

2.9 WH-ADC0916H9E8 WH-UD16HE8

Item		Unit	Outdoor Unit		
Performance Test Condition			EN 14511		
Cooling Capacity		Condition (Ambient/Water)	A35W7		
		kW	12.20		
		BTU/h	41600		
		kcal/h	10490		
Cooling EER		W/W	2.56		
		kcal/h	2.20		
Heating Capacity		Condition (Ambient/Water)	A7W35	A2W35	
		kW	16.00	13.00	
		BTU/h	54600	44300	
		kcal/h	13760	11180	
Heating COP		W/W	4.28	3.28	
		kcal/h	3.68	2.82	
Heating ErP	Low temperature Application (W35)				
	Application	Climate	Warmer	Average	Colder
	Pdesign	kW	13.0	12.0	12.0
	Tbivalent / TOL	°C	2 / 2	-10 / -10	-15 / -22
	SCOP / ns	(W/W) / %	6.20 / 245	4.82 / 190	4.28 / 168
	Annual Consumption	kWh	2801	5146	6911
	Class		A++	A++	A++
	Low temperature Application (W55)				
	Application	Climate	Warmer	Average	Colder
	Pdesign	kW	10.0	13.0	10.0
	Tbivalent / TOL	°C	2 / 2	-3 / -10	-15 / -22
	SCOP / ns	(W/W) / %	4.30 / 169	3.33 / 130	3.10 / 121
	Annual Consumption	kWh	3104	8076	7955
	Class		A++	A++	A+
Noise Level		Condition (Ambient/Water)	A35W7	A7W35	A2W35
		dB(A)	Cooling: 54	Heating: 55	-
		Power level dB	Cooling: 72	Heating: 72	-
Air Flow		m³/min (ft³/min)	Cooling: 97.8 (3450) Heating: 90.0 (3180)		
Refrigerant Control Device			Expansion Valve		
Refrigerant Oil		cm³	FV50S (1200)		
Refrigerant (R410A)		kg (oz)	2.55 (90.0)		
F-GAS	GWP		2088		
	CO2eq (ton) (Precharged / Maximum)		5.324 / 7.412		
Dimension	Height	mm (inch)	1340 (52-3/4)		
	Width	mm (inch)	900 (35-7/16)		
	Depth	mm (inch)	320 (12-19/32)		

Item		Unit	Outdoor Unit		
Net Weight		kg (lbs)	107 (236)		
Pipe Diameter	Liquid	mm (inch)	9.52 (3/8)		
	Gas	mm (inch)	15.88 (5/8)		
Standard Length		m (ft)	5 (16.4)		
Pipe Length Range		m (ft)	3 (9.8) ~ 30 (98.4)		
I/D & O/D Height Different		m (ft)	20 (65.6)		
Additional Gas Amount		g/m (oz/ft)	50 (0.5)		
Refrigerant Chargeless		m (ft)	10 (32.8)		
Compressor	Type		Hermetic Motor		
	Motor Type		Brushless (4-poles)		
	Rated Output	kW	4.30		
Fan	Type		Propeller Fan		
	Material		PP		
	Motor Type		DC (8-poles)		
	Input Power	W	-		
	Output Power	W	60		
	Fan Speed	rpm	Cooling: 630 (Top), 670 (Bottom) Heating: 580 (Top), 620 (Bottom)		
Heat Exchanger	Fin Material		Aluminium (Pre Coat)		
	Fin Type		Corrugated Fin		
	Row x Stage x FPI		2 x 51 x 18		
	Size (W x H X L)	mm	903.7 x 1295.4 x 38.1		
Power Source (Phase, Voltage, Cycle)		Ø	Three		
		V	400		
		Hz	50		
Input Power		Condition (Ambient/Water)	A35W7	A7W35	A2W35
		kW	Cooling: 4.76	Heating: 3.74	Heating: 3.96
Maximum Input Power for Heatpump System		kW	6.59		
Power Supply 1 : Phase (Ø) / Max. Current (A) / Max. Input Power (W)			3Ø / 9.9 / 6.59k		
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	7.1		
Running Current		Condition (Ambient/Water)	A35W7	A7W35	A2W35
		A	Cooling: 7.1	Heating: 5.7	Heating: 6.0
Maximum Current for Heatpump System		A	9.9		
Power Factor Power factor means total figure of compressor and outdoor fan motor.		%	Cooling: 97	Heating: 95	Heating: 96
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 (min. / max.)	Cooling: 16 / 43 Heating: -20 / 35		
	Water Outlet	°C (min. / max.)	Cooling: 5 / 20 Heating (Tank): - / 65* Heating (Circuit): 20 / 55		
Internal Pressure Differential		kPa	Cooling: 40.0 Heating: 69.0		
Noise Level		Condition (Ambient/Water)	A35W7	A7W35	A2W35
		dB(A)	Cooling: 33	Heating: 33	-
		Power level dB	Cooling: 46	Heating: 46	-
Dimension	Height	mm (inch)	717 (28-7/32)		
	Width	mm (inch)	598 (23-17/32)		
	Depth	mm (inch)	1800 (70-27/32)		
Net Weight		kg (lbs)	126 (278)		
Refrigerant Pipe Diameter	Liquid	mm (inch)	9.52 (3/8)		
	Gas	mm (inch)	15.88 (5/8)		
Water Pipe Diameter	Room	mm (inch)	31 (1-1/4)		
	Shower	mm (inch)	19 (3/4)		
Water Drain Hose Inner Diameter		mm (inch)	12.10 (17/38)		
Pump	Motor Type		DC Motor		
	Input Power	W	132		
Hot Water Coil	Type		Braze Plate		
	No. of Plates		52		
	Size (H x W x L)	mm	93 x 119 x 376		
	Water Flow Rate	l/min (m³/h)	Cooling: 35.0 (2.1) Heating: 45.9 (2.8)		
Pressure Relief Valve Water Circuit		kPa	Open: 300, Close: 266 and below		
Flow Switch	Type		Electronic Sensor		
Protection Device		A	Residual Current Circuit Breaker (25)		
Expansion Vessel	Volume	l	10		
	MWP	bar	3		
Capacity of Integrated Electric Heater / OLP TEMP		kW / °C	9.00 / 80		
Tank Volume (Spec / Nett)		L	200 / 185		
Max. Tank Water Set Temperature		°C	65		
Tank Coil Surface		m²	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		EN-1.4521
	Volume	L	185
	Design Pressure	bar	10
Heat Exchanger	Material		EN-1.4162 / EN-1.4521
	Diameter	mm	22
	Thickness	mm	0.8
	Surface Area	m ²	1.8
	Total Length	m	25
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:

- 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.
- * Above 55°C, only possible with backup heater operation.
- 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.