

# Heat pump models



Energy Machines' products are mainly differentiated by their application and heating or cooling capacities. Technical differences include refrigerants used, number of refrigerant circuits, types of compressors, and heat exchangers.

Our heat pumps are designed to run on environmentally friendly refrigerants such as R1234ze, R515b, and R513A. Additionally, they can be customized to accommodate alternative refrigerant types as needed, tailored to the specific requirements of your project.



# Heat pump models

#### **EMA**

EMA models are designed for space heating, production of warm tap water, and comfort cooling. EMA has two separate refrigerant circuits and one secondary circuit.

Compressor type: Scroll

Refrigerants: R1234ze, R515B

Nominal capacity: Heating 230-470 kW, Cooling 290-585 kW

#### **EMB**

EMB models are designed for space heating, production of warm tap water, and comfort cooling. They contain either one or two refrigerant circuits with a twin compressor in each.

Compressor type: Scroll

Refrigerants: R1234ze, R515B

Nominal capacity: Heating 115-350kW, Cooling 145-365kW

#### **EMT**

EMT products are designed for space heating, production of warm tap water, and comfort cooling. These models are powered by oil-free turbocompressors.

Compressor type: Turbo / Centrifugal

Refrigerants: R1234ze

Nominal capacity: Heating 265-2355 kW, Cooling 235-2050 kW

## **EMHP**

EMHP products are designed for space heating, production of warm tap water, and comfort cooling.

Compressor type: Reciprocating
Refrigerants: R1234ze, R515B

Nominal capacity: Heating 40-120 kW, Cooling 60-165 kW

### **EMHW & EMCW**

EMHW products are designed for production of warm tap water with serial connected heat exchangers. The heat exchangers heat water (or liquid) in stages up to 60°C (140 °F).

The heat exchangers can utilize different heat sources. EMCW products are similar to EMHW products, but designed for cooling water or liquids.

**Refrigerants:** EMHW and EMCW do not contain refrigerant circuits **Nominal capacity:** Heating 130-500 kW, Cooling defined by request



# Heating capacity and working temperatures

This graph illustrates the heating capacity and working temperatures of Energy Machines' heat pump products.

The solid colors show the typical heating capacity and working temperatures that can be achieved.

The shaded areas show the range of temperatures and heating capacity possible through customization and the availability of an adequate source temperature.







