

# PRODUCT LINEUP AIR TO WATER For RESIDENTIAL

Room Heating & Cooling



## Complete Solution meets various needs

The clean energy produced by WATERSTAGE<sup>™</sup> reliably delivers "comfort" to all spaces in the home up to the living room, bedrooms, bath, and swimming pool.

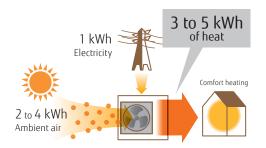




- 240 SOLUTIONS
- 242 CORE TECHNOLOGY
- 243 WATERSTAGE<sup>™</sup> Lineup
- 244 Split Type Split DHW Integrated Type
- 246 Monobloc Type
- 247 Case Studies
- 248 Optional Parts
- 250 Installation Limitations Specifications & Dimensions

## What's a Heat Pump?

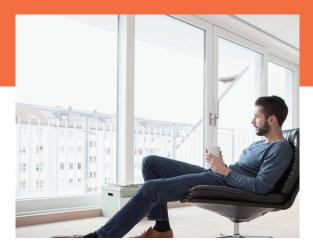
Absorbing free energy from the atmosphere. Heat pump system requires only 1 kW of electricity to generate 3 to 5 kW thermal energy.



# HOME HEATING

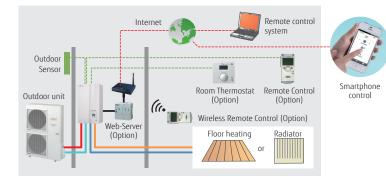
Wide range lineup suited for regional characteristics, family structure, and application. We provide various products to meet your needs from High Power via heating-centered series to reasonably-priced compact series





# High leaving water temperature

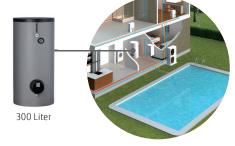
High leaving water temperature 60°C kept down to -20°C outdoor temperature without using backup heater.



# Smart control

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



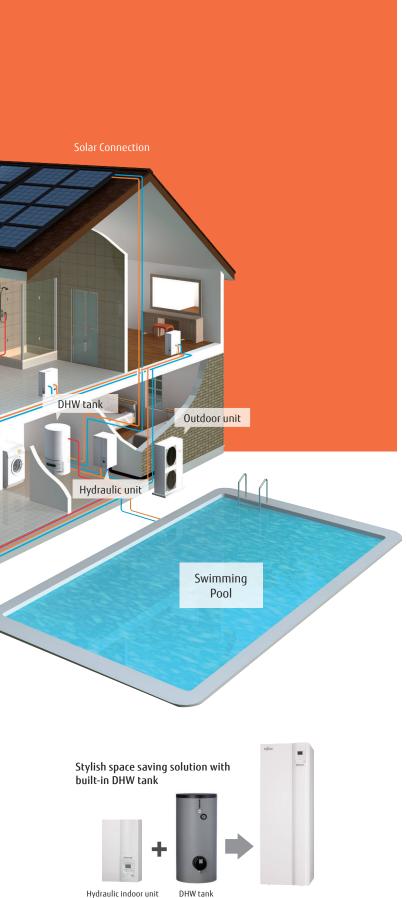


## + DHW Tank

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

# + Boiler

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



Hydraulic indoor unit

# 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.



# For Room heating & domestic hot water

### Split type Super High Power series

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.



244 Page

# Appearance-oriented compact outdoor unit

#### Split type Comfort series

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





## Monobloc type

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.

246 Page

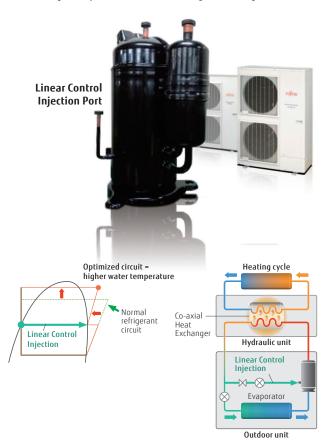


# CORE TECHNOLOGY

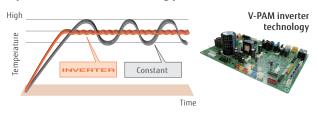
# High Efficiency

## 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



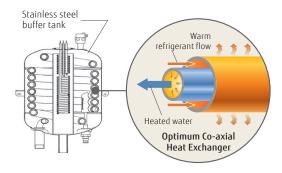
## For Hydraulic Indoor Unit Class A pump

Energy saving pump with constant volume or pressure adjustment function.



# Stainless steel buffer tank

Heat exchange amount is 25% higher than previous model. Energy saving performance is improved.



Easy Control



#### Hydraulic Indoor Unit Controller 4 Heating mode

1. Automatic mode Comfort/Reduce mode switching automatically

according to time program
2. Reduce mode

Constant reduce temperature

**3. Comfort mode** Constant comfort temperature

**4. Protection mode** Stand-by mode with anti-frost protection



# WATERSTAGE<sup>™</sup> Lineup

(2	pacity (kW)	5	6	8	10	11	14	15	16	17
	NEW Super High Power series 3 phase Page 244 Hydraulic Indoor Unit/Outdoor Unit				10			WSYK170DJ9 / WOYK150LJL	10	WSYK170DJ9 / WOYK170LJL
Split	High Power series Single phase Page 244 Hydraulic Indoor Unit/Outdoor Unit					WSYG140DG6 / WOYG112LHT	WSYG140DG6 / WOYG140LCTA			
lit	High Power series 3 phase Page 244 Hydraulic Indoor Unit/Outdoor Unit					WSYK160DG9 / WOYK112LCTA	WSYK160DG9 / WOYK140LCTA		WSYK160DC9 / WOYK160LCTA	
	Comfort series Page 244 Hydraulic Indoor Unit/Outdoor Unit	WSYA050DG6 / WOYA060LFCA	WSYA100DG6 / WOYA060LFCA	WSYA100DG6 / WOYA080LFCA	WSYA100DG6 / WOYA100LFTA		WOINTAGECIA		WORKIGELIK	
	High Power series Single phase Page 244 Hydraulic Indoor Unit/Outdoor Unit					WGYG140DG6 / WOYG112LHT	WGYG140DG6 / WOYG140LCTA			
Split DHW integrated	High Power series 3 phase Page 244 Hydraulic Indoor Unit/Outdoor Unit					WGYK160DG9 / WOYK112LCTA	WGYK160DG9 / WOYK140LCTA		WGYK160DG9 / WOYK160LCTA	
pe	Comfort series Page 244 Hydraulic Indoor Unit/Outdoor Unit	WGYA050DG6 / WOYA060LFCA	WGYA100DG6 / WOYA060LFCA	WGYA100DG6 / WOYA080LFCA	WGYA100DG6 / WOYA100LFTA					
Monobloc	Compact series with hydraulic unit Page 246 Hydraulic Indoor Unit/Outdoor Unit	WSYP100DG6 / WPYA050LG		WSYP100DG6 / WPYA080LG	WSYP100DG6 / WPYA100LG					

# 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 endconsumer 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

## **PRODUCT LINEUP: AIR TO WATER**

# Split Type

Super high power series High power series **Comfort series** 



# WATERSTAGE

Super high power series Hydraulic indoor unit: [3phase] WSYK170DJ9 Outdoor unit: [3phase] WOYK150LJL/WOYK170LJL

#### **High power series**

Hydraulic indoor unit: WSYG140DG6/[3phase] WSYK160DG9 Outdoor unit: WOYG112LHT/WOYG140LCTA [3phase] WOYK112LCTA/WOYK140LCTA/ WOYK160LCTA

### **Comfort series** Hydraulic indoor unit:

WSYA050DG6/WSYA100DG6 Outdoor unit: WOYA060LFCA/WOYA080LFCA/ WOYA100LFTA





indoor unit 3 Phase

Outdoor unit 3 Phase 15/17 kW



Hydraulic Outdoor unit indoor unit Single Phase/ 3 Phase Single Phase 11/14 kW

3 Phase 11/14/16 kW



Hvdraulic indoor unit Outdoor unit 5/6/8 kW

10 kW



# Split DHW Integrated Type

High power series **Comfort series** 

# WATERSTAGE

#### **High power series**

Hydraulic indoor unit: WGYG140DG6/[3phase] WGYK160DG9 Outdoor unit: WOYG112LHT/WOYG140LCTA [3phase] WOYK112LCTA/WOYK140LCTA/WOYK160LCTA



Hydraulic Outdoor unit indoor unit Single Phase/ Single Phase 3 Phase

11/14 kW

3 Phase 11/14/16 kW



## **Comfort series**

Hydraulic indoor unit: WGYA050DG6/WGYA100DG6 Outdoor unit: WOYA060LFCA/WOYA080LFCA/WOYA100LFTA



5/6/8 kW

Hydraulic indoor unit

Outdoor unit 10 kW



## High leaving water temperature

#### Super High power series:

High leaving water temperature of 60°C is kept even when outdoor temperature is down to -20°C without using backup heaters. Maximum leaving water temperature is 55°C without backup heater. Hot water supply temperature can be maintained even at -22°C outdoor temperature.





#### High power series:

High leaving water temperature of 60°C is kept even when outdoor temperature is down to -20°C without using backup heaters.



### Comfort series:

Maximum leaving water temperature is  $55^{\circ}$ C without backup heater. Hot water supply temperature can be maintained even at  $-10^{\circ}$ C outdoor temperature.



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

## High COP

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

Energy efficiency class



Seasonal space heating energy efficiency  $(\eta_s)$ 



Condition : Outdoor Temp. 7°C Heating Temp. 35°C.

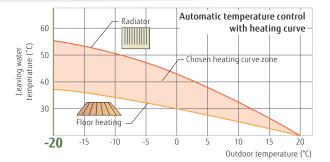
## 2 Zone individual control\*

2 Zone individual control (2 under floor heating zones or under floor heating + radiator zone, etc.)\*
\*: Optional parts are required.



## Automatic heating curve control

Automatic temperature regulation in accordance with heating curve (Depends on heating terminal and outdoor temperature)



## **PRODUCT LINEUP: AIR TO WATER**



#### **Compact series**

Hydraulic indoor unit: WSYP100DG6 Outdoor unit : WPYA050LG / WPYA080LG / WPYA100LG





Outdoor unit

5 kW



Hydraulic indoor unit

8/10 kW

## High leaving water temperature

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



## High COP

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

Energy efficiency class





Condition: Outdoor Temp. 7°C Heating Temp. 35°C.

## Compact & light weight design



## Features of the hydraulic indoor unit

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

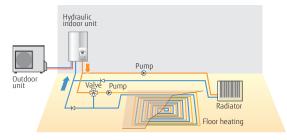




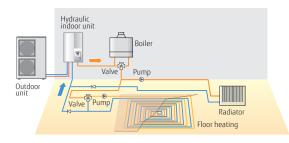
# **Case Studies**

# Split Type

2 emitter simultaneous heating (Individual control) Floor heating + Radiator



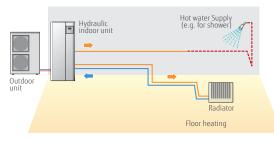
Boiler connected to heating (Boiler + Heating)



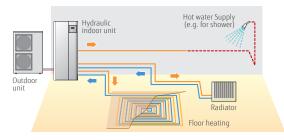
# Split DHW Integrated Type

## Single heating & Domestic Hot Water

Radiator + Domestic Hot Water

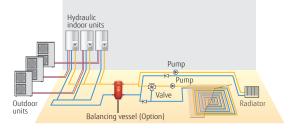


2 emitter simultaneous heating (Individual control) & Domestic Hot Water Radiator + Domestic Hot Water

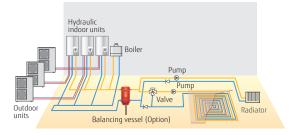


# Split Cascade System

**2 emitter simultaneous heating (Individual control)** Floor heating + Radiator



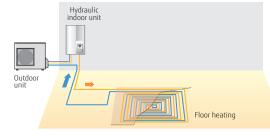
Boiler connected to heating (Boiler + Heating)



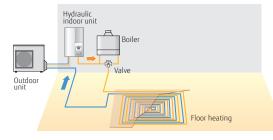
# Monobloc Type

## Single heating system

Floor heating



**Boiler connected to heating (Boiler + Heating)** Floor heating



# **Optional Parts**

								Split								Split	DHW	integ	rated	type			M	onobl	00
Product I	Name	Model Name	Hi	iper igh		Hi	gh Po	wer			Corr	ıfort			Hi	gh Po	wer			Соп	nfort		C	ompa	ct
			3	wer Ø		Ø		3Ø			1				Ø		3Ø				Ø			1Ø	10
		UTW-KZSXE	•	•	•	•	•	•	•	•	6	8	•	-	-	-	-	-	-	6	8	-	-	-	-
2nd Circuit Kit	<b>F</b>	UTW-KZDXE	_	_	_	_	_	_	_	_	_	_	_	•	•	•	•	•	•	•	•	•	_	_	
Boiler	D	UTW-KBSXD	•	•	•	•	•	•	•	•	•	•	•	-	-	-	_	_	_	_	-	-	-	-	-
Connection Kit	Z.	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 400 Liter	UTW-T20AXH UTW-T30AXH UTW-T40AXH	•	•	•	•	•	•	•	•	•	•	•	-*1	-*1	-*1	-*1	-*1	-*1	-*1	-*1	-*1	•	•	•
	200 Liter 300 Liter 400 Liter	UTW-T20BXH UTW-T30BXH UTW-T40BXH	•	•	•	•	•	•	•	•	•	•	•	-*1	-*1	_*1	_*1	-*1	-*1	-*1	-*1	-*1	•	•	•
Circulating Pump		UTW-PHFXG	•	•	•	•	•	•	•	-	-	-	-	•	•	•	•	•	_	_	-	-	-	-	_
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	•	•	•	•	•	•	•	_	-	-	•	-	-	-	_	-	-	-	-	-	-	-	-



					1			Split		1						Split	DHW	integ	rated	type			M	onobl	00
Pro	duct Name	Model Name	Hi	iper igh wer		Hi	gh Po	wer			Con	nfort			Hi	gh Po	wer			Сог	nfort		C	ompa	ct
			3 15	17	11	Ø 14	11	3Ø 14	16	5	6	Ø 8	10	1 11	Ø 14	11	3Ø 14	16	5	6	1Ø 8	10	5	1Ø 8	10
HMI Kit		UTW-KHMXE* <sup>3</sup>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
		UTW-C74TXF* <sup>3</sup>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Remote	Wired	UTW-C74HXF* <sup>3</sup>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Controller	(tr. 📷	UTW-C78XD	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Wireless	UTW-C78XD-E*4	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Room	Wired Jacobian Street	UTW-C55XA	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Thermostat	Wireless	UTW-C58XD	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Outdoor Sensor Transmitter	(1.	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	-* <sup>7</sup>	-* <sup>7</sup>	-*7	-*7	-*7	-*7	-*7	-*7	-*7	-*7	-* <sup>7</sup>	-*7	-*7	-*7	-*7	_*7	-*7	-*7	•	•	•
		UTW-HAMXE	-	_	-	_	-	-	-	-	_	_	-	-	_	-	_	-	_	-	-	-	-	•	•
Base Heater		UTW-HAMXF	_	_	_	_	-	_	-	_	_	_	_	_	_	_	_	_	_	-	-	-	•	_	_
Service Tool (incl. OCI700 Adaj	ptor)	UTW-KSTXD	•*5	•*5	•*5	•*5	•*5	•*5	•*5	•*5	•*5	•*5	•*5	•*5	•*5	•*5	•*5	•*5	•*5	•*5	•*5	•*5	•*5	•*5	•*5
Service Tool Software	0	UTW-KPSXD	•*6	•*6	•*6	•*6	•*6	•*6	•*6	•*6	•*6	•*6	•*6	•*6	•*6	•*6	•*6	•*6	•*6	•*6	•*6	•*6	•*6	•* <sup>6</sup>	•*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 Eastern European RC necessary. C74TXF: Built in Room Temperature sensor C74HXF: Built in Room temperature and Humidity sensor \*4: Eastern European Language(English, Czech Republic, Slovakia, Poland, Turkey, Hungary, Russia, Slovenia, Greece, Serbia) \*5: UTW-KW1XD or UTW-KW4XD is required for the connection. \*7: Additional optional part necessary

● : Available — : Not Available

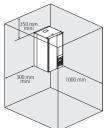
**AIR TO WATER** 

# Installation Limitations

# **Equipment Installation**

#### Split type Hydraulic indoor unit

- Hydraulic indoor unit is to be hang on the wall
- Weight < 65 kg (including water) • Space for maintenance should be respected



#### Monobloc Type Hydraulic indoor unit

- Hydraulic indoor unit is to be hang on the wall
- Weight < 62 kg (including water)
- Distances for maintenance should be respected

#### Split DHW integrated type Hydraulic indoor unit

- Floor stand
- Weight 366 kg (including water)
- Space for maintenance should be respected.

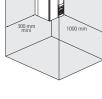
#### Monobloc type Outdoor unit

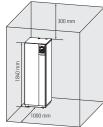
- Floor stand
- Weight 72 kg (without water): WPYA080LG, WPYA100LG
  - 49 kg (without water): WPYA050LG
- Distances for maintenance should be kept

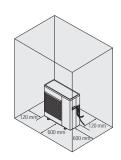
# Piping and Wiring

#### Split type Capacity range(kW) H (m) L (m) Series 5 6 Comfort ±20 5-30 8 10 Min. 11 ±15 5-20 14 Hiah 15 ±15 5-30 power ±15 5-20 16 17 ±15 5-30

\*For the outdoor unit installed below the indoor units: 25 m max. (15, 17 kW models)







# Specifications & Dimensions

Split type Super high power series/High power series

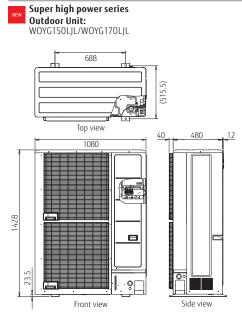
### Specifications

specifications		Undernulie in do ne unit		
Model Name		Hydraulic indoor unit Outdoor unit		
C		Outdoor unit		
Capacity range		Handa a secondo :		
786 (2586 (1 ) )	* ો	Heating capacity	- kW -	
7°C/35°C floor heatin	g *'	Input power		
		СОР		
	.1	Heating capacity	- kW -	
2°C/35°C floor heatin	g *'	Input power		
		СОР		
	. 1	Heating capacity	- kW -	
-7°C/35°C floor heatir	ng*'	Input power		
		СОР		
Space heating chara				
Temperature applica			°C	
Energy efficiency cla				
Rated heat output (P			kW	
	ing energy efficiency	(η <sub>s</sub> )	%	
Annual energy consu			kWh	
Sound power level	Hydraulic indoor un	it	dB(A)	
Sound power level	Outdoor unit			
Hydraulic indoor un	it Specification			
Power source				
Dimensions H×W×D			mm	
Weight (Net)			kg	
Water circulation		Min/Max	L/min	
Buffer tank capacity			L	
Expansion vessel car	pacity		L	
Leaving water tempe	erature range	Max	°C	
Water pipe connection	on diameter	Flow/Return	mm	
Backup heater		Capacity	kW	
Outdoor unit specifi	cation			
Power source				
Current		Max	A	
Dimensions H × W ×	D		mm	
Weight (Net)			kg	
		Type (Global Warming I		
Refrigerant		Charge	kg	
Additional refrigeran	it charge amount	enorge	g/m	
		Liquid		
	Diameter	Gas	- mm -	
Connection pipe	Length	Min/Max	m	
connection pipe	Length(Pre-charge)	MILLINGA	m	
	Height difference	Max	m	
Operation range	I neight unterente	Heating	°(	
operation range		neading		

\*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.

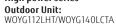
#### Dimensions

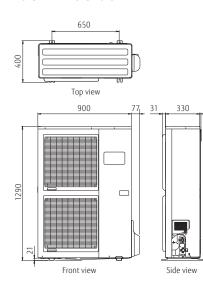


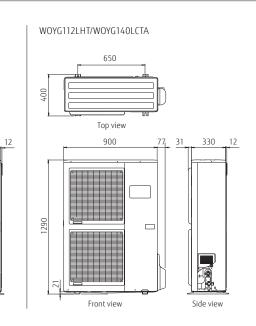


	N	EW											
	Super high	power series						High pov	wer series				
WSYK	170DJ9	WSYK	170DJ9	WSYG1		WSYG1			160DG9	WSYK1		WSYK1	60DG9
	(150LJL	WOYK		WOYG1		WOYG1			112LCTA	WOYK1		WOYK1	
	15		7	1		1			11	1		1	
	5.00		.00	10.			50		.80	13.		15.	
	.46		13	2.		3.			.51	3.		3.7	
	.33	4.	-	4.1		4.			.30	4.		4.1	
	_		-	3.4		3.0			.40	4.		4.3	
	-			3.		3.			.17	4.		3.	
	3.2		0.0	10.		11.				12		13.	
	.55		32	4.		5.0			.28	5.		5.4	
	.90		82	2.4		2			.43	2.1		2.5	
55	35	55	35	55	35	55	35	55	35	55	35	55	35
A++	A++	A++	A++	A+	A++	A+	A+	A+	A++	A+	A++	A+	A+
16	17	17	18	9	11	11	13	9	11	11	13	13	14
130	164	130 10178	161	112	151 6062	113 8041	148	112 6669	154	117 7803	150 6738	117 9062	149
9849	8635	10178	9092	6704		8041	6824		5930 46	7803		9062 4	7408
68	67	68	68			6		69	68	70	68	4	
00	07	00	00	0	0	0	5	05	00	70	00	/	1
	3 N 400	V 50 Hz			1 Ø 230	V 50 Hz				3 N 400	V 50 Hz		
-	-	-	-		800 × 4	50 × 457				800 × 4	50 × 457		
_	-	_	-		L	2				4			
-	-	-	-	19.5/		24.4	48.7	19.5	/39.0	24.4		27.4/	54.8
-	-	-	-			6					6		
-	-	-				8					3		
		_	-			i0 /@.25./				6 Ø 25.4			
	-	_	-		6.0(3.0k	/Ø 25.4				9.0(3.0k)			
		_			0.0(3.0K	wv~zpcs.)				9.0(5.0K	w^spcs.)		
	3 N 400	V 50 Hz			1 Ø 230	V 50 Hz		1		3 N 400	V 50 Hz		
_	-	-	-	22		25	.0	8	1.5	9.		10	.5
1,428 × 1	,080 ×480	1,428 × 1,	080 ×480					1,290 ×	900 ×330			,	
1	38		38		ç	92				9	9		
		(2,088)							(2,088)				
	.80		80						.50				
	50		0						50				
	9.52	Ø 9							9.52				
	5.88 /30		5.88 30						5.88 /20				
	15		5						15				
	15		5						15				
	to 35		:0 35						to 35				
	-		-						-				

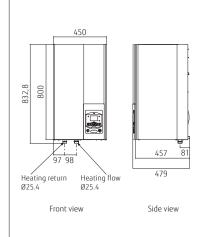
High power series







Hydraulic Indoor Unit: WSYK170DJ9 (Super high power series) WSYG140DG6/WSYK160DG9 (High power series)



# Specifications & Dimensions

Split type Comfort series

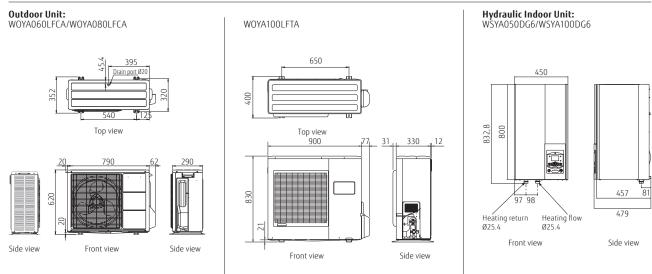
#### Specifications

Model Name		Hydraulic indoor unil			)50DG6		00DG6		100DG6		00DG6		
		Outdoor unit			60LFCA		60LFCA		80LFCA		00LFTA		
Capacity range					5		6		8		0		
		Heating capacity	- kw -		50		00		50		.00		
7°C/35°C floor heati	ng *1	Input power	N V V		996		41		84		49		
		COP			52		27		.08		02		
		Heating capacity	- kw -		50		95		.65		70		
2°C/35°C floor heati	ng *1	Input power	N V V		39		53		.78		47		
		COP			24		24		.17		12		
		Heating capacity	- kW		10		60		.70		40		
-7°C/35°C floor heat	ing*1	Input power	N V V		47		.74		.23		97		
		COP		2.	79	2.	64	2.	.56	2.	49		
Space heating cha													
Temperature applic			°C	55	35	55	35	55	35	55	35		
Energy efficiency cl				A+	A++	A+	A++	A+	A++	A+	A++		
Rated heat output(			kW	4	4	5	5	6	7	8	8		
Seasonal space hea		ncy( <b>ŋ</b> s)	%	115	169	115	169	118	156	113	155		
Annual energy cons			kWh	3026	2160	3180	2505	3886	3375	5415	441		
Sound power level	Hydraulic indoor	unit	dB(A)		+6		6		¥6		6		
•	Outdoor unit		UD(A)	65	60	65	63	65	69	68	69		
Hydraulic indoor u	nit Specification												
Power source							1 Ø 230						
Dimensions H×W×D	)		mm				800 × 4	50 × 457					
Weight (Net)			kg				4						
Water circulation		Min/Max	L/min	8.1/	16.2	10.8	/21.7	13.5	/27.1	18.1	/36.1		
Buffer tank capacit <sup>,</sup>			L				1						
Expansion vessel ca	apacity		L				8						
Leaving water temp	perature range	Max	°C				5						
Water pipe connect	ion diameter	Flow/Return	mm				Ø 25.4	Ø 25.4					
Backup heater		Capacity	kW				6.0(3.0k	W×2pcs.)					
Outdoor unit speci	fication												
Power source							1 Ø 230	V 50 Hz					
Current		Max	A	11	1.0		2.5	1	7.5		3.5		
Dimensions H × W >	< D		mm			620 × 7	90 ×290			830 × 9	00 × 330		
Weight (Net)			kg		L	+1		1	42	9	0		
Refrigerant		Type (Global Warming					R410A						
5		Charge	kg		1.	10		1.	40	1.	80		
Additional refrigera	int charge amount		g/m				25				+0		
	Diameter	Liquid	mm				5.35				9.52		
		Gas			Ø	2.7			Ø 1	5.88			
Connection pipe	Length	Min/Max	m				5/						
	Length(Pre-char		m	15									
	Height difference	e Max	m	20									
Operation range		Heating	0.0	-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.

these values. \*2:All information of ErP can be available for downloaded from www.fujitsu-general.com/global/products/erp-ecodesign/index.html.

#### Dimensions



# WATERSTAGE

## Split DHW Integrated type High power series

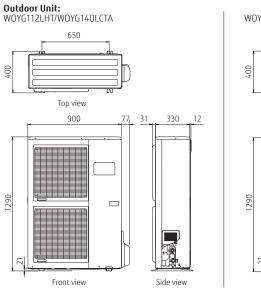
#### Specifications

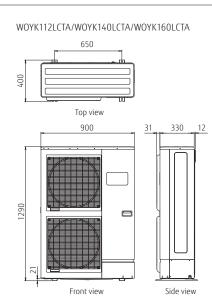
		Hydraulic indoor uni	t	WGYG1	40DG6	WGYG1	40DG6	WGYK1	60DG9	WGYK1	60DG9	WGYK1	160DG9
Model Name		Outdoor unit		WOYG	112LHT	WOYG1	40LCTA	WOYK1	12LCTA	WOYK1	40LCTA	WOYK1	60LCTA
Capacity range					1	1	4	1	1	1	4	1	16
		Heating capacity		10	.80		.50	10	80		.50		.17
7°C/35°C floor heati	ina *1	Input power	– kW		54	3.		2.			20		70
		COP			25		18		30		22		.10
		Heating capacity			.77		.00		.77		.00		.50
2°C/35°C floor heati	ina *1	Input power	kW		44	3.			40		15		34
2 0.55 0 1001 11000		СОР			13	3.		3.			13		.11
		Heating capacity			.38		.54		.38		.20		.50
-7°C/35°C floor heat	tina*1	Input power	kW		32	5.		4.			13		40
/ 0.55 0100111000	ing	СОР			40	2.		2.			38	-	50
Space heating chai	racteristics* <sup>2</sup>				-10	2.	21	۷.	15	2.	50		
Temperature applic			°C	55	35	55	35	55	35	55	35	55	35
Energy efficiency cl	lass			A+	A++	A+	A+	A+	A++	A+	A++	A+	A+
Rated heat output(	(P)		kW	9	11	11	13	9	11	11	13	13	14
	ating energy efficien	cv(n <sub>s</sub> )	%	112	151	113	148	112	154	117	150	117	149
Annual energy cons		- / 3 (5)	kWh	6704	6062	8041	6824	6669	5930	7803	6738	9062	740
	Hydraulic indoor	unit			6		6		6		6		6
Sound power level	Outdoor unit	-	dB(A)		8		9	69	68	70	68		/1
Domestic hot wate	er characteristics* <sup>2</sup>				-		-						
Load profile									_				
Energy efficiency cl	lass							/	ł				
Energy efficiency(n			%					8	8				
Annual electricity of			kWh					11	66				
Hydraulic indoor u	nit Specification												
Power source					1 Ø 230	) V 50 Hz				3 N 400	V 50 Hz		
Dimensions H×W×D	)		mm					1,840×6	48 × 698				
Weight (Net)			kg					1	52				
Water circulation			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					19	90				
Hot water heater ca	apacity		kW					1	5				
Expansion vessel ca	apacity		L					1	2				
Leaving water temp		Max	°C					6					
Water pipe connect	tion diameter	Flow/Return	mm					Ø 25.4	Ø 25.4				
Hot water pipe con	nection diameter		mm					Ø 19	9.05				
Backup heater		Capacity	kW		6.0(3.0k	:W×2pcs.)				9.0(3.0k	W×3pcs.)		
Outdoor unit speci	ification												
Power source					1 Ø 230	) V 50 Hz				3 N 400	V 50 Hz		
Current		Max	A	22	2.0	25	5.0	8		9	.5	10	).5
Dimensions H × W >	× D		mm					1,290 × 9	900 ×330				
Weight (Net)			kg		ç	92				9	9		
Refrigerant		Type (Global Warming	Potential)					R410A					
5		Charge	kg						50				
Additional refrigera	ant charge amount		g/m						0				
	Diameter	Liquid	mm					Ø 9					
	Diameter	Gas						Ø 15	5.88				
		AA: - /AA	m					5/	20				
Connection pipe	Length	Min/Max											
Connection pipe	Length Length(Pre-charg		m					1	5				
Connection pipe		e)							5				

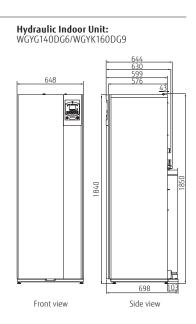
\*1:The values of heating capacity/input power/COP are based on measurement of EN14511 standard. Usage environment, such as operation of the heating equipment, room temperature, and controller adjustments, may cause disparities between practically determined values and these values.

\*2:All information of ErP can be available for downloaded from www.fujitsu-general.com/global/products/erp-ecodesign/index.html.

#### Dimensions







# Specifications & Dimensions

Split DHW Integrated type Comfort series

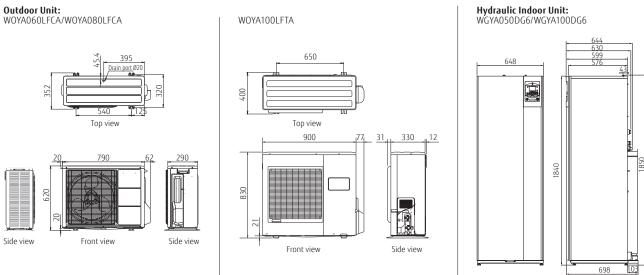
### Specifications: Split DHW Integrated type Comfort series

Model Name		Hydraulic indoor unit			)50DG6		00DG6		100DG6		100DG6			
Model Maine		Outdoor unit		W0YA0	60LFCA	WOYA0	60LFCA	WOYAC	80LFCA		00LFTA			
Capacity range				1	5	(	5		8	1	10			
		Heating capacity	kW		50	6.	00	7.	50	10	.00			
7°C/35°C floor heatir	ng *1	Input power	KVV		996	1.			84	2.	.49			
		COP			52	4.	27		.08		.02			
		Heating capacity	kW	4.	50	4.	95	5	.65	7.	70			
2°C/35°C floor heatir	ng *1	Input power	K VV	1.	39	1.	53	1.	.78	2.	.47			
	-	COP		3.	24	3.	24	3	.17	3	.12			
		Heating capacity	kW	4.	10	4.	60	5.	.70	7.	40			
-7°C/35°C floor heati	ing*1	Input power	KVV	1.	47	1.	74	2.	.23	2.	.97			
		COP		2.	79	2.	64	2	.56	2.	.49			
Space heating char	acteristics*2													
Femperature applica	ation		°C	55	35	55	35	55	35	55	35			
Energy efficiency cla	ass			A+	A++	A+	A++	A+	A++	A+	A++			
Rated heat output(P			kW	4	4	5	5	6	7	8	8			
seasonal space hear	ting energy efficiency	(η <sub>s</sub> )	%	115	169	115	169	118	156	113	155			
Annual energy cons	umption		kWh	3026	2160	3180	2505	3886	3375	5415	441			
Sound power level	Hydraulic indoor ur	nit	dB(A)	4	•6	4	6	4	46	4	+6			
·	Outdoor unit			65	60	65	63	65	69	68	69			
Domestic hot water	r characteristics* <sup>2</sup>							·						
Load profile								L						
Energy efficiency cla	ass				A+									
Energy efficiency( <b>n</b> v	wh)		%				1	20						
Annual electricity co	onsumption		kWh				8	80						
Hydraulic indoor un	nit Specification													
Power source	•						1 Ø 230	V 50 Hz						
Dimensions H×W×D			mm				1,840× 6	698 × 698						
Weight (Net)			kg				1	52						
Water circulation			L/min	8.1/	16.2	10.8	/21.7	13.5	5/27.1	18.1	/36.1			
DHW capacity			L				1	90						
Hot water heater ca	pacity		kW				1	.5						
Expansion vessel ca			L		-		1	2						
Leaving water temp		Мах	°C					5						
Water pipe connecti		Flow/Return	mm				Ø 25.4	/Ø 25.4						
Hot water pipe conn			mm				Ø 1	9.05						
Backup heater		Capacity	kW				6.0(3.0k	W×2pcs.)						
Outdoor unit specif	fication													
Power source							1 Ø 230	V 50 Hz						
Current		Max	A	11	1.0	12		1	7.5		8.5			
Dimensions H × W ×	D		mm			620 × 7	90 ×290			830 × 9	00 ×330			
Weight (Net)			kg		4	41		4	42	6	50			
		Type (Global Warming F	Potential)				R410A	(2,088)						
) of close of		Charge	kg		1	.10		1.	40	1.	80			
Refrigerant		-	g/m			2	5			4	+0			
2	nt charge amount									1				
5	1	Liquid				Ø6	.35			Ø	9.52			
5	nt charge amount Diameter	Liquid Gas	- mm -		Ø 1	Ø 6 2.70	.35		Ø 1	0 9 5.88	9.52			
Additional refrigera	1				Ø 1			30	Ø 1		9.52			
Additional refrigera	Diameter Length	Gas Min/Max	- mm		Ø 1		5/	30	Ø1		).52			
Refrigerant Additional refrigerai Connection pipe	Diameter	Gas Min/Max	- mm m		Ø1		5/		Ø1		9.52			

\*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



Front view

Side view

254



#### Monobloc type

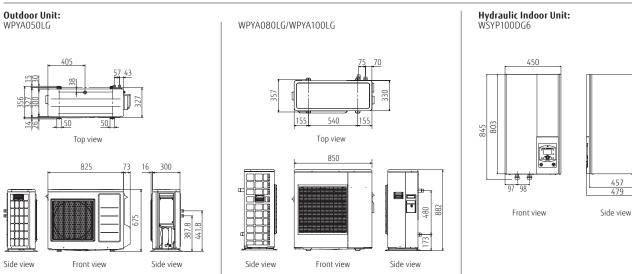
#### Specifications

Model Name	Hydraulic indoor uni	t l			WSYP1	100DG6				
model Name	Outdoor unit		WPYA	050LG	WPYA	.080LG	WPYA	100LG		
Capacity range				5	-	8	1	0		
	Heating capacity	1.11	5.	00	8.	.00	10	.00		
7°C/35°C floor heating *1	Input power	- kW -	1.	19	1.	.78	2.	30		
2	COP		4.	20	4.	50	4.35			
	Heating capacity	- kW -	3.	65	4.	.35	4.	90		
2°C/35°C floor heating *1	Input power		1.	07	1.	23	1.	44		
2	COP	· · · · ·	3.	40	3.	.55	3.	40		
	Heating capacity	- kW -	3.	55	7.	.10	8.	00		
-7°C/35°C floor heating*1	Input power	KW -	1.	38	2.	.93	3.	32		
-	COP		2.	57	2.	42	2.	41		
Space heating characteristics* <sup>2</sup>										
Temperature application		°C	55	35	55	35	55	35		
Energy efficiency class			A+	A++	A+	A++	A+	A++		
Rated heat output(P <sub>rated</sub> )		kW	4	4	6	7	7	8		
Seasonal space heating energy efficie	ncy( <b>ŋ</b> 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	6	55	6	8		
Hydraulic indoor unit Specification										
Power source					1 Ø 230	) V 50 Hz				
Dimensions H×W×D		mm			803 × 4	50 × 457				
Weight (Net)		kg			4	+0				
Buffer tank capacity		L				22				
Expansion vessel capacity		L			1	12				
Water pipe connection diameter	Flow/Return	mm			Ø 25.4	/Ø 25.4				
Backup heater	Capacity	kW			6.0(3.0k	:W×2pcs.)				
Outdoor unit specification										
Power source					1 Ø 230	) V 50 Hz				
Dimensions H × W × D		mm	675 × 82			882 × 8				
Weight (Net)		kg	4			. 7				
Current	Max	A		).9	15	5.2		7.5		
Water circulation	Min/Max	L/min								
Water pipe connection diameter	Flow/Return	mm	Ø 19.05	/Ø 19.05		Ø 25.4	Ø 25.4			
Refrigerant	Type (Global Warming	Potential)								
Neniyeralli	Charge	kg								
Leaving water temperature range	Max	°Ĉ								
Operation range	Heating	°C	°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.

these values. \*2:All information of ErP can be available for downloaded from www.fujitsu-general.com/global/products/erp-ecodesign/index.html.

#### Dimensions



84