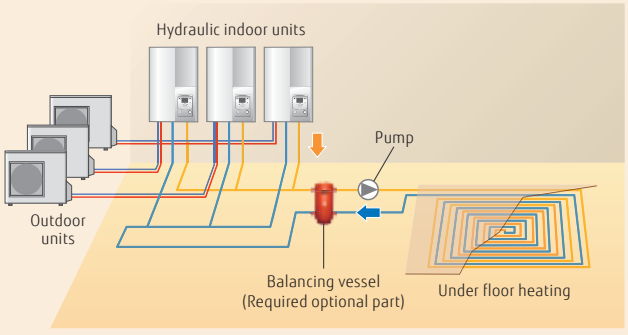
FEATURES

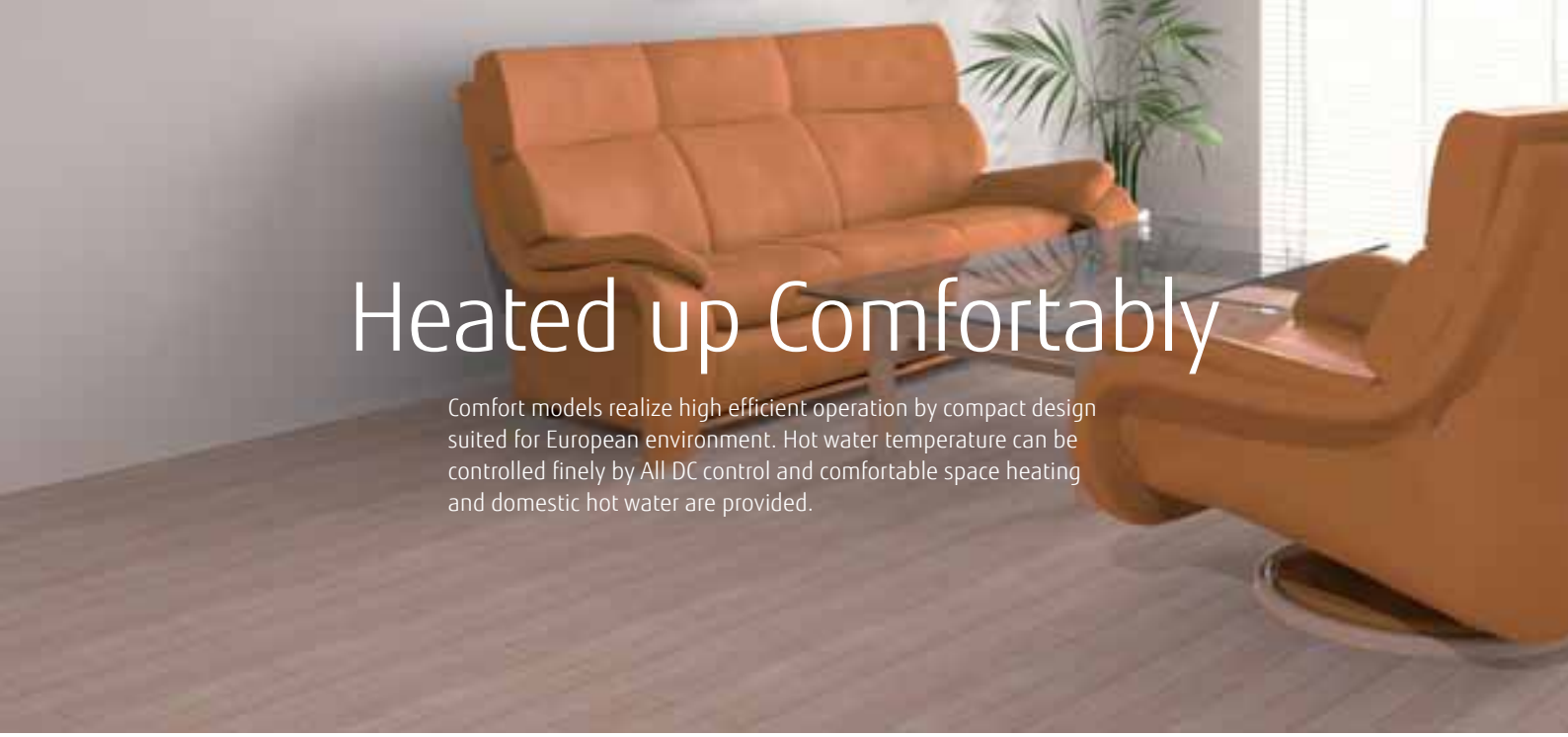
Comfort Control
- Automatic heating curve operation
- Auto-changeover
- Cooling operation
- Quick recovery from defrost operation
- Backup heater operation

Energy Saving
- Programmable timer

Safety Function
- Anti-legionella function
- Anti-freeze function
- Emergency operation
- Error/Maintenance alarm

Cascade connection (10 kw model)





Heated up Comfortably

Comfort models realize high efficient operation by compact design suited for European environment. Hot water temperature can be controlled finely by All DC control and comfortable space heating and domestic hot water are provided.

High Leaving Water Temperature

No backup heater*

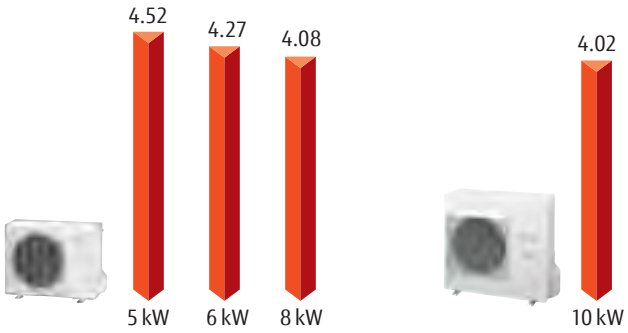
Maximum leaving water temperature is 55°C without backup heater. Hot water supply temperature can be maintained even at –10°C outdoor temperature.

* If you want to raise the hot water supply temperature, backup heater can be used for the auxiliary operation.

Wide Operation Range

Improved operation range down to -20°C outdoor temperature

High COP



A7W35 condition

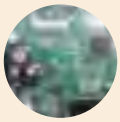
Outdoor unit technology

DC Fan Motor

High performance, high efficiency small DC fan motor mounted.

DC Twin Rotary Compressor

High efficient DC twin rotary compressor



DC Inverter

Smooth water temperature control realized by DC inverter control.

PRODUCT LINEUP

SD

SPLIT DHW INTEGRATED TYPE

SG Ready Smart Heat Pumps

High Power series

Split DHW integrated type realizes significant space saving because of the integrated DHW tank. Quick hot water supply is possible due to built-in high performance DHW tank. Heating and domestic hot water supply can be selected inside the intelligent controller. High Power models realize very efficient large heating capacities by newly developed "Linear Control Injection Technology" and "Co-axial heat Exchanger".

FEATURES

Comfort Control
- Automatic heating curve operation
- Auto-changeover
- Cooling operation
- Quick recovery from defrost operation
- Backup heater operation

Energy Saving
- Programmable timer

Safety Function
- Anti-legionella function
- Anti-freeze function
- Emergency operation
- Error/Maintenance alarm

Single Phase power supply

11 kW | 14 kW

Hydraulic indoor unit
WGYG140DG6

Outdoor unit
WOYG112LCTA
WOYG140LCTA

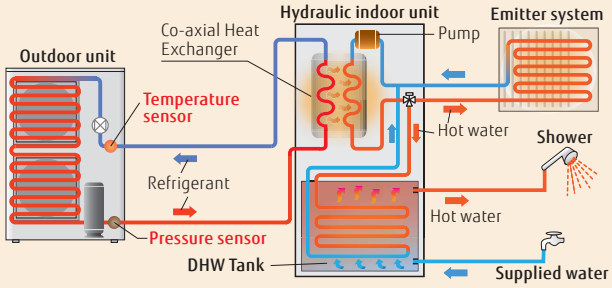
3 Phase power supply

11 kW | 14 kW | 16 kW

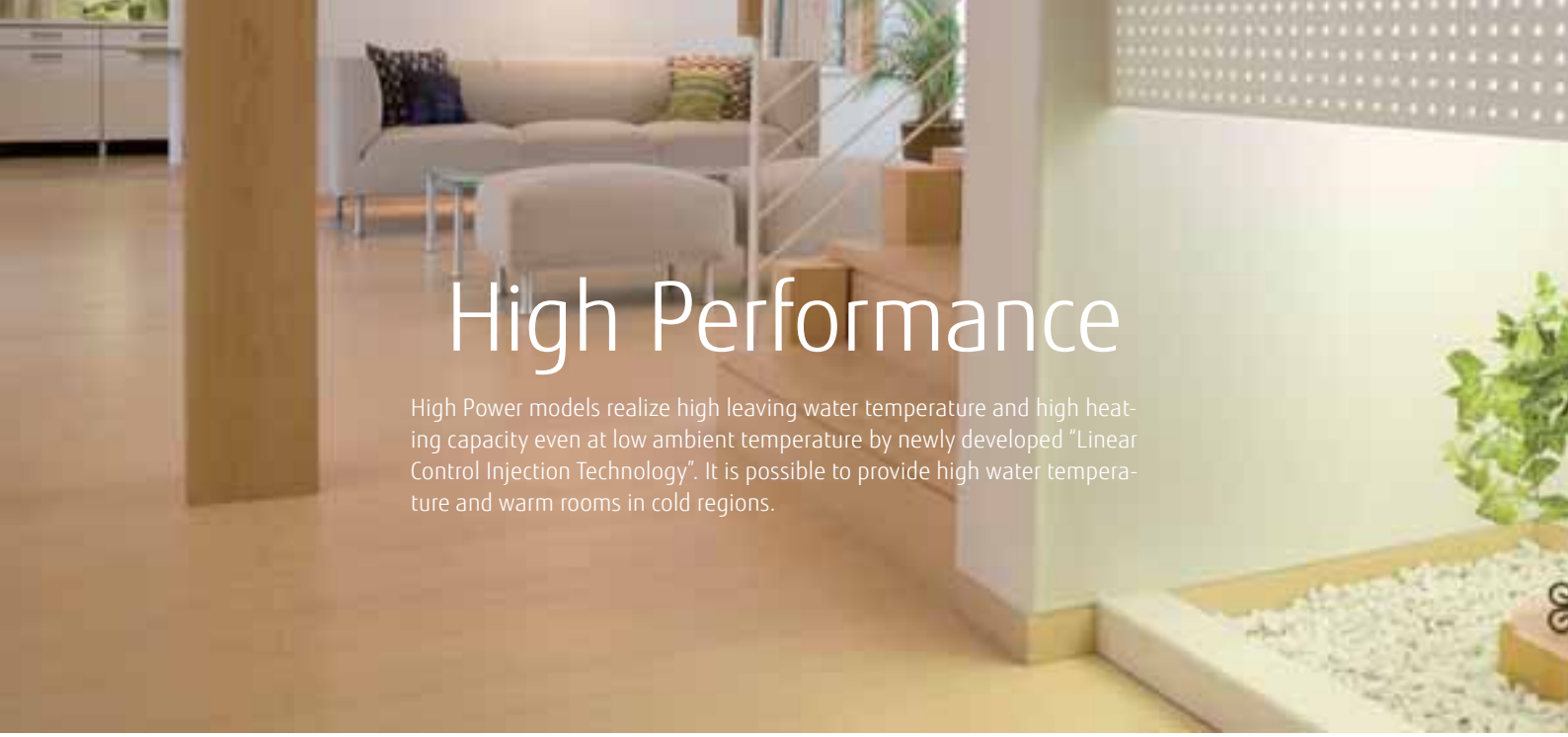
Hydraulic indoor unit
WGYK160DG9

Outdoor unit
WOYK112LCTA
WOYK140LCTA
WOYK160LCTA

Optimization of refrigerant cycle operation



High Power model realizes high performance and high efficiency by adopting twin sensors and control technology corresponding to hot water heating.



High Performance

High Power models realize high leaving water temperature and high heating capacity even at low ambient temperature by newly developed "Linear Control Injection Technology". It is possible to provide high water temperature and warm rooms in cold regions.

High Leaving Water Temperature

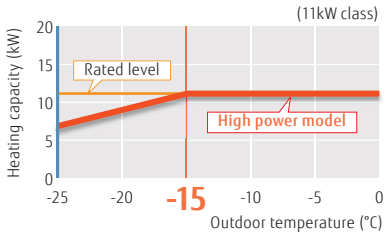
No backup heater*

High leaving water temperature 60°C kept down to -20°C outdoor temperature without using backup heater.

* If you want to raise the hot water supply temperature, backup heater can be used for the auxiliary operation.

Strong & Powerful Heating Capacity

Keeping the rated heating capacity at -15°C outdoor temperature

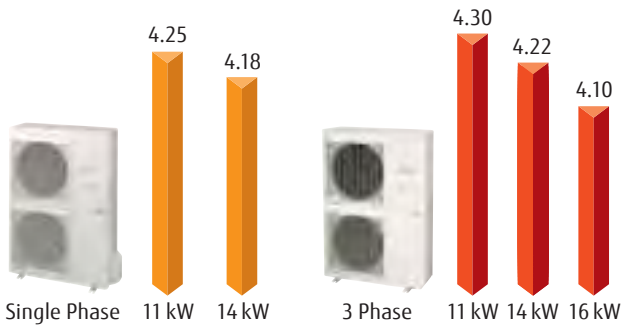


Extended Operation Range Down to -25°C

Improved operation range down to -25°C outdoor temperature

High COP

Energy efficiency is improved by the linear Control Injection Technology and the optimization of refrigerant cycle control. High Power model realizes high performance and high efficiency by adopting twin sensors and control technology corresponding to hot water heating.



A7W35 condition

For Split DHW Integrated type

Hydraulic indoor unit

Stylish space saving solution with

Built in High Performance

DHW Tank 190 L

- DHW Production with coil heat exchanger to optimise the DHW performance
- Quick temperature rise due to a big exchanger surface

PRODUCT LINEUP

SD

SPLIT DHW INTEGRATED TYPE

SG Ready Smart Heat Pumps

Comfort series

For Comfort series, optimized flow temperature control is realized by DC inverter technology.

5 kW 6 kW 8 kW

Hydraulic indoor unit
WGYA050DG6
WGYA100DG6

Outdoor unit
WOYA060LFCA
WOYA080LFCA

10 kW

Hydraulic indoor unit
WGYA100DG6

Outdoor unit
WOYA100LFTA

FEATURES

Comfort Control
- Automatic heating curve operation
- Auto-changeover
- Cooling operation
- Quick recovery from defrost operation
- Backup heater operation

Energy Saving
- Programmable timer

Safety Function
- Anti-legionella function
- Anti-freeze function
- Emergency operation
- Error/Maintenance alarm

Heated up Comfortably

Comfort models realize high efficient operation by compact design suited for European environment. Hot water temperature can be controlled finely by All DC control and comfortable space heating and domestic hot water are provided.

High Leaving Water Temperature

No backup heater*

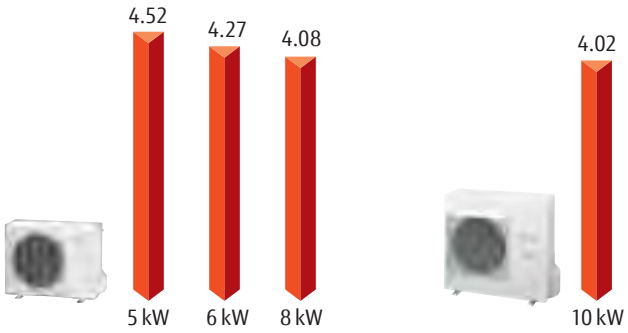
Maximum leaving water temperature is 55°C without backup heater. Hot water supply temperature can be maintained even at –10°C outdoor temperature.

* If you want to raise the hot water supply temperature, backup heater can be used for the auxiliary operation.

Wide Operation Range

Improved operation range down to -20°C outdoor temperature

High COP



A7W35 condition

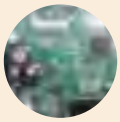
Outdoor unit technology

DC Fan Motor

High performance, high efficiency small DC fan motor mounted.

DC Twin Rotary Compressor

High efficient DC twin rotary compressor



DC Inverter

Smooth water temperature control realized by DC inverter control.

PRODUCT LINEUP

M

MONOBLOC TYPE

SG Ready
Smart Heat Pumps

Compact
series

Compact designed heat pump. Refrigerant pipe work is unnecessary. Only hydraulic connecting work is to be done. Circulation pump, safety valve and automatic vent valve are included. Easy installation and maintenance is feasible.

FEATURES

Comfort Control
- Automatic heating curve operation
- Auto-changeover
- Cooling operation
- Quick recovery from defrost operation
- Backup heater operation

Energy Saving
- Programmable timer

Safety Function
- Anti-legionella function
- Anti-freeze function
- Emergency operation
- Error/Maintenance alarm

5 kW

Hydraulic indoor unit
WSYP100DG6

Outdoor unit
WPYA050LG

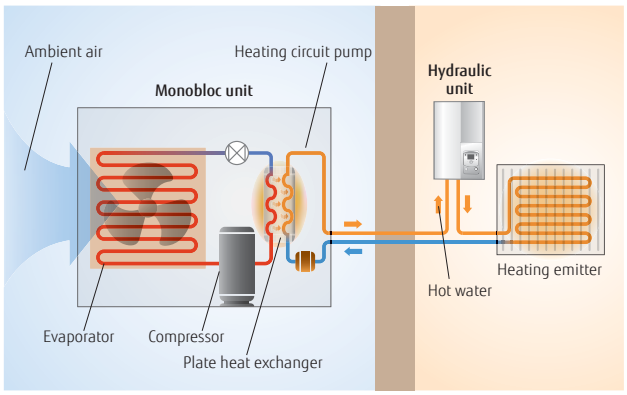
8 kW | 10 kW

Hydraulic indoor unit
WSYP100DG6

Outdoor unit
WPYA080LG
WPYA100LG

Easy installation & maintenance!

All-in-One Model



High Performance

High Leaving Water Temperature

No backup heater*

High leaving water temperature of 55°C keeps to -20°C outdoor temperature without additional heater.

* If you want to raise the hot water supply temperature, backup heater can be used for the auxiliary operation.

Wide Operation Range

Improved operation range down to -20°C outdoor temperature

High COP 4.50 (8 kW model)

High COP is realized by using a DC twin rotary compressor, inverter technology, and high efficient water heat exchanger.

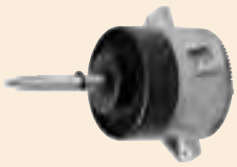
Smart installation Hydraulic Indoor Unit

- The compact Indoor unit provides two electrical back up heater, each with 3kW capacity
- 12 L expansion vessel included
- No waste of space. DHW Kit installation inside the hydraulic indoor unit possible.
- New generation controller. Connection by Modbus protocol possible.
- Heat metering included

Outdoor unit technology

DC Fan Motor

High performance, high efficiency small DC fan motor mounted.

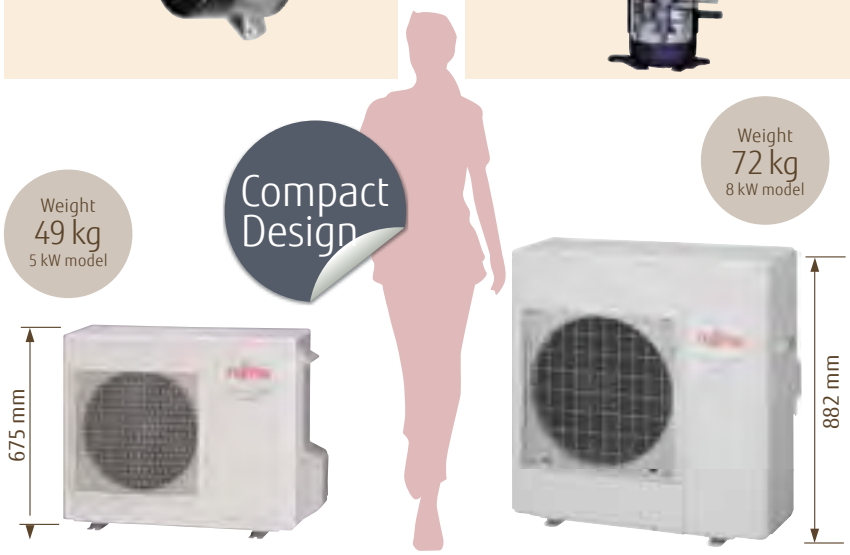


DC Twin Rotary Compressor

High efficient DC twin rotary compressor

DC Inverter

Smooth water temperature control realized by DC inverter control.



High Efficient Plate Heat Exchanger

Very compact size achieved by a thin high-efficiency heat exchanger

SYSTEM CONFIGURATION & OPTIONAL PARTS

Control
System Configuration
Optional Parts

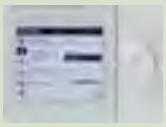
Control

User`s needs are supported by offering a variety of controls, such as individual control and remote control options.

Individual Controller

Wired Remote Control (option)

Room Thermostat
UTW-C55XA



Remote Control
UTW-C74TXF*1
UTW-C74HXF*1

Wireless Remote Control (option)

Room Thermostat
UTW-C58XD

Remote Control
UTW-C78XD

RF Module
UTW-MRCXD

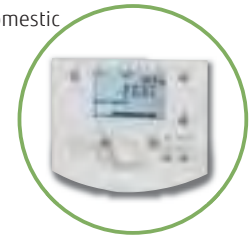
*1: 19 Languages included,no separate Estern European RC necessary

Hydraulic Indoor Unit Controller

Simple operation mode setting
- Selecting the heating mode and Domestic hot water operation

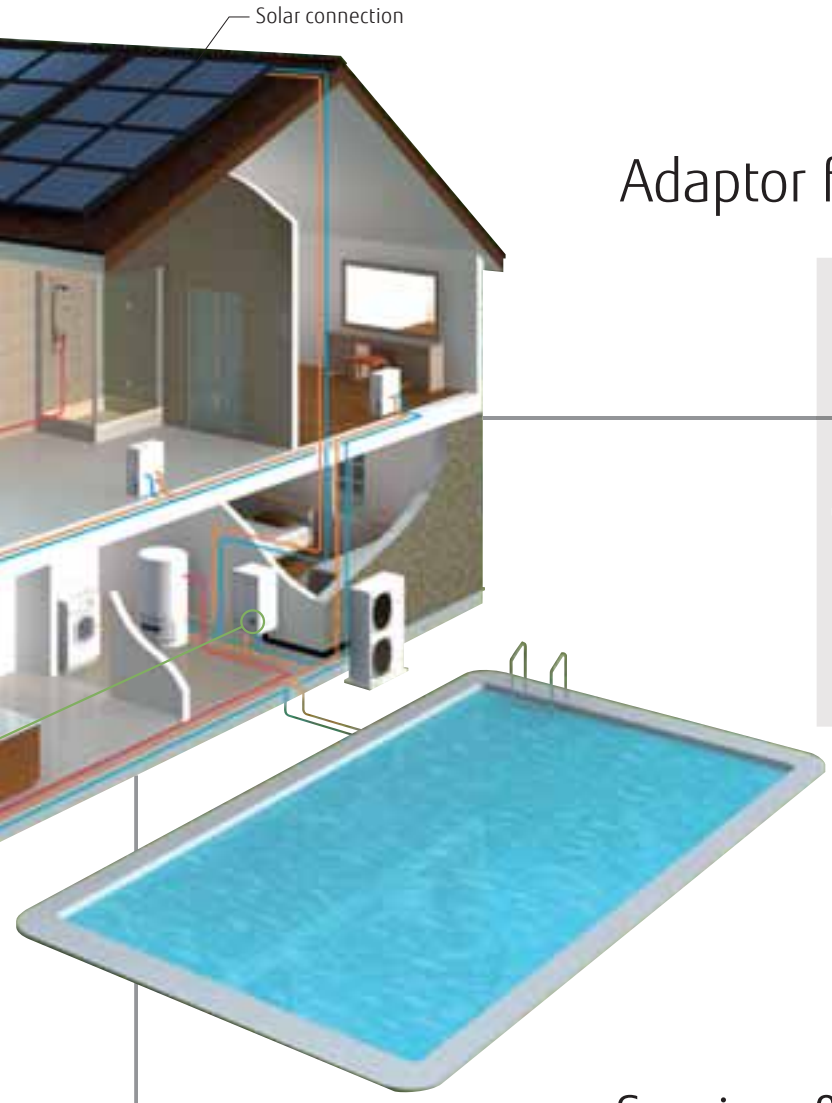
Large LCD display
- Operation status display
- Error display
- plain text

Navigation and setting
- Selecting the heating menu
- Setting program timer

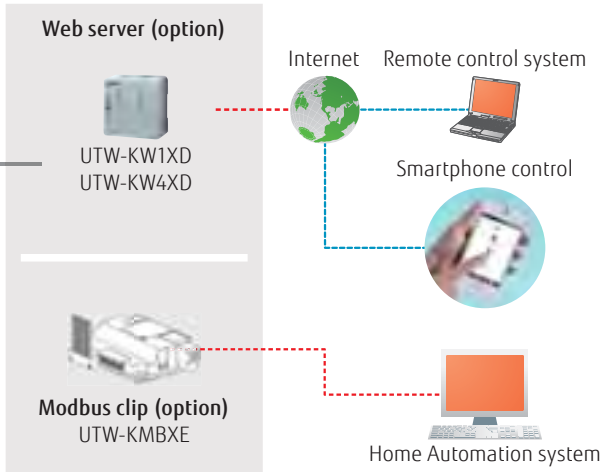


HMI Kit (option)
UTW-KHMXE
Corresponding to multi languages

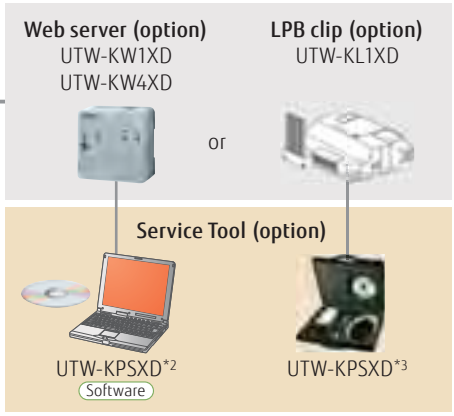
SIEMENS



Adaptor for external device

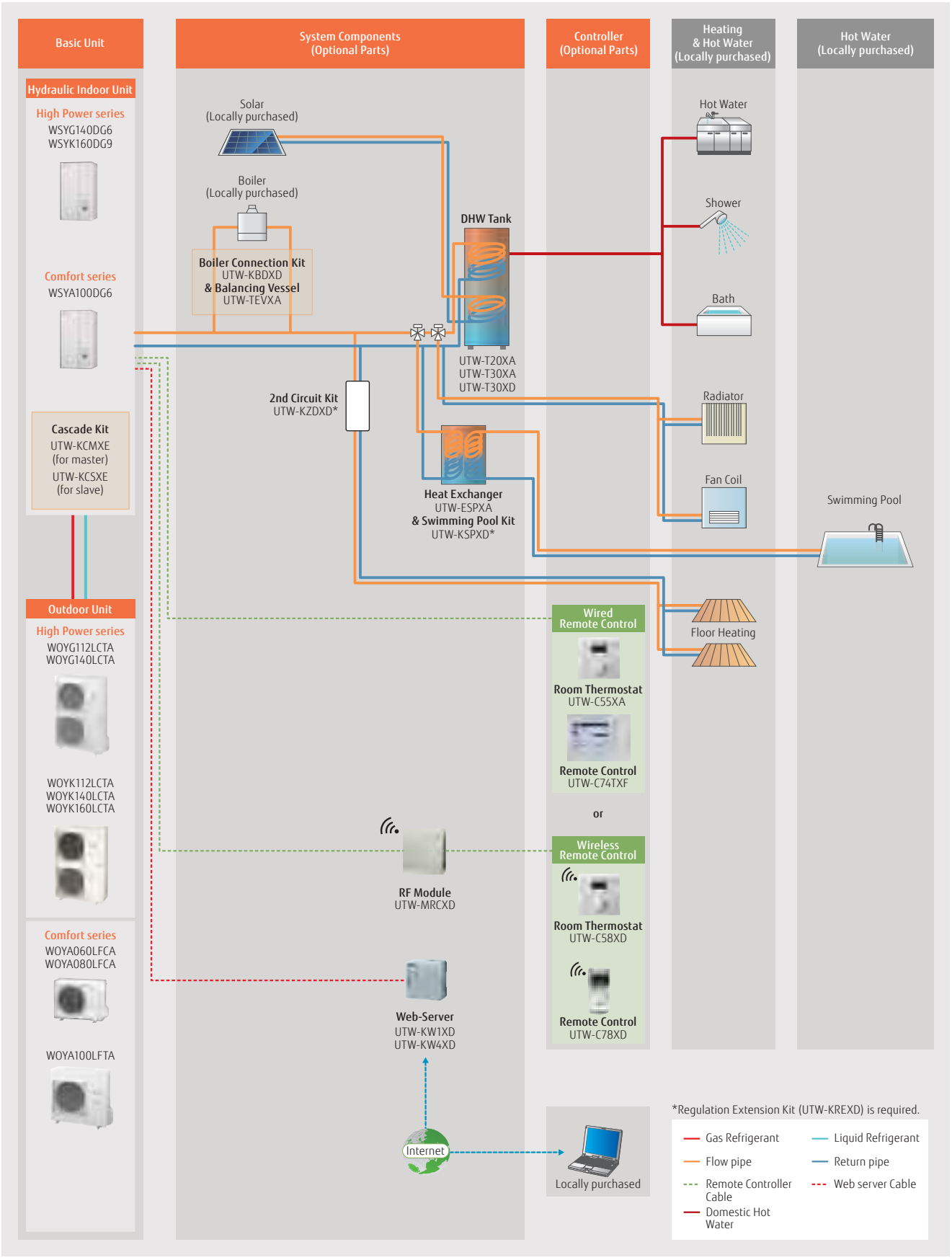


Service & Maintenance Tool



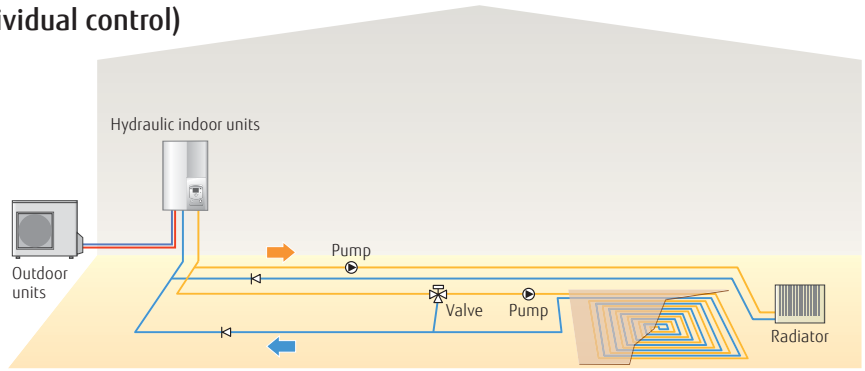
*2: UTW-KW1XD or UTW-KW4XD is required for the connection.
*3: UTW-KL1XD is required for the connection.

System Configuration

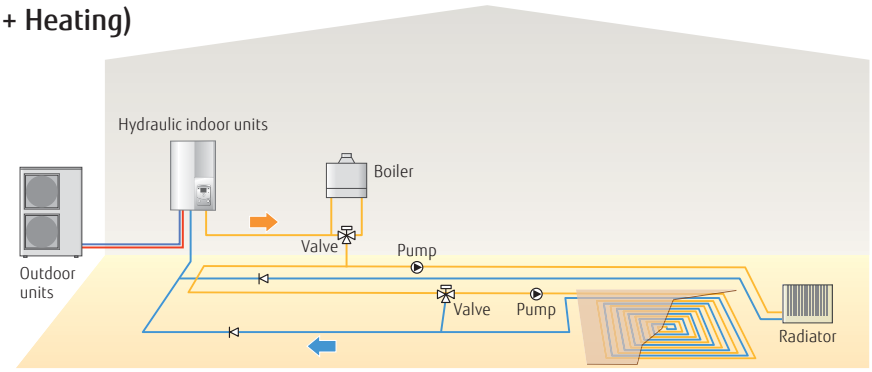


System Case Studies

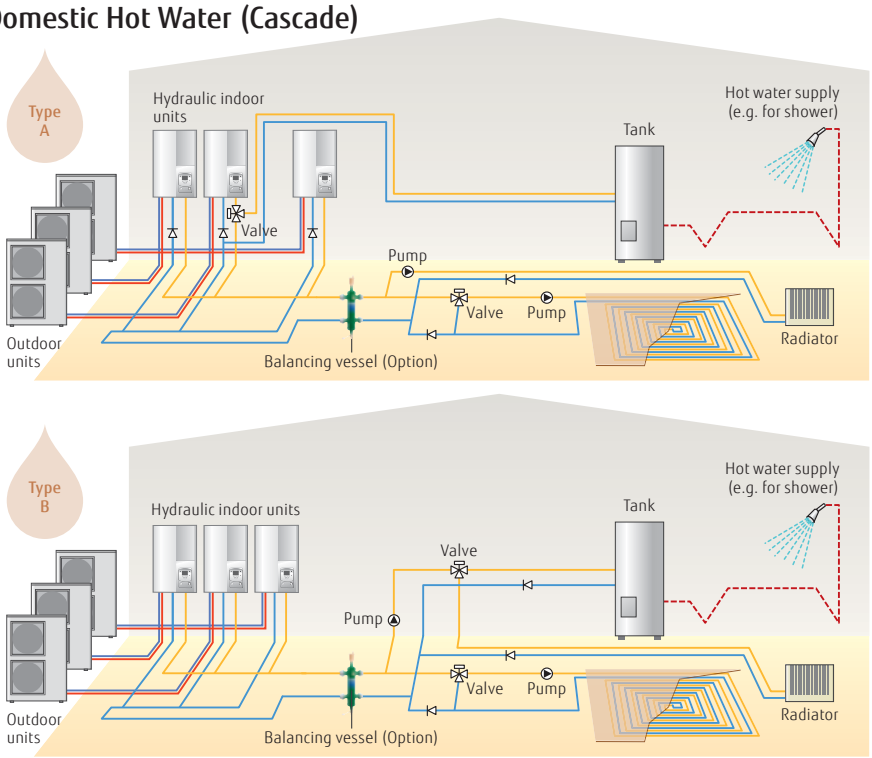
2 emitter simultaneous heating (Individual control)



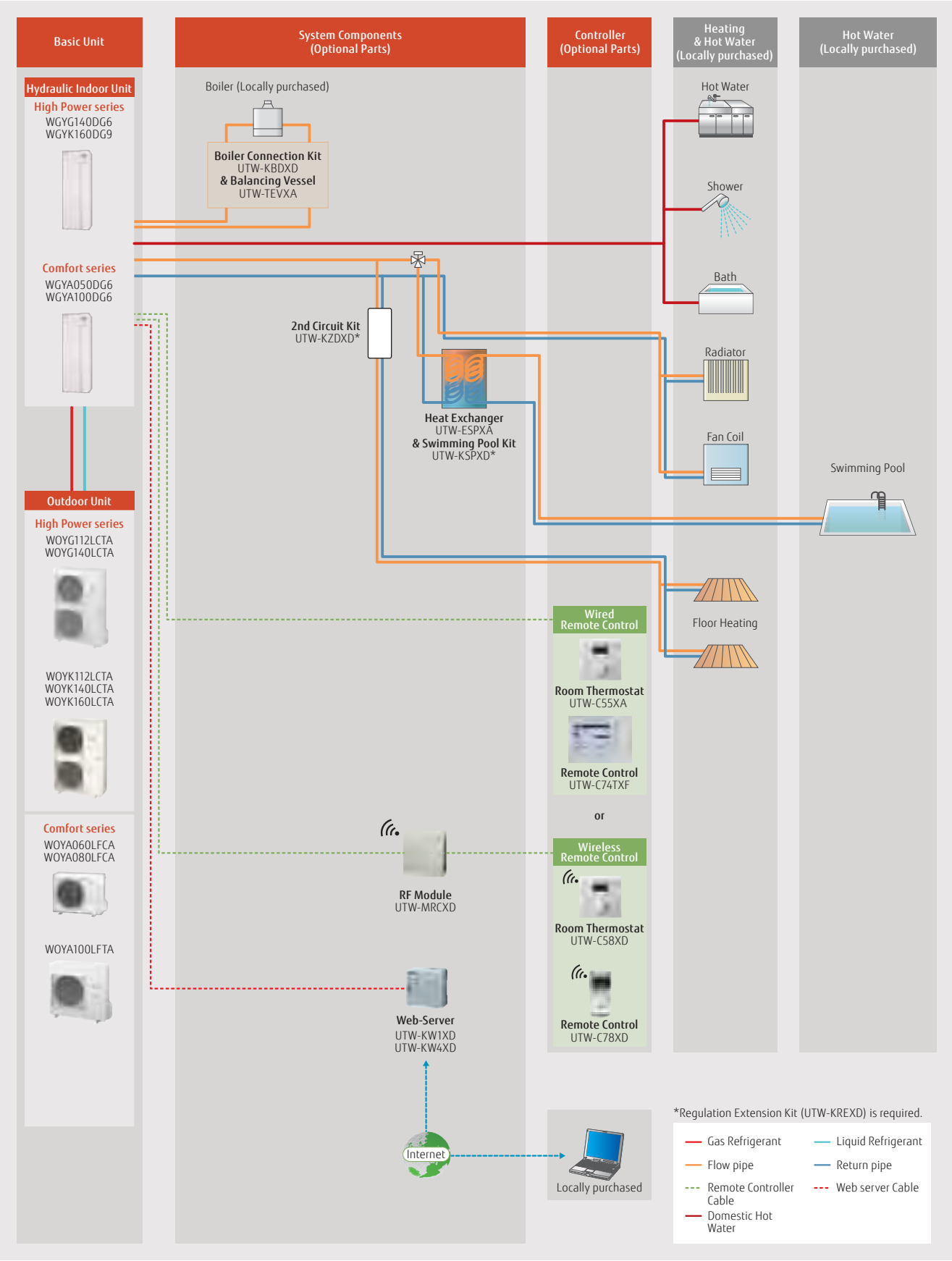
Boiler connected to heating (Boiler + Heating)



2 emitter simultaneous heating & Domestic Hot Water (Cascade)

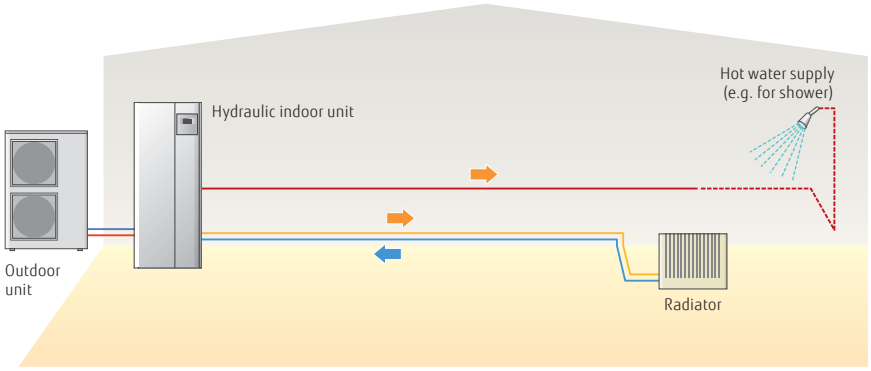


System Configuration

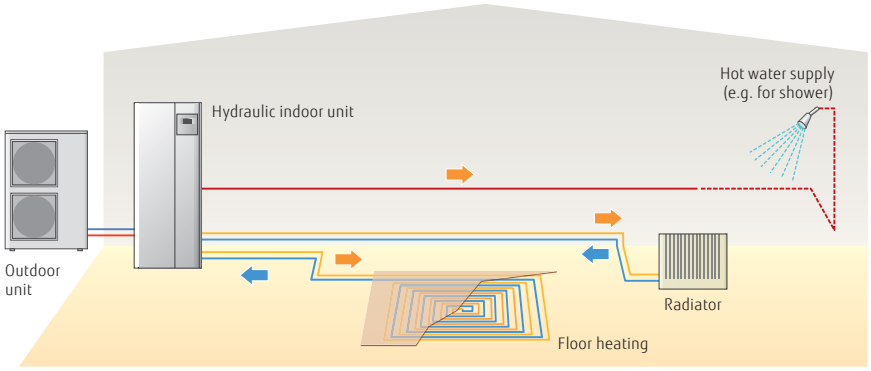


System Case Studies

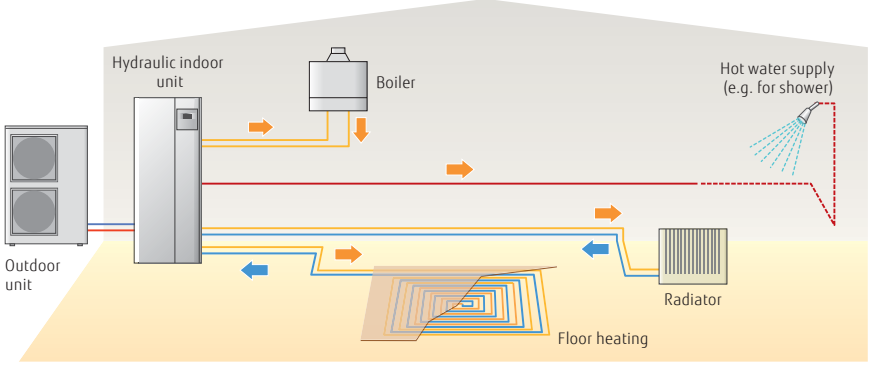
Single heating & Domestic Hot Water



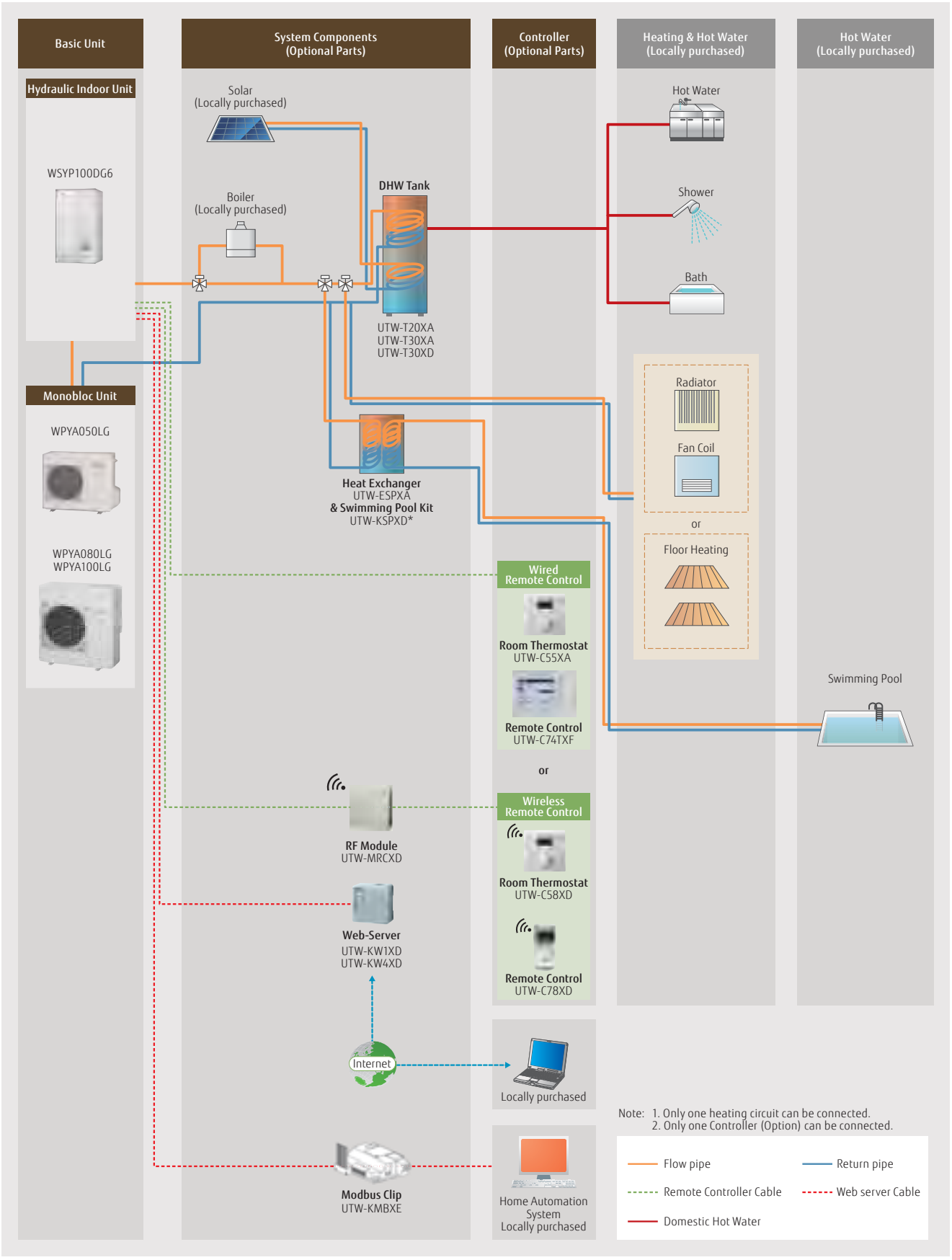
2 emiter simultaneous heating (Individual control) & Domestic Hot Water



Boiler connected to heating (Boiler + Heating) & Domestic Hot Water

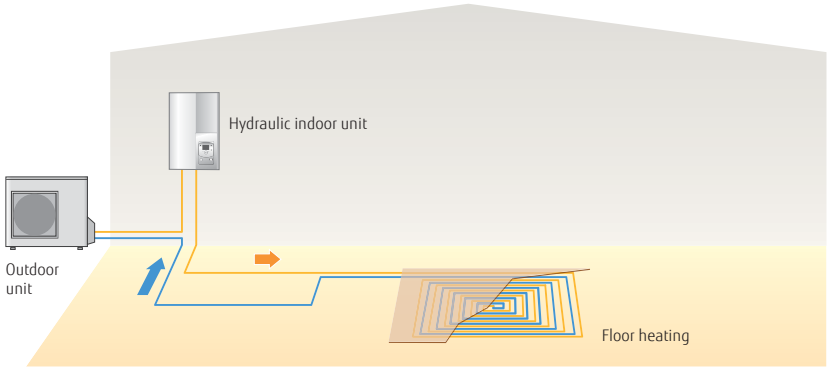


System Configuration

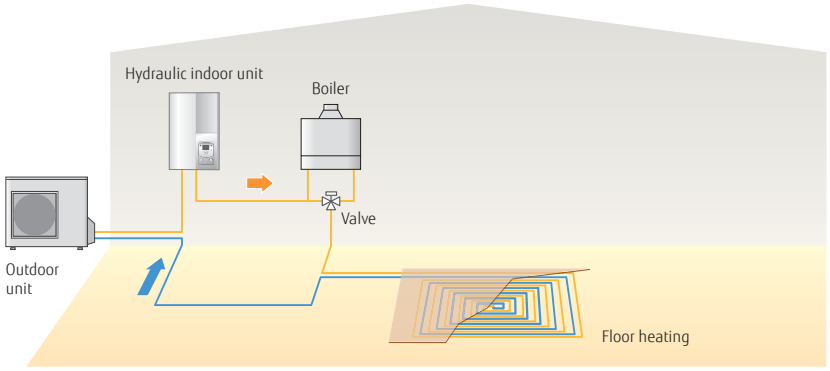


System Case Studies

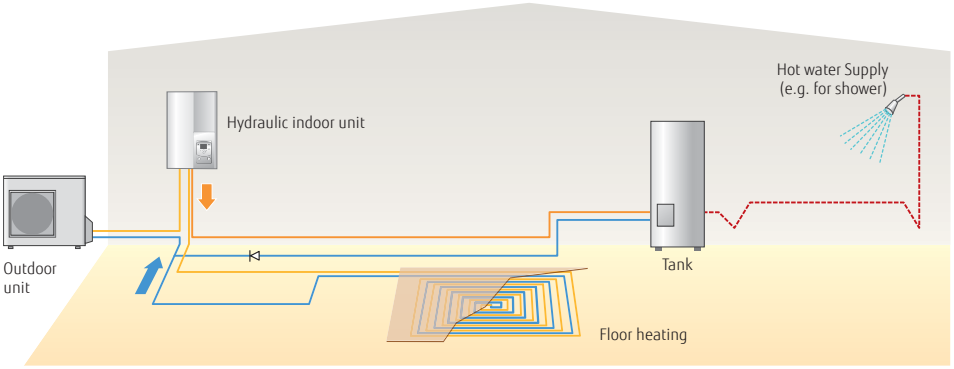
Single heating system



Boiler connected to heating (Boiler + Heating)



2 types of heat distribution



OPTIONAL PARTS

Optional parts compatibility for system

Product Name		Model Name	Split									Split DHW integrated type									Monobloc		
			High Power					Comfort				High Power					Comfort				Compact		
			1Ø		3Ø			1Ø				1Ø		3Ø			1Ø				1Ø		
			11	14	11	14	16	5	6	8	10	11	14	11	14	16	5	6	8	10	5	8	10
2nd Circuit Kit		UTW-KZSXE	●	●	●	●	●	●	●	●	●	–	–	–	–	–	–	–	–	–	–	–	–
		UTW-KZDXE	–	–	–	–	–	–	–	–	–	●	●	●	●	●	●	●	●	●	–	–	–
Boiler Connection kit		UTW-KBSXD	●	●	●	●	●	●	●	●	●	–	–	–	–	–	–	–	–	–	–	–	–
		UTW-KBDXD	–	–	–	–	–	–	–	–	–	●	●	●	●	●	●	●	●	●	–	–	–
Balancing vessel		UTW-TEVXA	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
DHW kit		UTW-KDWXG (Internal)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	●	●	●
		UTW-KDWXD (External)	●	●	●	●	●	●	●	●	●	–*1	–*1	–*1	–*1	–*1	–*1	–*1	–*1	–*1	●	●	●
DHW tank	200 Liter 300 Liter 	UTW-T20XA UTW-T30XA	●	●	●	●	●	●	●	●	●	–*1	–*1	–*1	–*1	–*1	–*1	–*1	–*1	–*1	●	●	●
	300 Liter 	UTW-T30XD	●	●	●	●	●	●	●	●	●	–*1	–*1	–*1	–*1	–*1	–*1	–*1	–*1	–*1	●	●	●
Circulating pump		UTW-PHFXD	●	●	●	●	●	–	–	–	–	●	●	●	●	●	–	–	–	–	–	–	–
Swimming Pool kit		UTW-KSPXD	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Heat Exchanger for swimming pool kit		UTW-ESPXA	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Cooling kit		UTW-KCLXD	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	–*2	–*2	–*2
Regulation Extension Kit		UTW-KREXD	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Low Noise Kit		UTW-KLNXE	●	●	●	●	●	–	–	–	–	●	●	●	●	●	–	–	–	–	–	–	–
Drain Pan		UTW-KDPXA	–	–	–	–	–	●	●	●	–	–	–	–	–	–	–	–	–	–	–	–	–
Cascade Master Kit (incl. LPB Clip)		UTW-KCMXE	●	●	●	●	●	–	–	–	●	–	–	–	–	–	–	–	–	–	–	–	–
Cascade Slave Kit (incl. LPB Clip)		UTW-KCSXE	●	●	●	●	●	–	–	–	●	–	–	–	–	–	–	–	–	–	–	–	–

Optional parts compatibility for control

Product Name	Model Name	Split									Split DHW integrated type									Monobloc		
		High Power					Comfort				High Power					Comfort				Compact		
		1Ø		3Ø			1Ø				1Ø		3Ø			1Ø				1Ø		
		11	14	11	14	16	5	6	8	10	11	14	11	14	16	5	6	8	10	5	8	10
HMI Kit	UTW-KHMXE*3	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Remote Controller Wired	UTW-C74TXF*3	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Remote Controller Wired	UTW-C74HXF*3	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Remote Controller Wireless	UTW-C78XD	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Remote Controller Wireless	UTW-C78XD-E*4	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Room Thermostat Wired	UTW-C55XA	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Room Thermostat Wireless	UTW-C58XD	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Outdoor Sensor Transmitter	UTW-MOSXD	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
RF Modules for BSB-Port	UTW-MRCXD	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Web server	UTW-KW1XD UTW-KW4XD	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
LPB Clip	UTW-KL1XD	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Modbus Clip	UTW-KMBXE	–*7	–*7	–*7	–*7	–*7	–*7	–*7	–*7	–*7	–*7	–*7	–*7	–*7	–*7	–*7	–*7	–*7	–*7	●	●	●
Base Heater	UTW-HAMXE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	●	●
Base Heater	UTW-HAMXF	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	●	–	–
Service Tool (incl.OCI700 adaptor)	UTW-KSTXD	●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5
Service Tool Software	UTW-KPSXD	●*6	●*6	●*6	●*6	●*6	●*6	●*6	●*6	●*6	●*6	●*6	●*6	●*6	●*6	●*6	●*6	●*6	●*6	●*6	●*6	●*6
External connect kit	UTY-XWZXZ2	●	●	●	●	●	–	–	–	–	●	●	●	●	●	–	–	–	–	–	–	–

*1: DHW operation is possible without DHW Kit and DHW Tank.

*2: Cooling operation is possible without cooling kit

*3: 19 Languages included,no separate Estern European RC necessary

*4: Eastern European Language(English, Czech Republic, Slovakia, Poland, Turkey, Hungary, Russia, Slovenia, Greece, Serbia)

*5: UTW-KL1XD is required for the connection. C74TXF: Built in Room Temperature sensor C74HXF: Built in Room temperature and Humidity sensor

*6: UTW-KW1XD or UTW-KW4XD is required for the connection.

*7: Additional optional part necessary

●: Available –: Not Available

OTHERS

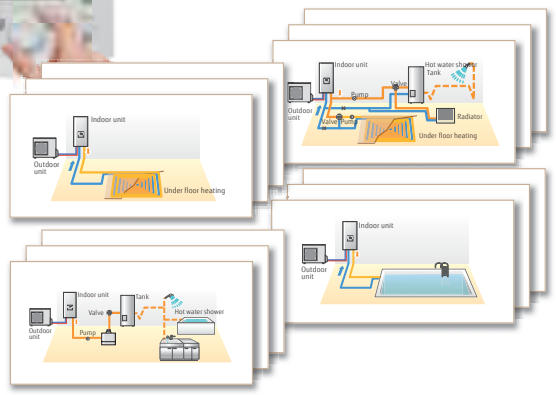
Simple Installation & Maintenance
Installation Information
Specifications & Dimensions
Model Selection Software

Simplified installation

Pre-setting configurations

When installed, the controller makes it simple to set system settings without having to individually set the system's components and units.

Easy pre-setting 8 pattern systems
(Duo heating : 12 patterns)

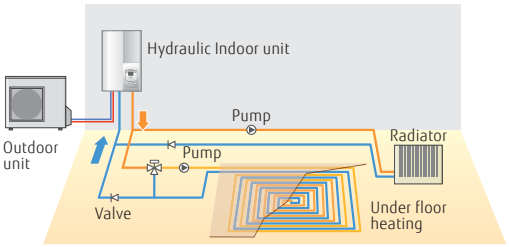


Configurstion (Parameter 5700)	Type of installation
Pre setting 1	1 heating circuit
Pre setting 2	2 heating circuit
Pre setting 3	1 heating circuit & boiler backup
Pre setting 4	2 heating circuit & boiler backup
Pre setting 5	1/2 heating circuit & buffer control
Pre setting 6	1/2 heating circuit & buffer control & boiler backup
Pre setting 7	cascade connection Master
Pre setting 8	cascade connection A
Pre setting 9	cascade connection B/C

- DHW & solar control auto detection
- pool heating & cooling optional

Outdoor temperature simulation

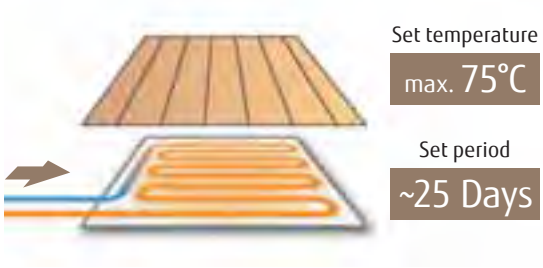
It can be checked whether each unit operates correctly under the set conditions and expected outdoor temperatures when the system is actually assembled.



Outdoor temperatures in the range from –50°C to +50°C can be simulated.

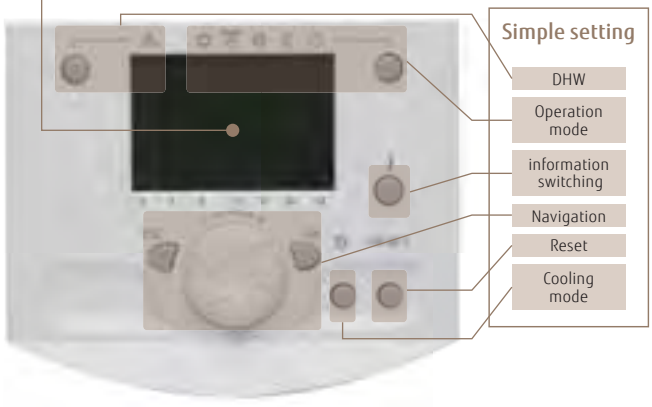
Floor drying

When floor heating is installed, it can be used to dry the concrete surrounding the hot water piping more quickly to shorten the construction period.



Controller features a large LCD display and buttons to make setting functions easy

Large display
Display of all segments operation mode indicate
•Clock •Temperature •DHW •Massage •Service/maintenance •Timer menu



Main operation flow and setting contents for installers and end users

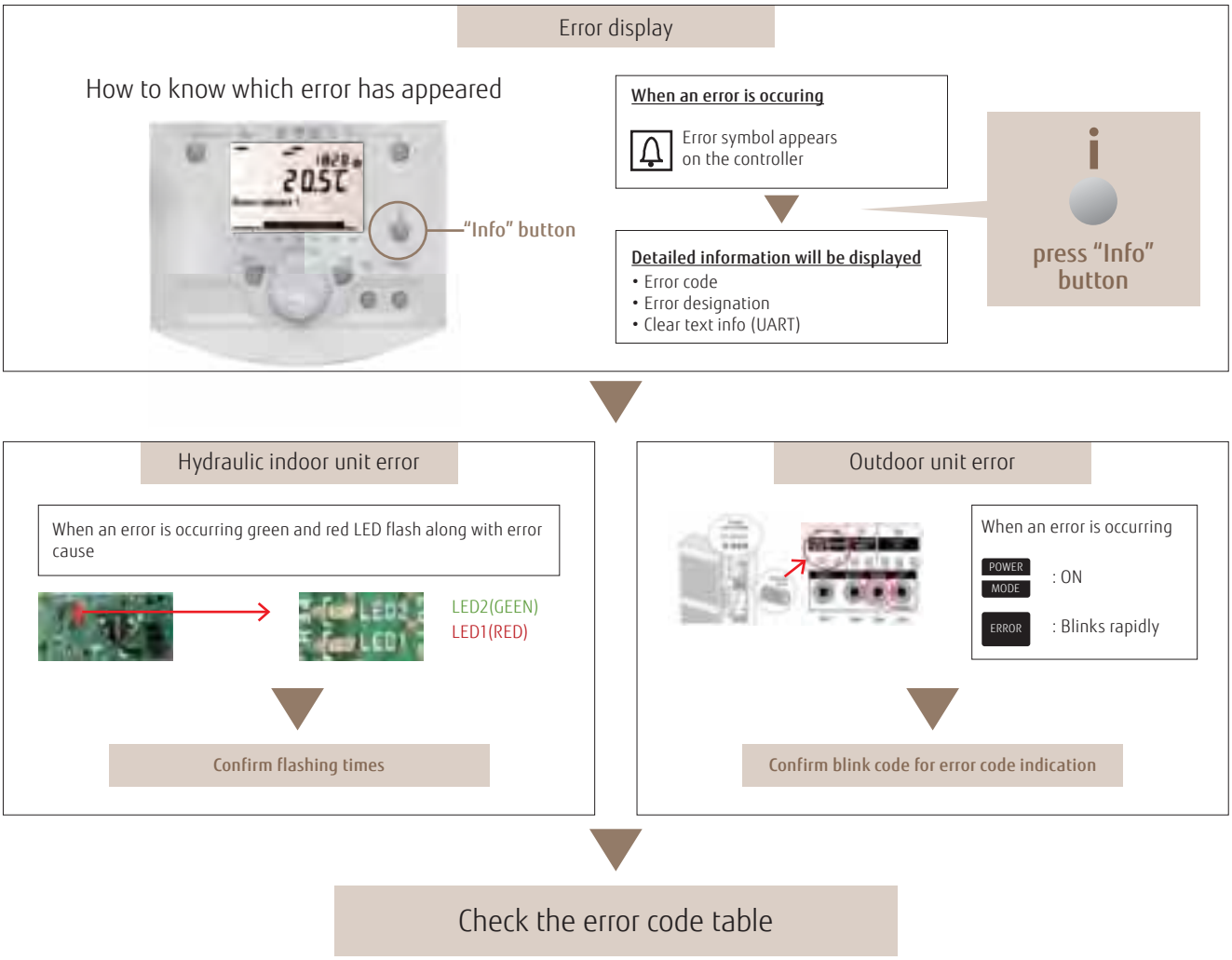
		Flow Chart	Example Item
Installers	1	Install Setting	Pump speed setting,Configuration. Heating curve setting, Heat pump shout off
	2	Option Setting	Cooling kit, DHW kit, Boiler kit, Swimming pool kit
	3	Convenient Function	Automatic Heating curve setting, Floor controlled driving,Outdoor temperature adjiustment, Maintenance period srtting
	4	workout Setting	Outdoor temperature simulator
	5	Confirmation	Operation conform (Heating cooling, DHW, option,)
End users	6	User Setting	Date and time, time program, Operation temperatur setting

Easy Installation & Maintenance

- All hydraulic safety & controlling components built in, no additional selection required
- Lifting bars for an installation without any difficulty or risk
- Easy access for maintenance operations
- No installation of refrigerant circuit connections (Only Monobloc)
- Refrigerant pump down operation

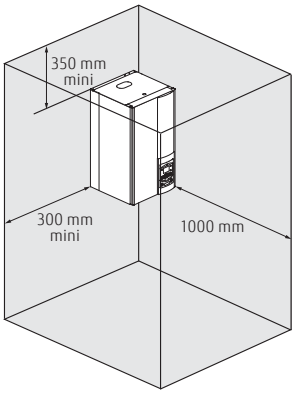
Maintenance Support

Diagnotics function for trouble shooting



INSTALLATION INFORMATION

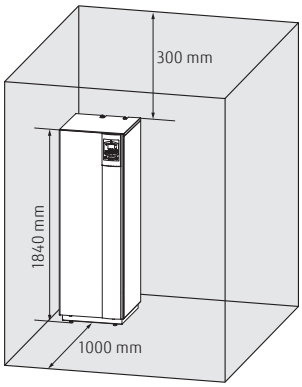
S



Hydraulic indoor unit

- Hydraulic unit is to be hang on the wall
- Weight < 60kg (including water)
- Distances for maintenance should be respected

SD

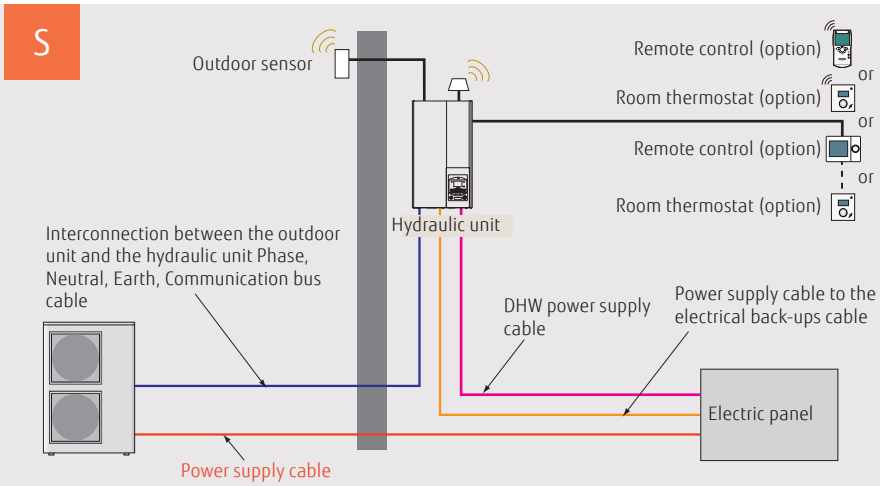


Hydraulic indoor unit

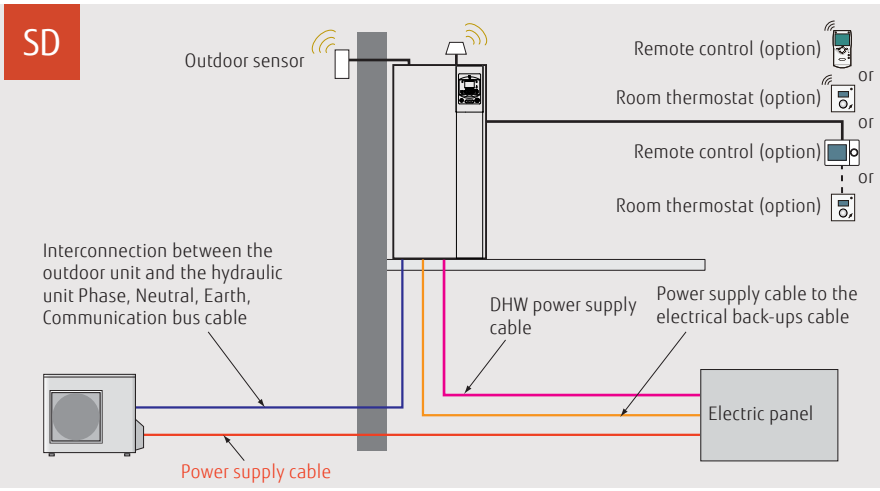
- Floor stand
- Weight: 152 kg (without water)
- Distances for maintenance should be respected.

Electrical Wiring

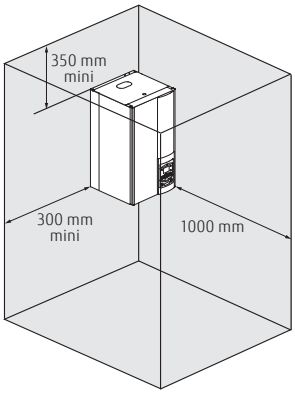
S

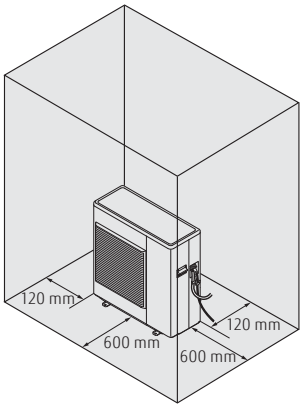


SD



M





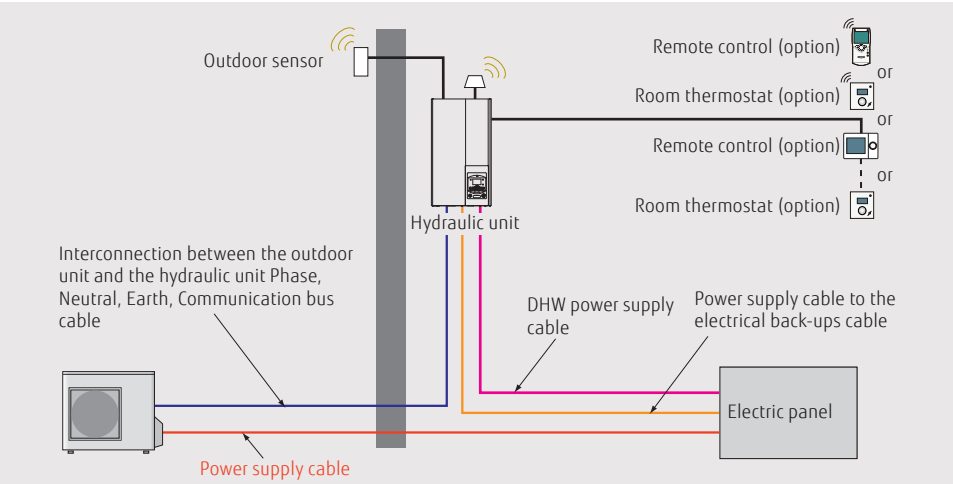
Hydraulic indoor unit

- Hydraulic unit is to be hang on the wall
- Weight < 60kg (including water)
- Distances for maintenance should be respected

Outdoor unit

- Floor stand
- Weight < 71 kg (without water)
- Distances for maintenance should be kept

Electrical Wiring



SPECIFICATIONS & DIMENSIONS Split type

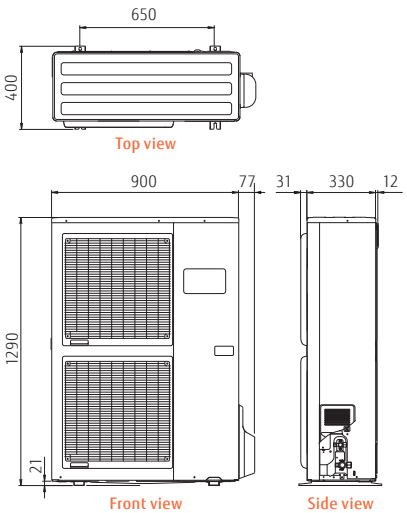
Specifications (High Power series)

Model Name	Hydraulic indoor unit		WSYG140DG6	WSYG140DG6	WSYK160DG9	WSYK160DG9	WSYK160DG9
	Outdoor unit		WOYG112LCTA	WOYG140LCTA	WOYK112LCTA	WOYK140LCTA	WOYK160LCTA
Capacity range			11	14	11	14	16
7°C/35°C floor heating *1	Heating capacity	kW	10.80	13.50	10.80	13.50	15.17
	Input power		2.54	3.23	2.51	3.20	3.70
	COP		4.25	4.18	4.30	4.22	4.10
2°C/35°C floor heating *1	Heating capacity	kW	10.77	12.00	10.77	13.00	13.50
	Input power		3.44	3.87	3.40	4.15	4.34
	COP		3.13	3.10	3.17	3.13	3.11
-7°C/35°C floor heating*1	Heating capacity	kW	10.80	12.00	10.80	13.00	13.50
	Input power		4.32	5.08	4.28	5.18	5.40
	COP		2.50	2.36	2.52	2.51	2.50
Space heating characteristics*2							
Temperature application		°C	55 / 35	55 / 35	55 / 35	55 / 35	55 / 35
Energy efficiency class			A+	A++	A+	A+	A+	A++	A+	A++	A+	A+
Rated heat output(P_{rated})		kW	9	11	11	13	9	11	11	13	13	14
Seasonal space heating energy efficiency(η_s)		%	109	151	113	148	112	154	117	150	117	149
Annual energy consumption		kWh	6842	6062	8041	6824	6669	5930	7803	6738	9062	7408
Sound power level	Hydraulic indoor unit	dB(A)	46		46		46		46		46	
	Outdoor unit		68		69		69	68	70	68	71	
Hydraulic unit Specification												
Power source			1 Ø 230 V 50 Hz				3 N 400 V 50 Hz					
Dimensions H×W×D		mm	800 × 450 × 457									
Weight (Net)		kg	42									
Water circulation	Min/Max	L/min	19.5/39.0		24.4/48.7		19.5/39.0		24.4/48.7		27.4/54.8	
Buffer tank capacity		L	16									
Expansion vessel capacity		L	8									
Leaving water temperature range	Max	°C	60									
Water pipe connection diameter	Flow/Return	mm	Ø 25.4/Ø 25.4									
Backup heater	Capacity	kW	6.0(3.0kW×2pcs.)				9.0(3.0kW×3pcs.)					
Outdoor unit specification												
Power source			1 Ø 230 V 50 Hz				3 N 400 V 50 Hz					
Current	Max	A	22.0		25.0		8.5		9.5		10.5	
Dimensions H × W × D		mm	1,290 × 900 ×330									
Weight (Net)		kg	92				99					
Refrigerant (Global warming potential)			R410A									
Refrigerant amount		kg	2.50									
Additional refrigerant charge amount		g/m	50									
Connection pipe	Diameter	Liquid	mm	Ø 9.52								
		Gas		Ø 15.88								
	Length	Min/Max	m	5/20								
	Length(Pre-charge)		m	15								
	Height difference	Max	m	15								
Operation range		Heating	°C	-25 to 35								

Dimensions (High Power series)

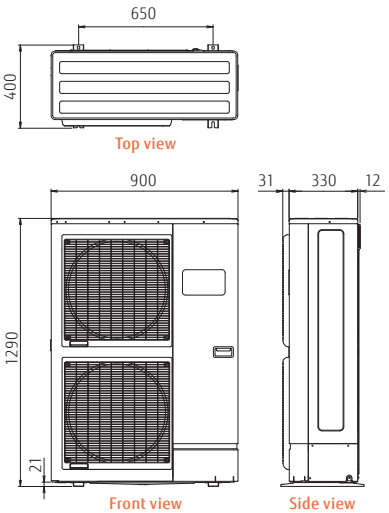
Outdoor Unit

WOYG112LCTA/WOYG140LCTA



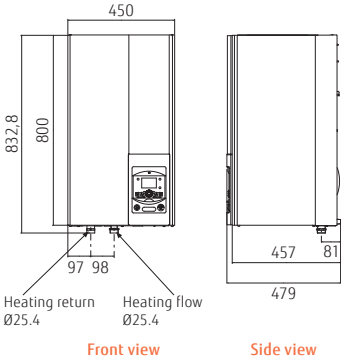
Outdoor Unit

WOYK112LCTA/WOYK140LCTA/WOYK160LCTA



Hydraulic Indoor Unit

WSYG140DG6/WSYK160DG9



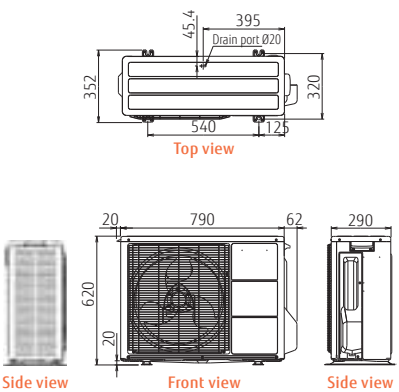
Specifications (Comfort series)

Model Name	Hydraulic indoor unit		WSYA050DG6		WSYA100DG6		WSYA100DG6		WSYA100DG6	
	Outdoor unit		WOYA060LFCA		WOYA060LFCA		WOYA080LFCA		WOYA100LFTA	
Capacity range			5		6		8		10	
7°C/35°C floor heating *1	Heating capacity	kW	4.50		6.00		7.50		10.00	
	Input power		0.996		1.41		1.84		2.49	
	COP		4.52		4.27		4.08		4.02	
2°C/35°C floor heating *1	Heating capacity	kW	4.50		4.95		5.65		7.70	
	Input power		1.39		1.53		1.78		2.47	
	COP		3.24		3.24		3.17		3.12	
-7°C/35°C floor heating*1	Heating capacity	kW	4.10		4.60		5.70		7.40	
	Input power		1.47		1.74		2.23		2.97	
	COP		2.79		2.64		2.56		2.49	
Space heating characteristics*2										
Temperature application		°C	55	35	55	35	55	35	55	35
Energy efficiency class			A+	A++	A+	A++	A+	A++	A+	A++
Rated heat output(P_{rated})		kW	4	4	5	5	6	7	8	8
Seasonal space heating energy efficiency(η_s)		%	115	169	115	169	118	156	113	155
Annual energy consumption		kWh	3026	2160	3180	2505	3886	3375	5415	4415
Sound power level	Hydraulic indoor unit	dB(A)	46		46		46		46	
	Outdoor unit		65	60	65	63	65	69	68	69
Hydraulic unit Specification										
Power source			1 Ø 230 V 50 Hz							
Dimensions H×W×D		mm	800 × 450 × 457							
Weight (Net)		kg	42							
Water circulation	Min/Max	L/min	8.1/16.2		10.8/21.7		13.5/27.1		18.1/36.1	
Buffer tank capacity		L	16							
Expansion vessel capacity		L	8							
Leaving water temperature range	Max	°C	55							
Water pipe connection diameter	Flow/Return	mm	Ø 25.4/Ø 25.4							
Backup heater	Capacity	kW	6.0(3.0kW×2pcs.)							
Outdoor unit specification										
Power source			1 Ø 230 V 50 Hz							
Current	Max	A	11.0		12.5		17.5		18.5	
Dimensions H × W × D		mm	620 × 790 ×290						830 × 900 × 330	
Weight (Net)		kg	41				42		60	
Refrigerant (Global warming potential)			R410A							
Refrigerant amount		kg	1.10				1.40		1.80	
Additional refrigerant charge amount		g/m	25						40	
Connection pipe: Diameter	Liquid	mm	Ø 6.35						Ø 9.52	
	Gas		Ø 12.70				Ø 15.88			
Length	Min/Max	m	5/30							
Length(Pre-charge)		m	15							
Height difference	Max	m	20							
Operation range	Heating	°C	-25 to 35							

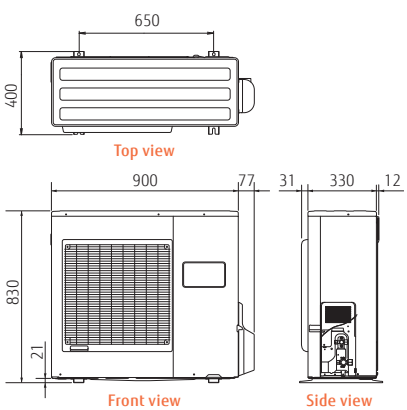
*1:The values of heating capacity/input power/COP are based on measurement of EN14511 standard. Usage environment, such as operation of the heating equipment, room temperature, and controller adjustments, may cause disparities between practically determined values and these values.
*2:All information of ErP can be available for downloaded from www.fujitsu-general.com/global/products/erp-ecodesign/index.html.

Dimensions (Comfort series)

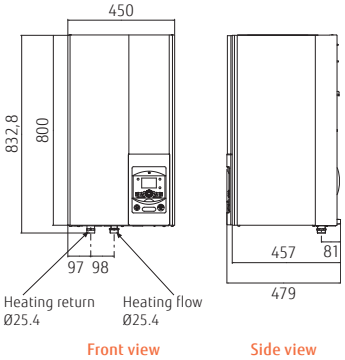
Outdoor Unit
WOYA060LFCA/WOYA080LFCA



Outdoor Unit
WOYA100LFTA



Hydraulic Indoor Unit
WSYA050DG6/WSYA100DG6



SPECIFICATIONS & DIMENSIONS Split DHW Integrated type

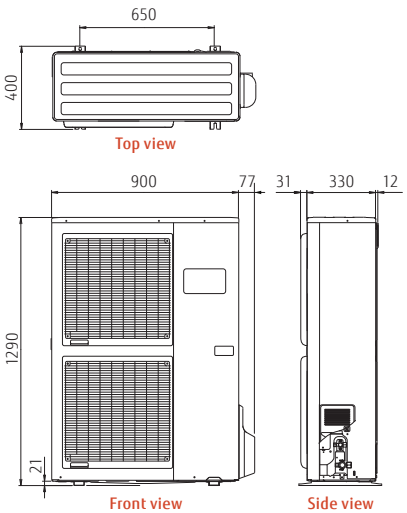
Specifications (High Power series)

Model Name	Hydraulic indoor unit		WGYG140DG6		WGYG140DG6		WGYK160DG9		WGYK160DG9		WGYK160DG9	
	Outdoor unit		WOYG112LCTA		WOYG140LCTA		WOYK112LCTA		WOYK140LCTA		WOYK160LCTA	
Capacity range			11		14		11		14		16	
7°C/35°C floor heating *1	Heating capacity	kW	10.80		13.50		10.80		13.50		15.17	
	Input power		2.54		3.23		2.51		3.20		3.70	
	COP		4.25		4.18		4.30		4.22		4.10	
2°C/35°C floor heating *1	Heating capacity	kW	10.77		12.00		10.77		13.00		13.50	
	Input power		3.44		3.87		3.40		4.15		4.34	
	COP		3.13		3.10		3.17		3.13		3.11	
-7°C/35°C floor heating*1	Heating capacity	kW	10.80		12.00		10.80		13.00		13.50	
	Input power		4.32		5.08		4.28		5.18		5.40	
	COP		2.50		2.36		2.52		2.51		2.50	
Space heating characteristics*2												
Temperature application		°C	55	35	55	35	55	35	55	35	55	35
Energy efficiency class			A+	A++	A+	A+	A+	A++	A+	A++	A+	A+
Rated heat output(P_{rated})		kW	9	11	11	13	9	11	11	13	13	14
Seasonal space heating energy efficiency(η_s)		%	109	151	113	148	112	154	117	150	117	149
Annual energy consumption		kWh	6842	6062	8041	6824	6669	5930	7803	6738	9062	7408
Annual energy consumption	Hydraulic indoor unit	dB (A)	46		46		46		46		46	
	Outdoor unit		68		69		69	68	70	68	71	
Domestic hot water characteristics*2												
Load profile			L									
Energy efficiency class			A									
Energy efficiency(η_{wh})		%	88									
Annual electricity consumption		kWh	1166									
Hydraulic indoor unit Specification												
Power source			1 Ø 230 V 50 Hz				3 N 400 V 50 Hz					
Dimensions H×W×D		mm	1,840× 648 × 698									
Weight (Net)		kg	152									
Water circulation	Min/Max	L/min	19.5/39.0		24.4/28.7		19.5/39.0		24.4/48.7		27.4/54.8	
DHW capacity		L	190									
Hot water heater capacity		kW	1.5									
Expansion vessel capacity		L	12									
Leaving water temperature range	Max	°C	60									
Water pipe connection diameter	Flow/Return	mm	Ø 25.4/Ø 25.4									
Hot water pipe connection diameter		mm	Ø 19.05									
Backup heater	Capacity	mm	6.0(3.0kW×2pcs.)				9.0(3.0kW×3pcs.)					
Outdoor unit specification												
Power source			1 Ø 230 V 50 Hz				3 N 400 V 50 Hz					
Current	Max	A	22.0		25.0		8.5		9.5		10.5	
Dimensions H × W × D		mm	1,290 × 900 ×330									
Weight (Net)		kg	92				99					
Refrigerant (Global warming potential)			R410A									
Refrigerant amount		kg	2.50									
Additional refrigerant charge amount		g/m	50									
Connection pipe – Diameter	Liquid	mm	Ø 9.52									
Connection pipe – Diameter	Gas	mm	Ø 15.88									
Connection pipe – Length	Min/Max	m	5/20									
Connection pipe – Length(Pre-charge)		m	15									
Connection pipe – Height difference	Max	m	15									
Operation range	Heating	°C	-25 to 35									

Dimensions (High Power series)

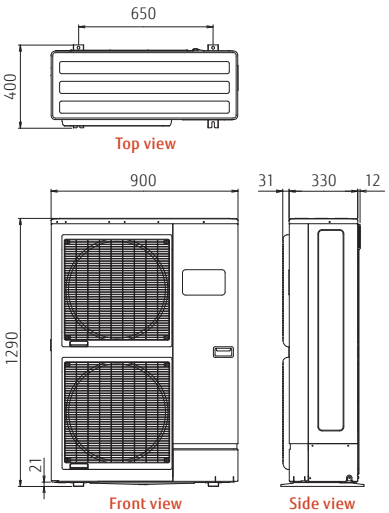
Outdoor Unit

WOYG112LCTA/WOYG140LCTA



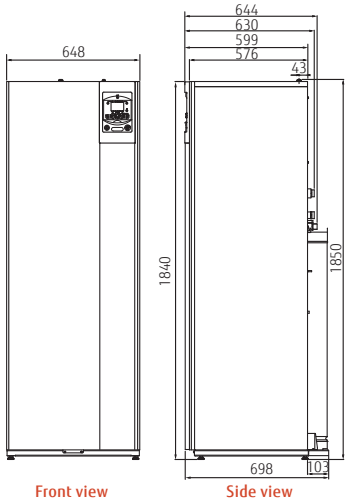
Outdoor Unit

WOYK112LCTA/WOYK140LCTA/WOYK160LCTA



Hydraulic Indoor Unit

WGYG140DG6/WGYK160DG9



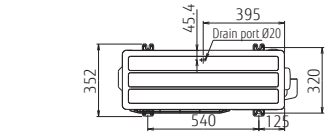
Specifications (Comfort series)

Model Name	Hydraulic indoor unit			WGYA050DG6		WGYA100DG6		WGYA100DG6		WGYA100DG6	
	Outdoor unit			WOYA060LFCA		WOYA060LFCA		WOYA080LFCA		WOYA100LFTA	
Capacity range				5		6		8		10	
7°C/35°C floor heating *1	Heating capacity	kW		4.50		6.00		7.50		10.00	
	Input power			0.996		1.41		1.84		2.49	
	COP			4.52		4.27		4.08		4.02	
2°C/35°C floor heating *1	Heating capacity	kW		4.50		4.95		5.65		7.70	
	Input power			1.39		1.53		1.78		2.47	
	COP			3.24		3.24		3.17		3.12	
-7°C/35°C floor heating*1	Heating capacity	kW		4.10		4.60		5.70		7.40	
	Input power			1.47		1.74		2.23		2.97	
	COP			2.79		2.64		2.56		2.49	
Space heating characteristics*2											
Temperature application			°C	55	35	55	35	55	35	55	35
Energy efficiency class				A+	A++	A+	A++	A+	A++	A+	A++
Rated heat output(P_{rated})			kW	4	4	5	5	6	7	8	8
Seasonal space heating energy efficiency(η_s)			%	115	169	115	169	118	156	113	155
Annual energy consumption			kWh	3026	2160	3180	2505	3886	3375	5415	4415
Annual energy consumption	Hydraulic indoor unit		dB (A)	46		46		46		46	
	Outdoor unit			65	60	65	63	65	69	68	69
Domestic hot water characteristics*2											
Load profile				L							
Energy efficiency class				A+							
Energy efficiency(η_{wh})			%	120							
Annual electricity consumption			kWh	880							
Hydraulic indoor unit Specification											
Power source				1 Ø 230 V 50 Hz							
Dimensions H×W×D			mm	1,840× 648 × 698							
Weight (Net)			kg	152							
Water circulation		Min/Max	L/min	8.1/16.2		10.8/21.7		13.5/27.1		18.1/36.1	
DHW capacity			L	190				190			
Hot water heater capacity			kW	1.5				1.5			
Expansion vessel capacity			L	12				12			
Leaving water temperature range		Max	°C	55							
Water pipe connection diameter		Flow/Return	mm	Ø 25.4/Ø 25.4							
Hot water pipe connection diameter			mm	Ø 19.05							
Backup heater		Capacity	mm	6.0(3.0kW×2pcs.)							
Outdoor unit specification											
Power source				1 Ø 230 V 50 Hz							
Current		Max	A	11.0		12.5		17.5		18.5	
Dimensions H × W × D			mm	620 × 790 ×290						830 × 900 ×330	
Weight (Net)			kg	41				42		90	
Refrigerant (Global warming potential)				R410A							
Refrigerant amount			kg	1.10				1.40		1.80	
Additional refrigerant charge amount			g/m	25						40	
Connection pipe	Diameter	Liquid	mm	Ø 6.35						Ø 9.52	
		Gas		Ø 12.70				Ø 15.88			
	Length	Min/Max	m	5/30							
	Length(Pre-charge)		m	15							
	Height difference	Max	m	20							
Operation range		Heating	°C	-25 to 35							

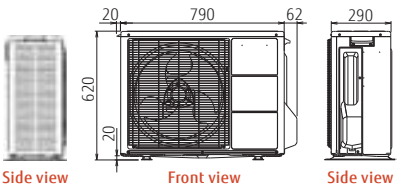
*1:The values of heating capacity/input power/COP are based on measurement of EN14511 standard. Usage environment, such as operation of the heating equipment, room temperature, and controller adjustments, may cause disparities between practically determined values and these values.
*2:All information of ErP can be available for downloaded from www.fujitsu-general.com/global/products/erp-ecodesign/index.html.

Dimensions (Comfort series)

Outdoor Unit
WOYA060LFCA/WOYA080LFCA

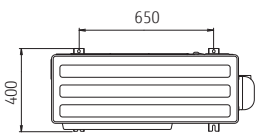


Top view

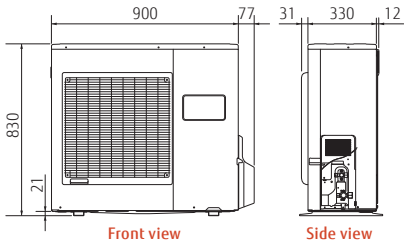


Side view Front view Side view

Outdoor Unit
WOYA100LFTA

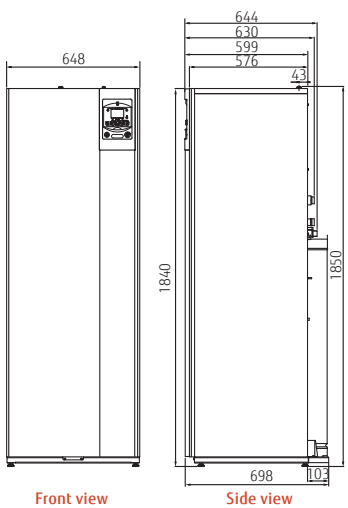


Top view



Front view Side view

Hydraulic Indoor Unit
WGYG140DG6/WGYK160DG9



Front view Side view

SPECIFICATIONS & DIMENSIONS Monobloc type

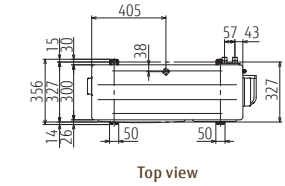
Specifications

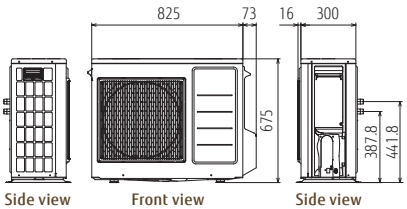
Model Name	Hydraulic indoor unit		WSYP100DG6					
	Outdoor unit		WPYA050LG		WPYA080LG		WPYA100LG	
Capacity range			5		8		10	
7°C/35°C floor heating *1	Heating capacity	kW	5.00		8.00		10.00	
	Input power		1.19		1.78		2.30	
	COP		4.20		4.50		4.35	
2°C/35°C floor heating *1	Heating capacity	kW	3.65		4.35		4.90	
	Input power		1.07		1.23		1.44	
	COP		3.40		3.55		3.40	
-7°C/35°C floor heating*1	Heating capacity	kW	3.55		7.10		8.00	
	Input power		1.38		2.93		3.32	
	COP		2.57		2.42		2.41	
Space heating characteristics*2								
Temperature application		°C	55	35	55	35	55	35
Energy efficiency class			A+	A++	A+	A++	A+	A++
Rated heat output(P_{rated})		kW	4	4	6	7	7	8
Seasonal space heating energy efficiency(η_s)		%	118	171	123	168	118	167
Annual energy consumption		kWh	3055	1952	3828	3580	4491	3700
Sound power level	Outdoor unit	dB (A)	62	61	65		68	
Hydraulic unit Specification								
Power source			1 Ø 230 V 50 Hz					
Dimensions H×W×D		mm	803 × 450 × 457					
Weight (Net)		kg	40					
Buffer tank capacity		L	22					
Expansion vessel capacity		L	12					
Water pipe connection diameter	Flow/Return	mm	Ø 25.4/Ø 25.4					
Backup heater	Capacity	kW	6.0(3.0kW×2pcs.)					
Outdoor unit specification								
Power source			1 Ø 230 V 50 Hz					
Dimensions H × W × D		mm	675 × 825 × 300		882 × 850 × 330			
Weight (Net)		kg	49		72			
Current	Max	A	10.9		15.2		17.5	
Water circulation	Min/Max	L/min	5.0/20.0		10.0/30.0			
Water pipe connection diameter	Flow/Return	mm	Ø 19.05/Ø 19.05		Ø 25.4/Ø 25.4			
Refrigerant			R410A					
Refrigerant amount		kg	1.05		1.72			
Leaving water temperature range	Max	°C	55					
Operation range	Heating	°C	-20 to 35					

*1:The values of heating capacity/input power/COP are based on measurement of EN14511 standard. Usage environment, such as operation of the heating equipment, room temperature, and controller adjustments, may cause disparities between practically determined values and these values.
*2:All information of ErP can be available for downloaded from www.fujitsu-general.com/global/products/erp-ecodesign/index.html.

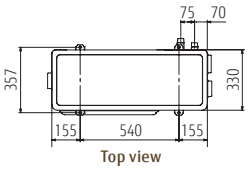
Dimensions

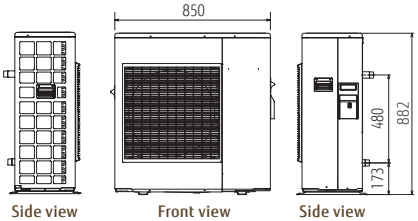
Outdoor Unit
WPYA050LG



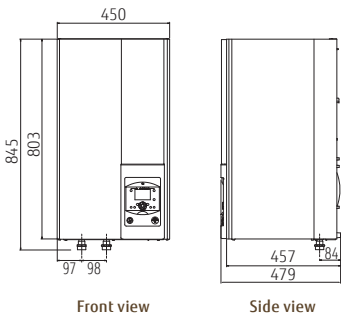


Outdoor Unit
WPYA080LG/WPYA100LG





Hydraulic indoor Unit
WSYP100DG6



MODEL SELECTION
SOFTWARE

Fujitsu General's new software for the WATERSTAGE automatically provides a combination of WATERSTAGE equipments just by giving few parameters. The software is featured with multiple languages, and automatic update function.

The entire system configuration can be reviewed and modified once the units are selected. And by seeing the images and the list of equipments at the same time, it avoids mistake in the selection of equipments.

Model selection with detailed technical information

- The software automatically selects the equipments just by inputting some factors, like the region where the equipment is installed, required capacity to heat up the space, and a heating method.
- The transition in the equipment capacity at each outdoor temperature condition and/or when back up heater is under operation can be easily created by this software.

- The visible images of the optional items enables the correct configuration of the systems.
- All of the associated optional items are automatically chosen in a case the application requires several devices of the WATERSTAGE equipments.

The software automatically provides graphs of monthly running cost, CO2 emission volume, cost comparison against other heating sources, and other data to allow the users to see at a glance the financial benefit of choosing WATERSTAGE equipments.

Estimate function

The software automatically provides the cost estimate of the entire WATERSTAGE system, not only the equipment itself but also the optional items.

Creating project files for customers

Various kinds of documents such as an equipment list, a system diagram, a cost estimate table, and an equipment CAD data can be printed out to paper or output into the files. This function also comes with a feature which allows you to change the template design of the documents.

Software updates

The database can be automatically updated through FTP by automatic update function.

Room Heating
Domestic Hot Water
Swimming Pool
Cooling
and much more ...

WATERSTAGE™

- Specifications and design are subject to change without notice for future improvement.
- For further details, please check with our authorized dealer.
- The products or equipment in this catalogue contain fluorinated greenhouse gases.
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