3.3 WH-ADC16K9E83 WH-UXZ16KE8

Item			Unit	Outdoor Unit		
Performance Test Condition				EN14511 / EN14825		
Cooling Capacity			Condition (Ambient/Water)	A35W7		
			kW	13.40		
			BTU/h	45700		
Cooling EER			W/W	2.64		
Heating Capacity			Condition (Ambient/Water)	A7W35	A2W35	
			kW	16.00	16.00	
			BTU/h	54600	54600	
Heating COP			W/W	4.38	3.10	
Heating ErP	Low Temperature Application (W35)			Warmer	Average	Colder
	Application		Climate			
	Pdesign		kW	16.0	13.0	19.0
	Tbivalent / TOL		°C	2 / 2	-10 / -10	-15 / -22
	SCOP / ns		(W/W) / %	5.88 / 232	4.46 / 176	3.83 / 150
	Annual Consumption		kWh	3634	6018	12233
	Class			A+++	A+++	A++
	Medium Temperature Application (W55)			Warmer	Average	Colder
	Application		Climate			
	Pdesign		kW	16.0	16.0	18.0
	Tbivalent / TOL		°C	2 / 2	-10 / -10	-15 / -22
	SCOP / ns		(W/W) / %	4.09 / 160	3.31 / 129	3.20 / 125
	Annual Consumption		kWh	5230	9984	13870
	Class			A+++	A++	A++
	DHW			Warmer	Average	Colder
	Application		Climate			
	COP / nwh		(W/W) / %	3.08 / 123	2.45 / 98	2.00 / 80
	AEC		kWh	1364	1717	2105
Noise Level			Condition (Ambient/Water)	A35W7	A7W35	A2W35
			dB (A)	Cooling: 55	Heating: 55	Heating: 55
			Power Level dB (A)	Cooling: 70	Heating: 70 Heating: 65	Heating: 70 Heating: 65
Air Flow			m^3/min (ft^3/min)	Cooling: 109.4 (3860) Heating: 100.1 (3530)		
Refrigeration Control Device				Expansion Valve		
Refrigeration Oil			cm^3	FW50S (1600)		
Refrigerant (R32) Precharged / Maximum			kg (oz)	1.83 (64.6) / 2.43 (85.8)		
F-GAS	GWP			675		
	CO_2eq (ton) (Precharged / Maximum)			1.235 / 1.640		
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)	103 (227)		
Pipe Diameter	Liquid		mm (inch)	6.35 (1/4)		
	Gas		mm (inch)	12.7 (1/2)		

Item		Unit	Outdoor Unit		
Standard Length		m (ft)	5 (16.4)		
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)	30 (0.3)		
Refrigeration Charge Less		m (ft)	10 (32.8)		
Compressor	Type		Hermetic Motor		
	Motor Type		Brushless (4-poles)		
	Rated Output	kW	4.60		
Fan	Type		Propeller Fan		
	Material		PP		
	Motor Type		DC (8-poles)		
	Input Power	W	-		
	Output Power	W	60		
	Fan Speed	rpm	Cooling: 680 (Top), 720 (Bottom) Heating: 630 (Top), 670 (Bottom)		
Heat Exchanger	Fin material		Aluminium (Pre Coat)		
	Fin Type		Corrugated Fin		
	Row × Stage × FPI		2 × 50 × 19		
	Size (W × H × L)	mm	898.8 × 1295.4 × 44		
Power Source (Phase, Voltage, Cycle)		Ø	Three		
		V	400		
		Hz	50		
Input Power		Condition (Ambient/Water)	A35W7	A7W35	A2W35
		kW	Cooling: 5.08	Heating: 3.65	Heating: 5.16
Maximum Input Power For Heatpump System		kW	11.09		
Power Supply 1 : Phase (Ø) / Max. Current (A) / Max. Input Power (W)			3Ø / 16.4 / 11.09k		
Power Supply 2 : Phase (Ø) / Max. Current (A) / Max. Input Power (W)			3Ø / 13.0 / 9.00k		
Power Supply 3 : Phase (Ø) / Max. Current (A) / Max. Input Power (W)			- / - / -		
Starting Current		A	5.4		
Running Current		Condition (Ambient/Water)	A35W7	A7W35	A2W35
		A	Cooling: 7.5	Heating: 5.4	Heating: 7.7
Maximum Current For Heatpump System		A	16.4		
Power Factor Power factor means total figure of compressor and outdoor fan motor.		%	Cooling: 98	Heating: 98	Heating: 97
Power Cord	Number of core		-		
	Length	m (ft)	-		
Thermostat			Electronic Control		
Protection Device			Electronic Control		

Item		Unit	Indoor Unit		
Performance Test Condition			EN14511 / EN14825		
Operation Range	Outdoor Ambient	°C (min. / max.)	Cooling (Circuit): 10 / 43 Heating (Tank/Circuit): -28 / 35		
	Water Outlet	°C (min. / max.)	Cooling: 5 / 20 Heating (Tank): - / 65*3, Heating Circuit: 20 / 55 (Below Ambient -15°C)*4 Heating Circuit: 20 / 60 (Above Ambient -10°C)*4		
Internal Pressure Differential		kPa	Cooling: 46.0 Heating: 64.0		
Noise Level		Condition (Ambient/Water)	A35W7	A7W35	A2W35
		dB (A)	Cooling: 33	Heating: 33	Heating: 33
		Power Level dB (A)	Cooling: 46	Heating: 46	Heating: 46
Dimension	Depth	mm (inch)	602 (23-45/64)		
	Width	mm (inch)	599 (23-37/64)		
	Height	mm (inch)	2036 (80-5/32)		
Net Weight		kg (lbs)	120 (265)		
Refrigerant Pipe Diameter	Liquid	mm (inch)	6.35 (1/4)		
	Gas	mm (inch)	12.7 (1/2)		
Water Pipe Diameter	Room	mm (inch)	31.75 (1-1/4)		
	Shower	mm (inch)	19.05 (3/4)		
Water Drain Hose Inner Diameter		mm (inch)	12.00 (17/36)		
Pump	Motor Type		Brushless DC Motor		
	No. of Speed		7 (Software Selection)		
	Input Power	W	145		
Hot Water Coil	Type		Brazed Plate		
	No. of Plates		52		
	Size (W × H × L)	mm	94 × 376 × 119		
	Water Flow Rate	l/min (m^3/h)	Cooling: 38.4 (2.3) Heating: 45.9 (2.8)		
Pressure Relief Valve Water Circuit		kPa	Open: 300, Close: 210 and below		
Flow Sensor	Type		Piezoelectric sensor		
	Range	l/min	5 ~ 60		
Pressure Release Valve		kPa	Open: 800, Close: 640 and below		
Protection Device		A	Earth Leakage Circuit Breaker (25 ~ 40)		
Expansion Vessel	Volume	l	10		
	MWP	bar	3.0		
Capacity of Integrated Electric Heater / OLP TEMP		kW / °C	9.00 / 80		
Tank Volume (Spec / Nett)		L	270 / 260		
Max. Tank Water Set Temperature		°C	65		
Tank Coil Surface		m^2	2.4		
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		En-1.4521
	Volume	L	260
	Design Pressure	Bar	10
Heat Exchanger	Material		EN-1.4521
	Diameter	mm	22
	Thickness	mm	0.8
	Surface Area	m^2	2.4
	Total Length	m	34.5
DHW Tank	Total Corrosion ion (Chloride + Sulphate + Nitric)	mg/L	< 150
	Conductivity @ Water Tank Water Temperature < 60ºC	µS/cm	< 1250
	Conductivity @ Water Tank Water Temperature < 65ºC	µS/cm	< 1200
	Saturation Index (LSI) @ 20ºC		> -4.0 / < 0.4
	PH		6.5 - 8.5

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.
- *3 Above 55°C, only possible with backup heater operation.
- *4 Between outdoor ambient -10°C and -15°C, the water outlet temperature gradually decreases from 60°C to 55°C.
- It is recommended to follow DHW tank water quality limit for Panasonic Air to Water All in One according to Drinking Water Directive 98/83 EC
- In case it is necessary to indicate the air flow volume in (l/s), the value in (m^3/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.
- Flowrate indicated are based on nominal capacity adjustment of leaving water temperature (LWT) 35°C and ΔT=5°C.
- The sound pressure 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 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)
- The sound power level is measured with accordance to EN12102 under conditions of the EN14825.
- EER and COP classification is at 230V only in accordance with EU directive 2003/32/EC.