Thermia Morix



A commercial heat pump with a totally natural refrigerant

The Thermia Morix is a commercial heat pump that uses the natural refrigerant R290 and is very easy to install, thanks to a built-in safety solution which enables simple and flexible installation. The Morix builds on Thermia's knowledge and the history of the Mega series, which has set the standard for commercial heat pumps since 2014.

Thermia's commercial heat pumps are known for their powerful control and ease of integration with BMS (Building Management Systems). The Thermia Morix communicates via Modbus.

Monitoring and control take place via an app, or on the web. The heat pump has a large, clear display with highly intuitive, user-friendly navigation. The Morix has both integrated Wi-Fi and 4G connectivity. With 4G, there is no need for Wi-Fi via a router or a cable.*

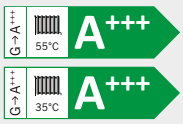
The Morix delivers high performance, with a flow temperature up to 75°C and the inverter-controlled compressor adjusts the heat load constantly according to the current heat demand. This means you never use more energy than is needed. It has a high annual efficiency (SCOP 5,32**) and maximum flexibility thanks to its inverter technology.

The Morix commercial heat pump is available in three models with a power range of 7 - 45 kW. By connecting several units together, you can achieve a total heating output of up to 720 kW. The Morix S is also available in a Morix S-E variant with an exchange valve for hot water production and a built-in auxiliary heater.

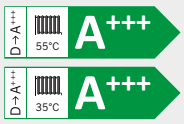
The Morix uses the natural refrigerant R290, with a GWP of just 0,02***. The refrigerant's GWP value and the heat pump's filling amount affect the CO_2 equivalent. The result is a perfect geothermal source heat pump for those who are thinking about the future while seeking quality and comfort.



System:



Product:



Read more about the energy class in footnotes 6–7 on the next page.

* The 4G connection is free of charge until 30 April 2028.

** SCOP 5,32 refers to the Morix M seasonal coefficient of performance according to the measurement standard EN 14825, based on underfloor heating in a cold climate. The SCOP figure according to the standard EN 14825, for underfloor heating in an average climate is 5,13.

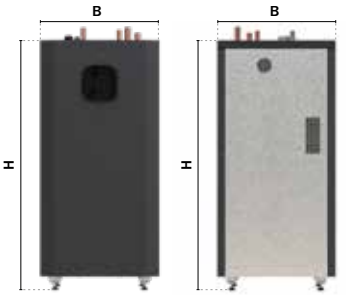
*** R290 is a hydrocarbon that occurs in nature and is not fluorinated. The refrigerant circuit is hermetically sealed and contains R290. Global Warming Potential (GWP) of R290 is 0,02, in accordance with Regulation (EU) 2024/573.

RETAILER:

Technical data Morix

Connections Morix S, S-E and M

1 Lead-ins for incoming supply
2 Heat return (return line)
3 Hot water (supply line) (*Applies to S-E only)
4 Heat supply (supply line)
5 Coolant out (from heat pump)
6 Coolant in (to heat pump)
7 Air evacuation outlet
8 Lead-in for communication cables and sensor





W: 811 mm
D: 805 mm
H: 1719 mm

MORIX S AND M



W: 811 mm
D: 805 mm
H: 1719 mm

MORIX S-E

Morix			Morix S	Morix S-E	Morix M
Heating capacity		kW	7–33	7–33	12–45
Refrigerant	Typ		R290	R290	R290
	Amount[1]	kg	1,60	1,60	1,95
	CO_2-equivalent	tCO_2	0,000032	0,000032	0,000039
Compressor	Typ		Inverter-controlled, Scroll	Inverter-controlled, Scroll	Inverter-controlled, Scroll
	Oil		POE	POE	POE
	Amount of oil (l)		3,50	3,50	3,50
Electrical data 3~N, 50Hz	Mains power supply	V	400 3N~	400 3N~	400 3N~
	Rated power, compressor	kW	14	14	19
	Rated power, circulation pumps	kW	0,8	0,8	0,8
	Auxiliary heater, 3 steps	kW	-	5/10/15	-
	Fuse[2]	A	-	32/40/50	-
		A	25	25	32
		A	-	10/16/25	-
	Short-circuit power	MVA	2,0	2,0	2,6
Performance	SCOP, Floor heating (35°C)[3]		5,16	5,16	5,32
	P-design (35°C)[3]		29,80	29,80	44,82
	SCOP, Radiator (55°C)[3]		4,06	4,06	4,13
	P-design (55°C)[3]		28,22	28,22	40,85
	SCOP, Floor heating (35°C)[4]		4,95	4,95	5,13
	P-design (35°C)[3]		29,80	29,80	44,82
	SCOP, Radiator (55°C) [4]		3,95	3,95	4,00
	P-design (55°C)[4]		28,22	28,22	40,85
	Heat factor[5]	kW	13,10	13,10	21,67
	Incoming power[5]	kW	2,89	2,89	4,68
	COP[5]		4,53	4,53	4,62
Energy class - system[6]	Floor heating (35°C)		A+++	A+++	A+++
	Radiator (55°C)		A+++	A+++	A+++
Energy class - product[7]	Floor heating (35°C)		A+++	A+++	A+++
	Radiator (55°C)		A+++	A+++	A+++
Max/min temperature	Cooling circuit	°C	25/–10	25/–10	25/–10
	Heating circuit	°C	75/20	75/20	75/20
Max system pressure	Cooling circuit	bar(g)	6	6	6
	Heating circuit	bar(g)	6	6	6
Required air flow for evacuation		m^3/h	58,3	58,3	65
		l/s	16,2	16,2	18,1
Anti-freeze[8]			Ethanol + water solution -17°C ±2°C		
Max/min refrigerant circuit	Low pressure	Bar(g)	1	1	1
	High pressure	Bar(g)	31	31	31
Sound power level		dB(A)	41–54[9]	41–54[9]	41–55[9]
		dB(A)	46[10]	46[10]	49[10]
Weight		kg	345	365	375
Dimensions (WxDxH)	without pipe connections	mm	811×805×1719 ±10	811×805×1719 ±10	811×805×1719 ±10
	with pipe connections	mm	811×805×1829 ±10	811×805×1829 ±10	811×805×1829 ±10

1) The refrigerant circuit is hermetically sealed and contains R290. Global Warming Potential (GWP) of R290 is 0,02, in accordance with Regulation (EU) 2024/573.
2) The minimum recommended fuse size depends on the limitation of the power supply in combination with compressor. The maximum power allowed for the auxiliary heater may be configured differently, with and without compressor for adaptation in case of low fuse. Auxiliary heater and compressor are operated with L1, L2 and L3. Controller and circulation pumps are operated with L1. Complies with IEC61000-3-12 at Ssc
3) SCOP according to EN14825, Cold climate (Helsinki)
4) SCOP according to EN14825, medium climate (Strasbourg).
5) At B0/W35, according to EN14511.
6) When the heat pump is part of an integrated system.According to Eco-design Directive 811/2013
7) When the heat pump is the sole heat generator and the built-incontroller is not included. According to Eco-design Directive 811/2013.
8) Always check local rules and regulations before using antifreeze.
9) Sound power level measured according to EN 12102 and EN 3741
10) Sound power level measured according to EN 12102 and EN 3741 (B0W55).

Thermia Heat Pumps and its certified dealers reserve the right to make changes to details and specifications without prior notice. Subject to any printing errors. 261012_Morix_EN