Residential

AIR TO WATER

280 Home Heating Air to Water Overview

282 Technology

283 WATERSTAGE™ Lineup



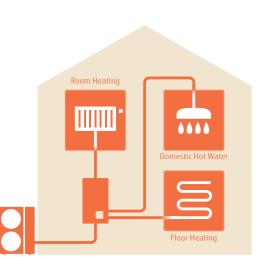


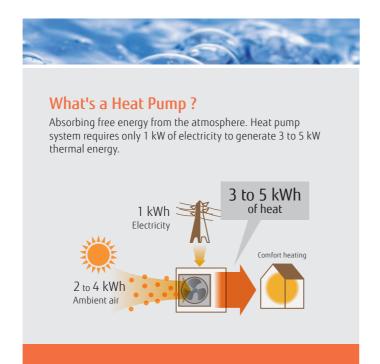
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Complete Solution meets various needs

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





Air to Water Overview

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

without using backup heater.





For Room heating & domestic hot water

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.



Appearance-oriented compact outdoor unit

Split type Comfort series

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

*: Outdoor Unit: WOYA060LFCA/WOYA080LFCA



Space is saved drastically due to built-in DHW tank.

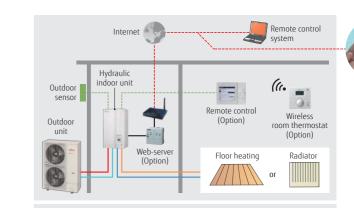
Existing boiler can be replaced easily. A larger heating capacity can be performed flexibly by using more units in cascade connection.



+ Boiler

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

*optional part necessary



Smart control

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



Technology

High Efficiency

For Outdoor Unit

Optimized circuit =

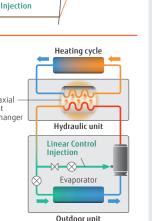
Linear Control

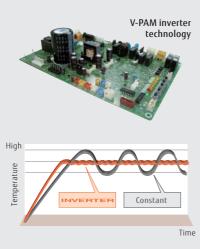
Twin Rotary Compressor with Linear Control **Injection Port**

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.









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 antifrost protection

WATERSTAGE™ Lineup

Ca	pacity (kW)	5	6	8	10	11	14	15	16	17
	Super High Power series Single phase	EW							0	
	Hydraulic Indoor Unit/ Outdoor Unit								WSYG160DJ6 / WOYG160LJL	
	Super High Power series 3 phase	EW								8
	Hydraulic Indoor Unit/ Outdoor Unit							WSYK170DJ9 / WOYK150LJL		WSYK170DJ9 / WOYK170LJL
Split	High Power series Single phase									
	Hydraulic Indoor Unit/ Outdoor Unit					WSYG140DG6 / WOYG112LHT	WSYG140DG6 / WOYG140LCTA			
	High Power series 3 phase									
	Hydraulic Indoor Unit/ Outdoor Unit					WSYK160DG9 / WOYK112LCTA	WSYK160DG9 / WOYK140LCTA		WSYK160DG9 / WOYK160LCTA	
	Comfort series		. 0	. 0						
	Hydraulic Indoor Unit/ Outdoor Unit	WSYA050DG6 / WOYA060LFCA	WSYA100DG6 / WOYA060LFCA	WSYA100DG6 / WOYA080LFCA	WSYA100DG6 / WOYA100LFTA					
	Super High Power series Single phase	EW							8	
	Hydraulic Indoor Unit/ Outdoor Unit								WGYG160DJ6 / WOYG160LJL	
	5 pilase	EW						0		0
Spli	Hydraulic Indoor Unit/ Outdoor Unit							WGYK170DJ9 / WOYK150LJL		WGYK170DJ9 / WOYK170LJL
Split DHW in	High Power series Single phase					0:	0=			
integrated	Hydraulic Indoor Unit/ Outdoor Unit					WGYG140DG6 / WOYG112LHT	WGYG140DG6 / WOYG140LCTA			
Pē	High Power series 3 phase									
	Hydraulic Indoor Unit/ Outdoor Unit					WGYK160DG9 / WOYK112LCTA	WGYK160DG9 / WOYK140LCTA		WGYK160DG9 / WOYK160LCTA	
	Comfort series				0					
	Hydraulic Indoor Unit/ Outdoor Unit	WGYA050DG6 / WOYA060LFCA	WGYA100DG6 / WOYA060LFCA	WGYA100DG6 / WOYA080LFCA	WGYA100DG6 / WOYA100LFTA					

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.

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

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

Split Type A **Integrated Type**



WATERSTAGE"

Split Type

Super high power series

Hydraulic indoor unit: WSYG160DJ6/[3 phase] WSYK170DJ9 **Outdoor unit:** WOYG160LJL [3 phase] WOYK150LJL/WOYK170LJL



Hydraulic indoor unit Single Phase/

Outdoor unit Single Phase 16kW 3 Phase 15/17kW

High power series

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



indoor unit Single Phase/

Outdoor unit Single Phase

11/14/16 kW

Comfort series

Hvdraulic indoor unit: WSYA050DG6/WSYA100DG6 **Outdoor unit:** WOYA060LFCA/WOYA080LFCA/ WOYA100LFTA



indoor unit Outdoor unit Single Phase Single Phase

Comfort series

Hydraulic indoor unit:

Outdoor unit:

WOYA100LFTA

WGYA050DG6/WGYA100DG6

WOYA060LFCA/WOYA080LFCA/

Single Phase

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. And it's possible to supply 55°C at -22°C outdoor temperature without backup heater.









Super high power series

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.



High power series

Comfort series:

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 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 (η_s)





(15 kW class)



(11 kW class)



(5 kW class)

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

2 Zone individual control*

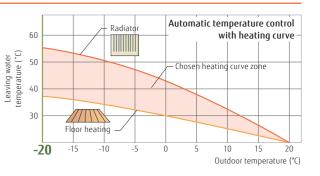
2 Zone individual control (2 under floor heating zones or under floor heating + radiator zone, etc.)*

*: Optional parts are required.



Automatic heating curve control

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



Split DHW Integrated Type

Super high power series

Hydraulic indoor unit: WGYG160DJ6/[3 phase] WGYK170DJ9 Outdoor unit: WOYG160LJL [3 phase] WOYK150LJL/WOYK170LJL



Hydraulic indoor unit Single Phase/ 3 Phase



Outdoor unit Single Phase 16kW 3 Phase 15/17kW

High power series Hydraulic indoor unit:

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



Hydraulic indoor unit

Outdoor unit Single Phase 11/14 kW

11/14/16 kW

Hydraulic Outdoor unit indoor unit Single Phase Single Phase

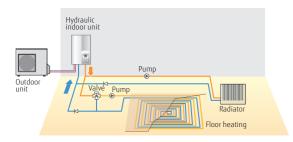
Single Phase

Case Studies

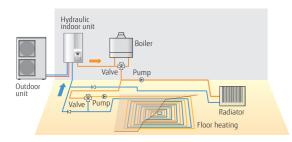
Split Type

2 emitter simultaneous heating (Individual control)

Floor heating + Radiator



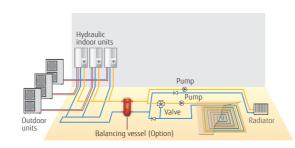
Boiler connected to heating (Boiler + Heating)



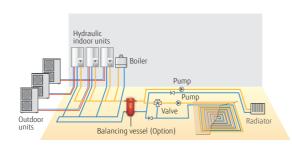
Split Cascade System

2 emitter simultaneous heating (Individual control)

Floor heating + Radiator



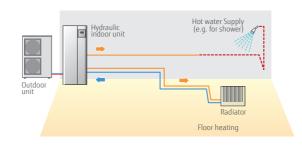
Boiler connected to heating (Boiler + Heating)



Split DHW Integrated Type

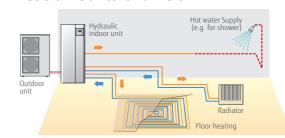
Single heating & Domestic Hot Water

Radiator + Domestic Hot Water



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

Radiator + Domestic Hot Water

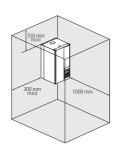


Installation Limitations

Equipment Installation

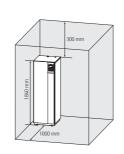
Split type Hydraulic indoor unit

- Hydraulic indoor unit is to be hang on the wall
- Weight \leq 88 kg (including water)
- Space for maintenance should be respected



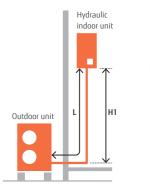
Split DHW integrated type Hydraulic indoor unit

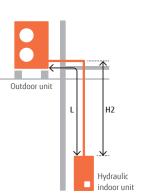
- Floor stand
- Weight \leq 393 kg (including water)
- Space for maintenance should be respected.



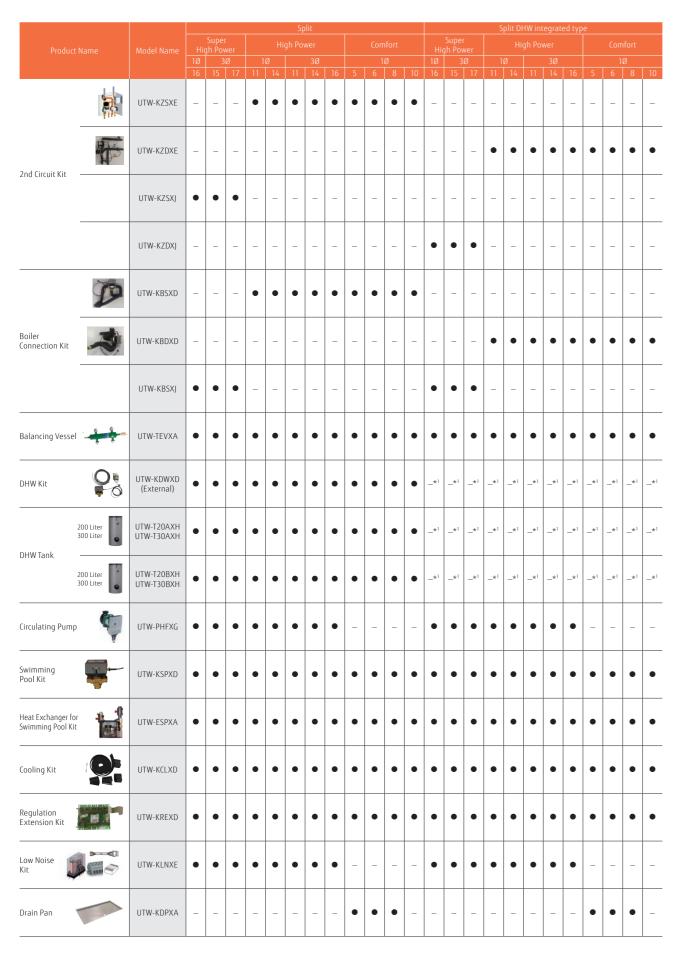
Piping and Wiring Split type

	Capacity range (kW)	Pipe diameter (Liquid/Gas) (mm)	H1 (m)	H2 (m)	L (m)	
	5	6.35/12.70				
Comfort	6	0.53/12./0	+20	-20	5-30	
Connoc	8	6.35/15.88	720	-20	3-30	
	10	9.52/15.88				
	11					
High power	14	9.52/15.88	+15	-15	5-20	
	16					
	15					
Super High power	16	9.52/15.88	+15	-25	5-30	
iligii powei	17					





Optional Parts



			Super			Ш	Sp gh Po				Cos	nfort					2	plit D Hi	HW in gh Po		ed typ	e			
		1Ø	_	Ø		Ø		3Ø				Ø		1Ø	_	Ø		Ø		3Ø			1	Ø	
ascade Master Kit ncl. LPB Clip)	UTW-KCMXE	16 -	15 -	17 -	•	•	•	•	16	5	6	8	•	16 -	15 -	17 -	- 11	14	11 -	14	16 -	5 -	6	8	10
ascade Slave it ncl. LPB Clip)	UTW-KCSXE	_	_	_	•	•	•	•	•	_	_	_	•	_	_	_	_	_	_	_	_	_	_	_	_
MI Kit	UTW-KHMXE*3	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
emote Wired	UTW-C74TXF* ³	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ontroller	UTW-C74HXF* ³	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Wired On Som	UTW-C55XA	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
wireless	UTW-C58XD	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
utdoor Sensor (%)	UTW-MOSXD	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
F (n. lodules for BSB-Port	UTW-MRCXD	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
leb Server	UTW-KW1XD UTW-KW4XD	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PB Clip	UTW-KL1XD	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
OODBUS Clip	UTW-KMBXJ	_*7	_*7	_*7	_* ⁷	_* ⁷	_* ⁷	_* ⁷	_*7	_*7	_*7	_*7	_*7	_*7	_*7	_*7	_*7	_*7	_*7	_*7	_*7	_*7	_*7	-* ⁷	_*
ervice Tool ncl. OCI700 dapter)	UTW-KSTXD	●* ⁵	●* ⁵	●* ⁵	●* ⁵	●* ⁵	●* ⁵	●* ⁵	●* ⁵	●* ⁵	●* ⁵	●* ⁵	●* ⁵	●* ⁵	●* ⁵	●* ⁵	●* ⁵	●* ⁵	• '						
ervice Tool oftware	UTW-KPSXD	●* ⁶	● * ⁶	●* ⁶	•																				
xternal	UTY-XWZXZ2	-	-	_	•	•	•	•	•	-	-	-	-	-	-	-	•	•	•	•	•	-	-	-	-
onnect Kit	UTY-XWZXZ3		•	•	_	_	_	_	_	_	_	_	_	•	•	•	_	_	_	_	_	_	_	_	_

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

*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-KL1XD is required for the connection.

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

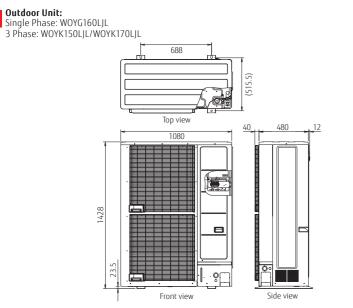
*7: Additional optional part necessary

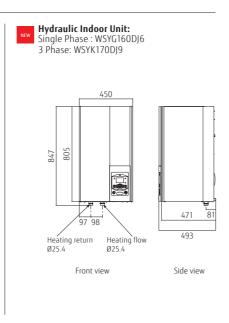
Specifications & Dimensions

for Split Type Super High Power Series

specifications						Tent	ative				
M. I. IN		Hydraulic indoor uni		WSYG	160DJ6	WSYK1	70DJ9	WSYK1	170DJ9		
Model Name		Outdoor unit		WOYG	160LJL	WOYK	150LJL	WOYK	170LJL		
Capacity range				1	16		5	1			
		Heating capacity	Law	16	.00	15.	.00	17.	.00		
7°C/35°C floor heati	ing *1	Input power	⊢ kW ⊢	3.	86	3.	46	4.	10		
		COP	·	4.	.15	4.	33	4.	15		
		Heating capacity	kW	13	.30	13.	20	13.	.50		
2°C/35°C floor heati	ing *1	Input power	T KW	4.	25	4.	06	4.27			
		COP		3.	.13	3.	25	3.	3.16		
		Heating capacity	kW	14	.50	13.	20	15.	.00		
-7°C/35°C floor heat	ting* ¹	Input power	T KVV [27		55	5.	32		
	-	COP		2.	75	2.	90	2.	82		
Space heating cha											
Temperature applic			°C	55	35	55	35	55	35		
Energy efficiency cl				A++	A++	A++	A++	A++	A++		
Rated heat output(kW	14	16	16	17	17	18		
	ating energy efficiency	(η_s)	%	125	163	130	164	130	161		
Annual energy con:			kWh	8,757	8,014	9,915	8,606	10,232	9,05		
Sound power level	Hydraulic indoor un	it	dB(A)	45	45	45	45	45	45		
	Outdoor unit		UD(A)	67	66	67	66	67	68		
Hydraulic indoor u	nit Specification										
Power source					e, 230 V 50 Hz			400 V 50 Hz			
Dimensions H×W×[)		mm		50 × 471			50 × 471			
Veight (Net)			kg		2.5			2.5			
Water circulation		Min/Max	L/min		/57.8	24.0/54.2 27.3/61.4					
Buffer tank capacit			L		25	25					
expansion vessel c			L		0			10			
Leaving water tem		Max	°C		0			60			
Water pipe connect	tion diameter	Flow/Return	mm		/Ø 25.4			ï 25.4			
Backup heater		Capacity	kW	6.0(3.0k	W×2pcs.)		9.0(3.0k	(W×3pcs.)			
Outdoor unit speci	fication										
Power source				Single-phase	e, 230 V 50 Hz		3-phase, 4	400 V 50 Hz			
Current		Max	A		.00		0		+.0		
Dimensions H × W	× D		mm		,080 × 480	1,428 × 1,			080 ×480		
Weight (Net)			kg	1	37	13		13	38		
Refrigerant		Type (Global Warming				R410A					
		Charge	kg		80	3.		3.1			
Additional refrigera	ant charge amount		g/m		0	5			0		
	Diameter	Liquid	- mm -		9.52	Ø 9		Ø 9			
		Gas			5.88	Ø 15			5.88		
Connection pipe	Length	Min/Max	m		30	5/			30		
	Length(Pre-charge)		m	1	15		5	1	5		
	Height difference	Max	m			25/15 (Outdoor u					
Operation range		Heating	°C	-25	to 35	-25 t	o 35	-25 t	to 35		

Dimensions





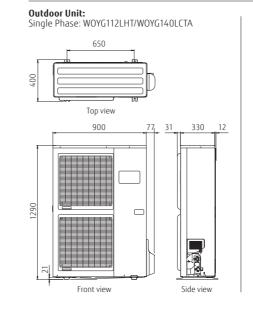
for Split Type High Power Series

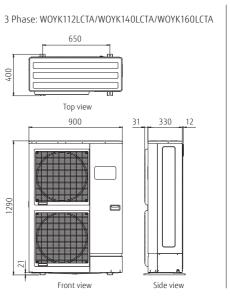
Specifications

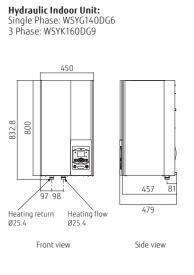
Model Name		Hydraulic indoor unit		WSYG1			40DG6		60DG9		60DG9		160DG9	
		Outdoor unit		WOYG1			40LCTA		12LCTA		40LCTA		60LCTA	
Capacity range				1			4		1		4		16	
		Heating capacity	kW	10.			.50		.80		.50		.17	
7°C/35°C floor heati	ng *¹	Input power	KVV	2.			23	2.	51		20		.70	
		COP		4		4	.18	4.			22		.10	
		Heating capacity	kW	10.			.00		.77	13	.00		.50	
2°C/35°C floor heating	ng *¹	Input power	KVV	3.4	44	3.	87	3.4	40		15	4.	34	
		COP		3.	13	3	.10	3.17		3.13		3.11		
		Heating capacity	kW	10.	38	11	.54	10.38		12.20		13.50		
-7°C/35°C floor heat	ing* ¹	Input power	T KVV	4.	32	5.	08	4	28	5.	13	5.	40	
	-	COP		2.	40	2.	27	2.4	43	2.	38	2.	50	
Space heating char	acteristics*2													
Temperature applica	ation		°C	55	35	55	35	55	35	55	35	55	35	
Energy efficiency cla	ass			A+	A++	A+	A+	A+	A++	A+	A++	A+	A+	
Rated heat output(I			kW	9 112	11	11	13	9	11	11	13	13	14	
Seasonal space hea	sonal space heating energy efficiency(η _s)				151	113	148	112	154	117	150	117	149	
Annual energy cons	ual energy consumption				6,062	8,041	6,824	6,669	5,930	7,803	6,738	9,062	7,40	
Sound power level	Hydraulic indoor unit		dB(A)	4			6		6		6	4	-6	
Souria power level	Outdoor unit		UD(A)	6	8	69		69	68	70	68	7	71	
Hydraulic indoor ur	draulic indoor unit Specification													
Power source	•			Si	ngle-phase	, 230 V 50 I	Ηz			3-phase, 4	00 V 50 Hz			
Dimensions H×W×D			mm		800 × 45	50 × 457				800 × 4	50 × 457			
Weight (Net)			kg		4	2				4	2			
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	1		L		1	6				16				
Expansion vessel ca	pacity		L		3	3		8						
Leaving water temp	erature range	Max	°C		6	0		60						
Water pipe connecti		Flow/Return	mm		Ø 25.4	/Ø 25.4		Ø 25.4/Ø 25.4						
Backup heater		Capacity	kW		6.0(3.0k)	W×2pcs.)				9.0(3.0k	W×3pcs.)			
Outdoor unit specif	ication									,				
Power source				Si	ngle-phase	, 230 V 50 I	Hz			3-phase, 4	00 V 50 Hz			
Current		Max	A	22			5.0	9.	.0		.5	10	0.5	
Dimensions H × W ×	D		mm			•		1,290 × 9	900 ×330			•		
Weight (Net)			kg		9	2				9	19			
		Type (Global Warming P	otential)					R410A	(2,088)					
Refrigerant		Charge	kg					2.	50					
Additional refrigera	nt charge amount		g/m						0					
	D:	Liquid						Ø 9	.52					
	Diameter	Gas	mm					Ø 15	5.88					
Connection pipe	Length	Min/Max	m					5/.						
	Length(Pre-charge)		m					1	5					
	Height difference	Max	m						5					
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.

Dimensions







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*2:All information of ErP can be available for downloaded from https://www.fujitsu-general.com/global/support/downloads/search/index.html

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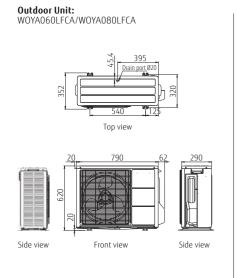
for Split Type Comfort Series

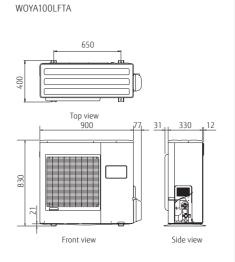
Specifications

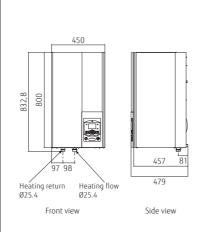
W 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Hydraulic indoor unit		WSYAC)50DG6	WSYA1	100DG6	WS <u>Y</u> A1	00DG6	WSYA1	00DG6				
Model Name		Outdoor unit			060LFCA		060LFCA		80LFCA		00LFTA				
Capacity range															
, ,		Heating capacity	1,147	4.	.50	6.	.00	7.	50	10.	.00				
7°C/35°C floor heating	ng *1	Input power	kW	0.9	996	1.	.41	1.0	84		49				
	,	COP		4.	.52	4.	.27	4.	08	4.	02				
		Heating capacity			.50	4.	.95	5.	65	7.					
2°C/35°C floor heating	na *1	Input power	kW	1.	.39	1.	.53	1.	78	2.	47				
	,	COP			.24		.24	3.	17		12				
		Heating capacity	T		.10		.60	5.			40				
-7°C/35°C floor heat	ina*¹	Input power	kW		.47	1.74		2.23			97				
, cros emodrinede	9	COP			.79		.64	2.			49				
Space heating char	acteristics*2	1 44.													
Temperature applica			l °C	55	35	55	35	55	35	55	35				
Energy efficiency cla				A+	A++	A+	A++	A+	A++	A+	A++				
Rated heat output(I			kW	4	4	5	5	6	7	8	8				
	ting energy efficiency	/(n _c)	%	115	169	115	169	118	156	113	155				
Annual energy cons		1 137	kWh	3.026	2.160	3,180	2,505	3,886	3,375	5,415	4,415				
	Hydraulic indoor u	nit			46		+6	4		4					
Sound power level	Outdoor unit		dB(A)	65	60	65	63	65	69	68	69				
Hydraulic indoor ur	nit Specification														
Power source							Single-phase	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	3/21.7	13.5	/27.1	18.1	/36.1				
Buffer tank capacity	/		L				1	6							
Expansion vessel ca	apacity		L					В							
Leaving water temp		Max	°C				5	5							
Water pipe connecti		Flow/Return	mm				Ø 25.4	/Ø 25.4							
Backup heater		Capacity	kW				6.0(3.0k	W×2pcs.)							
Outdoor unit specif	fication	,, ,						,							
Power source							Single-phase	230 V 50 Hz							
Current		Max	A		12	2.5			7.5	18	3.5				
Dimensions H × W ×	. D	'	mm			620 × 7	'90 ×290			830 × 90	00 × 330				
Weight (Net)			kg			1		4	2	6	0				
		Type (Global Warming F	otential)				R410A	(2,088)							
Refrigerant		Charge	kg		1.	.10		1.4	40	1.8	80				
Additional refrigera	nt charge amount	1	g/m			2	25			4	0				
		Liquid				Øe	5.35			Ø 9	.52				
	Diameter	Gas	mm		Ø				Ø 15	5.88					
Connection pipe	Length	Min/Max	m				5/	30							
r r*	Length(Pre-charge		m					5							
	Height difference	Max	m					0							
Operation range	, , ,	Heating	°C				-20	to 35							
		wer/COP are based on		. (5111/5											

^{*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

Dimensions





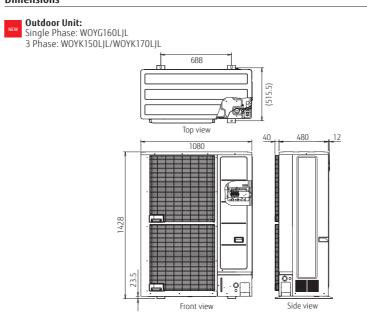


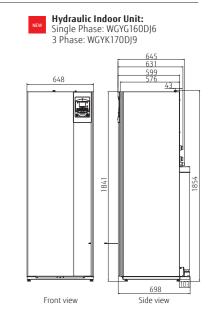
Hydraulic Indoor Unit: WSYA050DG6/WSYA100DG6

for Split DHW Integrated Type Super High Power Series

specifications						lent	ative		
Madal Name		Hydraulic indoor unit		WGYG	160DJ6	WGYK	170DJ9	WGYK	170DJ9
		Outdoor unit		WOYO	i160LJL	WOYK	150LJL	WOYK	(170LJL
Capacity range									17
		Heating capacity		16	5.00	15	.00	17	7.00
7°C/35°C floor heat	ina *1	Input power	kW		.86		46		.10
	,	COP			.15		.33	4.15	
		Heating capacity	Ι.		3.30		.20		3.50
2°C/35°C floor heat	ina *1	Input power	kW -		.25		.06		.27
2 6/33 6 11001 11606	9	COP			.13		.25		.16
		Heating capacity			+.50		.20		5.00
-7°C/35°C floor hea	tina*	Input power	kW -		.27		.55		.32
-/ C/33 C 11001 11ea	ung	COP	-		.75		.90		.82
Space heating cha	ractoristics* ²	COP			./ 3	Δ.	.90		.02
Space neating cha Temperature appli			l °C l	55	35	55	35	55	35
			1						
Energy efficiency c			Law	A++	A++	A++	A++	A++	A+-
Rated heat output		(- \	kW	14	16	16	17	17	18
	ating energy efficiency	(η _s)	%	125	163	130	164	130	16
Annual energy con			kWh	8,757	8,014	9,915	8,606	10,232	9,05
Sound power level	Hydraulic indoor ur	nit	dB(A)	45	45	45	45	45	45
•	Outdoor unit		35()	67	66	67	66	67	68
	er characteristics*2								
Load profile							L		
Energy efficiency c							A		
Energy efficiency(r			%				09		
Annual electricity			kWh			9	41		
Hydraulic indoor u	ınit Specification								
Power source				Single-phas	e, 230 V 50 Hz			400 V 50 Hz	
Dimensions H×W×I	D		mm			1,841 × 6	548 × 698		
Weight (Net)			kg			1	66		
Water circulation			L/min	26.4	4/57.8	24.0	/54.2	27.3	3/61.4
DHW capacity			L			1:	90		
Hot water heater c	apacity		kW			1	.5		
Expansion vessel of			L			1	12		
Leaving water tem		Max	°C			6	50		
Water pipe connec		Flow/Return	mm			Ø 25.4	/Ø 25.4		
Hot water pipe con			mm				9.05		
Backup heater		Capacity	kW	6,0(3.0)	(W×2pcs.)			(W×3pcs.)	
Outdoor unit spec	ification			(0.00	, /		(0.0)	F /	
Power source	-			Single-phas	e, 230 V 50 Hz		3-phase. 4	400 V 50 Hz	
Current		Max	I A		8.0			4.0	
Dimensions H × W	× D	1	mm		,080 × 480			,080 × 480	
Weight (Net)	-		kg		37			38	
		Type (Global Warming F			(2,088)			(2,088)	
Refrigerant		Charge	kg		.80			.80	
Additional refriger	ant charge amount	1 cyc	g/m		50			50	
, was trongs reninger		Liquid	9/111		9.52			9.52	
	Diameter	Gas	mm -		5.88				
Connection pice	Longth	Min/Max	- m		/30	Ø 15.88 5/30			
Connection pipe	Length		m		15			15	
	Length(Pre-charge		m						
0	Height difference	Max	m °C		15			15	
Operation range		Heating	1 -(-25	to 35	I	-25	to 35	

Dimensions





these values.

*2:All information of ErP can be available for downloaded from https://www.fujitsu-general.com/global/support/downloads/search/index.html

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for Split DHW Integrated Type High Power Series

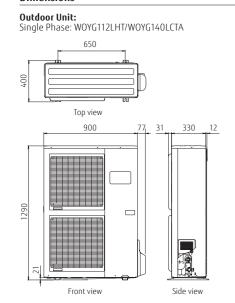
Specifications

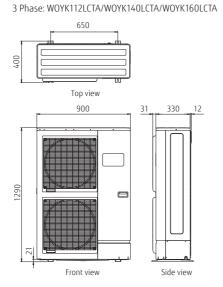
Mardal Name		Hydraulic indoor uni		WGYG	40DG6	WGYG1	40DG6	WGYK1	60DG9	WGYK1	160DG9	WGYK	160DG9
		Outdoor unit		WOYG	112LHT	WOYG1	40LCTA	WOYK1	12LCTA	WOYK1	40LCTA	WOYK1	160LCTA
Capacity range				1				1			4		
		Heating capacity	1144	10	.80	13	.50	10	.80	13	.50	15	5.17
7°C/35°C floor heati	ina *1	Input power	kW	2.	54	3.	23	2.	51	3.	20	3.	.70
	,	COP	-	4.	25	4.	18	4.	30	4.	22	4.	.10
		Heating capacity			.77		.00		.77		.00		.50
2°C/35°C floor heati	ina *1	Input power	kW		44		87		40		.15		.34
	,	COP			13		10	3.			13		.11
		Heating capacity			.38		.54		.38		.20		.50
-7°C/35°C floor heat	ina*1	Input power	kW		32		08		28		.13		.40
	9	COP			40		27		43		38		.50
Space heating char	racteristics*2	1 44.											
Temperature applic			l °C	55	35	55	35	55	35	55	35	55	35
Energy efficiency cl				A+	A++	A+	A+	A+	A++	A+	A++	A+	A+
Rated heat output(kW	9	11	11	13	9	11	11	13	13	14
Seasonal space hea		$ncv(\mathbf{n}_c)$	%	112	151	113	148	112	154	117	150	117	149
Annual energy cons			kWh	6,704	6,062	8,041	6,824	6,669	5,930	7,803	6,738	9,062	7,408
	Hydraulic indoo	runit			6		6	46			6		+6
Sound power level	Outdoor unit	· Gilic	dB(A)		8		9	69	68	70	68		71
Domestic hot wate							-						
Load profile	choroccenscies												
Energy efficiency cl	ass								4				
Energy efficiency(n	.)		%										
Annual electricity of			kWh						66				
Hydraulic indoor u			1 101111										
Power source	inc specification			9	ingle-phase	e 230 V 50 F	17			3-phase, 4	00 V 50 Hz		
Dimensions H×W×D)		mm		1,840× 648 × 698								
Weight (Net)			kg						52				
Water circulation			L/min	19.5	/39.0	24.4	/28.7		39.0	24.4	/48.7	27.4	/54.8
DHW capacity			1						90				
Hot water heater ca	anacity		kW						.5				
Expansion vessel ca			1						2				
Leaving water temp		Max	°°						0				
Water pipe connect		Flow/Return	mm					Ø 25.4	Ø 25.4				
Hot water pipe con			mm					Ø 19					
Backup heater		Capacity	kW		6.0(3.0k	W×2pcs.)				9.0(3.0k	W×3ncs.)		
Outdoor unit speci	fication	1 0000000			0.0 (0.0					010 (0101			
Power source				9	inale-phase	e 230 V 50 F	lz			3-phase, 4	00 V 50 Hz		
Current		Max	A		2.0		5.0	9	.0		.5	1(0.5
Dimensions H × W >	× D	1	mm					1.290 × 0	900 ×330			-	
Weight (Net)			kg		C	92		,		q	19		
	-	Type (Global Warming						R410A	(2.088)				
Refrigerant		Charge	kg						50				
Additional refrigera	ant charge amount		g/m						0				
		Liquid	1					Ø 9					
	Diameter	Gas	mm					Ø 15					
Connection pipe	Length	Min/Max	m					5/					
	Length(Pre-cha		m						5				
	Height difference		m						5				
Operation range	, - ,	Heating	°C						o 35				
		t nowor/COD are based on		. ([]	/ F 11 - b d -	1.00							

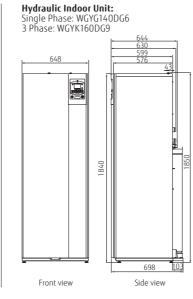
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Dimensions







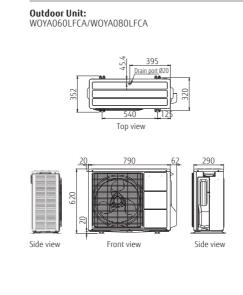
for Split DHW Integrated Type Comfort Series

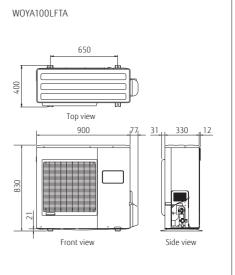
Specifications

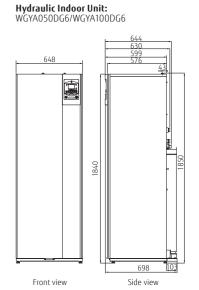
Model Name		Hydraulic indoor unit			50DG6	WGYA1			00DG6						
		Outdoor unit		WOYA0	60LFCA	WOYA0		WOYA0							
Capacity range			الكتب	į.		(3						
		Heating capacity	- kw -	4.		6.0		7.							
7°C/35°C floor heati	Heating cap Input power COP Input power In	Input power	N. V.		196	1.4			84						
				4.		4.		4.		WOYA100L 10 10.000 2.49 4.02 7.700 2.47 3.12 7.40 2.97 2.49 55 A+ 8 113 5,415 46 68 18.1/36.					
		Heating capacity	kW	4.		4.9		5.							
2°C/35°C floor heati	ing *1	Input power	I NVV	1.3		1.5			78						
				3		3		3.							
		Heating capacity	kW	4.	10	4.0	50	5.	70	10.00 2.49 4.02 7.70 2.47 3.12 7.40 2.97 2.49 55 3 A+ A 8 4 113 1! 5,415 4,4 68 68 6					
-7°C/35°C floor heat	ing* ¹	Input power	7 KW [1.4	47	1.7	74	2	23	WOYA100LFTA 10 10.00 2.49 4.02 7.70 2.47 3.12 7.40 2.97 2.49 55 3 4 8 113 1 5 5,415 4,6 68 68 6					
		COP		2.	79	2.0	54	2.	56	2.4	49				
Space heating cha	racteristics*2									7.70 2.47 3.12 7.40 2.97 2.49 55 A+ A 8 113 1 5,415 46 68					
Temperature applic			°C	55	35	55	35	55	35	55	3.5				
Energy efficiency cl			-	A+	A++	A+	A++	A+	A++		A+				
Rated heat output(kW	4	4	5	5	6	7	3.12 7.40 2.97 2.49 35 55 5 A++ A+ A 7 8 156 113 1 3,375 5,415 4, 69 68					
	Characteristics*2 Plication °C 55 35 55 35 55 55 55 5								15						
Annual energy con:		1 13/									4,4				
	Hydraulic indoor ur	nit													
Sound power level	Hydraulic indoor unit Outdoor unit water characteristics* cy class		- dB(A) -								69				
Domestic hot water						- 55		- 55		- 55	- 0.				
Load profile								i							
Energy efficiency cl	ass														
Energy efficiency (n			1 %												
			I KWIII				0	30							
Power source	inc specification						Single-phase	230 V 50 Hz							
Dimensions H×W×[)		T mm												
Weight (Net)	,														
Weight (Net) Water circulation			L/min	8.1/	16.2	10.8		13.5	/27.1	10.1/	126 1				
DHW capacity				0.1/	10.2	10.8		90	121.1	18.1/	30.1				
			L			-			-						
			kW					.5							
Hot water heater ca			1 1												
Expansion vessel c		T.	L												
Expansion vessel c Leaving water tem	perature range		°C				5	5							
Expansion vessel c Leaving water tem Water pipe connect	perature range ion diameter	Max Flow/Return	°C mm				Ø 25.4	5 /Ø 25.4							
Expansion vessel c Leaving water tem Water pipe connect Hot water pipe con	perature range ion diameter	Flow/Return	°C mm mm				Ø 25.4 Ø 1	5 /Ø 25.4 9.05							
Expansion vessel c Leaving water tem Water pipe connect Hot water pipe con Backup heater	perature range ion diameter nection diameter	Flow/Return	°C mm				Ø 25.4	5 /Ø 25.4 9.05							
Expansion vessel c Leaving water tem Water pipe connect Hot water pipe con Backup heater Outdoor unit speci	perature range ion diameter nection diameter	Flow/Return	°C mm mm				Ø 25.4 Ø 1 6.0(3.0k	5 /Ø 25.4 9.05 W×2pcs.)							
Expansion vessel c Leaving water tem Water pipe connect Hot water pipe con Backup heater Outdoor unit speci Power source	perature range ion diameter nection diameter	Flow/Return Capacity	°C mm mm kW				Ø 25.4 Ø 1 6.0(3.0k	9.05 W×2pcs.)							
Expansion vessel c Leaving water tem Water pipe connect Hot water pipe con Backup heater Outdoor unit speci Power source Current	perature range ion diameter nection diameter fication	Flow/Return Capacity	°C mm mm kW		12	2.5	Ø 25.4 Ø 1 6.0(3.0k	9.05 W×2pcs.)	7.5						
Expansion vessel c Leaving water tem Water pipe connect Hot water pipe con Backup heater Outdoor unit speci Power source Current Dimensions H × W	perature range ion diameter nection diameter fication	Flow/Return Capacity	°C mm mm kW			620 × 79	Ø 25.4 Ø 1 6.0(3.0k	55 /Ø 25.4 9.05 W×2pcs.) ≥ 230 V 50 Hz		830 × 90	00 ×330				
Expansion vessel c. Leaving water tem Water pipe connect Hot water pipe con Backup heater Outdoor unit speci Power source Current Dimensions H × W	perature range ion diameter nection diameter fication	Flow/Return Capacity Max	°C mm mm kW		12	620 × 79	90 ×290	55 /Ø 25.4 9.05 W×2pcs.) = 230 V 50 Hz	7.5	830 × 90	00 ×330				
Expansion vessel c. Leaving water tem Water pipe connect Hot water pipe con Backup heater Outdoor unit speci Power source Current Dimensions H × W Weight (Net)	perature range ion diameter nection diameter fication	Flow/Return Capacity Max Type (Global Warming F	°C mm mm kW A mm kg Potential)		4	620 × 79	Ø 25.4 Ø 1 6.0(3.0k	55 10 25.4 9.05 W×2pcs.) 2 230 V 50 Hz 17 4 (2,088)	-2	830 × 90 60	00 ×330 0				
Expansion vessel c. Leaving water tem Water pipe connect Hot water pipe con Backup heater Outdoor unit speci Power source Current Dimensions H × W: Weight (Net) Refrigerant	perature range ion diameter nection diameter fication	Flow/Return Capacity Max Type (Global Warming F	°C mm mm kW A mm kg Potential) kg		4	620 × 79	90 ×290 R410A	55 10 25.4 9.05 W×2pcs.) 2 230 V 50 Hz 17 4 (2,088)		830 × 90 60	00 ×330 0				
Expansion vessel c. Leaving water tem Water pipe connect Hot water pipe con Backup heater Outdoor unit speci Power source Current Dimensions H × W: Weight (Net) Refrigerant	perature range ion diameter nection diameter fication	Flow/Return Capacity Max Type (Global Warming F	°C mm mm kW A mm kg Potential)		4	620 × 79	9 25.4 Ø 1 6.0(3.0k Single-phase 90 ×290 R410A	55 10 25.4 9.05 W×2pcs.) 2 230 V 50 Hz 17 4 (2,088)	-2	830 × 90 60 1.8	00 ×330 0 80				
Expansion vessel c. Leaving water tem Water pipe connect Hot water pipe con Backup heater Outdoor unit speci Power source Current Dimensions H × W: Weight (Net) Refrigerant	perature range ion diameter nection diameter fication × D	Flow/Return Capacity Max Type (Global Warming F	°C mm mm kW A mm kg Potential) kg g/m		4	620 × 79	9 25.4 Ø 1 6.0(3.0k Single-phase 90 ×290 R410A	55 10 25.4 9.05 W×2pcs.) 2 230 V 50 Hz 17 4 (2,088)	-2	830 × 90 60 1.8	00 ×330 0 80				
Expansion vessel c. Leaving water tem Water pipe connect Hot water pipe con Backup heater Outdoor unit speci Power source Current Dimensions H × W: Weight (Net) Refrigerant	perature range ion diameter nection diameter fication × D	Flow/Return Capacity Max Type (Global Warming F Charge Liquid	°C mm mm kW A mm kg Potential) kg		1.	620 × 79	9 25.4 Ø 1 6.0(3.0k Single-phase 90 ×290 R410A	55 10 25.4 9.05 W×2pcs.) 2 230 V 50 Hz 17 4 (2,088)	2	830 × 90 60 1.8	00 ×330 0 80				
Expansion vessel c Leaving water tem Water pipe connect Hot water pipe con Backup heater Outdoor unit speci Power source Current Dimensions H × W	perature range cion diameter nection diameter fication × D ant charge amount Diameter	Flow/Return Capacity Max Type (Global Warming F Charge Liquid Gas	°C mm mm kW A mm kg Potential) kg g/m		1.	620 × 79 11 10 2 Ø 6	90 ×290 R410A	55 10 25.4 9.05 W×2pcs.) 2 230 V 50 Hz 17 4 (2,088)	2	830 × 90 60 1.8 40 Ø 9	00 ×330 0 80				
Expansion vessel c. Leaving water temp Water pipe connect Hot water pipe con Backup heater Outdoor unit speci Power source Current Dimensions H × W: Weight (Net) Refrigerant Additional refrigera	perature range ion diameter nection diameter fication × D ant charge amount Diameter Length	Flow/Return Capacity Max Type (Global Warming F. Charge Liquid Gas Min/Max	°C mm mm kW A mm kg Potential) kg g/m mm -		1.	620 × 79 11 10 2 Ø 6	9 25.4 Ø 1 6.0(3.0k Single-phase 30 ×290 R410A	.5 // 25.4 9.05 9.05 W×2pcs.) 2230 V 50 Hz 17 (2,088) 1.4	2	830 × 90 60 1.8 40 Ø 9	00 ×330 0 80				
Expansion vessel c. Leaving water temp Water pipe connect Hot water pipe con Backup heater Outdoor unit speci Power source Current Dimensions H × W: Weight (Net) Refrigerant Additional refrigera	perature range ion diameter nection diameter fication × D ant charge amount Diameter Length Length(Pre-charge	Flow/Return Capacity Max Type (Global Warming F Charge Liquid Gas Min/Max	"C mm mm kW A mm kg openitial) kg g/m mm m	1.	620 × 79 11 10 2 Ø 6	90 25.4 Ø 25.4 Ø 1 6.0(3.0k Single-phase 90 ×290 R410A 5 .35	.55 /Ø 25.4 90.5 W×2pcs.) 220 V 50 Hz 17 (2,088) 1.	2	830 × 90 60 1.8 40 Ø 9	00 ×330 0 80					

^{*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

Dimensions







 $^{*2:}All\ information\ of\ ErP\ can\ be\ available\ for\ downloaded\ from\ https://www.fujitsu-general.com/global/support/downloads/search/index.html$