



Mammoth®

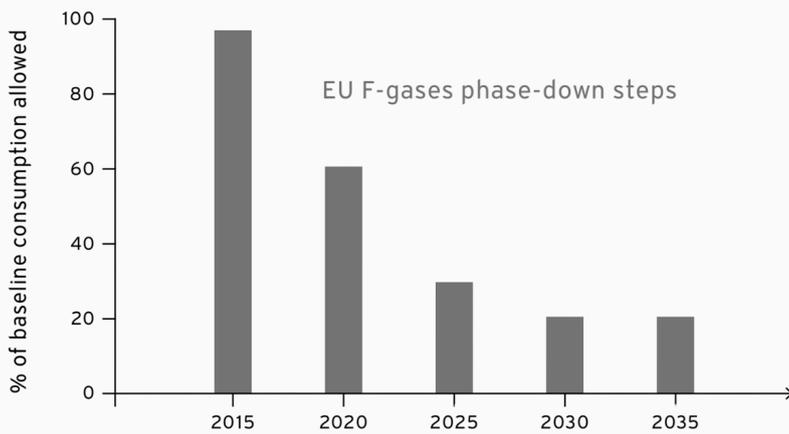
The Leader In Custom HVAC & Energy Saving

DOMESTIC HEAT PUMPS ALL IN ONE



20
25

Our Path to Green Solution



EU's Decarbonization Goal by Using Natural Refrigerant

 The new F-gas Regulation (PE-CONS 60/23) enters into force on 11th of March, will prohibit the use of GWP greater than 150 in new heat pumps from January 1, 2027

Mammoth R290 Product Line-up



TECHNOLOGY ADVANTAGE

A. High Efficiency Micro Channel Heat Exchanger



Enhance Heat Transfer Efficiency by 30%

It's with larger surface area, which facilitates more efficient heat exchange between the refrigerant and the air or water, and with less refrigerant charge.



Durability and Corrosion Resistance With 1500 hrs. Salt Spray Test

Adopting materials that are more resistant to corrosion (1500 hrs. Salt spray test) than those used in traditional heat exchangers. This enhances their longevity and reliability, especially in environments with high humidity or corrosive elements.



Compact and Lightweight Design

It makes the DHW heat pump easier to install and requires less space, which is particularly beneficial in residential installation scenarios.



Quick Thermal Response

It can adjust its temperature quickly, allowing the heat pump to respond rapidly to changes in hot water demand.



B. High Efficiency System Composition



EXV

Delivers precise & optimized control of refrigerant flow. Enhance the efficiency in different weather conditions.



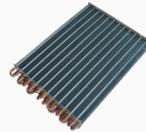
Dedicated DHW Heat Pump Compressor

GMCC compressor dedicated for R290 DHW heat pump.



Optimized air channel*

Engineered for maximum airflow with minimal energy consumption, Low noise level.



Bigger Evaporator

Enhance the efficiency, leading to faster heating, lower energy consumption, and improved performance in different environmental conditions

C. Thermal Efficient Tank

High Insulation Properties:

The 50 mm thick polyurethane foam offers superior insulation, significantly reducing heat loss.

EF-gas Free:

The polyurethane foam insulation is free from fluorinated gases (F-gases) during and postproduction.

Energy Efficiency and Cost Savings:

Ensures minimal energy is required to maintain water temperature.

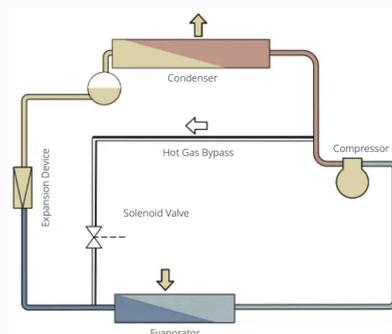


D. Intelligent Defrost

Hot Gas Bypass for fast Defrost

- Direct use superheated vapor to warm the evaporator coil
- Higher efficiency and more energy saving
- Defrost without removing heat from the tank

With Mammoth innovated intelligent defrost logic, the defrost cycle can be finished in 240 s*, Ensures maximum efficiency and minimum temperature drop.



COMFORT ADVANTAGE

A. 5 Temp. Sensors to Ensure Precise Temperature Control

- 1 Tank middle temperature sensor**
 - Ensures water is evenly heated by checking for temperature gradients.
 - Provides assurance of consistent hot water during simultaneous usage.
- 2 Tank top temperature sensor**
 - Monitors the ready-to-use hot water temperature.
 - Guarantees immediate comfort.
- 3 Coil temperature sensor**
 - Prevents overheating and maximize efficiency.
 - Enhances longevity of the system.
- 4 Suction pipe temperature sensor**
 - Adjusts the refrigerant flow to enhance efficiency and precise control
- 5 Ambient temperature sensor**
 - Ensures the system operates optimally across different climates and seasons



B. Designed for Multiple Installation Scenarios

<p>Scenario 1</p>	<p>Scenario 2</p>	<p>Scenario 3</p>	<p>Scenario 4</p>
<p>Double duct installation: Absorbs heat from the surrounding air to warm water.</p>	<p>Single duct installation: Provides fresh air ventilation for indoor areas. The unit also features Independent Ventilation function.</p>	<p>Single duct installation: Recycles waste heat from indoor spaces to heat water.</p>	<p>Ductless installation: Offers space cooling for unheated areas such as wine cellars and garages.</p>

C. Smart Home Features – Plug & Play

Powered by Smart Life

<p>One Button Connection</p> <p>Thanks to Integrated Bluetooth chip</p>	<p>Control Panel</p> <p>Target and current Tank Temp. at a glance</p>	<p>Weekly Schedule</p> <p>Customize to Lifestyle, Lower carbon emissions</p>	<p>Geo Location Automation</p> <p>Leaving home, turn off Arriving home, turn on</p>	<p>Local Temp. Based Automation</p>	<p>Supports 60+ Languages</p>
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D. Other Features

<p>Anti-Legionella Function</p> <p>Legionella die immediately</p> <p>90% legionella die in two minutes</p> <p>90% legionella die in two hours</p> <p>Ideal temperature for legionella breeding</p> <p>Legionella survives but not active</p>	<p>Enamel Coating</p>	<p>High Efficiency System Composition</p>
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TECHNICAL SPECIFICATIONS

TECHNICAL DATA		MA29-E-100LT	MA29-E-160LT	MA29-E-200LT	MA29-E-300LT
Nominal Heating Capacity	KW	1.1		1.6	
Heating Capacity (20/15°C)**	kW	0.93	1.06	1.46	1.38
COP (20/15°C)****	W/W	3.13	3.4	3.53	3.68
Water heating energy efficiency (smart=0) %****		131.80%	141.20%	146.80%	151.10%
Rated Input Power - Heat Pump	W	297	312	414	375
Energy Class(20/15°C)****		A++	A+	A+	A+
Standby power input(20/15°C)***	W	17	23	23	24
Sound power level *****	dB(A)	55	55	56	56
Power supply	V/Ph/Hz	220-240/1/50			
Rated Power - electrical heater	W	1600		1600	
Rated Max. Power - heat pump	W	500		700	
Rated Current	A	2.18 +6.8 (e-heater)		3.05 +6.8 (e-heater)	
Max.water temperature (without using backup heater)	°C	65			
Max. water temperature	°C	75			
Temperature setting range	°C	10-75			
Rated water yield*	L/H	23.6		34.4	
Working temperature range	°C	-7 ~ 43			
Max. discharge pressure	bar	30			
Max. suction pressure	bar	10			
Compressor		GMCC/Rotary		GMCC/Rotary	
Refrigerant type		R290			
Refrigerant charge	g	150			
Fan motor (Type/W/RPM)		DC motor/15/880		DC motor/26/1050	
Air flow	m3/h	240	250	350	
Duct diameter	mm	160			
Max allowed pressure of tank	bar	8			
Inside body material of tank		Enamel			
Inner tank thickness	mm	1.8		2	2.5
Insulation material		polyurethane			
Thickness of the tank insulation	mm	50	50	45	50
Outside tank material		Galvanised Steel			
Outside tank thickness	mm	0.5			
Coating thickness of the tank cover	mm	0.05			
Water tank Colour		White / Silver			
Hot water outlet	inch	G 1/2	G 3/4	G 3/4	G 3/4
Cold water inlet	inch	G 1/2	G 3/4	G 3/4	G 3/4
Size of water drain	inch	G 1/2	G 3/4	G 3/4	G 3/4
Condensed water outlet	inch	G 1/2	G 1/2	G 1/2	G 1/2
Material of heat pump coil		Microchannel		Microchannel	
Unit protection Indoor unit (IP xx)		IPX1			
Water tank Volume	L	100	160	200	300
Net Dimensions	mm	φ510x1230	φ510x1700	φ560x1750	φ640x2010
Packing Dimensions	mm	570x570x1290	570x570x1800	629x629x1892	695x695x2145
Net Weight	Kg	59	73	86	117
Gross Weight	Kg	72	83	106	140
Included features:		Sanitary water heating			
		Auxiliary electrical heater 1.6kw			
		Salgnomia Electronic expansion valve			
(*) Capacities and power inputs based on the following conditions: - Heating: Ambient temperature 20°C/15°C, Water temperature from 15°C to 55°C. (**) Capacities and Heating Time based on ERP(EN16147) for Stage A ,water temp heating from 10°C to 53°C. (***)Standby power input based on ERP(EN16147) for Stage B (****)COP and Energy Class based on ERP(EN16147) for Stage C with tapping cycle M / L / XL (*****Noise is tested according to EN 12102 with water 50°C					