

3.3 WH-ADC0509L3E51 WH-WDG09LE5

Item		Unit	Outdoor Unit		
Performance Test Condition		EN 14511			
		EN 14825			
Cooling Capacity	Condition (Ambient/Water)	A35W7			
	kW	8.20			
	BTU/h	28000			
Cooling EER	W/W	2.82			
Heating Capacity	Condition (Ambient/Water)	A7W35	A2W35		
	kW	9.00	7.00		
	BTU/h	30700	23900		
Heating COP	W/W	4.55	3.41		
Heating Erp	Low Temperature Application (W35)		Warmer	Average	Colder
	Application	Climate			
	Pdesign	kW	7.0	8.0	9.0
	Tbivalent / TOL	°C	2 / 2	-10 / -10	-15 / -22
	SCOP / ns	(W/W) / %	6.44 / 255	4.84 / 190	4.31 / 170
	Annual Consumption	kWh	1453	3417	5142
	Class		A+++	A+++	A++
	Medium Temperature Application (W55)		Warmer	Average	Colder
	Application	Climate			
	Pdesign	kW	7.0	8.0	8.0
	Tbivalent / TOL	°C	2 / 2	-7 / -10	-15 / -22
	SCOP / ns	(W/W) / %	4.50 / 177	3.67 / 144	3.33 / 130
	Annual Consumption	kWh	2080	4499	5915
	Class		A+++	A++	A++
	DHW		Warmer	Average	Colder
	Application	Climate			
	COP / nwh	(W/W) / %	3.35 / 134	2.88 / 115	2.26 / 90
	AEC	kWh	384	447	569
	Noise Level	Condition (Ambient/Water)	A35W7	A7W35	A2W35
		dB (A)	Cooling: -	Heating: -	Heating: -
Power Level dB		Cooling: 63***	Heating: 63*** Heating: 54***	Heating: 63*** Heating: 54***	
Air Flow	m ³ /min (ft ³ /min)	Cooling: 61.0 (2154) Heating: 74.0 (2613)			
Refrigeration Control Device	Expansion Valve				
Refrigeration Oil	cm ³	PZ68S (1100)			
Refrigerant	kg (oz)	R290, 1.00 (35.3) (Pre-charged) (-) (Maximum)			
F-GAS	GWP	3			
	CO ₂ eq (ton) (Precharged / Maximum)	0.003 / -			
Dimension	Height	mm (inch)	996 (39-7/32)		
	Width	mm (inch)	980 (38-37/64)		
	Depth	mm (inch)	430 (16-59/64)		
Net Weight	kg (lbs)	97 (214)			

Item		Unit	Outdoor Unit		
Pipe Diameter (Inner)		mm	25		
Standard Length		m (ft)	5.0 (16.4)		
Maximum Pipe Length		m (ft)	30.0 (98.4)		
I/D & O/D Height Difference		m (ft)	10 (32.8)		
Water Pipe Connector	Indoor	inch	1		
	Outdoor		1		
Compressor	Type		Hermetic Motor Compressor (Rotary)		
	Motor Type		Synchronous Electric Motor (4-poles)		
	Rated Output	kW	1.70		
Fan	Type		Propeller Fan		
	Material		PP		
	Motor Type		DC (8-poles)		
	Input Power	kW	2.178 (Heating) / 3.201 (Cooling)		
	Output Power	W	120		
	Fan Speed	rpm	Cooling: 570 Heating: 560		
Heat Exchanger	Fin material		Aluminium (Blue Coat)		
	Fin Type		Corrugated Fin		
	Row × Stage × FPI		2 × 46 × 19		
	Size (W × H × L)	mm	36.38 × 966 × 880.6 : 908.6		
Hot Water Coil	Type		Brazed Plate		
	No. of Plates		26		
	Size (W × H × L)	mm	57.8 × 524 × 117		
	Water Flow Rate	l/min (m ³ /h)	Cooling: 23.5 (1.4) Heating: 25.8 (1.5)		
Power Source (Phase, Voltage, Cycle)	Ø		Single		
	V		230		
	Hz		50		
Input Power	Condition (Ambient/Water)		A35W7	A7W35	A2W35
	kW		Cooling: 2.91	Heating: 1.98	Heating: 2.05
Maximum Input Power For Heatpump System		kW	3.56		
Power Supply 1 : Phase (Ø) / Max. Current (A) / Max. Input Power (W)			1Ø / 15.8 / 3.56k		
Power Supply 2 : Phase (Ø) / Max. Current (A) / Max. Input Power (W)			1Ø / 13.0 / 3.00k		
Power Supply 3 : Phase (Ø) / Max. Current (A) / Max. Input Power (W)			- / - / -		
Starting Current		A	12.9		
Running Current	Condition (Ambient/Water)		A35W7	A7W35	A2W35
	A		Cooling: 12.9	Heating: 8.8	Heating: 9.1
Maximum Current For Heatpump System		A	15.8		
Power Factor Power factor means total figure of compressor and outdoor fan motor.	Condition (Ambient/Water)		A35W7	A7W35	A2W35
	%		Cooling: 98	Heating: 98	Heating: 98
Power Cord	Number of core		-		
	Length	m (ft)	-		
Thermostat			Electronic Control		
Protection Device			Electronic Control		
Pressure Relief Valve Water Circuit		kPa	Open: 300, Close: 210 and below		

Item		Unit	Indoor Unit		
Performance Test Condition		EN 14511			
		EN 14825			
Operation Range	Outdoor Ambient	°C (min. / max.)	Cooling: 10 / 43 Heating (Tank): -25 / 35 Heating (Circuit): -25 / 35		
	Water Outlet	°C (min. / max.)	Cooling: 5 / 20 Heating (Tank): - / 65* ³ , Heating (Circuit): 20 / 55 (Below Ambient -20 °C) * ⁴ Heating (Circuit): 20 / 75 (Above Ambient -10 °C) * ⁴		
Internal Pressure Differential		kPa	Cooling: 32.0 Heating: 36.0		
Noise Level		Condition (Ambient/Water)	A35W7	A7W35	A2W35
		dB (A)	Cooling: 31***	Heating: 31***	Heating: 31***
		Power Level dB	Cooling: 44***	Heating: 44***	Heating: 44***
Dimension	Depth	mm (inch)	602 (23-45/64)		
	Width	mm (inch)	599 (23-37/64)		
	Height	mm (inch)	1293 (50-7/8)		
Net Weight		kg (lbs)	79 (174)		
Water Pipe Diameter	Room	mm (inch)	31 (1-1/4)		
	Shower	mm (inch)	19 (3/4)		
Water Drain Hose Inner Diameter		mm (inch)	12.00 (17/36)		
Pump	Motor Type		Brushless DC Motor (Sensorless vector control system)		
	No. of Speed		7 (Software Selection)		
	Input Power	W	145		
Flow Sensor	Type		Vortex (Piezoelectric sensor)		
	Measuring range	l/min	5 ~ 60		
Pressure Transducer (Range)		bar	0 ~ 4		
Protection Device		A	Earth Leakage Circuit Breaker (30 ~ 40)		
Expansion Vessel	Volume	l	10		
	MWP	bar	3		
Capacity of Integrated Electric Heater / OLP TEMP		kW / °C	3.00 / 85		
Tank Volume (Spec / Nett)		L	127 / 120		
Max. Tank Water Set Temperature		°C	65		
Tank Coil Surface		m ²	1.8		
Maximum Working Pressure	Heat / Cool	Bar	3.0		
	Tank Circuit	Bar	10.0		
Operating Pressure	Tank Unit	Bar	3.5		
	Expansion Relief Valve	Bar	8.0		
Expansion Vessel Pre-charge Pressure (DHW Circuit)		Bar	3.5		
Pressure Reducing Valve Set Pressure (DHW Circuit)		Bar	3.5		

Item		Unit	Indoor Unit
Pressure Vessel	Material		EN14511
	Volume	L	120
	Design Pressure	Bar	10
Heat Exchanger	Material		EN-1.4521
	Diameter	mm	22
	Thickness	mm	0.65
	Surface Area	m ²	1.3
	Total Length	m	18.5
DHW Tank	Total Corrosion ion (Chloride + Sulphate + Nitric)	mg/L	< 150
	Conductivity @ Water Tank Water Temperature < 60°C	µS/cm	< 1250
	Conductivity @ Water Tank Water Temperature < 65°C	µS/cm	< 1200
	Saturation Index (LSI) @ 20°C		> -4.0 / < 0.4
	PH		6.5 - 8.5

Note:

- In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.
- If the EUROVENT Certified models can be operated under the “extra-low” temperature condition, -7°C DB and -8°C WB temperature with rated voltage 230V shall be used.
- Capacity is measured at outdoor temperature 7°C DB and 6°C WB with controlled water inlet 30°C and water outlet 35°C (EN 14511-2)
- Flowrate indicated are based on nominal capacity adjustment of leaving water temperature (LWT) 35°C and ΔT=5°C.
- EER and COP classification is at 230V only in accordance with EU directive 2003/32/EC.
- *** The sound pressure and sound power level is measured with distance 1.0m from the unit and height at 1.5m. (Test carry out for cooling at ambient 35°C DB and Water Out 7°C, heating at ambient 7°C DB / 6°C WB and water out 55°C)
- **** The sound power level is measured with accordance to EN12102 under conditions of the EN14825.
- *** The sound power level is measured with accordance to EN12102 under full load conditions. (Test carry out for cooling at ambient 35°C DB and Water Out 7°C, heating at ambient 7°C DB / 6°C WB and water out 55°C)
- *³ When outdoor ambient is under -10°C, only the backup heater operate above 55°C.
- *⁴ Between outdoor ambient -10°C and -20°C, the water outlet temperature gradually decreases from 75°C to 55°C.