

2. Specifications

2.1 WH-SXC09F3E5 WH-UX09FE5

Item		Unit	Outdoor Unit		
Performance Test Condition			EN 14511		
Cooling Capacity	Condition (Ambient/Water)		A35W7		
	kW		7.00		
	BTU/h		23900		
	kcal/h		6020		
Cooling EER	W/W		3.17		
	kcal/hW		2.72		
Heating Capacity	Condition (Ambient/Water)		A7W35	A2W35	
	kW		9.00	9.00	
	BTU/h		30700	30700	
	kcal/h		7740	7740	
Heating COP	W/W		4.84	3.59	
	kcal/hW		4.16	3.08	
Noise Level	Condition (Ambient/Water)		A35W7	A7W35	A2W35
	dB (A)		Cooling: 49	Heating: 49	—
	Power Level dB		Cooling: 67	Heating: 66	—
Air Flow	m ³ /min (ft ³ /min)		Cooling: 89.5 (3160) Heating: 76.8 (2710)		
Refrigeration Control Device			Expansion Valve		
Refrigeration Oil	cm ³		FV50S (1200)		
Refrigerant (R410A)	kg (oz)		2.85 (100.6)		
Dimension	Height	mm (inch)	1340 (52-3/4)		
	Width	mm (inch)	900 (35-7/16)		
	Depth	mm (inch)	320 (12-19/32)		
Net Weight	kg (lbs)		101 (223)		
Pipe Diameter	Liquid	mm (inch)	9.52 (3/8)		
	Gas	mm (inch)	15.88 (5/8)		
Standard Length	m (ft)		7 (23.0)		
Pipe Length Range	m (ft)		3 (9.8) ~ 30 (98.4)		
I/D & O/D Height Difference	m (ft)		20 (65.6)		
Additional Gas Amount	g/m (oz/ft)		50 (0.5)		
Refrigeration Charge Less	m (ft)		10 (32.8)		
Compressor	Type		Hermetic Motor		
	Motor Type		Brushless (4-poles)		
	Rated Output	kW	3.00		
Fan	Type		Propeller Fan		
	Material		PP		
	Motor Type		DC (8-poles)		
	Input Power	W	—		
	Output Power	W	60		
	Fan Speed	rpm	Cooling: 550 (Top), 590 (Bottom) Heating: 490 (Top), 530 (Bottom)		
Heat Exchanger	Fin material		Aluminium (Pre Coat)		
	Fin Type		Corrugated Fin		
	Row × Stage × FPI		2 × 51 × 18		
	Size (W × H × L)	mm	903.7 × 1295.4 × 38.1		

Item		Unit	Outdoor Unit		
Power Source (Phase, Voltage, Cycle)		∅	Single		
		V	230		
		Hz	50		
Input Power		Condition (Ambient/Water)	A35W7	A7W35	A2W35
		kW	Cooling: 2.21	Heating: 1.86	Heating: 2.51
Maximum Input Power For Heatpump System		kW	5.41		
Power Supply 1 : Phase (∅) / Max. Current (A) / Max. Input Power (W)			1∅ / 25.0 / 5.41k		
Power Supply 2 : Phase (∅) / Max. Current (A) / Max. Input Power (W)			1∅ / 13.0 / 3.00k		
Power Supply 3 : Phase (∅) / Max. Current (A) / Max. Input Power (W)			— / — / —		
Starting Current		A	10.2		
Running Current		Condition (Ambient/Water)	A35W7	A7W35	A2W35
		A	Cooling: 10.2	Heating: 8.6	Heating: 11.6
Maximum Current For Heatpump System		A	25.0		
Power Factor Power factor means total figure of compressor and outdoor fan motor.		%	Cooling: 94 Heating: 94		
Power Cord	Number of core		—		
	Length	m (ft)	—		
Thermostat			Electronic Control		
Protection Device			Electronic Control		

Item		Unit	Indoor Unit		
Performance Test Condition			EN 14511		
Operation Range	Outdoor Ambient	°C	Cooling: 16 ~ 43 Heating: -20 ~ 35		
	Water Outlet	°C	Cooling: 5 ~ 20 Heating: 25 ~ 55		
Internal Pressure Differential		kPa	Cooling: 11.6 Heating: 18.7		
Noise Level		Condition (Ambient/Water)	A35W7	A7W35	A2W35
		dB (A)	Cooling: 33	Cooling: 33	—
		Power Level dB	Cooling: 46	Cooling: 46	—
Dimension	Height	mm (inch)	892 (35-1/8)		
	Width	mm (inch)	502 (19-3/4)		
	Depth	mm (inch)	353 (13-29/32)		
Net Weight		kg (lbs)	44 (97)		
Refrigerant Pipe Diameter	Liquid	mm (inch)	9.52 (3/8)		
	Gas	mm (inch)	15.88 (5/8)		
Water Pipe Diameter	Inlet	mm (inch)	28 (1-3/32)		
	Outlet	mm (inch)	28 (1-3/32)		
Water Drain Hose Inner Diameter		mm (inch)	15 (19/32)		
Pump	Motor Type		DC Motor		
	No. of Speed		7 (Software Selection)		
	Input Power	W	54		
Hot Water Coil	Type		Brazen Plate		
	No. of Plates		36		
	Size (H × W × L)	mm	65 × 120 × 376		
	Water Flow Rate	l/min (m³/h)	Cooling: 20.1 (1.2) Heating: 25.8 (1.5)		
Pressure Relief Valve Water Circuit		kPa	Open: 300, Close: 265 and below		
Flow Switch			Magnetic Lead Switch		
Protection Device		A	Residual Current Circuit Breaker (30)		

Item		Unit	Indoor Unit
Expansion Vessel	Volume	l	10
	MWP	bar	3
Capacity of Integrated Electric Heater		kW	3.00

Note:

- Cooling capacities are based on outdoor air temperature of 35°C Dry Bulb with controlled indoor water inlet temperature of 12°C and water outlet temperature of 7°C.
- Heating capacities are based on outdoor air temperature of 7°C Dry Bulb (44.6°F Dry Bulb), 6°C Wet Bulb (42.8°F Wet Bulb) with controlled indoor water inlet temperature of 30°C and water outlet temperature of 35°C.
- Specification are subjected to change without prior notice for further improvement.
- Flow rate indicated are based on nominal capacity adjustment of leaving water temperature (LWT) 35°C and $\Delta T = 5^\circ\text{C}$.

2.2 WH-SXC12F6E5 WH-UX12FE5

Item		Unit	Outdoor Unit		
Performance Test Condition			EN 14511		
Cooling Capacity	Condition (Ambient/Water)		A35W7		
	kW		10.00		
	BTU/h		34100		
	kcal/h		8600		
Cooling EER	W/W		2.81		
	kcal/hW		2.42		
Heating Capacity	Condition (Ambient/Water)		A7W35	A2W35	
	kW		12.00	12.00	
	BTU/h		41000	41000	
	kcal/h		10320	10320	
Heating COP	W/W		4.74	3.44	
	kcal/hW		4.08	2.96	
Noise Level	Condition (Ambient/Water)		A35W7	A7W35	A2W35
	dB (A)		Cooling: 50	Heating: 50	—
	Power Level dB		Cooling: 68	Heating: 67	—
Air Flow	m ³ /min (ft ³ /min)		Cooling: 93.3 (3290) Heating: 80.0 (2830)		
Refrigeration Control Device			Expansion Valve		
Refrigeration Oil		cm ³	FV50S (1200)		
Refrigerant (R410A)		kg (oz)	2.85 (100.6)		
Dimension	Height	mm (inch)	1340 (52-3/4)		
	Width	mm (inch)	900 (35-7/16)		
	Depth	mm (inch)	320 (12-19/32)		
Net Weight		kg (lbs)	101 (223)		
Pipe Diameter	Liquid	mm (inch)	9.52 (3/8)		
	Gas	mm (inch)	15.88 (5/8)		
Standard Length		m (ft)	7 (23.0)		
Pipe Length Range		m (ft)	3 (9.8) ~ 30 (98.4)		
I/D & O/D Height Difference		m (ft)	20 (65.6)		
Additional Gas Amount		g/m (oz/ft)	50 (0.5)		
Refrigeration Charge Less		m (ft)	10 (32.8)		
Compressor	Type		Hermetic Motor		
	Motor Type		Brushless (4-poles)		
	Rated Output	kW	3.00		
Fan	Type		Propeller Fan		
	Material		PP		
	Motor Type		DC (8-poles)		
	Input Power	W	—		
	Output Power	W	60		
	Fan Speed	rpm	Cooling: 600 (Top), 640 (Bottom) Heating: 520 (Top), 560 (Bottom)		
Heat Exchanger	Fin material		Aluminium (Pre Coat)		
	Fin Type		Corrugated Fin		
	Row × Stage × FPI		2 × 51 × 18		
	Size (W × H × L)	mm	903.7 × 1295.4 × 38.1		

Item		Unit	Outdoor Unit		
Power Source (Phase, Voltage, Cycle)		ø	Single		
		V	230		
		Hz	50		
Input Power		Condition (Ambient/Water)	A35W7	A7W35	A2W35
		kW	Cooling: 3.56	Heating: 2.53	Heating: 3.49
Maximum Input Power For Heatpump System		kW	6.27		
Power Supply 1 : Phase (Ø) / Max. Current (A) / Max. Input Power (W)		1Ø / 29.0 / 6.27k			
Power Supply 2 : Phase (Ø) / Max. Current (A) / Max. Input Power (W)		1Ø / 26.0 / 6.00k			
Power Supply 3 : Phase (Ø) / Max. Current (A) / Max. Input Power (W)		— / — / —			
Starting Current		A	16.5		
Running Current		Condition (Ambient/Water)	A35W7	A7W35	A2W35
		A	Cooling: 16.5	Heating: 11.7	Heating: 16.1
Maximum Current For Heatpump System		A	29.0		
Power Factor Power factor means total figure of compressor and outdoor fan motor.		%	Cooling: 94	Heating: 94	Heating: 94
Power Cord	Number of core		—		
	Length	m (ft)	—		
Thermostat			Electronic Control		
Protection Device			Electronic Control		

Item		Unit	Indoor Unit		
Performance Test Condition			EN 14511		
Operation Range	Outdoor Ambient	°C	Cooling: 16 ~ 43 Heating: -20 ~ 35		
	Water Outlet	°C	Cooling: 5 ~ 20 Heating: 25 ~ 55		
Internal Pressure Differential		kPa	Cooling: 23.1 Heating: 33.0		
Noise Level		Condition (Ambient/Water)	A35W7	A7W35	A2W35
		dB (A)	Cooling: 33	Cooling: 33	—
		Power Level dB	Cooling: 46	Cooling: 46	—
Dimension	Height	mm (inch)	892 (35-1/8)		
	Width	mm (inch)	502 (19-3/4)		
	Depth	mm (inch)	353 (13-29/32)		
Net Weight		kg (lbs)	45 (99)		
Refrigerant Pipe Diameter	Liquid	mm (inch)	9.52 (3/8)		
	Gas	mm (inch)	15.88 (5/8)		
Water Pipe Diameter	Inlet	mm (inch)	28 (1-3/32)		
	Outlet	mm (inch)	28 (1-3/32)		
Water Drain Hose Inner Diameter		mm (inch)	15 (19/32)		
Pump	Motor Type		DC Motor		
	No. of Speed		7 (Software Selection)		
	Input Power	W	60		
Hot Water Coil	Type		Brazen Plate		
	No. of Plates		36		
	Size (H × W × L)	mm	65 × 120 × 376		
	Water Flow Rate	l/min (m ³ /h)	Cooling: 28.7 (1.7) Heating: 34.4 (2.1)		
Pressure Relief Valve Water Circuit		kPa	Open: 300, Close: 265 and below		
Flow Switch			Magnetic Lead Switch		
Protection Device		A	Residual Current Circuit Breaker (30)		

Item		Unit	Indoor Unit
Expansion Vessel	Volume	l	10
	MWP	bar	3
Capacity of Integrated Electric Heater		kW	6.00

- Note:**
- Cooling capacities are based on outdoor air temperature of 35°C Dry Bulb with controlled indoor water inlet temperature of 12°C and water outlet temperature of 7°C.
 - Heating capacities are based on outdoor air temperature of 7°C Dry Bulb (44.6°F Dry Bulb), 6°C Wet Bulb (42.8°F Wet Bulb) with controlled indoor water inlet temperature of 30°C and water outlet temperature of 35°C.
 - Specifications are subjected to change without prior notice for further improvement.
 - Flow rate indicated are based on nominal capacity adjustment of leaving water temperature (LWT) 35°C and $\Delta T = 5^\circ\text{C}$.