

- World-leading energy efficiency - COP up to 4.88
- Estia heat pump systems can be used in combination with different types of emitters
- Contributes to reducing the CO₂ emissions in the atmosphere
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- Toshiba inverter uses the new vector-controlled intelligent power drive unit, which enables a wide range of frequencies and voltages



Estia Air-to-Water Heat Pump Medium Temp Powerful

CODE		71	100
OUTDOOR UNIT	HWS-	P804HR-E1	P1104HR-E1
Heating Capacity *1	kW	8.0	11.2
Operating Temperature Range Hydro/Outdoor	°C	5 to 32/-20 to 43	
Operating Humidity Range Hydro/Outdoor	%	15 to 85/15 to 100	
Heating Condition 1 LWT=35°C DT=5°C Input Power/COP	kW	1.68/4.76	2.30/4.88
Heating Condition 1 LWT=35°C DT=5°C Rated Water Flow	l/m	22.90	32.10
Operating Noise *1 *3 Sound Pressure Hydro/Outdoor	dB(A)	27/49	29/49
Operating Noise *1 *3 Sound Power Hydro/Outdoor	dB(A)	42/64	44/64
Hydro Unit Running Current Heating	A	0.44	0.66
Hydro Unit Power Input Heating	kW	0.06	0.09
Outdoor Unit Running Current Heating	A	7.57	10.33
Outdoor Unit Power Input Heating	kW	1.62	2.21
Total Running Current Heating	A	8.01	10.99
Dimensions Height/Width/Depth	mm	1340/900/320	
Net Weight	kg	92	
Standard Air Flow	l/s	1717	
Standard Air Flow	m ³ /h	6180	
Refrigerant Piping Gas	mm - "	15.9 - 5/8	
Refrigerant Piping Liquid	mm - "	9.5 - 3/8	
Drain Port Hose Inner Diameter	mm	16	
Refrigerant Charge Amount/Chargeless To	kg	2.7/30	
Refrigerant Piping Minimum/Maximum Length	m	5/30	
Refrigerant Piping Maximum Height Difference	m	±30	
Power Supply		1 phase 230 V 50 Hz	
Suggested Fused Supply	A	25	
Wiring Connection Power To Outdoor Unit		2 core + earth	
Power Cable From Outdoor To Hydro Unit		3 core + earth	

DOMESTIC HOT WATER TANK	HWS-	1501CSHM3-UK	2101CSHM3-UK	3001CSHM3-UK
Water Volume	l	150	210	300
Max Water Temperature	°C	75	75	75
Electric Heater	kW	2.75	2.75	2.75
Standing Heat Loss	kWh/day	1.45	1.91	2.52
Nominal Storage Capacity Of Units	l - kg	150 - 181	210 - 251	300 - 360
Maximum Water Supply Pressure To PRV	MPa - bar	1.6 - 16.0		
Operating Pressure Of Unit	MPa - bar	0.35 - 3.5		
Expansion Vessel Charge Pressure	MPa - bar	0.35 - 3.5		
Expansion Valve Setting	MPa - bar	0.6 - 6.0		
Max. Primary Working Pressure	MPa - bar	0.3 - 3.0		
Opening Temperature of T&P Relief Valve	°C	90		
Opening Pressure of T&P Relief Valve	MPa - bar	1.0 - 10		
Material		Stainless steel		
Insulation		CFC/HCFC-free polyurethane foam		
Height - Diameter	mm	1090 - 550	1474 - 550	2040 - 550
Weight Net	kg	31	41	60
Power Supply		1 phase 230 V 50 Hz		
Suggested Fused Supply	A	16		

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Estia Air-to-Water Heat Pump High Temp Powerful

CODE		71	71	71	100	100	100
HYDRO UNIT	HWS-	P804XWHM3-E1	P804XWHT6-E1	P804XWHT9-E1	P1104XWHM3-E1	P1104XWHT6-E1	P1104XWHT9-E1
Heat Exchanger		Plate-type heat exchanger					
Water Piping Maximum Length - Minimum Flow Rate	m - l/m	None - 13+			None - 17+		
Water Piping Maximum Height Difference	m	±7					
Water Piping Maximum Working Water Pressure	kPa	300					
Heat Exchanger Type		Brazen plate					
Heat Exchanger Water Volume	l	0.67			1.18		
Heat Exchanger Minimum Flow Rate	l/m	13			17.5		
Circulating Pump Maximum Motor Output	W	125			190		
Circulating Pump Flow Rate	l/m	22.9			32.1		
Circulating Pump Type		Non-self-suction centrifugal pump					
Water Pump Power Input	W	48			87		
Water Pump Delivery Head	m	6.3			8.8		
Expansion Vessel Volume	l	12					
Expansion Vessel Initial Pressure	MPa - Bar	0.1 - 1					
Pressure Relief Valve Operating Pressure	MPa - Bar	0.3 - 3					
Sound Pressure Level	dB(A)	27			29		
Operation Water Temperature Range Heating	°C	20 - 60					
Water Pipe Outlet/Inlet	External thread	R1 1/4					
Refrigerant Piping Gas	mm - "	15.9 - 5/8					
Refrigerant Piping Liquid	mm - "	9.5 - 3/8					
Drain Port Hose Inner Diameter	mm	16					
Outer Dimension Height/Width/Depth	mm	925/525/355					
Unit Weight	kg	49			52		
Back Up Heater Power Supply		1 - 220-230 V 50 Hz	3N- 380-400 V 50 Hz	3N- 380-400 V 50 Hz	1 - 220-230 V 50 Hz	3N- 380-400 V 50 Hz	3N- 380-400 V 50 Hz
Back Up Heater Power/Maximum Current	A	3.0/13	6.0/13 (13A*2P)	9.0/13 (13A*3P)	3.0/13	6.0/13 (13A*2P)	9.0/13 (13A*3P)
Hot Water Cylinder Heater* Power Supply		1 - 220-230V 50 Hz					
Hot Water Cylinder Heater* Maximum Current	A	12.0					
Remote Controller Standard Model		HWS-AMS11E - (Wired 2-core non-polarity)					

Note: The electric heater, incorporated in the hot water cylinder, requires separate power supply to hydro unit.

* Depending on outdoor unit

ACCESSORIES

TCB-PCMO3E	Input Signal PC Board	Estia room thermostat, emergency stop input signal
TCB-PCIN3E	Output PCB	Interface provide an output for fault and run
HWS-AMS11E	Additional Remote Controller	

*1 Heating performance measurement conditions: outside air temperature 7°C, water supply temperature 30°C, outlet temperature 35°C, refrigerant piping length 7.5 m (no height difference).

*2 The remote controller is installed into the hydro unit.

*3 The outdoor unit operating noise is measured at the point of 1 m away from the unit back surface centre and 1 m high from the ground. The hydro unit operating noise is measured at the point of 1 m away from the unit front surface centre. The value of the operating noise varies depending on room structure where the unit is installed.

*4 Do not leave the hydro unit at 5°C or below.