Thermia Mega

Mega^{S-E} Mega^{S} and Mega^{M}

Mega^{L} and Mega^{XL}

Maximum performance and best all-round economy

Thermia Mega is a commercial heat pump designed as a beacon of best all-round economy. The result is a heat pump with an inverter-controlled compressor, in the model sizes Mega S, M, L and XL with a power range from 10 kW - 88 kW. You can connect 16 Mega XL units together to achieve a total heating effect of up to 1408 kW. Mega S is also available in the Mega S-E variant with an exchange valve for hot water production and a built-in auxiliary heater.

Our inverter technology makes Mega an extremely flexible and versatile product, which can be installed and used in all types of property, whatever the conditions. Each solution can be tailored to meet your full heating, cooling and hot water needs.

The inverter technology, which continuously adjusts the heat pump's output to current demand, means that the heat pump can supply 100 per cent of your energy requirements. This in turn means that you will avoid having to pay for any expensive auxiliary heating. Thanks to the inverter control, you can also operate installations with different heating and hot water demands without the need for additional volume tanks. This will lower installation costs and reduce the space needed for the system. Hot gas exchangers as standard make hot water production extra cost-effective.

Our main aim when developing Mega was to create a powerful control system. Monitoring and control can be performed directly on the heat pump's newly designed colour touchscreen, as well as via a web interface, an upstream control system or via mobile.

RETAILER:

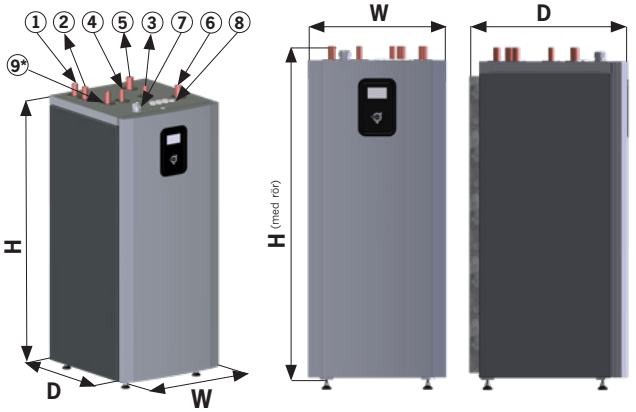
Technical data Mega

Connections

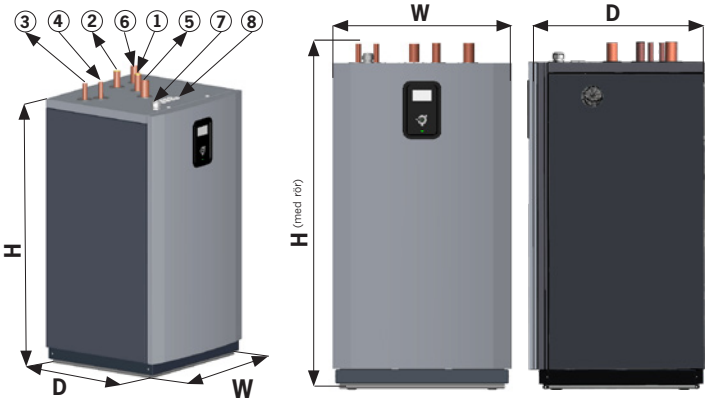
1 Heat return (return line)
2 Heat supply (supply line)
3 Hot gas exchanger (supply line)
4 Hot gas exchanger (return line)
5 Coolant out (from heat pump)
6 Coolant in (to heat pump)
7 Lead-ins for incoming supply
8 Lead-in for communication cables and sensor
9* Hot water (return line) (*applies only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

↑ = Flow direction

Mega^{S-E} Mega^{S} and Mega^{M}



Mega^{L} and Mega^{XL}



Mega			Mega^{S-E}	Mega^{S}	Mega^{M}	Mega^{L}	Mega^{XL}
Refrigerant	Type		R410A	R410A	R410A	R410A	R410A
	Amount[1]	kg	3,9	3,9	4,4	6,3	9,0
	Test pressure (low/high pressure)	MPa	3,0/4,5	3,0/4,5	3,0/4,5	3,0/4,5	3,0/4,5
	Design pressure	MPa	4,5	4,5	4,5	4,5	4,5
Compressor	Type		Scroll	Scroll	Scroll	Scroll	Scroll
	Oil		POE	POE	POE	POE	POE
Electrical data 3-N	Mains power supply	Volt	400	400	400	400	400
	Rated power, compressor	kW	14	14	17,5	22,2	32,5
	Rated power, circulation pumps	kW	0,7	0,7	0,7	1,0	1,0
	Fuse[19]	A	32	32	40	50	63
	Auxiliary heater, 3 steps	kW	5/10/15	N/A	N/A	N/A	N/A
	Fuse (including compressor and Auxiliary heater)	A	32/40/50[21]	N/A	N/A	N/A	N/A
Performance	COP[2]		4,73	4,73	4,60	4,50	4,71
	Heat factor[2]	kW	20,18	20,18	26,71	35,60	52,00
	Incoming power[2]	kW	4,26	4,26	5,81	7,91	11,00
	SCOP, Floor heating (35°C)		5,72[3]	5,72[3]	5,86[5]	5,29[7]	5,30[9]
	SCOP, Radiator (55°C)		4,33[4]	4,33[4]	4,55[6]	4,20[8]	4,32[10]
	Power range (B0/W35)		10–33[11]	10–33[11]	11–44[12]	14–59[12]	21–88[12]
Energy class - system[17]	Floor heating (35°C)		A+++	A+++	A+++	A+++	N/A[20]
	Radiator (55°C)		A+++	A+++	A+++	A+++	N/A[20]
Energy class - product[18]	Floor heating (35°C)		A+++	A+++	A+++	A+++	N/A[20]
	Radiator (55°C)		A+++	A+++	A+++	A+++	N/A[20]
Max system pressure	Cooling circuit	bar	6	6	6	6	6
	Heating circuit	bar	6	6	6	6	6
Max/min temperature[13]	Cooling circuit	°C	20/-10	20/-10	20/-10	20/-10	20/-10
	Heating circuit	°C	65[14]/20	65[14]/20	65[14]/20	65[14]/20	65[14]/20
Max/min refrigerant circuit	Low pressure	MPa	0,23	0,23	0,23	0,23	0,23
	High pressure	MPa	4,5	4,5	4,5	4,5	4,5
Sound power level	Min/Max[15a]	dB(A)	41–56[11]	41–56[11]	41–56[12]	40–59[12]	45–63[12]
	Sound power level[15b]	dB(A)	47	47	50	43	50
Anti-freeze			Ethanol + water solution -17°C ± 2[16]				
Dimensions (WxDxH) (without pipe connections)*		mm	692x796x1652 ± 10	692x796x1652 ± 10	692x796x1652 ± 10	900x849x1644 ±10	900x849x1644 ±10
Dimensions (WxDxH) (with pipe connections)*		mm	692x796x1722 ± 10	692x796x1722 ± 10	692x796x1722 ± 10	900x849x1744 ±10	900x849x1744 ±10
Weight		kg	309	300	310	407	487

1) The refrigerant circuit is hermetically sealed and subject to the F-gas directive. Global Warming Potential (GWP) for R410A according to EC 517/2014 is 2088, giving a CO_2 equivalent corresponding to: S and S-E: 8,143 ton, M: 9,187 ton, L: 13,154 ton, XL 18,792 ton.
2) B0/W35 according EN14511 including circulation pumps 2700 rpm with S-E and S and 3600 rpm with M, L, XL
3) B0/W35, according EN14825, Cold Climate Pdesign 33 kW
4) B0/W55, according EN14825, Cold Climate Pdesign 31 kW
5) B0/W35, according EN14825, Cold Climate Pdesign 36 kW
6) B0/W55, according EN14825, Cold Climate Pdesign 34 kW
7) B0/W35, according EN14825, Cold Climate Pdesign 60 kW
8) B0/W55, according EN14825, Cold Climate Pdesign 55 kW
9) B0/W35, according EN14825, Cold Climate Pdesign 85 kW
10) B0/W55, according EN14825, Cold Climate Pdesign 79 kW
11) Compressor speed 1500-4500 rpm
12) Compressor speed 1500-6000 rpm
13) Please note that it is not possible to combine all brine temperatures with heat transfer fluid temperatures.
14) Minimum incoming brine temperature 0° C.
15a Sound power level measured according to EN 12102: 2017 and EN 3741: 2010 (B0/W35)
15b Sound power level according to energy labelling, measured according to EN 12102:2017 and EN 3741:2010 (B0/W55)
16) Always check local rules and regulations before using antifreeze.
17) When the heat pump is part of an integrated system. According to Eco-design Directive 811/2013
18) When the heat pump is the sole heat generator and the built-in controller is not included. According to Eco-design Directive 811/2013.
19) The fuse size can be adjusted according to the heat pumps power output. Read more in technical literature 'Technical description – Mega', chapter 'Estimated current for XL, L and M, S'.
20) Space heaters with a power capacity in excess of 70 kW are not covered by the energy labeling regulation (European Commission Regulation N° 811/2013)
21) The minimum recommended fuse group size depends on auxiliary heater setting (5/10/15 kW) in combination with compressor. The maximal steps of auxiliary heater may be configured differently with/without compressor in the controller.

Thermia OnLine
Available on the iPhone App Store
Google play