ENERGY MACHINES

Heat Pump Datasheet

Models:	EMT-2380-2-4-ECO	EMT-2380-2-7-ECO
Refrigerant:	R1234ze	R515B
Certification:	CE	CE
Safety class:	A2L	A1

This Energy Machines™ EMT model contains two oil-free centrifugal turbocompressors and two refrigerant circuits. The compressors are classified as non-positive displacement compressors.

This model is equipped with two economizer heat exchangers, 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.



Characteristics

Model characteristics	
Energy source	Ground, water, or waste heat
Compressor type	Turbo
Capacity control	Frequency controlled
Special features	Economizer, oil-free
Options	Available with or without outer casing

Performance

Heating mode	
Heating capacity (kW)	951
Cooling capacity (kW)	696
COP	3.73

Cooling mode	
Heating capacity (kW)	982
Cooling capacity (kW)	776
COP	3.77

COP = Coefficient of performance

Design temperatures

Heating mode	
Heated fluid (in/out)	57°C / 63°C
Chilled fluid (in/out)	12°C / 7°C

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

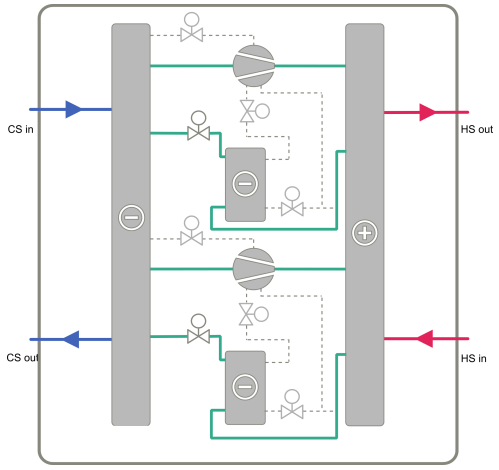
Chilled fluid = water, Heated fluid = water

Flow and pressure drop

Heating mode		
	Heated fluid	Chilled fluid
Flow (l/s)	37.86	33.25
Pressure drop (kPa)	44.4	40.6

Cooling mode		
	Heated fluid	Chilled fluid
Flow (l/s)	39.1	37.08
Pressure drop (kPa)	48.1	49.2

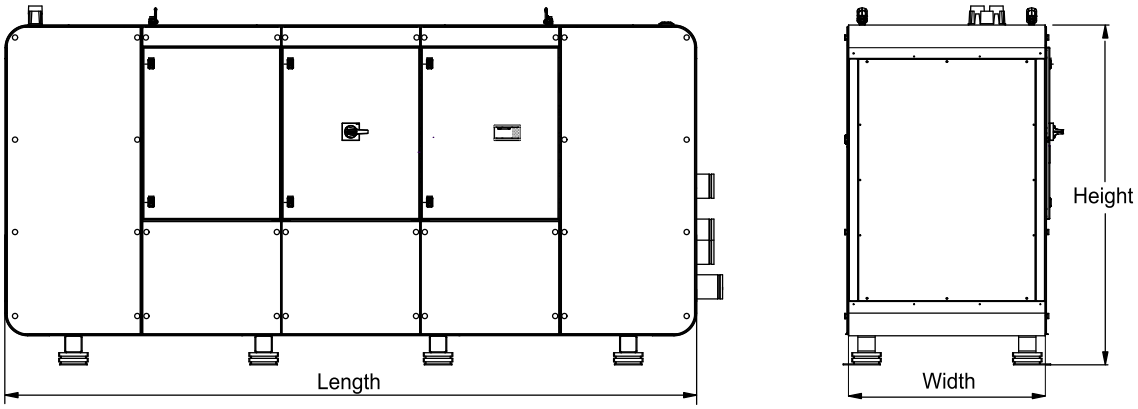
Chilled fluid = water, Heated fluid = water



Specifications

Electricity	
Power supply voltage (VAC)	400
Power supply frequency (Hz)	50
Power supply phase (ϕ)	3
Rated power input (kW)	160
Rated current (A)	420
Fuse (A)	500

Dimensions*	
Length (mm)	4000
Width (mm)	1260
Height (mm)	1965
Dry weight (kg)	N/A
Commissioned weight (kg)	N/A
**See dimensional drawings for clearance requirements*	



Refrigerant		
Model	EMT-2380-2-4-ECO	EMT-2380-2-7-ECO
Type	R1234ze	R515B
GWP value	1.37	288
Charge (kg)		N/A

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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