



HEAT PUMP WATER HEATER





NEW 2024

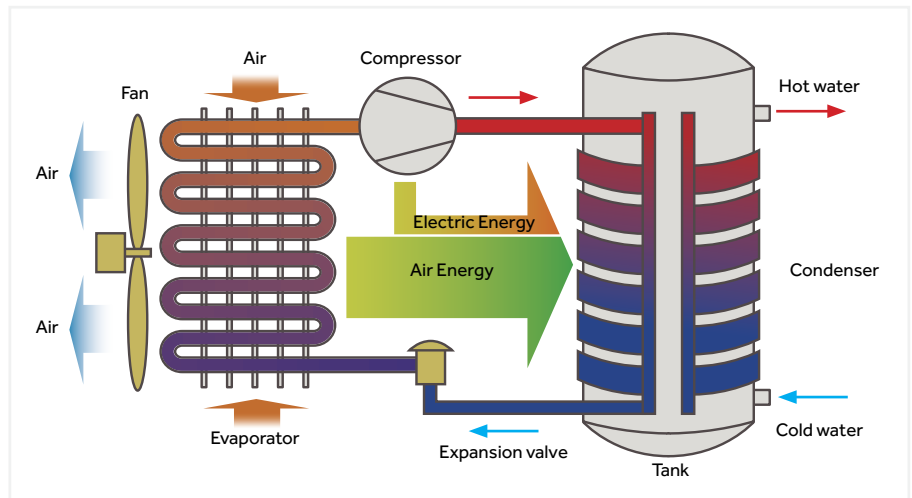
WHAT IS AN HEAT PUMP WATER HEATER?

Our range of Heat Pump Water Heaters provides a direct solution to your hot water necessities. It combines the renewable energy of an aerothermal source with a storage capacity of 80-300 L, allowing adaptations to a wide range of applications ranging from small homes to light commercial scenarios. This system will provide domestic hot water at a fraction of the cost of older technologies, the installation = only involves water piping, therefore it is suitable for renewing previous hot water installations easily and conveniently. Furthermore in 2024 we introduced the new R290 Heat Pump Water Heater range which is both greener and more efficient.

HOW IT WORKS?

To understand the concept of heat pumps, imagine a refrigerator working in reverse. While a refrigerator removes heat from an enclosed box and expels that heat to the surrounding air, a HPWH takes the heat from surrounding air and transfers it to water in an enclosed tank.

A refrigerant changes state, through compression and expansion cycles, absorbing the heat in the air at low temperature and transferring it to domestic water at a higher temperature.



CONDENSER DESIGN



MICRO-CHANNEL CONDENSER

The micro-channel condenser has larger contact surface for better heat transfer performance and less refrigerant consumption.



BOTTOM COIL

An extra coil fitted to the bottom of the tank increases the heat exchange area to deliver more hot water and contributes to better efficiency.

CONDENSER MICRO-CHANNEL VS COIL PIPE



Multiple channel design

Every piece of a micro-channel condenser has 18 micro-channels, which compared to the single-channel coil pipes offer much more contact surface.



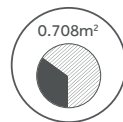
Titanium - aluminum alloy for better corrosion & heat resistances

Micro-channel: 1500 hours salt spray test
coil pipe: 200 hours salt spray test



Reduces the pressure drop which improves compress efficiency by 6%

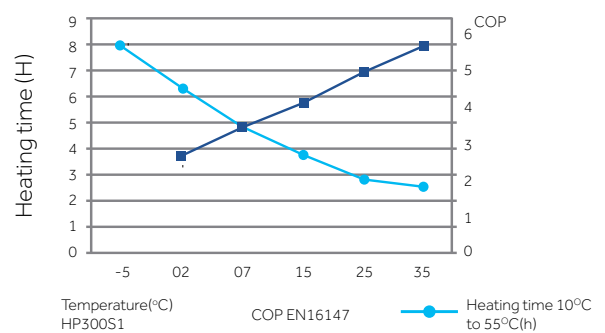
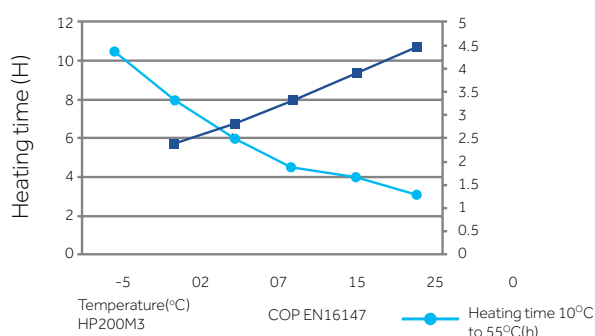
Micro-channel: pressure drop 0.03Mpa
Coil pipe: pressure drop 0.15Mpa



Larger contact surface improves heat transfer efficiency by 30%

Micro-channel: contact surface 0.708m²
Coil pipe: contact surface 0.236m²

PERFORMANCE CURVE



HPWH MODEL LINEUP

SERIES	MONOBLOC				SPLIT
	 M8 NEW	 M7 NEW	 M5	 M3	 S1
80L	•	-	•	-	-
110L	•	-	•	-	-
150L	•	-	•	-	-
200L	-	•	-	•	•
200L With Solar	-	•	-	-	-
250L	-	•	-	•	-
250L With Solar	-	•	-	•	-
300L	-	-	-	-	•

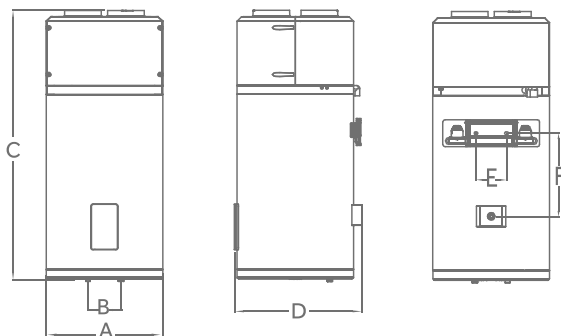
SERIES	MONOBLOC				SPLIT
Product Code	NEW M8 HP80M8-9 HP110M8-9 HP150M8-9	NEW M7 HP200M7-F9 HP200M7C-F9 HP250M7-F9 HP250M7C-F9	M5 HP80M5 HP110M5 HP150M5	M3 HP200M3 HP250M3 HP250M3C	S1 HP200S1 HP300S1
Description	Monobloc type heat pumps are packaged equipment, which includes all hydraulic components. It consists of only one outdoor unit. The advantage of the monobloc system is easy installation and no additional refrigerant piping requirement.				Split type heat pumps consist of one outdoor unit and one indoor unit. The heat exchange between the refrigerant and water is finished in the heat exchanger of indoor unit.
SG ready	●	●	-	-	●
Solar connection	-	● (200C & 250C)	-	● (250C)	-
Exhaust	●	●	●	●	-
hOn WiFi	●	●	-	-	-
Refrigerant	R290	R290	R134A	R134A	R134A
Max. water temperature	65°C	65°C	65°C	65°C	65°C
Energy rating	A+	A+	A+	A+	A+
Mute Mode	36dB(A)	36dB(A)	41dB(A)	41dB(A)	50dB(A)
COP @14°C	3,39	3,50	3,58	3,56	3,80
Micro channel condenser	●	●	●	●	●
Inverter	-	●	-	-	-
DC motor	●	●	-	-	-
Electr. Heater	1,200W	1,500W	1,500W	1,500W	2,150W
Smart defrost	●	●	●	●	●
Tank material	Enamel	Enamel	Enamel	Enamel	Enamel
Display	●	●	●	●	●
Modes	Auto, Eco, Boost, Vac	Auto, Eco, Boost, Vac	Auto, Eco, Boost, Vac	Auto, Eco, Boost, Vac	Auto, Eco, Eco+, Boost, Vac
Sterilisation	75°C	75°C	75°C	75°C	75°C

R134A HPWH

M5 HPWH R134A



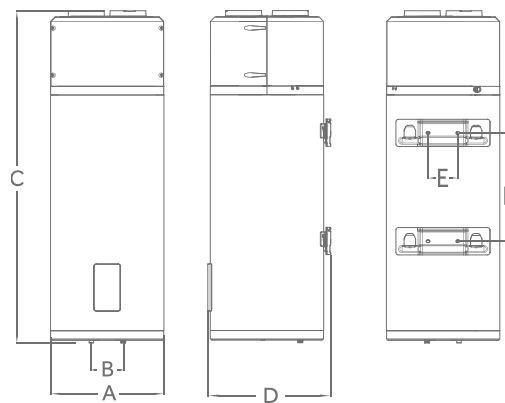
HP80M5 - HP110M5



Model	A	B	C	D	E	F
HP80M5	492	140	1170	537	159	362
HP110M5	492	140	1320	537	159	362

Unit:mm

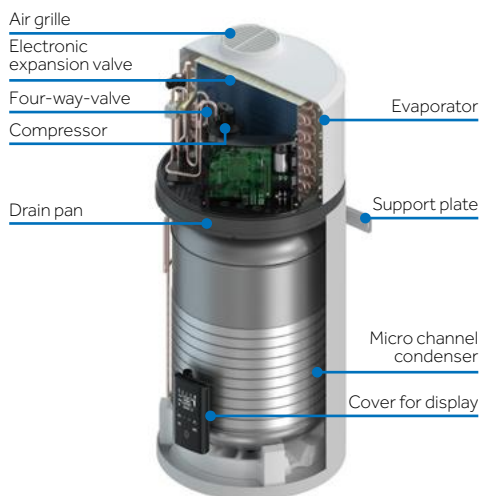
HP150M5



Model	A	B	C	D	E	F
HP150M5	492	140	1680	537	159	470

Unit:mm

M5 TECHNICAL PARAMETERS



FEATURES

- Under Photovoltaic system, you can set the product to optimize use of electricity produced
- Plug and play like a electric water heater, easy to install and replace
- Work under low tariff hours to help save on electricity costs
- Powerful compressors contribute to shorter heating up time
- Slim body design saves space

Model	HP80M5	HP110M5	HP150M5
Installation	Vertical wall-hung/ducted	Vertical wall-hung/ducted	Vertical wall-hung/ducted
Tank volume (L)	82	102	149
Rated voltage/ frequency (V/Hz)	220-240V/50Hz	220-240V/50Hz	220-240V/50Hz
Tank rated pressure (bar)	8	8	8
Corrosion protection	Magnesium anode	Magnesium anode	Magnesium anode
Water proof grade	IPX4	IPX4	IPX4
Assembled System			
Electric backup power (W)	1200	1200	1200
Average input - heat pump only(W)	240	240	240
Maximum input- heat pump only(W)	350	350	350
Maximum power input (W)	1550	1550	1550
Default temperature setting (°C)	55	55	55
Temperature setting range with heater (°C)	35-75	35-75	35-75
Temperature setting range heat pump only (°C)	35-65	35-65	35-65
Refrigerant type / Weight (kg)	R134a/0.45	R134a/0.45	R134a/0.45
Noise power dB(A)	50	50	50
Working temperature - heat pump only (°C)	-7-45	-7-45	-7-45
Working temperature - system (°C)	-7-45	-7-45	-7-45
Performance			
Type of extraction	Exterior	Exterior	Exterior
COP@7 °C (EN16147)	2.86	2.74	3.14
COP@14 °C (EN16147)	3.17	3.20	3.58
Heating up time (h) (@ 7°C)	4h58	6h35	10h29
Heating up time (h) (@ 14°C)	4h09	5h23	8h28
Tapping cycle (EN16147)	M	M	L
Maximum volume of usable hot water (L) V40 (EN16147)	102.5	132.6	193
Water heating energy efficiency class (ERP)	A+	A+	A+
Dimensions and connections			
Water outlet connection	G1/2" M	G1/2" M	G1/2" M
Water inlet & Drain connection	G1/2" M	G1/2" M	G1/2" M
Safety valve connection	G1/2" M	G1/2" M	G1/2" M
Product Dimensions (WxHxD) (mm) Tank unit/external unit	537 × 1170 × 492	537 × 1320 × 492	537 × 1680 × 492
Packing dimensions (WxHxD) (mm) Tank unit/external unit	587 × 1247 × 587	587 × 1397 × 587	587 × 1764 × 587
Gross weight (kg)	59	64	64
Net weight (kg)	51	55	55
Load qty. 40HQ	160	80	80



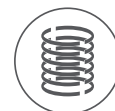
PV



Easy Install



ECO

Micro-Channel
Condenser

Fast heating



Slim Body



CE NF

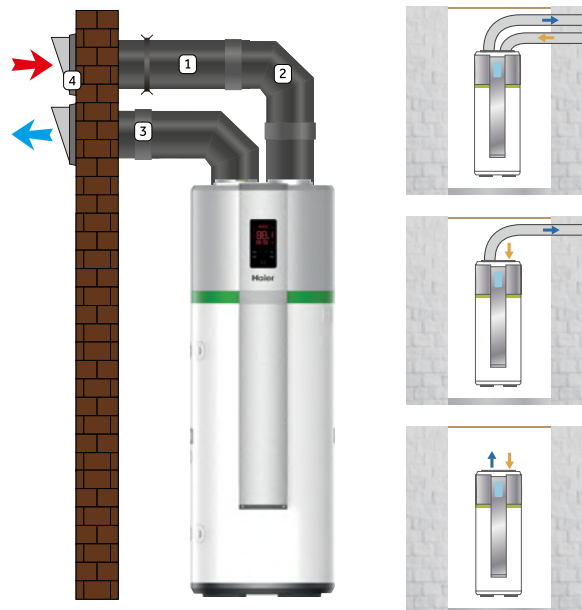
M5 & M3 INSTALLATION



M5 SERIES INSTALLATION



M3 SERIES INSTALLATION



Lift the heat pump by two persons.