ENERGY MACHINES

Heat Pump Datasheet

Models:	EMT-4285-1-4-FT-AC	EMT-4285-1-7-FT-AC
Refrigerant:	R1234ze	R515B
Certification:	CE	CE
Safety class:	A2L	A1

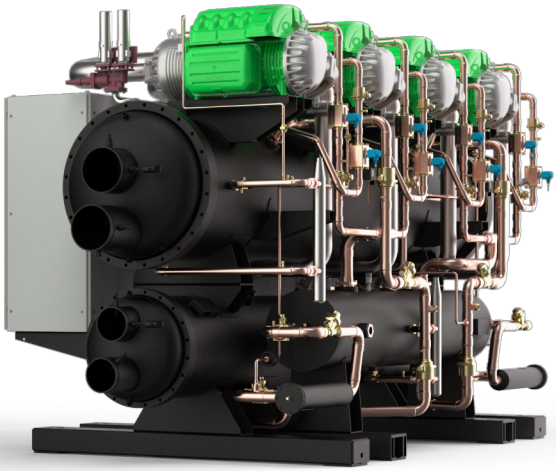
This Energy Machines™ model contains four oil-free centrifugal turbocompressors and one refrigerant circuit. The compressors are classified as non-positive displacement compressors.

This model is equipped with a flash tank, increasing its energy efficiency. The machine's evaporator and condenser are shell-and-tube heat exchangers. The evaporator operates with a flooded evaporation technique.

These components work together to create a powerful and efficient machine.

The heat pump is available with or without the outer casing.





External casing is an optional extra feature

Characteristics

Model characteristics	
Energy source	Ground, water, or waste heat
Compressor type	Turbo
Capacity control	Frequency controlled
Special features	Economizer, oil-free
Option	Additional external casing available on request

Performance

Heating mode	
Heating capacity (kW)	1804
Cooling capacity (kW)	1276
COP	3.42

Cooling mode	
Heating capacity (kW)	1572
Cooling capacity (kW)	1208
COP	3.36

COP = Coefficient of performance

Design temperatures

Heating mode	
Heated fluid (in/out)	68°C / 75°C
Chilled fluid (in/out)	20°C / 15°C

Cooling mode	
Heated fluid (in/out)	37°C / 43°C
Chilled fluid (in/out)	12°C / 7°C

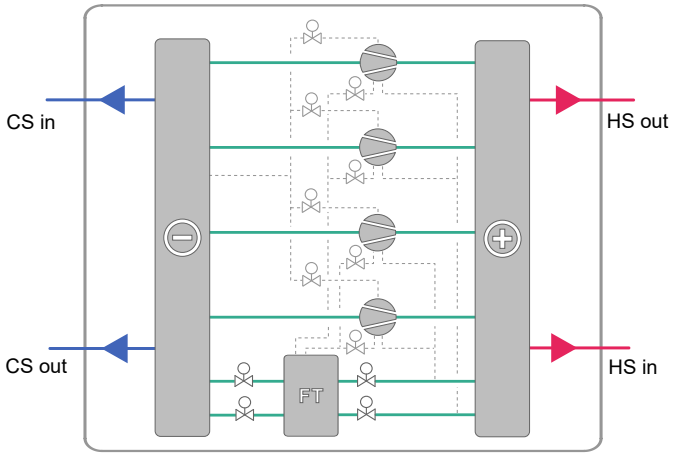
Chilled fluid = water, Heated fluid = water

Flow and pressure drop

Heating mode		
	Heated fluid	Chilled fluid
Flow (l/s)	62.9	61.0
Pressure drop (kPa)	34.7	58.7

Cooling mode		
	Heated fluid	Chilled fluid
Flow (l/s)	63.2	57.6
Pressure drop (kPa)	39.2	52.9

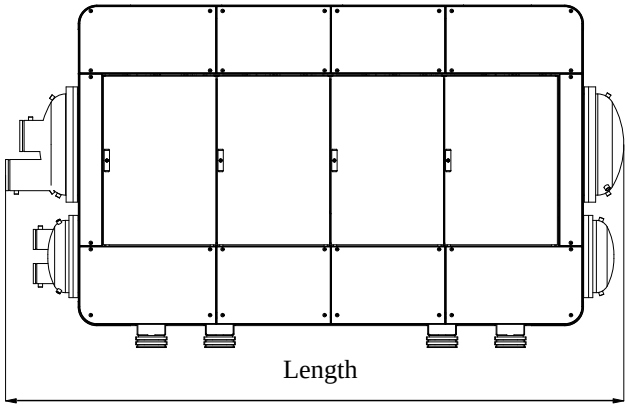
Chilled fluid = water, Heated fluid = water

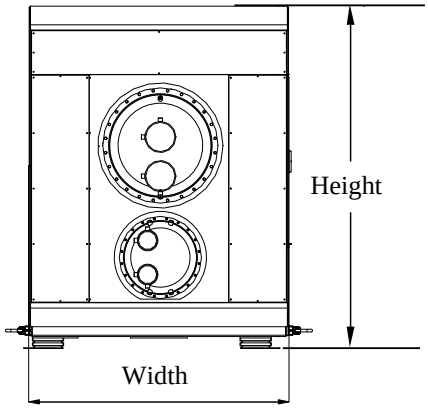


Specifications

Electricity	
Power supply voltage (VAC)	400
Power supply frequency (Hz)	50
Power supply phase (ϕ)	3
Rated power input (kW)	533
Rated current (A)	845
Fuse (A)	1000

Dimensions*	
Length (mm)	4350
Width (mm)	1830
Height (mm)	2406
Dry weight (kg)	8200
Commissioned weight (kg)	9000
**See dimensional drawings for clearance requirements*	





Refrigerant		
Model	EMT-4285-1-4-FT-AC	EMT-4285-1-7-FT-AC
Type	R1234ze	R515B
GWP value	1.37	293
Charge (kg)		420

Energy Machines has a policy of continuous product and data improvement and reserves the right to change design and specifications without notice. While Energy Machines strives for accuracy, it does not guarantee the completeness or correctness of the information provided.

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