HEAT PUMPS

Thermia Products 2024

thermia.com

Welcome to Thermia

the pioneers of geothermal energy

Thank you for your interest in our company. Choosing an energy solution for a single-family home or commercial building is an important and complex decision. We hope this product catalog will guide you through the process, answer your questions and inspire you to collaborate with Thermia – the pioneers of geothermal energy.

Thermia has been working with heat pumps and pioneering the field of geothermal technology since 1973. Over the decades, we have installed more than a quarter of a million systems, from domestic to major commercial installations.

Our heat pumps heat pumps are designed and manufactured in Sweden using the latest technology and top-quality european components. At our R&D center, we work continuously to take geothermal energy and heat pump technology to the next level in terms of energy efficiency, ease of use, sustainability and – not least – comfort for the people who benefit from our products.

If you are looking for the ultimate energy-efficient, high-power and reliable heat pump for your project, we believe you have come to the right place. But take your time and explore our solutions for yourself. If you have any questions, we are always here for you.

Welcome to Thermia's world of smart energy for one-family houses as well large, public and private buildings.

Thermia Team

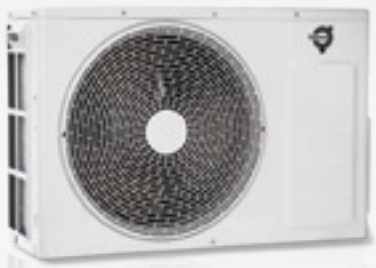
Thermia

Ground and Air Source Heat Pumps

Athena

iTec XT

iTec Eco



Aura T2
Aura S2

Thermia

HEAT PUMPS

Atlas

Calibra Eco Cool
Calibra Eco

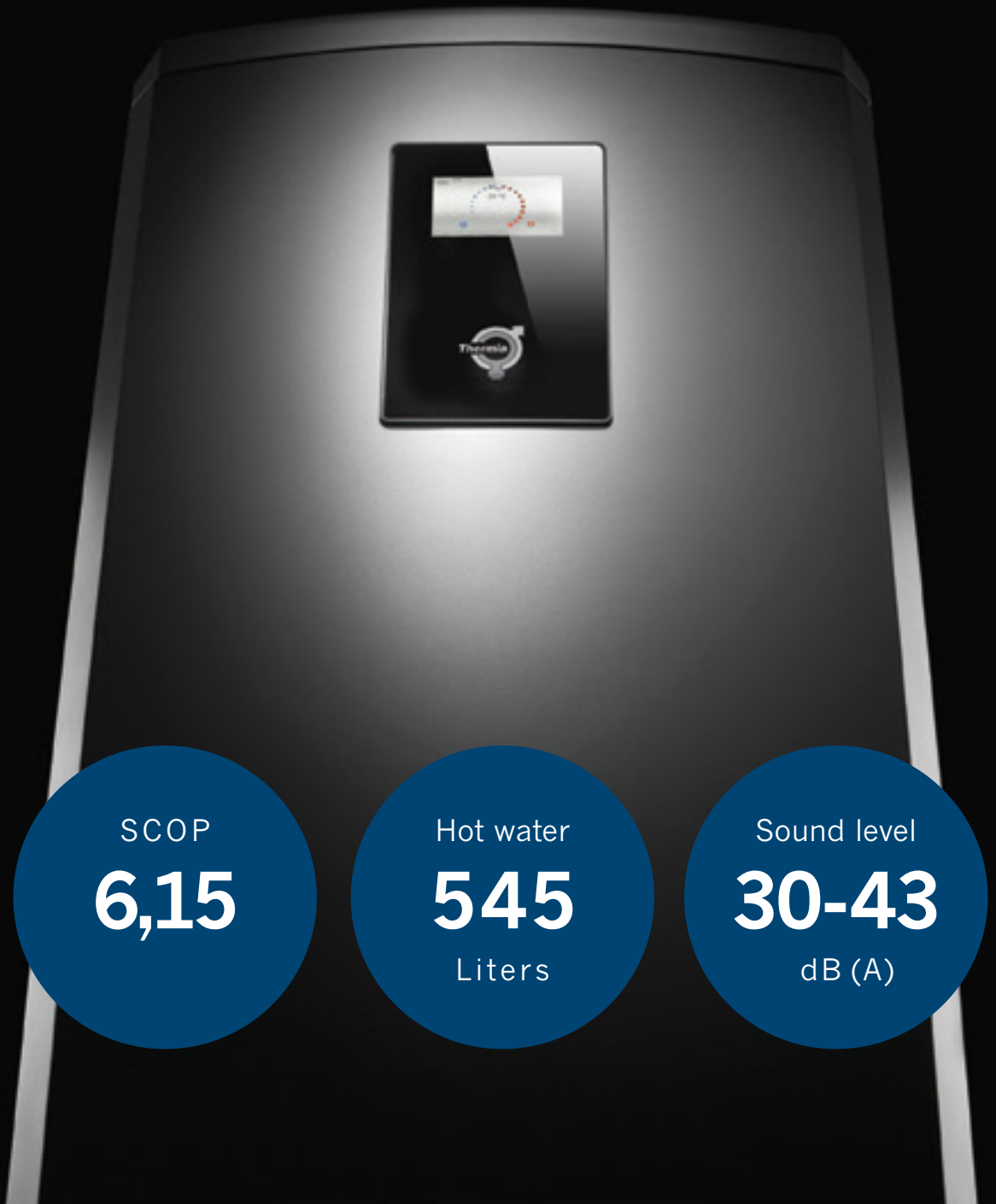
Legend

Mega M / Mega Eco M
Mega S / Mega Eco S
Mega S–E

Mega XL / Mega Eco XL
Mega L / Mega Eco L

Atlas

– new world class heat pump
breaks the dream limit of SCOP!



SCOP
6,15

Hot water
545
Liters

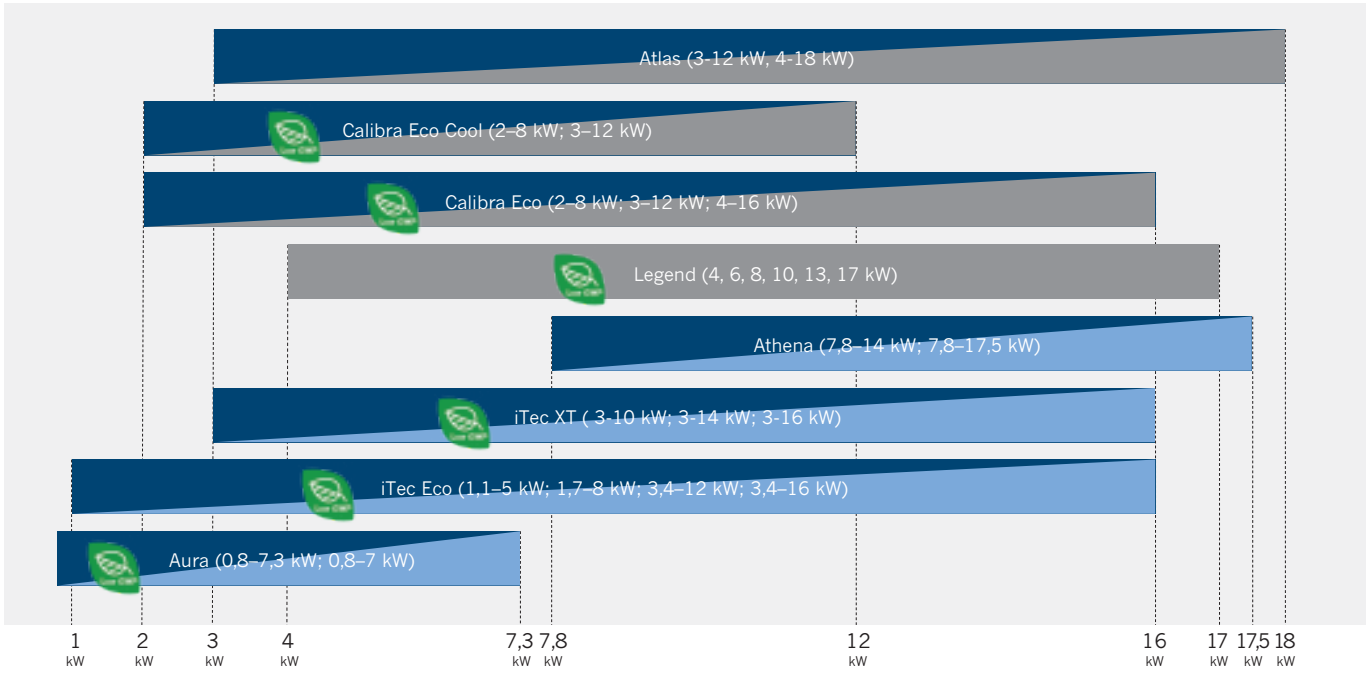
Sound level
30-43
dB (A)

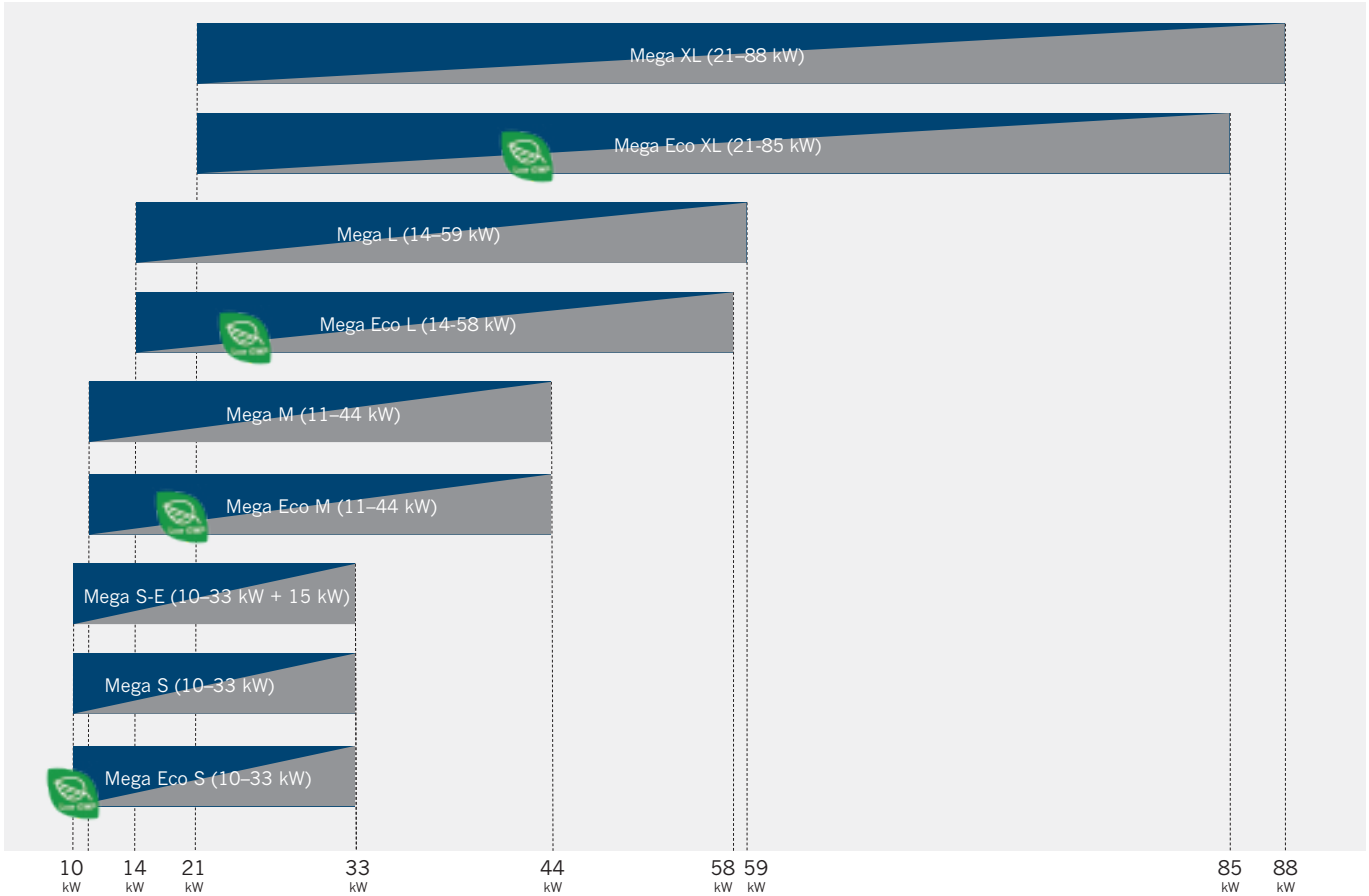
Flexibility - range of heating power [kW]

Thermia heat pumps provide heating, hot water and cooling for single family homes with 1,5 kW heat demand as well for large commercial properties with heat demand up to 1400 kW using cascade solutions.

Thermia heat pumps are available in three-phase (400V, 3-N) version. Only selected models are available in single-phase versions (230V, 1-N).

inverter technology | ground source heat pump | air source heat pump





Why choose Thermia heat pumps?

For the last 50 years, we have developed unique technologies that ensure you enjoy maximum performance, functionality, energy efficiency and cost savings. Added to that is Thermia's legendary reliability.

THERMIA INVERTER TECHNOLOGY

Inverter compressor technology is the latest and most effective way to control heating capacity in heat pumps. By continuously adjusting output to current demand, inverter technology enables the heat pump to supply 100% of your energy requirements. This in turn means that there is no need to spend money on auxiliary heating.

OPTIMUM TECHNOLOGY

Optimum Technology is a technology that constantly monitors your system and adjusts the pump's performance accordingly. Speed-controlled Class-A circulation pumps guarantee that daily operation is always adjusted according to the user's requirements and conditions. That means you can be sure your heat pump is always running at its most efficient level.

HGW (HOT GAS TECHNOLOGY)

Thermia has developed a unique method for producing hot water. At the same time as water is heated for distribution through the building's heating system, hot water is produced at very high temperature by an extra de-superheater. This means that during the part of the year when the building is heated, you get lots of hot water at a very low cost.

PASSIVE AND ACTIVE COOLING

The large areas of glass in many modern buildings are great during the darker months of the year but often lead to overheating in summer. Passive cooling ensures a perfect indoor climate all year round. If necessary, this can be supported with active cooling using the heat pump's compressor. Both passive and active cooling are far more economical than traditional air-conditioning systems.

TWS (TAP WATER STRATIFICATION)

The hot water tank can be fitted with our TWS (Tap Water Stratification) technology, which means that hot water is produced faster and at higher temperatures than with traditional technology. Because the hot water is diluted to tap water temperature, the volume of usable hot water is considerably higher due to the high temperature. TWS technology make Thermia heat pumps faster and more cost-efficient in hot water production compared with other brands.

SIMULTANEOUS HEATING AND COOLING

Simultaneous heating and cooling enables you to reduce operating costs even more. To achieve this, multiple heat pumps are connected in parallel between hot and cold buffer tanks. The hot tanks connect to the heating zones and the cold tanks to the cooling zones. The heat pump then simply exchanges hot for cold, depending on the needs of the building. For example, as a hotel conference room is cooled down, the excess heat removed is re-used to produce hot water for the swimming pool or SPA.

Overview of Thermia heat pump functions	Atlas	Atlas Duo	Calibra Eco Cool	Calibra Eco	Calibra Eco Duo	Legend	Legend Duo	Athena	iTec XT	iTec Eco	Aura	Mega / Mega Eco
Controller where heat demand calculation is based on an algorithm similar to PID (proportional-integral-derivative)	✓	✓	✓	✓	✓			✓				✓
Simultaneous heating and domestic hot water production	✓	✓										✓
Thermia Inverter Technology	✓	✓	✓	✓	✓			✓	✓	✓		✓
Electronic expansion valve	✓	✓	✓	✓	✓			✓	✓	✓		✓
Optimum technology	✓	✓	✓	✓	✓	✓	✓		✓	✓		
Online – remote control	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Calendar function	✓	✓	✓	✓	✓			✓	✓	✓		✓
Communication with other systems (ModBus)	✓	✓	✓	✓	✓			✓				✓
Plug-and-play software update via USB slot	✓	✓	✓	✓	✓			✓				✓
Passive cooling	✓	✓	✓	✓	✓	✓	✓					✓
Active cooling	✓	✓		✓	✓	✓	✓	✓*)	✓	✓	✓	✓
TWS (Tap Water Stratification)	✓	✓	✓	✓	✓	✓		✓	✓	✓		
HGW (Hot Gas Water)	✓	✓										✓
Legionella pasteurisation	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓
Automatic defrosting using heat accumulated in installation, without the use of an auxiliary heater								✓	✓	✓		
Simultaneous active/passive cooling control and domestic hot water production	✓	✓		✓	✓	✓	✓					✓
Control of the external auxiliary heater, such as gas boiler or electric heater	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓
Control of up to 5 distribution circuits heating/cooling, hot water circulating system and cooling system												✓
Control of external auxiliary heater via 0 – 10 V output or potential-free relay outputs	✓	✓	✓	✓	✓			✓				✓
Control shunt valves via 0-10 V outputs	✓	✓	✓	✓	✓			✓				✓
Hot water charging for the hot water heaters through a intermediate exchanger - WCS (Water Charging System)												✓

✓ *– Built-in Function;* ✓ *– Function available only with an additional accessories;* *) *Athena HC*

Thermia Atlas

Inverter-driven ground source heat pump with built-in 184-liter hot water tank and HGW (Hot Gas Water) technology.

- 6.15 SCOP - World class performance in heating
- Thermia Inverter Technology adjusts precisely to real-time demand
- Built-in hot water tank 184 l stainless steel
- HGW technology (Hot Gas Water)
- TWS technology (Tap Water Stratification)
- Advance functions (Smart Home, BMS, Smart Grid, Energy source control)
- Online – function build-in controller
- Plug-and-play software update via download over the air or USB slot

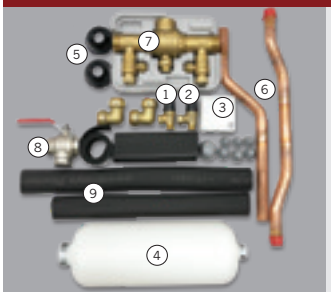
Atlas			Atlas 12	Atlas 18
Catalog number		400V	086L6187	086L6188
		230V	086L6191	–
Heating capacity			3 - 12 kW	4 - 18 kW
Refrigerant	Type		R410A	R410A
	Amount [1]	kg	1,4	1,95
	Design pressure	Bar(g)	45	45
Compressor	Type		Scroll	Scroll
Electrical data 3N (400V version)	Mains power supply	V	400	400
	Max working power, compressor	kW	4,5	6,7
	Rated power, circulation pumps	kW	0,2	0,3
	Auxiliary heater, 3 steps	kW	(0)/3/6/9	(0)/3/6/9
	Fuse (heat pump + auxiliary heater) [2]	A	(10)/16/20/25	(13)/20/25/32
Performance	SCOP Floor heating (35°C) [3]		5,86	6,15
	SCOP Radiator heating (55°C) [3]		4,39	4,55
	COP [4]		4,75	4,98
Energy class - system [5]	Floor heating (35°C), Radiator (55°C)		A+++	A+++
Energy class - product [6]	Floor heating (35°C), Radiator (55°C)		A+++	A+++
	Hot water (Economy) [7]		A+	A+
	Hot water (Normal/Comfort) [8]		A	A
Max/min temperature	Cooling circuit	°C	20/-10	20/-10
	Heating circuit	°C	65/20	65/20
Anti-freeze [9]			Ethanol + water solution -17°C ± 2	
Max/min refrigerant circuit	Low pressure	Bar(g)	2,3	2,3
	Operating pressure	Bar(g)	41,5	41,5
	High pressure	Bar(g)	45,0	45,0
Sound power level	Atlas	dB(A)	30-43 [10] (33) [11]	32-45 [10] (36) [11]
Hot water performance	Volume 40°C hot water [12]	l	307	344
	COP, hot water [7]		3,07	3,05
	Hot water incl. HGW [13]	l	488	545
Water tank	Atlas	l	184	184
Weight	Atlas, Empty	kg	177	187
	Atlas, Filled	kg	367	377
Dimensions (WxDxH)	Atlas	mm	598x703x1863 ±10	598x703x1863 ±10

* SCOP 6.15 for Atlas 18 according to measurement standard EN14825 (cold climate, Helsinki). ** HGW (Hot Gas Water): our patented technology uses the standard room heating function to produce domestic hot water simultaneously
*** Tap Water Stratification, our patented technology developed to ensure that stored heat is always used optimally **** Applies to Atlas 18 with fully deployed HGW (Hot Gas Water) function.

The measurements are performed on a limited number of heat pumps which can cause variations in the results. Tolerances in the measuring methods can also cause variations.

1) The refrigerant circuit is hermetically sealed and contains refrigerants covered by the F-gas regulation. GWP for R410A according to EC 517/2014 is 2088, which gives a CO2 equivalent corresponding to Atlas 12: 2.923 tons, Atlas 18: 4.072 tons.
2) The minimum recommended fuse size depends on the limitation of the electrical immersion heater in combination with the compressor. The maximum permissible power for immersion heater can also be set differently with and without compressor for further adjustment at low fuses.
- 400V versions: The power supply and the frequency converter for the compressor are powered by L1, L2 and L3. Control and circulation pumps are operated with L1. Meets IEC61000-3-12 at Ssc connection point min. 1.3 MVA for Atlas 12 and for Atlas 18 min. 2.1 MVA without action - 230V versions: The feeding for auxilliary heater and compressor can be physically separated. The 230V version can in addition to 1N also be connected to 230V 3phase grids, for fuse sizes see technical documentation.
3) SCOP according to EN14825, cold climate (Helsinki), P-design Atlas 12: 10.5 kW (B0W55), 11.5 kW (B0W35). P-design Atlas 18: 15.7 kW (B0W55), 15.1 kW (B0W35).
4) At B0 / W35, according to EN14511
5) When the heat pump is installed in a heating system that is controlled via the heat pump's control computer. According to EU regulation 811/2013.
6) When the heat pump is not connected to a heating system, and the function of the built-in control computer is not taken into account. According to EU regulation 811/2013.
7) Hot water performance according to EN16147, COP according to XL cycle with the control computer set for Economy mode and built-in hot water tank.
8) Hot water performance according to EN16147, COP according to XL cycle with the control computer set for Normal / Comfort mode and built-in hot water tank.
9) Local regulations and regulations must always be checked before antifreeze agents are used.
10) Sound power level measured according to EN12102 and EN 3741 (min / max B0W35).
11) Sound power level according to energy labeling, measured according to EN12102 and EN3741 (B0W55).
12) Hot water performance according to EN16147, V40 according to XL cycle with the control computer set for comfort mode and built-in hot water tank.
13) Maximum available amount of hot water when the boiler has been able to fully charge using HGW operation and subsequent V40 discharge in accordance with EN16147

Connection set included in delivery



1. Safety valve 3 bar
2. Safety valve 9 bar
3. Outdoor temperature sensor
4. Brine level vessel
5. Rubber glands
6. Connecting pipe for brine system ø28
7. Filling device for brine with insulation
8. Shut off valve with dirt strainer
9. Vapor barrier

Selected accessories for Atlas	Catalog number
Primary shunt group (Distribution circuit 1, built-in)	
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
Valve actuator, 2-point, 24 V, 45 - 120 sec (0-10 V)	086U5272
Strap on PT 1000 temperature sensor with 2 m cable	086U3365
Strap on temperature sensor with connection box PT1000	086U3356
System shunt group (used as buffer tank shunt)	
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
Valve actuator, 2-point, 24 V, 45 - 120 sec (0-10 V)	086U5272
Strap on PT 1000 temperature sensor with 2 m cable	086U3365
Strap on temperature sensor with connection box PT1000	086U3356
Buffer tank WT-V 100	086L4926
Buffer tank WT-V 200	086L4927
Buffer tank WT-V 300	086L4928
Buffer tank WT-V FC 500	086L5883
Passive cooling	
Passive cooling module PT1000	086L6358
Valve actuator, 2-point, 24 V, 45 - 120 sec (0-10 V)	086U5272
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
Active cooling	
Expansion card EM3 for internal mounting	086L5983
3-way valve with actuator (LK 8) 230V, 28 mm	086U7999
Valve actuator, 2-point, 24 V, 45 - 120 sec (0-10 V)	086U5272
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
Valve actuator, 2-point 230 V, 15 sec	086U5271
Strap on PT 1000 temperature sensor with 2 m cable	086U3365
Strap on temperature sensor with connection box PT1000	086U3356
Submersible sensor PT1000	086U3364
Pool heating	
Expansion card EM3 for internal mounting	086L5983
3-way valve with actuator (LK 8) 230V, 28 mm	086U7999
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
Valve actuator, 2-point 230 V, 15 sec	086U5271
Strap on PT 1000 temperature sensor with 2 m cable	086U3365
Strap on temperature sensor with connection box PT1000	086U3356
External auxiliary heater	
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
Valve actuator, 2-point, 24 V, 45 - 120 sec (0-10 V)	086U5272
Strap on PT 1000 temperature sensor with 2 m cable	086U3365
Strap on temperature sensor with connection box PT1000	086U3356
Other accessories	
Room sensor Genesis (with display)	086L3937
Room sensor PT1000 (without display)	086L5875
Brine pipe kit - the brine pipe connection on top of heat pump	351857
Level guard to fit in brine vessel	086U9122
Extension Socket Kit (additional base for extra space under the indoor unit)	086L6340
Connector kit ø28mm to install additional MBH hot water tank 200/300	086L5766
Hot water circulation pipe kit	086L2260
Flexible hose for heating system, 22Cu/DN20, lenght 600 mm	086U6015
Flexible hose for heating system, 28Cu/DN25, lenght 600 mm	086U6000

Thermia Atlas Duo

Inverter-driven ground source heat pump with HGW (Hot Gas Water) technology.

- 6..15 SCOP - World class performance in heating
- Thermia Inverter Technology adjusts precisely to real-time demand
- HGW technology (Hot Gas Water)
- Advance functions (Smart Home, BMS, Smart Grid, Energy source control)
- Online – function build-in controller
- Plug-and-play software update via download over the air or USB slot
- Atlas Duo version is designed to work with a the MBH Atlas 200 or MBH Atlas 300, or any other hot water tank.
- Auxiliary heater 0/3/6/9 kW

Atlas			Atlas 12 Duo	Atlas 18 Duo
Catalog number		400V	086L6195	086L6196
		230V	086L6199	–
Heating capacity			3 - 12 kW	4 - 18 kW
Refrigerant	Type		R410A	R410A
	Amount [1]	kg	1,4	1,95
Compressor	Type		Scroll	Scroll
Electrical data 3N (400V version)	Mains power supply	V	400	400
	Max working power, compressor	kW	4,5	6,7
	Rated power, circulation pumps	kW	0,2	0,3
	Auxiliary heater, 3 steps	kW	(0)/3/6/9	(0)/3/6/9
	Fuse (heat pump + auxiliary heater) [2]	A	(10)/16/20/25	(13)/20/25/32
Performance	SCOP Floor heating (35°C) [3]		5,86	6,15
	SCOP Radiator heating (55°C) [3]		4,39	4,55
	COP [4]		4,75	4,98
Energy class - system [5]	Floor heating (35°C), Radiator (55°C)		A+++	A+++
Energy class - product [6]	Floor heating (35°C), Radiator (55°C)		A+++	A+++
Max/min temperature	Cooling circuit	°C	20/-10	20/-10
	Heating circuit	°C	65/20	65/20
Anti-freeze [7]			Ethanol + water solution -17°C ± 2	
Max/min refrigerant circuit	Low pressure	Bar(g)	2,3	2,3
	Operating pressure	Bar(g)	41,5	41,5
	High pressure	Bar(g)	45,0	45,0
Sound power level	Atlas Duo	dB(A)	31-45 [8] (34) [9]	33-46 [8] (37) [9]
Water tank	Atlas Duo	l	optional	optional
Weight	Atlas Duo	kg	137	147
Dimensions (WxDxH)	Atlas Duo	mm	598x703x1450 ±10	598x703x1450 ±10

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3) SCOP according to EN14825, cold climate (Helsinki), P-design Atlas 12: 10.5 kW (B0W55), 11.5 kW (B0W35). P-design Atlas 18: 15.7 kW (B0W55), 15.1 kW (B0W35).
4) At B0 / W35, according to EN14511
5) When the heat pump is installed in a heating system that is controlled via the heat pump's control computer. According to EU regulation 811/2013.
6) When the heat pump is not connected to a heating system, and the function of the built-in control computer is not taken into account. According to EU regulation 811/2013.
7) Local regulations and regulations must always be checked before antifreeze agents are used.
8) Sound power level measured according to EN12102 and EN 3741 (min / max B0W35).
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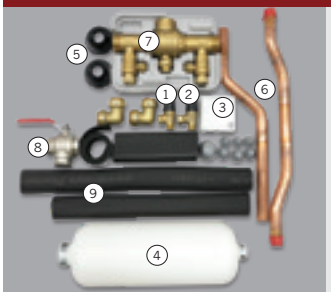


1. Safety valve 3 bar
2. Safety valve 9 bar
3. Outdoor temperature sensor
4. Brine level vessel
5. Rubber glands
6. Connecting pipe for brine system ø28
7. Filling device for brine with insulation
8. Shut off valve with dirt strainer
9. Vapor barrier

Selected accessories for Atlas Duo	Catalog number
Primary shunt group (Distribution circuit 1, built-in)	
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
Valve actuator, 2-point, 24 V, 45 - 120 sec (0-10 V)	086U5272
Strap on PT 1000 temperature sensor with 2 m cable	086U3365
Strap on temperature sensor with connection box PT1000	086U3356
System shunt group (used as buffer tank shunt)	
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
Valve actuator, 2-point, 24 V, 45 - 120 sec (0-10 V)	086U5272
Strap on PT 1000 temperature sensor with 2 m cable	086U3365
Strap on temperature sensor with connection box PT1000	086U3356
Buffer tank WT-V 100	086L4926
Buffer tank WT-V 200	086L4927
Buffer tank WT-V 300	086L4928
Buffer tank WT-V FC 500	086L5883
Passive cooling	
Passive cooling module PT1000	086L6358
Valve actuator, 2-point, 24 V, 45 - 120 sec (0-10 V)	086U5272
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
Active cooling	
Expansion card EM3 for internal mounting	086L5983
3-way valve with actuator (LK 8) 230V, 28 mm	086U7999
Valve actuator, 2-point, 24 V, 45 - 120 sec (0-10 V)	086U5272
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
Valve actuator, 2-point 230 V, 15 sec	086U5271
Strap on PT 1000 temperature sensor with 2 m cable	086U3365
Strap on temperature sensor with connection box PT1000	086U3356
Submersible sensor PT1000	086U3364
Pool heating	
Expansion card EM3 for internal mounting	086L5983
3-way valve with actuator (LK 8) 230V, 28 mm	086U7999
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
Valve actuator, 2-point, 24 V, 45 - 120 sec (0-10 V)	086U5272
Strap on PT 1000 temperature sensor with 2 m cable	086U3365
Strap on temperature sensor with connection box PT1000	086U3356
External auxiliary heater	
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
Valve actuator, 2-point 230 V, 15 sec	086U5271
Strap on PT 1000 temperature sensor with 2 m cable	086U3365
Strap on temperature sensor with connection box PT1000	086U3356
Hot water cylinders	
MBH Atlas 200	086L6169
MBH Atlas 300	086L6302
Water heater WT-T 300	086L4900
Water heater WT-T 500	086L4901
Water heater WT-C FC 500 (3 bar)	086L5880
Strap on temperature sensor with connection box PT1000	086U3356
Other accessories	
Room sensor Genesis (with display)	086L3937
Room sensor PT1000 (without display)	086L5875
Level guard to fit in brine vessel	086U9122
Extension Socket Kit (additional base for extra space under the indoor unit)	086L6340
Hot water circulation pipe kit	086L2260
Flexible hose for heating system, 22Cu/DN20, lenght 600 mm	086U6015
Flexible hose for heating system, 28Cu/DN25, lenght 600 mm	086U6000

Thermia Calibra Eco Cool

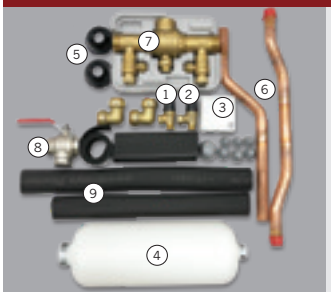
Inverter-driven ground source heat pump with built-in 184-liter hot water tank with TWS technology (Tap Water Stratification).

- 5.96 SCOP - high performance in heating
- Climate-friendly technology (R452B) with lowest GWP
- Thermia Inverter Technology adjusts precisely to real-time demand
- Built-in hot water tank 184 l stainless steel
- TWS technology (Tap Water Stratification)
- Advance functions (Smart Home, BMS, Smart Grid, Energy source control)
- Online – function build-in controller
- Plug-and-play software update via download over the air or USB slot

Thermia Calibra Eco			Calibra Eco Cool 8	Calibra Eco Cool 12
Catalog number	**400V**		**206943**	**206944**
Heating capacity		kW	2-8	3–12
Refrigerant	Type		R452B	R452B
	Amount[1]	kg	0.90	1.30
	GWP (CO_2 equivalent)	tCO_2	0.628	0.907
Compressor	Type		Inverter-controlled, Scroll	Inverter-controlled, Scroll
Electrical data 400V 3-N, ~50Hz	Main power supply	V	400	400
	Max working power, compressor	kW	2,8	4,1
	Rated power, circulation pumps	kW	0,1	0,2
	Auxiliary heater, 3 steps	kW	(0)2/4/6	(0)3/6/9
	Fuse[2A, 2B]	A	(13)/13/13/16[2A]	(10)/13/20/25[2B]
Performance	SCOP, Floor heating (35°C)[3]		5,87	5,85
	SCOP, Radiator (55°C)[3]		4,10	4,39
	SCOP, Floor heating (35°C)[4]		5,57	5,67
	SCOP, Radiator (55°C)[4]		4,10	4,25
	COP[5]		4,6	4,78
Energy class - system[6]	Floor heating (35°C)		A+++	A+++
	Radiator (55°C)		A+++	A+++
Energy class - product[7]	Floor heating (35°C)		A+++	A+++
	Radiator (55°C)		A+++	A+++
Max/min temperature	Cooling circuit	°C	20/-10[14]	20/-10
	Heating circuit	°C	65/20	65/20
Anti-freeze[10]			Ethanol + water solution[14] -17+/- 2 °C	
Max/min refrigerant circuit	Low pressure	Bar(g)	2,3	2,3
	Operating pressure	Bar(g)	41,5	41,5
	High pressure	Bar(g)	45	45
Sound power level	Calibra Eco Cool	dB(A)	30-42[11] (33)[12]	29-44[11] (35)[12]
Hot water performance	Volume 40°C hot water[13]	l	260	260
	COP, Hot water[7]		3.14	2.8
Water volume	Calibra Eco Cool	l	184	184
Weight	Calibra Eco Cool, Empty	kg	157	169
	Calibra Eco Cool, Filled	kg	347	359
Dimensions (WxDxH)	Calibra Eco Cool	mm	598x703x1863 +/-10	598x703x1863 +/-10

1) The refrigerant circuit is hermetically sealed and subject to the F-gas directive. Global Warming Potential (GWP) for R452B according to EC 517/2014 is 698.
2a) The minimum recommended fuse size depends on auxiliary heater setting in combination with compressor. The maximal steps of auxilliary heater may be configured differently with/without compressor in the controller. Controller and circulation pumps are connected by L1, electrical immersion heater is connected by L1 and L2 and the frequency converter for the compressor is connected by L3.Meets IEC 61000-3-12 without action.
2b) The minimum recommended fuse size depends on auxiliary heater setting in combination with compressor. The maximal steps of auxilliary heater may be configured differently with/without compressor in the controller. Controller and circulation pumps are connected by L1. Electrical immersion heater and frequency converter for the compressor are connected by L1, L2 and L3. Meets IEC61000-3-12 at Ssc connection point min 1,3 MVA without action.
3) SCOP according to EN14825, Cold climate (Helsinki), P-design: (All climate zones) P-design Calibra Eco Cool 8: 6 kW (B0W55), 7 kW (B0W35). P-design Calibra Eco Cool 12: 11 kW (B0W55), 12 kW (B0W35)
4) SCOP according to EN14825, Average climate (Strasbourg), P-design: (All climate zones) P-design Calibra Eco Cool 8: 6 kW (B0W55),7 kW (B0W35). P-design Calibra Eco Cool 12: 11 kW (B0W55), 12 kW (B0W35)
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-in controller is not included. According to Eco-design Directive 811/2013.
8) Hot water performance according to EN16147, COP according to XL cycle with the control computer set for Economy mode and built-in tank.
9) Hot water performance according to EN16147, COP according to XL cycle with the control computer set for Normal / Comfort mode and built-in tank.
10) Always check local rules and regulations before using antifreeze.
11) According to EN12102:2017 and EN 3741:2010 (max B0W35, min B0W35).
12) Sound power level according to Energy label, EN 12102:2017 and EN 3741:2010 (B0W55)
13) Hot water performance according to EN 16147: 2017, V40 according to XL cycle, COP with the control computer set for Comfort mode and built-in tank.
14) Applies only to Calibra Eco Cool 400V BW (Brine/Water) versions. Calibra Eco Cool 8 400V WW (Water/Water) version is intended for specific applications only within +20/+8 ° C.

Connection set included in delivery



1. Safety valve 3 bar
2. Safety valve 9 bar
3. Outdoor temperature sensor
4. Brine level vessel
5. Rubber glands
6. Connecting pipe for brine system ø28
7. Filling device for brine with insulation
8. Shut off valve with dirt strainer
9. Vapor barrier

Selected accessories for Calibra Cool	Catalog number
Primary shunt group (Distribution circuit 1)	
Expansion card EM3 for internal mounting	086L5983
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
Valve actuator, 2-point, 24 V, 45 - 120 sec (0-10 V)	086U5272
Strap on PT 1000 temperature sensor with 2 m cable	086U3365
Strap on temperature sensor with connection box PT1000	086U3356
Circulation pump (system)	
Expansion card EM3 for internal mounting	086L5983
Pool heating	
3-way valve with actuator (LK 8) 230V, 28 mm	086U7999
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
Valve actuator, 2-point 230 V, 15 sec	086U5271
Strap on PT 1000 temperature sensor with 2 m cable	086U3365
Strap on temperature sensor with connection box PT1000	086U3356
External auxiliary heater	
Expansion card EM3 for internal mounting	086L5983
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
Valve actuator, 2-point, 24 V, 45 - 120 sec (0-10 V)	086U5272
Strap on PT 1000 temperature sensor with 2 m cable	086U3365
Strap on temperature sensor with connection box PT1000	086U3356
Other accessories	
Room sensor Genesis (with display)	086L3937
Room sensor PT1000 (without display)	086L5875
Brine pipe kit - the brine pipe connection on top of heat pump	351857
Level guard to fit in brine vessel	086U9122
Extension Socket Kit (additional base for extra space under the indoor unit)	086L6340
Connector kit ø28mm to install additional MBH hot water tank 200/300	086L5766
Hot water circulation pipe kit	086L2260
Flexible hose for heating system, 22Cu/DN20, lenght 600 mm	086U6015
Flexible hose for heating system, 28Cu/DN25, lenght 600 mm	086U6000

Thermia Calibra Eco

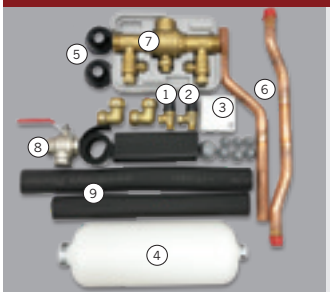
Inverter-driven ground source heat pump with built-in 184-liter hot water tank with TWS technology (Tap Water Stratification).

- 5.96 SCOP - high performance in heating
- Climate-friendly technology (R452B) with lowest GWP
- Thermia Inverter Technology adjusts precisely to real-time demand
- Built-in hot water tank 184 l stainless steel
- TWS technology (Tap Water Stratification)
- Advance functions (Smart Home, BMS, Smart Grid, Energy source control)
- Online – function build-in controller
- Plug-and-play software update via download over the air or USB slot

Calibra Eco			Calibra Eco 8	Calibra Eco 12	Calibra Eco 16
Catalog number		400V	203645	203650	204010
		230V	203648	203653	–
Heating capacity		kW	2-8	3–12	4-16
Refrigerant	Typ		R452B	R452B	R452B
	Amount [1]	kg	0.90	1.30	1.85
	GWP (CO_2 equivalent)	tCO_2	0.628	0.907	1.291
Compressor	Typ		Inverter-controlled, Scroll	Inverter-controlled, Scroll	Inverter-controlled, Scroll
Electrical data 400V 3-N, ~50Hz	Main power supply	V	400	400	400
	Max working power, compressor	kW	2,8	4,1	6
	Rated power, circulation pumps	kW	0,1	0,2	0,3
	Auxiliary heater, 3 steps	kW	(0)2/4/6	(0)3/6/9	(0)3/6/9
	Fuse [2A, 2B]	A	(13)/13/13/16[2A]	(10)/13/20/25[2B]	(13)/16/25/25[2B]
Performance	SCOP, Floor heating (35°C) [3]		5,87	5,85	5,96
	SCOP, Radiator (55°C) [3]		4,10	4,39	4,54
	COP [4]		4,6	4,78	4.87
Energy class - system [5]	Floor heating (35°C)		A+++	A+++	A+++
	Radiator (55°C)		A+++	A+++	A+++
Energy class - product [6]	Floor heating (35°C)		A+++	A+++	A+++
	Radiator (55°C)		A+++	A+++	A+++
	Hot water (Economy)[7]		A+	A	A
	Hot water (Normal/Comfort)[8]		A	A	A
Max/min temperature	Cooling circuit	°C	20/-10	20/-10	20/-10
	Heating circuit	°C	65/20	65/20	65/20
Anti-freeze [9]				Ethanol + water solution -17+/- 2 °C	
Max/min refrigerant circuit	Low pressure	Bar(g)	2,3	2,3	2,3
	Operating pressure	Bar(g)	41,5	41,5	41,5
	High pressure	Bar(g)	45	45	45
Sound power level	Calibra Eco	dB(A)	30-42[10] (32)[11]	29-44[10] (34)[11]	32-46[10] (36)[11]
Hot water performance	Volume 40°C hot water[12]	l	260	260	260
	COP, Hot water[7]		3.14	2.8	2.91
Water volume	Calibra Eco	l	184	184	184
Weight	Calibra Eco, Empty	kg	150	162	176
	Calibra Eco, Filled	kg	340	352	366
Dimensions (WxDxH)	Calibra Eco	mm	598x703x1863 +/-10	598x703x1863 +/-10	598x703x1863 +/-10

1) The refrigerant circuit is hermetically sealed and subject to the F-gas directive. Global Warming Potential (GWP) for R452B according to EC 517/2014 is 698.
2a) The minimum recommended fuse group size depends on auxiliary heater setting. The maximal steps of auxilliary heater may be configured differently with/without compressor in the controller. Controller and circulation pumps are connected by L1, electrical immersion heater is connected by L1 and L2 and the frequency converter for the compressor is connected by L3. Meets IEC 61000-3-12 without action.
2b) The minimum recommended fuse group size depends on auxiliary heater setting (0/3/6/9 kW). The maximal steps of auxilliary heater may be configured differently with/without compressor in the controller. Controller and circulation pumps are connected by L1. Electrical immersion heater and frequency converter for the compressor are connected by L1, L2 and L3. Meets IEC61000-3-12 at Ssc connection point min. 1.3 MVA for Calibra Eco 12 and for Calibra Eco 16 min. 1.8 MVA without action.
3) SCOP according to EN14825, Cold climate (Helsinki), P-design: (All climate zones) Calibra Eco 8: 6 kW (B0W55), 7 kW (B0W35). P-design Calibra Eco 12: 11 kW (B0W55), 12 kW (B0W35). P-design Calibra Eco 16: 15 kW (B0W55), 16 kW (B0W35).
4) At B0/W35, according to EN14511
5) When the heat pump is part of an integrated system. According to Eco-design Directive 811/2013
6) When the heat pump is the sole heat generator and the built-in controller is not included. According to Eco-design Directive 811/2013.
7) Hot water performance according to EN16147, COP according to XL cycle with the control computer set for Economy mode and built-in tank.
8) Hot water performance according to EN16147, COP according to XL cycle with the control computer set for Normal / Comfort mode and built-in tank.
9) Always check local rules and regulations before using antifreeze.
10) According to EN12102:2017 and EN 3741:2010 (max B0W35, min B0W35).
11) Sound power level according to Energy label, EN 12102:2017 and EN 3741:2010 (B0W55)
12) Hot water performance according to EN 16147: 2017, V40 according to XL cycle, COP with the control computer set for Comfort mode and built-in tank.

Connection set included in delivery



1. Safety valve 3 bar
2. Safety valve 9 bar
3. Outdoor temperature sensor
4. Brine level vessel
5. Rubber glands
6. Connecting pipe for brine system ø28
7. Filling device for brine with insulation
8. Shut off valve with dirt strainer
9. Vapor barrier

Selected accessories for Calibra Eco	Catalog number
Primary shunt group (Distribution circuit 1)	
Expansion card EM3 for internal mounting	086L5983
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
Valve actuator, 2-point, 24 V, 45 - 120 sec (0-10 V)	086U5272
Strap on PT 1000 temperature sensor with 2 m cable	086U3365
Strap on temperature sensor with connection box PT1000	086U3356
System shunt group (used as buffer tank shunt)	
Expansion card EM3 for internal mounting	086L5983
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
Valve actuator, 2-point, 24 V, 45 - 120 sec (0-10 V)	086U5272
Strap on PT 1000 temperature sensor with 2 m cable	086U3365
Strap on temperature sensor with connection box PT1000	086U3356
Buffer tank WT-V 100	086L4926
Buffer tank WT-V 200	086L4927
Buffer tank WT-V 300	086L4928
Buffer tank WT-V FC 500	086L5883
Circulation pump (system)	
Expansion card EM3 for internal mounting	086L5983
Passive cooling	
Passive cooling module PT1000	086L6358
Expansion card EM3 for internal mounting	086L5983
Active cooling	
Expansion card EM3 for internal mounting	086L5983
3-way valve with actuator (LK 8) 230V, 28 mm	086U7999
Valve actuator, 2-point, 24 V, 45 - 120 sec (0-10 V)	086U5272
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
Valve actuator, 2-point 230 V, 15 sec	086U5271
Strap on PT 1000 temperature sensor with 2 m cable	086U3365
Strap on temperature sensor with connection box PT1000	086U3356
Submersible sensor PT1000	086U3364
Pool heating	
Expansion card EM3 for internal mounting	086L5983
3-way valve with actuator (LK 8) 230V, 28 mm	086U7999
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
Valve actuator, 2-point, 24 V, 45 - 120 sec (0-10 V)	086U5272
Strap on PT 1000 temperature sensor with 2 m cable	086U3365
Strap on temperature sensor with connection box PT1000	086U3356
External auxiliary heater	
Expansion card EM3 for internal mounting	086L5983
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
Valve actuator, 2-point, 24 V, 45 - 120 sec (0-10 V)	086U5272
Strap on PT 1000 temperature sensor with 2 m cable	086U3365
Strap on temperature sensor with connection box PT1000	086U3356
Other accessories	
Room sensor Genesis (with display)	086L3937
Room sensor PT1000 (without display)	086L5875
Brine pipe kit - the brine pipe connection on top of heat pump	351857
Level guard to fit in brine vessel	086U9122
Extension Socket Kit (additional base for extra space under the indoor unit)	086L6340
Connector kit ø28mm to install additional MBH hot water tank 200/300	086L5766
Hot water circulation pipe kit	086L2260
Flexible hose for heating system, 22Cu/DN20, lenght 600 mm	086U6015
Flexible hose for heating system, 28Cu/DN25, lenght 600 mm	086U6000

Thermia Calibra Eco Duo

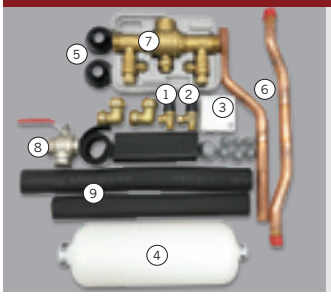
Inverter-driven ground source heat pump.

- 5.96 SCOP - high performance in heating
- Climate-friendly technology (R452B) with lowest GWP
- Thermia Inverter Technology adjusts precisely to real-time demand
- Advance functions (Smart Home, BMS, Smart Grid, Energy source control)
- Online – function build-in controller
- Plug-and-play software update via download over the air or USB slot
- Calibra Duo version is designed to work with a the MBH Calibra 200 or MBH Calibra 300, or any other hot water tank.

Calibra Eco Duo			Calibra Eco 8	Calibra Eco 12	Calibra Eco 16
Catalog number		400V	203646	203651	204013
		230V	203649	203654	–
Heating capacity		kW	2-8	3–12	4-16
Refrigerant	Typ		R452B	R452B	R452B
	Amount [1]	kg	0.90	1.30	1.85
	GWP (CO_2 equivalent)	tCO_2	0.628	0.907	1.291
Compressor	Typ		Inverter-controlled, Scroll	Inverter-controlled, Scroll	Inverter-controlled, Scroll
Electrical data 400V 3-N, ~50Hz	Main power supply	V	400	400	400
	Max working power, compressor	kW	2,8	4,1	6
	Rated power, circulation pumps	kW	0,1	0,2	0,3
	Auxiliary heater, 3 steps	kW	(0)2/4/6	(0)3/6/9	(0)3/6/9
	Fuse [2A, 2B]	A	(13)/13/13/16[2A]	(10)/13/20/25[2B]	(13)/16/25/25[2B]
Performance	SCOP, Floor heating (35°C) [3]		5,87	5,85	5,96
	SCOP, Radiator (55°C) [3]		4,10	4,39	4,54
	COP [4]		4,6	4,78	4.87
Energy class - system [5]	Floor heating (35°C)		A+++	A+++	A+++
	Radiator (55°C)		A+++	A+++	A+++
Energy class - product [6]	Floor heating (35°C)		A+++	A+++	A+++
	Radiator (55°C)		A+++	A+++	A+++
Max/min temperature	Cooling circuit	°C	20/-10	20/-10	20/-10
	Heating circuit	°C	65/20	65/20	65/20
Anti-freeze [7]			Ethanol + water solution -17+/- 2 °C		
Max/min refrigerant circuit	Low pressure	Bar(g)	2,3	2,3	2,3
	Operating pressure	Bar(g)	41,5	41,5	41,5
	High pressure	Bar(g)	45	45	45
Sound power level	Calibra Eco Duo	dB(A)	30-42[8] (33)[9]	30-46[8] (36)[9]	33-48[8] (38)[9]
Water volume	Calibra Eco Duo	l	valfri	optional	optional
Weight	Calibra Eco Duo	kg	115	127	141
Dimensions (WxDxH)	Calibra Eco Duo	mm	598x703x1450 +/-10	598x703x1450 +/-10	598x703x1450 +/-10

1) The refrigerant circuit is hermetically sealed and subject to the F-gas directive. Global Warming Potential (GWP) for R452B according to EC 517/2014 is 698.
2a) The minimum recommended fuse group size depends on auxiliary heater setting. The maximal steps of auxilliary heater may be configured differently with/without compressor in the controller. Controller and circulation pumps are connected by L1, electrical immersion heater is connected by L1 and L2 and the frequency converter for the compressor is connected by L3. Meets IEC 61000-3-12 without action.
2b) The minimum recommended fuse group size depends on auxiliary heater setting (0/3/6/9 kW). The maximal steps of auxilliary heater may be configured differently with/without compressor in the controller. Controller and circulation pumps are connected by L1. Electrical immersion heater and frequency converter for the compressor are connected by L1, L2 and L3. Meets IEC61000-3-12 at Ssc connection point min. 1.3 MVA for Calibra Eco 12 and for Calibra Eco 16 min. 1.8 MVA without action.
3) SCOP according to EN14825, Cold climate (Helsinki), P-design: (All climate zones) Calibra Eco 8: 6 kW (B0W55), 7 kW (B0W35). P-design Calibra Eco 12: 11 kW (B0W55), 12 kW (B0W35). P-design Calibra Eco 16: 15 kW (B0W55), 16 kW (B0W35).
4) At B0/W35, according to EN14511
5) When the heat pump is part of an integrated system. According to Eco-design Directive 811/2013
6) When the heat pump is the sole heat generator and the built-in controller is not included. According to Eco-design Directive 811/2013.
7) Always check local rules and regulations before using antifreeze.
8) According to EN12102:2017 and EN 3741:2010 (max B0W35, min B0W35).
9) Sound power level according to Energy label, EN 12102:2017 and EN 3741:2010 (B0W55)

Connection set included in delivery



1. Safety valve 3 bar
2. Safety valve 9 bar
3. Outdoor temperature sensor
4. Brine level vessel
5. Rubber glands
6. Connecting pipe for brine system ø28
7. Filling device for brine with insulation
8. Shut off valve with dirt strainer
9. Vapor barrier

Selected accessories for Calibra Eco Duo	Catalog number
Primary shunt group (Distribution circuit 1)	
Expansion card EM3 for internal mounting	086L5983
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
Valve actuator, 2-point, 24 V, 45 - 120 sec (0-10 V)	086U5272
Strap on PT 1000 temperature sensor with 2 m cable	086U3365
Strap on temperature sensor with connection box PT1000	086U3356
System shunt group (used as buffer tank shunt)	
Expansion card EM3 for internal mounting	086L5983
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
Valve actuator, 2-point, 24 V, 45 - 120 sec (0-10 V)	086U5272
Strap on PT 1000 temperature sensor with 2 m cable	086U3365
Strap on temperature sensor with connection box PT1000	086U3356
Buffer tank WT-V 100	086L4926
Buffer tank WT-V 200	086L4927
Buffer tank WT-V 300	086L4928
Buffer tank WT-V FC 500	086L5883
Circulation pump (system)	
Expansion card EM3 for internal mounting	086L5983
Passive cooling	
Passive cooling module PT1000	086L6358
Expansion card EM3 for internal mounting	086L5983
Active cooling	
Expansion card EM3 for internal mounting	086L5983
3-way valve with actuator (LK 8) 230V, 28 mm	086U7999
Valve actuator, 2-point, 24 V, 45 - 120 sec (0-10 V)	086U5272
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
Valve actuator, 2-point 230 V, 15 sec	086U5271
Strap on PT 1000 temperature sensor with 2 m cable	086U3365
Strap on temperature sensor with connection box PT1000	086U3356
Submersible sensor PT1000	086U3364
Pool heating	
Expansion card EM3 for internal mounting	086L5983
3-way valve with actuator (LK 8) 230V, 28 mm	086U7999
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
Valve actuator, 2-point 230 V, 15 sec	086U5271
Strap on PT 1000 temperature sensor with 2 m cable	086U3365
Strap on temperature sensor with connection box PT1000	086U3356
External auxiliary heater	
Expansion card EM3 for internal mounting	086L5983
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
Valve actuator, 2-point, 24 V, 45 - 120 sec (0-10 V)	086U5272
Strap on PT 1000 temperature sensor with 2 m cable	086U3365
Strap on temperature sensor with connection box PT1000	086U3356
Hot water cylinders	
Water heater MBH 200 Calibra	086L6170
Water heater MBH 300 Calibra	086L5701
Water heater WT-T 300	086L4900
Water heater WT-T 500	086L4901
Water heater WT-C FC 500 (3 bar)	086L5880
Strap on temperature sensor with connection box PT1000	086U3356
Other accessories	
Room sensor Genesis (with display)	086L3937
Room sensor PT1000 (without display)	086L5875
Level guard to fit in brine vessel	086U9122
Extension Socket Kit (additional base for extra space under the indoor unit)	086L6340
Hot water circulation pipe kit	086L2260
Flexible hose for heating system, 22Cu/DN20, lenght 600 mm	086U6015
Flexible hose for heating system, 28Cu/DN25, lenght 600 mm	086U6000

Thermia Legend

Ground source heat pump with built-in 184-liter hot water tank and TWS (Tap Water Stratification) technology.

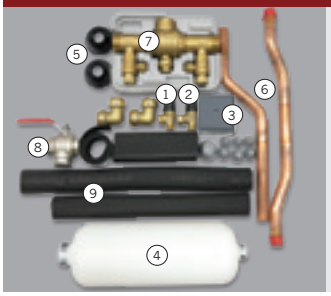
- 5.24 SCOP – very good performance in heating
- Climate-friendly technology (R452B) with lowest GWP
- Proven technology with fixed-speed compressor
- Built-in hot water tank 184 l stainless steel
- TWS technology (Tap Water Stratification)
- Optimum technology (constant detla-T in heating and brine system)
- Additional functions (Smart Grid, Energy source control)
- Online – control your heat pump from anywhere (optional)
- Auxiliary heater 0/3/6/9 kW

Legend			4	6	8	10
Catalog number		400V	204592	204593	204594	204595
		230V	–	–	204631	204632
Refrigerant	Type		R452B	R452B	R452B	R452B
	Amount[1]	kg	0,575 or 0,650	0,575 or 0,650	0,850 or 0,925	0,900 or 1,075
	CO_2 equivalent	tCO_2	0,401 or 0,454	0,401 or 0,454	0,593 or 0,646	0,628 or 0,750
Compressor	Type		Scroll	Scroll	Scroll	Scroll
Electrical data	Max working power, compressor	kW	2,1	2,4	3,0	4,1
	Rated power, circulation pumps	kW	0,15	0,15	0,15	0,2
400V 3-N, ~50 Hz	Main power supply	Volt	400	400	400	400
	Auxiliary heater, 3 steps	kW	(0)/3/6/9	(0)/3/6/9	(0)/3/6/9	(0)/3/6/9
	Fuse[2]	A	10/13/20	10/16/20	13/16/20	13/16/20
	Start current[3]	A	8	9	10	11
Performance	Heating capacity[4]	kW	4,71	5,56	7,35	9,81
	Power Input[4]	kW	1,10	1,26	1,59	2,06
	COP[4]		4,30	4,40	4,62	4,76
	SCOP, floor heating (35°C)[5]		4,72	4,87	5,10	5,24
	SCOP, radiator heating (55°C)[5]		3,41	3,65	3,74	3,94
	SCOP, floor heating (35°C)[6]		4,59	4,74	4,96	5,09
	SCOP, radiator heating (55°C)[6]		3,33	3,56	3,64	3,84
Energy class - system	Floor heating (35°C)[7]		A+++	A+++	A+++	A+++
	Radiator (55°C)[7]		A++	A++	A++	A++
Energy class - product	Floor heating (35°C)[8]		A+++	A+++	A+++	A+++
	Radiator (55°C)[8]		A++	A++	A++	A++
	Hot water[9]		A	A	A	A
Max/min temperature	Cooling circuit	°C	25/–10	25/–10	25/–10	25/–10
	Heating circuit	°C	60/20	60/20	60/20	60/20
Anti-freeze	Cooling circuit[10]			Ethanol + water solution –17+/–2 °C		
Sound power level	Legend[11]	dB(A)	40	40	41	41
Water volume	Legend	l	184	184	184	184
Weight	Legend, Empty	kg	146	148	165	170
	Legend, Filled	kg	336	338	355	360
Dimensions (WxDxH) +/–10 mm	Legend	mm	598x703x1863	598x703x1863	598x703x1863	598x703x1863

***) 230V version is available only with built-in water heater
****) Only Legend Duo

1) The refrigerant circuit is hermetically sealed and subject to the F-gas directive. Global Warming Potential (GWP) for R452B according to EC 517/2014 is 698. Legend can be produced with 2 different charge quantities depending on the heat exchanger. See type plate.
2) The minimum recommended fuse group size depends on auxiliary heater setting (3/6/9 kW) in combination with compressor.
The maximal steps of auxiliary heater may be configured differently with/without compressor in the controller. For 230V versions, the feeding for compressor & aux heater can be physically separated if required
3) According to IEC61000.
4) At B0/W35, according to EN14511.
5) SCOP according to EN14825, Cold climate (Helsinki), P-design: Legend 4: 5 kW (B0W55), 5 kW (B0W35). Legend 6 : 6 kW (B0W55), 6 kW (B0W35). Legend 8: 8 kW (B0W55), 8 kW (B0W35), Legend 10: 11 kW (B0W55), 11 kW (B0W35), Legend 13: 14 kW (B0W55), 15 kW (B0W35), Legend 17: 19 kW (B0W55), 19 kW (B0W35)
6) SCOP according to EN14825, Average climate (Strasbourg), P-design: Legend 4: 5 kW (B0W35), 5 kW (B0W55). Legend 6 : 6 kW (B0W55), 6 kW (B0W35). Legend 8: 9 kW (B0W55), 8 kW (B0W35), Legend 10: 12 kW (B0W55), 11 kW (B0W35), Legend 13: 15 kW (B0W55), 14 kW (B0W35), Legend 17: 20 kW (B0W55), 18 kW (B0W35)
7) When the heat pump is part of an integrated system.
According to Eco-design Directive 811/2013
8) When the heat pump is the sole heat generator and the built-in controller is not included. According to Eco-design Directive 811/2013.
9) Hot water performance according to EN16147, according to XL cycle.
10) Always check local rules and regulations before using antifreeze.
11) Sound power level according EN 12102 and EN 3741 (B0W35)
12) MBH Legend 200 (6–13kW)/MBH Legend 300 (6–17kW).

Connection set included in delivery



1. Safety valve 3 bar
2. Safety valve 9 bar
3. Outdoor temperature sensor
4. Brine level vessel
5. Rubber glands
6. Connecting pipe for brine system ø28
7. Filling device for brine with insulation
8. Shut off valve with dirt strainer DN 20
9. Vapor barrier

Selected accessories for Legend	Catalog number
Shunt group	
Expansion card	086U6009
Valve actuator, 3-point 24 V, 240 sec.	086U5269
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
Temperature sensor	086U2773
Shunt group (used as buffer tank shunt)	
Valve actuator, 3-point 230 V, 120 sec.	086L3146
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
Temperature sensor	086U2773
Buffer tank WT-V 100	086L4926
Buffer tank WT-V 200	086L4927
Buffer tank WT-V 300	086L4928
Buffer tank WT-V FC 500	086L5883
Passive / Active cooling	
Expansion card	086U6009
Passive cooling module	205413
Pool heating	
Expansion card	086U6009
3-way valve with actuator (LK 8) 230V, 28mm	086U7999
External auxiliary heater	
Temperature sensor	086U2773
Valve actuator, 3-point 230 V, 120 sec.	086L3146
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
Online - remote control	
Thermia Connect	206495
Other accessories	
Room thermostat	086U6003
Brine pipe kit - the brine pipe connection on top of heat pump	351857
Level guard to fit in brine vessel	086U9122
Extension Socket Kit (additional base for extra space under the indoor unit)	086L6340
Connector kit ø22mm to install additional MBH hot water tank 200/300	205561
Hot water circulation pipe kit	086L2260
Flexible hose for heating system, 22Cu/DN20, lenght 600 mm	086U6015
Flexible hose for heating system, 28Cu/DN25, lenght 600 mm	086U6000

Thermia Legend Duo

Ground source heat pump with Optimum technology.

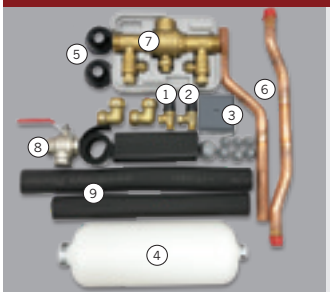
- 5.24 SCOP – very good performance in heating
- Climate-friendly technology (R452B) with lowest GWP
- Optimum technology (constant detla-T in heating and brine system)
- Online – control your heat pump from anywhere (optional)
- Additional functions (Smart Grid, Energy source control)
- Auxiliary heater 0/3/6/9 kW
- Legend Duo version is designed to work with a the MBH 200 or MBH 300, or any other hot water tank

Legend Duo			6	8	10	13****	17****
Catalog number		**400V**	**204626**	**204627**	**204628**	**204629**	**204630**
Refrigerant	Type		R452B	R452B	R452B	R452B	R452B
	Amount[1]	kg	0,575 or 0,650	0,850 or 0,925	0,900 or 1,075	1,000 or 1,400	1,250 or 1,700
	CO_2 equivalent	tCO_2	0,401 or 0,454	0,593 or 0,646	0,628 or 0,750	0,698 or 0,977	0,872 or 1,187
Compressor	Type		Scroll	Scroll	Scroll	Scroll	Scroll
Electrical data	Max working power, compressor	kW	2,4	3,0	4,1	5,1	7,1
	Rated power, circulation pumps	kW	0,15	0,15	0,2	0,25	0,3
400V 3-N, ~50 Hz	Main power supply	Volt	400	400	400	400	400
	Auxiliary heater, 3 steps	kW	(0)/3/6/9	(0)/3/6/9	(0)/3/6/9	(0)/3/6/9	(0)/3/6/9
	Fuse[2]	A	10/16/20	13/16/20	13/16/20	16/20/25	20/25/32
	Start current[3]	A	9	10	11	20	30
Performance	Heating capacity[4]	kW	5,56	7,35	9,81	12,42	16,69
	Power Input[4]	kW	1,26	1,59	2,06	2,75	3,77
	COP[4]		4,40	4,62	4,76	4,52	4,43
	SCOP, floor heating (35°C)[5]		4,87	5,10	5,24	5,09	4,92
	SCOP, radiator heating (55°C)[5]		3,65	3,74	3,94	3,83	3,80
	SCOP, floor heating (35°C)[6]		4,74	4,96	5,09	4,94	4,79
	SCOP, radiator heating (55°C)[6]		3,56	3,64	3,84	3,74	3,70
Energy class - system	Floor heating (35°C)[7]		A+++	A+++	A+++	A+++	A+++
	Radiator (55°C)[7]		A++	A++	A++	A++	A++
Energy class - product	Floor heating (35°C)[8]		A+++	A+++	A+++	A+++	A+++
	Radiator (55°C)[8]		A++	A++	A++	A++	A++
Max/min temperature	Cooling circuit	°C	25/-10	25/-10	25/-10	25/-10	25/-10
	Heating circuit	°C	60/20	60/20	60/20	60/20	60/20
Anti-freeze	Cooling circuit[10]		Ethanol + water solution -17+/-2 °C				
Sound power level	Legend Duo[11]	dB(A)	42	42	42	45	45
Weight	Legend Duo	kg	113	125	130	135	140
Dimensions (WxDxH) +/-10 mm	Legend Duo	mm	598x703x1450	598x703x1450	598x703x1450	598x703x1450	598x703x1450

***) 230V version is available only with built-in water heater
****) Only Legend Duo

1) The refrigerant circuit is hermetically sealed and subject to the F-gas directive. Global Warming Potential (GWP) for R452B according to EC 517/2014 is 698. Legend can be produced with 2 different charge quantities depending on the heat exchanger. See type plate.
2) The minimum recommended fuse group size depends on auxiliary heater setting (3/6/9 kW) in combination with compressor. The maximal steps of auxiliary heater may be configured differently with/without compressor in the controller. For 230V versions, the feeding for compressor & aux heater can be physically separated if required
3) According to IEC61000.
4) At B0/W35, according to EN14511.
5) SCOP according to EN14825, Cold climate (Helsinki), P-design: Legend 4: 5 kW (B0W55), 5 kW (B0W35). Legend 6 : 6 kW (B0W55), 6 kW (B0W35). Legend 8: 8 kW (B0W55), 8 kW (B0W35), Legend 10: 11 kW (B0W55), 11 kW (B0W35), Legend 13: 14 kW (B0W55), 15 kW (B0W35), Legend 17: 19 kW (B0W55), 19 kW (B0W35)
6) SCOP according to EN14825, Average climate (Strasbourg), P-design: Legend 4: 5 kW (B0W35), 5 kW (B0W55). Legend 6 : 6 kW (B0W55), 6 kW (B0W35). Legend 8: 9 kW (B0W55), 8 kW (B0W35), Legend 10: 12 kW (B0W55), 11 kW (B0W35), Legend 13: 15 kW (B0W55), 14 kW (B0W35), Legend 17: 20 kW (B0W55), 18 kW (B0W35)
7) When the heat pump is part of an integrated system. According to Eco-design Directive 811/2013
8) When the heat pump is the sole heat generator and the built-in controller is not included. According to Eco-design Directive 811/2013.
9) Always check local rules and regulations before using antifreeze.
10) Sound power level according EN 12102 and EN 3741 (B0W35)

Connection set included in delivery



1. Safety valve 3 bar
2. Safety valve 9 bar
3. Outdoor temperature sensor
4. Brine level vessel
5. Rubber glands
6. Connecting pipe for brine system ø28
7. Filling device for brine with insulation
8. Shut off valve with dirt strainer DN 20 (6-10 kW) or DN 25 (13-17 kW)
9. Vapor barrier

Selected accessories for Legend Duo	Catalog number
Shunt group	
Expansion card	086U6009
Valve actuator, 3-point 24 V, 240 sec.	086U5269
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
Temperature sensor	086U2773
Shunt group (used as buffer tank shunt)	
Valve actuator, 3-point 230 V, 120 sec.	086L3146
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
Temperature sensor	086U2773
Buffer tank WT-V 100	086L4926
Buffer tank WT-V 200	086L4927
Buffer tank WT-V 300	086L4928
Buffer tank WT-V FC 500	086L5883
Hot water cylinders	
MBH Legend 200	204596
MBH Legend 300	204597
Water heater WT-T 300	086L4900
Water heater WT-T 500	086L4901
Water heater WT-C FC 500 (3 bar)	086L5880
Temperature sensor	086U2773
Passive / Active cooling	
Expansion card	086U6009
Passive cooling module	205413
Pool heating	
Expansion card	086U6009
3-way valve with actuator (LK 8) 230V, 28mm	086U7999
External auxiliary heater	
Temperature sensor	086U2773
Valve actuator, 3-point 230 V, 120 sec.	086L3146
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
Online - remote control	
Thermia Connect	206495
Other accessories	
Room thermostat	086U6003
Connector kit ø22mm to install additional MBH hot water tank 200/300	086U9122
Extension Socket Kit (additional base for extra space under the indoor unit)	086L6340
Hot water circulation pipe kit	086L2260
Flexible hose for heating system, 22Cu/DN20, lenght 600 mm	086U6015
Flexible hose for heating system, 28Cu/DN25, lenght 600 mm	086U6000

Thermia Mega

Inverter-driven ground source heat pump for large buildings and commercial properties with hot gas technology and cascading option.

- 5.86 SCOP - World class performance in heating
- Thermia Inverter Technology adjusts precisely to real-time demand
- Cascade function up to 16 units (1408 kW)
- Hot Gas technology for superb hot water production
- Simultaneous heating and cooling
- New intelligent control system with a color touchscreen display
- Advance control system (Smart Home, BMS, Smart Grid, Energy source control)
- Online – function build-in controller

Mega			Mega S-E	Mega S	Mega M	Mega L	Mega XL
Catalog number			**205218**	**203229**	**203230**	**203231**	**203232**
Refrigerant	Type		R410A	R410A	R410A	R410A	R410A
	Amount[1]	kg	3,9	3,9	4,4	6,3	9,0
	Design pressure	MPa	4,5	4,5	4,5	4,5	4,5
Compressor	Type		Scroll	Scroll	Scroll	Scroll	Scroll
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 CO2 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.

Connection set included in delivery

1. [1x] Outdoor temperature sensor
2. [1x] Strap on temperature sensor with connection box PT1000
3. [1x] Rubber glands
4. [1x] Mounting screws
5. [1x] Plastic mountings

Selected accessories for Mega	Catalog number
Extra distribution circuits	
Expansion card EM3 for internal mounting	086L5982
Expansion card EM3 for external mounting	086L5981
Valve actuator, 2-point, 24 V, 45 - 120 sec (0-10 V)	086U5272
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
3-way shunt valve DN32 (Kvs 16)	086U5267
3-way shunt valve DN40 (Kvs 25)	086U5268
3-way shunt valve DN50 (Kvs 40)	086U5232
Strap on PT 1000 temperature sensor with 2 m cable	086U3365
Strap on temperature sensor with connection box PT1000	086U3356
Submersible sensor PT1000	086U3364
Passive cooling (Distribution cirtuit 1)	
Valve actuator, 2-point, 24 V, 45 - 120 sec (0-10 V)	086U5272
3-way shunt valve DN32 (Kvs 16)	086U5267
3-way shunt valve DN40 (Kvs 25)	086U5268
3-way shunt valve DN50 (Kvs 40)	086U5232
Strap on PT 1000 temperature sensor with 2 m cable	086U3365
Strap on temperature sensor with connection box PT1000	086U3356
Submersible sensor PT1000	086U3364
Passive and Active cooling	
Expansion card EM3 for internal mounting	086L5982
Expansion card EM3 for external mounting	086L5981
Reversing valve kit DN40 + 230V, 15 sec	086L3426
Reversing valve kit DN50 + 230V, 15 sec	086L3427
Valve actuator, 2-point 230 V, 15 sec	086U5271
3-way shunt valve DN32 (Kvs 16)	086U5267
3-way shunt valve DN40 (Kvs 25)	086U5268
3-way shunt valve DN50 (Kvs 40)	086U5232
Strap on PT 1000 temperature sensor with 2 m cable	086U3365
Strap on temperature sensor with connection box PT1000	086U3356
Submersible sensor PT1000	086U3364
External auxiliary heater	
Valve actuator, 2-point, 24 V, 45 - 120 sec (0-10 V)	086U5272
3-way shunt valve DN25 (Kvs 10)	086U5266
3-way shunt valve DN32 (Kvs 16)	086U5267
3-way shunt valve DN40 (Kvs 25)	086U5268
3-way shunt valve DN50 (Kvs 40)	086U5232
Strap on PT 1000 temperature sensor with 2 m cable	086U3365
Strap on temperature sensor with connection box PT1000	086U3356
Submersible sensor PT1000	086U3364
Shunt group (used as buffer tank shunt)	
Valve actuator, 2-point, 24 V, 45 - 120 sec (0-10 V)	086U5272
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
3-way shunt valve DN32 (Kvs 16)	086U5267
3-way shunt valve DN40 (Kvs 25)	086U5268
3-way shunt valve DN50 (Kvs 40)	086U5232
Buffer tank WT-V 100	086L4926
Buffer tank WT-V 200	086L4927
Buffer tank WT-V 300	086L4928
Buffer tank WT-V FC 500 (3 bar)	086L5883
Buffer tank WT-V FC 750 (3 bar)	203960
Buffer tank WT-V FC 1000 (3 bar)	203961
Submersible sensor PT1000	086U3364
Hot water cylinders	
Switching valve for hot water DN 32 with 230 V motor	086U9938
Valve actuator, 2-point 230 V, 15 sec	086U5271
3-way shunt valve DN32 (Kvs 16)	086U5267
3-way shunt valve DN40 (Kvs 25)	086U5268
3-way shunt valve DN50 (Kvs 40)	086U5232
Water heater WT-T 300	086L4900
Water heater WT-T 500	086L4901
Water heater WT-C FC 500 (3 bar)	086L5880
Water heater WT-C FC 750 (3 bar)	086L5881
Water heater WT-C FC 1000 (3 bar)	086L5882
Water heater WT-S 500 (without coils - hot water is produced by intermediate heat exchanger, require EM3 expansion card)	086L4898
Water heater WT-S 1000 (without coils - hot water is produced by intermediate heat exchanger, require EM3 expansion card)	086L4899
Hot gas circuit	
A circulation pump for the hot gas circuit (Wilo Yonos Para 25/6-180)	086L3004
Flow Adjustment Valve 2-16 l/min. Connection = 22 mm clamp ring connection	086U3757
Flexible hose for heating system, 28Cu/DN25, lenght 600 mm	086U6000
Other accessories	
Room sensor Genesis (with display)	086L3937
Rubber hose for brine system DN50 54mm Cu/2", lenght: 820 mm	356806
Felxible hose For heating system DN40 42mm Cu/1 1/2", lenght: 820 mm	356807
Felxible hose for hot gas DN25 28mm Cu/28Cu, lenght: 600 mm	086U6000

Thermia Mega Eco

Inverter-driven ground source heat pump for large buildings and commercial properties with hot gas technology and cascading option.

- » 5.54 SCOP - World class performance in heating
- » Climate-friendly technology (R454B) with low GWP
- » Thermia Inverter Technology adjusts precisely to real-time demand
- » Cascade function up to 16 units (1408 kW)
- » Hot Gas technology for superb hot water production
- » Simultaneous heating and cooling
- » New intelligent control system with a color touchscreen display
- » Advance control system (Smart Home, BMS, Smart Grid, Energy source control)
- » Online – function build-in controller

Mega Eco			Mega Eco S-E	Mega Eco S	Mega Eco M	Mega Eco L	Mega Eco XL
Catalog number			**205917**	**205916**	**205915**	**205914**	**205850**
Refrigerant	Type					R454B	R454B
	Amount[1]	kg				5.9	8.8
	Test pressure (low/high pressure)	MPa				3,0/4,3	3,0/4,3
	Design pressure	MPa				4,0	4,0
Compressor	Type					Scroll	Scroll
Electrical data 3-N	Mains power supply	Volt				400	400
	Rated power, compressor	kW				21	30
	Rated power, circulation pumps	kW				1,0	1,0
	Fuse[2]	A				40	63
Performance	COP[3]					4,72	4,55
	Heat factor[3]	kW				35,4	50,3
	Incoming power[3]	kW				7.75	11,00
	SCOP C, Floor heating (35°C)[4a]					5.54	5,44
	SCOP C, Radiator (55°C)[4b]					4.46	4,35
	SCOP A, Floor heating (35°C)[5]					5.32	5,25
	SCOP A, Radiator (55°C)[6]					4.27	4,18
	Power range (B0/W35)					14-58[15]	21-85[15]
Energy class - system[7]	Floor heating (35°C)		Available for sale from Q3 2024			A+++	N/A
	Radiator (55°C)					A+++	N/A
Energy class - product[8]	Floor heating (35°C)					A+++	N/A
	Radiator (55°C)					A+++	N/A
Max system pressure	Cooling circuit	bar				6	6
	Heating circuit	bar				6	6
Max/min temperature[9]	Cooling circuit	°C				20/-10	20/-10
	Heating circuit	°C				65[10]/20	65[10]/20
Max/min refrigerant circuit	Low pressure	MPa				0,21	0,21
	High pressure	MPa				4,3	4,3
Sound power level	Min/Max[11]	dB(A)				39-59[12]	45–63[12]
	Sound power level[13]	dB(A)				44	50
Anti-freeze						Ethanol + water solution -17°C ±2°C[14]	
Dimensions (WxDxH) (without pipe connections)		mm				900x883x1644 ±10	900x883x1644 ±10
Dimensions (WxDxH) (with pipe connections)		mm				900x883x1744 ±10	900x883x1744 ±10
Weight		kg				407	485

*The CO2 equivalent is the most accurate measure for a product. The measurement shows the GWP value times the filling amount and thus also takes into account how much refrigerant a specific product contains. GWP stands for "Global warming potential" and is expressed in GWP/gram of gas.
**Similar products with refrigerant R410A.
***SCOP (Seasonal Coefficient of Performance according to the international EN14825 standard) is a measurement that shows how effective the heat pump is on an annual basis under all seasonal weather conditions.

1) The refrigerant circuit is hermetically sealed and subject to the F-gas directive. Global Warming Potential (GWP) for R454B according to IPCC AR4 is 466, giving a CO_2 equivalent corresponding to XL: 4,101 ton, L: 2,749 ton.

2) The minimum recommended fuse size depends on the limitation of thepower 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) B0/W35, according EN1451, including circulation pump at 3600 rpm on L and XL
4a) B0/W35, according EN14825, Cold Climate Pdesign XL: 84 kW L: 58 kW
4b) B0/W55, according EN14825, Cold Climate Pdesign XL: 81 kW L: 58 kW
5) B0/W35, according EN14825, Average Climate Pdesign XL: 84 kW L: 58 kW
6) B0/W55, according EN14825, Average Climate Pdesign XL: 81 kW L: 58 kW

7) When the heat pump is part of an integrated system. According to Eco-design Directive 811/2013
8) When the heat pump is the sole heat generator and the built-in controller is not included. According to Eco-design Directive 811/2013.
9) Please note that it is not possible to combine all brine temperatures with heat transfer fluid temperatures.
10) Minimum incoming brine temperature 5° C.
11) Sound power level measured according to EN 12102: 2017 and EN 3741: 2010 (B0/W35)
12) Compressor speed 1500-6000 rpm
13) Sound power level according to energy labelling, measured according to EN 12102:2017 and EN 3741:2010 (B0/W55)
14) Always check local rules and regulations before using antifreeze.
15) Δt = 10K

Connection set included in delivery

1. [1x] Outdoor temperature sensor
2. [1x] Strap on temperature sensor with connection box PT1000
3. [1x] Rubber glands
4. [1x] Mounting screws
5. [1x] Plastic mountings

Selected accessories for Mega Eco	Catalog number
Extra distribution circuits	
Expansion card EM3 for internal mounting	086L5982
Expansion card EM3 for external mounting	086L5981
Valve actuator, 2-point, 24 V, 45 - 120 sec (0-10 V)	086U5272
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
3-way shunt valve DN32 (Kvs 16)	086U5267
3-way shunt valve DN40 (Kvs 25)	086U5268
3-way shunt valve DN50 (Kvs 40)	086U5232
Strap on PT 1000 temperature sensor with 2 m cable	086U3365
Strap on temperature sensor with connection box PT1000	086U3356
Submersible sensor PT1000	086U3364
Passive cooling (Distribution cirtuit 1)	
Valve actuator, 2-point, 24 V, 45 - 120 sec (0-10 V)	086U5272
3-way shunt valve DN32 (Kvs 16)	086U5267
3-way shunt valve DN40 (Kvs 25)	086U5268
3-way shunt valve DN50 (Kvs 40)	086U5232
Strap on PT 1000 temperature sensor with 2 m cable	086U3365
Strap on temperature sensor with connection box PT1000	086U3356
Submersible sensor PT1000	086U3364
Passive and Active cooling	
Expansion card EM3 for internal mounting	086L5982
Expansion card EM3 for external mounting	086L5981
Reversing valve kit DN40 + 230V, 15 sec	086L3426
Reversing valve kit DN50 + 230V, 15 sec	086L3427
Valve actuator, 2-point 230 V, 15 sec	086U5271
3-way shunt valve DN32 (Kvs 16)	086U5267
3-way shunt valve DN40 (Kvs 25)	086U5268
3-way shunt valve DN50 (Kvs 40)	086U5232
Strap on PT 1000 temperature sensor with 2 m cable	086U3365
Strap on temperature sensor with connection box PT1000	086U3356
Submersible sensor PT1000	086U3364
External auxiliary heater	
Valve actuator, 2-point, 24 V, 45 - 120 sec (0-10 V)	086U5272
3-way shunt valve DN25 (Kvs 10)	086U5266
3-way shunt valve DN32 (Kvs 16)	086U5267
3-way shunt valve DN40 (Kvs 25)	086U5268
3-way shunt valve DN50 (Kvs 40)	086U5232
Strap on PT 1000 temperature sensor with 2 m cable	086U3365
Strap on temperature sensor with connection box PT1000	086U3356
Submersible sensor PT1000	086U3364
Shunt group (used as buffer tank shunt)	
Valve actuator, 2-point, 24 V, 45 - 120 sec (0-10 V)	086U5272
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
3-way shunt valve DN32 (Kvs 16)	086U5267
3-way shunt valve DN40 (Kvs 25)	086U5268
3-way shunt valve DN50 (Kvs 40)	086U5232
Buffer tank WT-V 100	086L4926
Buffer tank WT-V 200	086L4927
Buffer tank WT-V 300	086L4928
Buffer tank WT-V FC 500 (3 bar)	086L5883
Buffer tank WT-V FC 750 (3 bar)	203960
Buffer tank WT-V FC 1000 (3 bar)	203961
Submersible sensor PT1000	086U3364
Hot water cylinders	
Switching valve for hot water DN 32 with 230 V motor	086U9938
Valve actuator, 2-point 230 V, 15 sec	086U5271
3-way shunt valve DN32 (Kvs 16)	086U5267
3-way shunt valve DN40 (Kvs 25)	086U5268
3-way shunt valve DN50 (Kvs 40)	086U5232
Water heater WT-T 300	086L4900
Water heater WT-T 500	086L4901
Water heater WT-C FC 500 (3 bar)	086L5880
Water heater WT-C FC 750 (3 bar)	086L5881
Water heater WT-C FC 1000 (3 bar)	086L5882
Water heater WT-S 500 (without coils - hot water is produced by intermediate heat exchanger, require EM3 expansion card)	086L4898
Water heater WT-S 1000 (without coils - hot water is produced by intermediate heat exchanger, require EM3 expansion card)	086L4899
Hot gas circuit	
A circulation pump for the hot gas circuit (Wilo Yonos Para 25/6-180)	086L3004
Flow Adjustment Valve 2-16 l/min. Connection = 22 mm clamp ring connection	086U3757
Flexible hose for heating system, 28Cu/DN25, lenght 600 mm	086U6000
Other accessories	
Room sensor Genesis (with display)	086L3937
Rubber hose for brine system DN50 54mm Cu/2", lenght: 820 mm	356806
Felxible hose For heating system DN40 42mm Cu/1 1/2", lenght: 820 mm	356807
Felxible hose for hot gas DN25 28mm Cu/28Cu, lenght: 600 mm	086U6000

Thermia Athena

Inverter-driven, monoblock air source heat pump with wide range of indoor package: Total Compact, Total 300 l and Total EQ.

- 4.87 SCOP – high performance in heating
- Inverter technology adjusts precisely to real-time demand
- TWS technology (Tap Water Stratification) with four hot water modes
- Advance functions (Smart Home, BMS, Smart Grid)
- Built-in cooling function in HC models
- Class A circulation pumps
- Online – built-in remote control
- Auxiliary heater 0/3/6/9 kW
- Plug-and-play software update via download over the air or USB slot

Athena H / Athena HCww			14 H	18 H	14 HC	18 HC
Catalog number			**202184**	**202186**	**202185**	**202187**
Heating capacity	Min–max[1]	kW	7,85–13,98	7,85–17,5	7,85–13,98	7,85–17,5
Refrigerant	Type		R410A		R410A	
	Amount[2]	kg	4,7		5,5	
	GWP	tCO_2	9,81		11,48	
Compressor	Type		Inverter-controlled, Scroll		Inverter-controlled, Scroll	
Electrical data 3~N, 50Hz Outdoor unit	Main supply	V	400		400	
	Max working power, compressor	kW	5,5	7,1	5,5	7,1
	Auxiliary heater[3]	kW	8,8		8,8	
	Fuse[3]	A	16		16	
Electrical data 3~N, 50Hz Indoor unit	Main supply	V	400		400	
	Auxiliary heater, 3 steps	kW	3/6/9		3/6/9	
	Fuse	A	6/10/16		6/10/16	
Performance	A7/W35 / A7/W65	kW	10,8 / 13,98	12,85 / 17,5	10,8 / 13,98	12,85 / 17,5
	A–7/W35 / A–7/W65	kW	10,14 / 11,06	12,86 / 14,3	10,14 / 11,06	12,86 / 14,3
	COP A7/W35		5,09		5,09	
	SCOP (average climate) floor heating		4,7	4,63	4,87	4,76
	SCOP (average climate) radiator		3,65	3,59	3,74	3,67
	SCOP (cold climate) floor heating		4,2	4,05	4,25	4,08
	SCOP (cold climate) radiator		3,22	3,18	3,25	3,2
Energy class - system	Floor heating (35°C)/Radiator (55°C)		A+++/A++		A+++/A++	
Energy class - product	Floor heating (35°C)/Radiator (55°C)		A+++/A++		A+++/A++	
	Domestic hot water / Declared load profile		A/XL		A/XL	
Hot water performance	Volume 40°C hot water	l	254[4]/417[5]		254[4]/417[5]	
	Efficency of hot water cylinder		102[6]/100[7]		102[6]/100[7]	
Operating range (outdoor)	Heating/Domestic hot water	°C	–20 ~ +37		–20 ~ +37	
	Cooling	°C	Not available		+15 ~ +37	
Max temperature	Heating circuit	°C	65		65	
Sound power level	Normal operation – EN12102 – A7/W55	dB(A)	55		55	
	Max	dB(A)	63/66		63/66	
Sound pressure level	1/5/10 m	dB(A)	48/32/28		48/32/28	
Weight Outdoor unit		kg	176,5 kg		188 kg	
Weight Indoor unit	Total 300L	kg	123 kg		123 kg	
	Total EQ	kg	147,5 kg		147,5 kg	
	Total Compact	kg	96,5 kg		96,5 kg	
Dimensions	Outdoor unit (WxDxH)	mm	1 490 x 593 x 1 045		1 490 x 593 x 1 045	

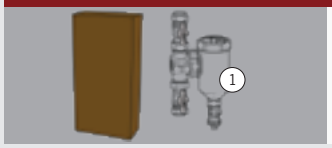
1) Minimum power corresponds to part load at A7/W35 and maximum power corresponds to full compressor speed at A7/W65
2) The refrigerant circuit is hermetically sealed and subject to the F-gas directive. Global Warming Potential (GWP) for R410A according to EC 517/2014 is 2088, which corresponds to 9.81 tCO2e for Athena H. Global Warming Potential (GWP) for R410A according to EC 517/2014 is 2088, corresponding to 11.48 tCO2e for Athena HC.
3) The auxiliary heater in the outdoor unit and compressor cannot run at the same time. The auxiliary heater in the outdoor unit can only be started at low outdoor temperatures and when the compressor is not running.
4) Hot water performance according to EN16147, V40 according to XL cycle in average climate, with the controller set to comfort mode and Total Compact/Total EQ
5) Hot water performance according to EN16147, V40 according to XL cycle in average climate, with the controller set to comfort mode and Total 300L
6) Hot water performance according to EN16147, V40 according to XL cycle in average climate, with the controller set to comfort mode and Total Compact/Total EQ
7) Hot water performance according to EN16147, V40 according to XL cycle in average climate, with the controller set to comfort mode and Total 300L

Three indoor kits – Flexibility in a heating system

With a choice of three different indoor kits, we are able to meet all the requirements of both new-build and refurbishment projects. Pre-fabricated indoor kits ensure quick, aesthetic and high-quality installation with no individual parts placed outside the cabinet.

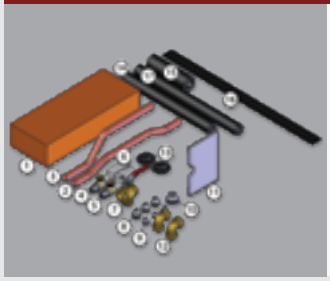
	Athena STANDARD	Athena TOTAL COMPACT	Athena TOTAL 300 L	Athena TOTAL EQ
Catalog number	204462	204463	204465	204464
Intelligent Controller	✓	✓	✓	✓
Optimum controlled circulation pump Class A		✓	✓	✓
Three way valve for heating or hot water production		✓	✓	✓
Immersion heater (3/6/9 kW 3~400 V)		✓	✓	✓
Hot water tank, 180 litre		✓		✓
Hot water tank, 300 litre			✓	
Extra 60 liters volume tank, 12 liters expansion vessel and an additional circulation pump				✓
Cascade function (up to 4 heat pumps)	✓			

Connection set included in delivery (For all deliveries)



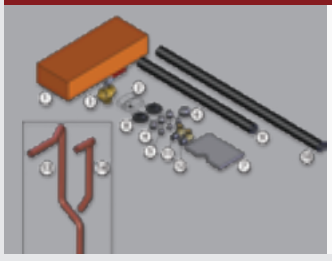
1. Magnetite filter

Connection set included in delivery (For Athena Total EQ and Athena Compact)



1. Accessory box
2. Water pipe out
3. Water pipe in
4. Safety valve, 9 bar
5. Safety valve, 3 bar, 1/2”
6. Outdoor sensor
7. Filter ball, DN25, PN16
8. Cable inlet
9. Cable inlet
10. Cable inlet M40
11. Plastic manual holder
12. Push-fit elbow 28
13. Grommet
14. Pipe insulation
15. Pipe insulation, length: 200mm, 42x9mm
16. Insulation tape
17. Pipe insulation, length: 540mm, 28x9mm

Connection set included in delivery (For Athena Total 300L:)



1. Accessory box
2. Outdoor sensor
3. Filter ball DN25 PN16
4. Cable inlet
5. Cable inlet
6. Cable inlet, M40
7. Plastic manual holder
8. Grommet
9. Pipe insulation, length: 700mm
10. Pipe insulation, length: 1000mm
11. Safety valve, 9 bar
12. Safety valve, 3 bar, 1/2”
13. Cu-pipe Ø28 (placed behind the electrical cabinet inside the unit and not included in this package)
14. Cu-pipe Ø28 (placed behind the electrical cabinet inside the unit and not included in this package)

Thermia iTec XT

Inverter-driven, monoblock air source heat pump with wide range of indoor package: Standard, Plus, Total, Total Compact and Total EQ

- 4.9 SCOP – high performance in heating
- Climate-friendly technology (R32) with low GWP
- Inverter technology adjusts precisely to real-time demand
- TWS technology (Tap Water Stratification) with Total, Total Compact and Total EQ package
- Built-in cooling function
- Low sound level
- Online – remote control with optional accessory
- Auxiliary heater 0/3/6/9/12/15 kW

iTec XT			10	14	16
Catalog number		400V	206668	206670	206672
		230V	206667	206669	206671
Heating capacity		kW	3-10	3-14	3-16
Refrigerant	Type		R32	R32	R32
	Amount[1]	kg	2,7	3,3	3,3
	CO_2 equivalent	tCO2	1,82	2,23	2,23
Compressor	Type		Scroll	Scroll	Scroll
Electrical data, 400V~3N / 230~1N	Main supply	V	400~3N/230~1N	400~3N/230~1N	400~3N/230~1N
	Max working power, compressor	kW	5,85	8,19	9,2
	Fuse [2]	A	10/25	16/32	16/32
Performance	SCOP (average climate) floor heating[3]		4,64	4,90	4,83
	SCOP (average climate) radiator[3]		3,38	3,78	3,75
	SCOP (cold climate) floor heating[4]		4,33	4,33	4,45
	SCOP (cold climate) radiator[4]		3,50	3.45	3,40
	Power output [5]	kW	10,00	14,00	16,00
	Power output A-25W35	kW	8,00	12,00	14,00
	COP A7W35		5,0	5,0	5,1
	COP A-7/W35		3,25	3,15	3,10
	SEER		4,75	5,0	5,0
	Cooling capacity	kW	8	12	14
	Power input – cooling A35/W18	kW	1,7	2,64	3,14
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++
Operating range - Min/max temperature (outdoor)	Heating	°C	–30~+43	–30~+43	–30~+43
	Cooling	°C	+10~+46	+10~+46	+10~+46
	Domestic hot water	°C	–30~+43	–30~+43	–30~+43
Max/min temperature	Heating circuit	°C	+70/+20[9]	+70/+20[9]	+70/+20[9]
Sound power level	Outdoor unit	dB(A)	56[10]	59[10]	60[10]
Max sound pressure level[11]	1/4/10 m	dB(A)	55/50/42	57/52/44	58/53/45
Max sound pressure level - silent mode[11]	1/4/10 m	dB(A)	40/35/27	40/35/27	40/35/27
Hot water performance	Volume 40°C hot water [8]	l	270	265	254
Weight	Outdoor unit	kg	126	137	137
	Standard	kg	11	11	11
	Plus	kg	21	21	21
	Total	kg	106	106	106
	Total EQ	kg	142	142	142
	Total Compact	kg	100	100	100
Dimensions (WxDxH)	Outdoor unit	mm	1270 x 530 x 1018	1270 x 530 x 1018	1270 x 530 x 1018
Maximum distance between outdoor and indoor unit		m	15	15	15

1) The refrigerant circuit is hermeti cally sealed and subject to the F-gas directive. Global Warming Potential (GWP) for R32 according to EC 517/2014 is 675.

2) The minimum recommended fuse size depends on the limitation of the electricity supply. Complies with IEC61000-3-12 at Ssc.

3) SCOP according to EN14825, medium climate (Strasbourg).

4) SCOP according to EN14825, cold climate (Helsinki).

5) At A7/W65, 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-in controller is not included. According to Eco-design Directive 811/2013.

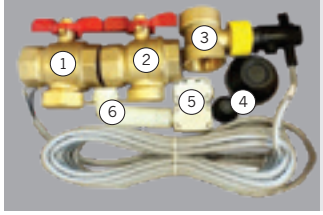
8) Hot water performance according to EN16147, V40 according to XL cycle

9) Maximum flow rate at -15°C to +43°C.

10) Sound power level according to energy labeling, measured according to EN12102 and EN3741 (A7W5).

11) Measured at maximum compressor speed and fan rpm at -5°C air temperature and +55°C outlet temperature. Sound pressure level calculated according to ISO 11203 at 1 meter, otherwise calculated as quarter spherical sound propagation in free field. Depending on ice buildup and local circumstances at the specific installation, higher sound pressure levels may occur.

Connection set included in delivery



1. [1x] Shut-off valve with filter
2. [1x] Shut-off valve without
3. [1x] Flow guard
4. [1x] Rubber glands M20 + M40
5. [1x] Snap ferrites (for cable assembly)
6. [1x] Drainage pipe

Five indoor kits – each application can be tailored-made

With a choice of five different indoor kits, we are able to meet all the requirements of both new-build and refurbishment projects. Pre-fabricated indoor kits ensure quick, aesthetic and high-quality installation with no individual parts placed outside the cabinet.

	iTec XT STANDARD	iTec XT PLUS	iTec XT TOTAL COMPACT	iTec XT TOTAL	iTec XT TOTAL EQ
Intelligent Controller	✓	✓	✓	✓	✓
Optimum controlled circulation pump Class A		✓	✓	✓	✓
Three way valve for heating or hot water production		✓	✓	✓	✓
Immersion heater (3/6/9/12/15 kW 3~400 V; 3/6/9 kW 1~230 V		✓	✓	✓	✓
Hot water tank, 180 litre			✓	✓	✓
Additional free space in the lower part of the unit might be used for the expansion vessel or/and hydraulic connections				✓	
Extra 60 liters volume tank, 12 liters expansion vessel and an additional circulation pump					✓

Thermia iTec Eco (3~400V)	Catalog number
iTec XT 10kW (3~400V)	206668
ITec XT 14kW (3~400V)	206670
iTec XT 16kW (3~400V)	206672

iTec indoor unit (3~400V)	Catalog number
iTec XT Standard (1~230V)	206673
iTec XT Plus (3~400V)	206678
iTec XT Total (3~400V)	206679
iTec XT Compact (3~400V)	206677
iTec XT Total EQ (3~400V)	206682

Thermia iTec Eco (1~230V)	Catalog number
iTec XT 10kW (1~230V)	206667
ITec XT 14kW (1~230V)	206669
iTec XT 16kW (1~230V)	206671

iTec indoor unit (1~230V)	Catalog number
iTec XT Standard (1~230V)	206673
iTec XT Plus (1~230V)	206674
iTec XT Total (1~230V)	206675
iTec XT Compact (1~230V)	206676
iTec XT Total EQ (1~230V)	206680

Thermia iTec Eco

Inverter-driven, monoblock air source heat pump with wide range of indoor package: Standard, Plus, Total Compact and Total.

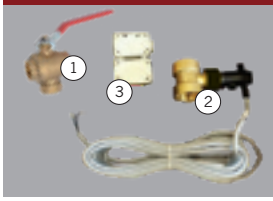
- 4.69 SCOP – high performance in heating
- Inverter technology adjusts precisely to real-time demand
- TWS technology (Tap Water Stratification) with Total, Total Compact package
- Cooling function
- Class A circulation pumps
- Online – remote control with optional accessory
- Auxiliary heater 0/3/6/9/12/15 kW

iTec Eco			5	8	12	16
Catalog number		400V	–	203241	203243	203244
		230V	203239	203240	203242	203245
Refrigerant	Type		R32	R32	R32	R32
	Amount	kg	1	1.15	2.2	2.2
	GWP	tCO2e	0.68	0.78	1.49	1.49
	Design pressure	MPa	4.7	4.7	4.7	4.7
Compressor	Type				BLDC Twin Rotary	
	Oil				POE	
Electrical data	Main supply	Volt	230	400/230	400/230	400/230
	Rated power, cooling A35/W18	kW	1.14	1.50	2.77	3.28
	Rated power, heating	kW	2.79	4.13	6.87	8.47
	Fuse	A	13	10/20	10/30	16/40
Performance	COP/Heating capacity/Power input-heating A7/W35	kW	4.85/5/1.03	4.52/8/1.77	4.53/12/2.65	4.42/16/3.62
	COP/Heating capacity/Power input-heating A-7/W35	kW	2.71/5.31/1.96	2.43/7.66/3.15	2.55/12.5/4.91	2.43/15.21/6.25
	COP/Heating capacity/Power input-heating A-15/W35	kW	2.32/4.3/2.32	2.29/6.31/2.75	2.22/10.6/4.78	2.17/13/6
	SEER		3.98	4.52	5.22	5.31
	Cooling capacity		5.00	7.90	12.00	14.00
	Power input – cooling A35/W18		1.14	1.50	2.77	3.28
	SCOP 14825 (Warm climate) Low temp		6.06	6.02	6.36	6.13
	SCOP 14825 (Average climate) Low temp		4.46	4.45	4.69	4.48
	SCOP 14825 (Cold climate) Low temp		3.6	3.62	3.66	3.44
	SCOP 14825 (Warm climate) High temp		3.71	3.77	3.85	3.8
	SCOP 14825 (Average climate) High temp		3.2	3.23	3.52	3.53
	SCOP 14825 (Cold climate) High temp		2.47	2.53	2.63	2.55
Energy class - system [1]	Floor heating (35°C)/Radiator (55°C)		A+++/A++	A+++/A++	A+++/A++	A+++/A++
Energy class - product [2]	Floor heating (35°C)/Radiator (55°C)		A+++/A++	A+++/A++	A+++/A++	A+++/A++
	Domestic hot water / Declared load profile		A+/L	A+/L	A/L / A+/L	A/L / A+/L
Hot water performance	Volume 40°C hot water	l	261*	248*	249**/251*	245**/252*
Operating range (outdoor)	Heating	°C	-25~+35	-25~+35	-25~+35	-25~+35
	Cooling	°C	+10~+46	+10~+46	+10~+46	+10~+46
	Domestic hot water	°C	-25~+35	-25~+35	-25~+35	-25~+35
Max temperature [3]	Heating circuit	°C	65	65	65	65
Sound power level	Normal drift - EN12102 - A7/W35	dB(A)	61	63	64	66
Sound pressure level	4m [4]	dB(A)	44	46	47	49
	8m [4]	dB(A)	38	40	41	43
Weight	Outdoor unit	kg	58.5	76	111	111
	Standard	kg	11	11	11	11
	Plus	kg	21	21	21	21
	Total	kg	106	106	106	106
	Total EQ	kg	142	142	142	142
	Total Compact	kg	100	100	100	100
Maximum distance between outdoor and indoor unit:		m	15	15	15	15
Dimensions (WxDxH)	Outdoor unit	mm	880 x 310 x 798	940 x 330 x 998	940 x 330 x 1420	940 x 330 x 1420

*) Super-Eco mode
**) Comfort mode

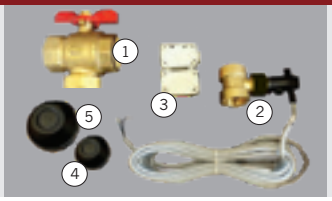
1) When the heat pump is part of an integrated system. According to Eco-design Directive 811/2013
2) When the heat pump is the sole heat generator and the built-in controller is not included. According to Eco-design Directive 811/2013.
3) At minimum outdoor temperature +7°C.
4) Quarter spherical sound propagation in free field, nominal operation A7W35, heat pump ground mounted against building facade

Connection set included in delivery



iTec ECO 5 kW

1. [1x] Filter ball DN25
2. [1x] Flow guard
3. [1x] Snap ferrites



iTec ECO 8, 12, 16 kW

1. [1x] Shut-off valve with filter
2. [1x] Flow guard
3. [1x] Snap ferrites
4. [1x] Rubber glands M20
5. [1x] Rubber glands M32

Five indoor kits – each application can be tailored-made

With a choice of five different indoor kits, we are able to meet all the requirements of both new-build and refurbishment projects. Pre-fabricated indoor kits ensure quick, aesthetic and high-quality installation with no individual parts placed outside the cabinet.

	iTec Eco STANDARD	iTec Eco PLUS	iTec Eco TOTAL COMPACT	iTec Eco TOTAL	iTec Eco TOTAL EQ
Intelligent Controller	✓	✓	✓	✓	✓
Optimum controlled circulation pump Class A		✓	✓	✓	✓
Three way valve for heating or hot water production		✓	✓	✓	✓
Immersion heater (3/6/9/12/15 kW 3~400 V; 3/6/9 kW 1~230 V		✓	✓	✓	✓
Hot water tank, 180 litre			✓	✓	✓
Additional free space in the lower part of the unit might be used for the expansion vessel or/and hydraulic connections				✓	
Extra 60 liters volume tank, 12 liters expansion vessel and an additional circulation pump					✓

Thermia iTec Eco (3~400V)	Catalog number
iTec Eco 8kW (3~400V)	203241
ITec Eco 12kW (3~400V)	203243
iTec Eco 16kW (3~400V)	203245

iTec indoor unit (3~400V)	Catalog number
iTec Eco Standard (1~230V)	204801
iTec Eco Plus (3~400V)	204802
iTec Eco Total (3~400V)	204804
iTec Eco Compact (3~400V)	204806
iTec Eco Total EQ (3~400V)	204808

Thermia iTec Eco (1~230V)	Catalog number
iTec Eco 5 kW (1~230V)	203239
iTec Eco 8 kw (1~230V)	203240
ITec Eco 12kW (1~230V)	203242
iTec Eco 16kW (1~230V)	203244

iTec indoor unit (1~230V)	Catalog number
iTec Eco Standard (1~230V)	204801
iTec Eco Plus (1~230V)	204803
iTec Eco Total (1~230V)	204805
iTec Eco Compact (1~230V)	204807
iTec Eco Total EQ (1~230V)	204809

Selected accessories for Athena	Catalog number
Primary shunt group (Distribution circuit 1, built-in)	
PT 1000 temperature sensor with 4 m cable	086L4466
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
Valve actuator, 2-point, 24 V, 45 - 120 sec (0-10 V)	086U5272
Shunt group (used as buffer tank shunt)	
PT 1000 temperature sensor with 4 m cable	086L4466
3-way shunt valve DN25 (Kvs 10)	086U5266
Valve actuator, 2-point, 24 V, 45 - 120 sec (0-10 V)	086U5272
Active cooling	
Athena Total EQ Pool Kit With Cooling	204763
Pool heating	
Athena Pool Kit (Expansion card EM3, PT 1000 temperature sensor, 3-way valve with actuator)	204764
Expansion card EM3 kit for Athena	205215
PT 1000 temperature sensor with 4 m cable	086L4466
3-way valve with actuator (LK 8) 230V, 28mm	086U7999
External auxiliary heater	
PT 1000 temperature sensor with 4 m cable	086L4466
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
Valve actuator, 2-point, 24 V, 45 - 120 sec (0-10 V)	086U5272
Other accessories	
Room sensor Genesis (with display)	086L3937
Room sensor PT1000 (without display)	086L5875
Power limiter	086L4535
Heating cable HZB-1	205069
Heating cable HZB-2	205070
Athena Ground Stand 400	205066
Athena T-Stand	205067
Wall bracket	205068
Athena Cover Hood	205071
Flexible Hose Kit High temp 2Pc L=1000Mm	205184
Extension Socket Kit (additional base for extra space under the indoor unit)	086L6340
Connector kit ø28mm to install additional MBH hot water tank 200/300	086L5766
Intermediate Heat exchanger 18 kW	086L0769

Selected accessories for iTec Eco / iTec XT	Catalog number
Primary shunt group (Distribution circuit 1)	
Valve actuator, 3-point 230 V, 120 sec.	086L3146
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
Temperature sensor	086U2773
Shunt group (used as buffer tank shunt)	
Valve actuator, 3-point 230 V, 120 sec.	086L3146
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
Buffer tank WT-V 100	086L4926
Buffer tank WT-V 200	086L4927
Buffer tank WT-V 300	086L4928
Buffer tank WT-V FC 500	086L5883
Temperature sensor	086U2773
Hot water cylinders	
3-way valve with actuator (LK 8) 230V, 28mm	086U7999
Water heater WT-T 300	086L4900
Water heater WT-T 500	086L4901
Water heater WT-C FC 500 (3 bar)	086L5880
Temperature sensor	086U2773
Active cooling	
3-way valve with actuator (LK 8) 230V, 28 mm	086U7999
Valve actuator, 2-point 230 V, 15 sec	086U5271
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
External auxiliary heater	
Valve actuator, 3-point 230 V, 120 sec.	086L3146
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
Temperature sensor	086U2773
Online - remote control	
Thermia Connect	206495
Other accessories	
Room sensor Modbus	086U9563
Expansion card for pool in iTec Eco	086L3047
Flexible metal hose Ø28mm, L=1000 mm, press fittings	086L0586
Flexible hose for heating system, 28Cu/DN25, lenght 600 mm	086U6000
Flexible hose kit W. 2X hose L=1000 mm and gasket	206909
Hydrocyclonic and magnetic in-line system filter Ø28	086L3232
Circulation Pump kit Grundfos UPM2 25-75 (0-10V)	206723

Thermia Aura T2

Air-to-air heat pump with environmentally friendly refrigerant (R32) and ability to perform at temperatures as low as -30°C.

- 5.1 SCOP – high performance in heating
- A+++ highest energy class
- Inverter technology adjusts precisely to real-time demand
- Eco-friendly technology (R32)
- Built-in cooling function
- 8.5 SEER = high performance in cooling
- Clean air - a three-layer filter system
- Built-in Wi-Fi - remote control via an app on your smartphone

Aura T2		Indoor unit	Outdoor unit
Catalog number		**204585**	**204586**
Performance	Heating capacity (min/nom/max)		0,8/4,0/7,3 kW
	COP[1]		4,26
	Power output –10°C		4,66 kW
	Power output –20°C		3,57 kW
	SCOP[2] (average climate)		5,1
	SCOP[2] (cold klimat)		4
	Energy class - heating, average climate		A+++
	Cooling capacity (min/nom/max)		0,9/3,5/4,8 kW
	SEER[3]		8,5
	Energy class - cooling, average climate		A+++
Electrical data 1N, ~50Hz	Fuse		10 A
	Main supply		1~220-240 V
	Rated power, heating (min/nom/max)		0,15/0,94/2,28 kW
	Rated power, cooling (min/nom/max)		0,18/0,89/1,45 kW
Compressor	Typ		BLDC rotary compressor
Refrigerant	Typ		R32
	Amount		0,965 kg
	GWP		675
	tCO_2-equivalent		0,65
Refrigerant pipe	Diameter		1/4 and 3/8 inch
Sound pressure level	min–max	19–40 dB(A)	≤ 46 dB(A)
Operating range (outdoor unit)	Heating		–30~24 °C
	Cooling		–15~46 °C
Operating range (indoor unit)	Heating		8~30 °C
Air flow	Heating (min–max)	8,1–13,1 m³/min	≤ 45 m³/min
	Cooling (min–max)	7,1–12,1 m³/min	≤ 45 m³/min
Dimensions and weight	Dimensions (WxDxH)	889 x 215 x 299 mm	790 x 285 x 548 mm
	Weight	10,4 kg	33 kg

1) COP = Coefficient of Performance in accordance with the international EN14511 standard. Applies to outdoor air temperature 7°C dry air, 6°C moist air and 20°C dry indoor air

2) SCOP = Seasonal Coefficient of Performance. A measure of how efficiently the heat pump works calculated for an entire heating season. Meets the conditions for A++ classification of air/ air source heat pumps in accordance with EN14825.

3) SEER = Seasonal Energy Efficiency Ratio. A measure of how efficiently the heat pump operates in cooling operation calculated for a whole season according to EN14825

Aura Accessories	Catalog number
Wall console 600	086L5949
Ground stand h=150-200mm (excl.vibdamp)	086L5969
Ground stand h=350-400mm (excl. vibdamp)	086L5970
Vibration isolator kit (aura)	086L5989
Driptray 1 with vibration damper 30-50kg	086L5154
Drain kit 1m	086L5157
Drain kit 3m	086L5158
Drain kit 5m	086L5159

Thermia Aura S2

Air-to-air heat pump with environmentally friendly refrigerant (R32) and ability to perform at temperatures as low as -30°C.

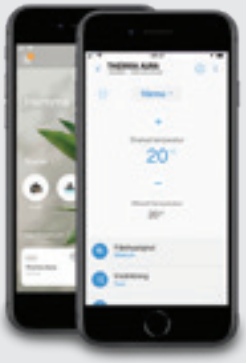
- 4.6 SCOP – high performance in heating
- A++ energy class
- Inverter technology adjusts precisely to real-time demand
- Eco-friendly technology (R32)
- Built-in cooling function
- 8.4 SEER = high performance in cooling
- Built-in Wi-Fi - remote control via an app on your smartphone

Aura S2		Indoor unit	Outdoor unit
Catalog number		**204583**	**204584**
Performance	Heating capacity (min/nom/max)		0,8/3,2/7,0 kW
	COP[1]		4,74
	Power output –10°C		4 kW
	Power output –20°C		3,19 kW
	SCOP[2] (average climate)		4,6
	SCOP[2] (cold klimat)		3,8
	Energy class - heating, average climate		A++
	Cooling capacity (min/nom/max)		0,9/2,5/3,5 kW
	SEER[3]		8,4
	Energy class - cooling, average climate		A++
Electrical data 1N, ~50Hz	Fuse		10 A
	Main supply		1~220-240 V
	Rated power, heating (min/nom/max)		0,15/0,68/2,16 kW
	Rated power, cooling (min/nom/max)		0,18/0,54/0,93 kW
Compressor	Typ		BLDC rotary compressor
Refrigerant	Typ		R32
	Amount		0,965 kg
	GWP		675
	tCO_2-equivalent		0,65
Refrigerant pipe	Diameter		1/4 and 3/8 inch
Sound pressure level	min–max	18–38 dB(A)	≤ 45 dB(A)
Operating range (outdoor unit)	Heating		–30~24 °C
	Cooling		–15~46 °C
Operating range (indoor unit)	Heating		8~30 °C
Air flow	Heating (min–max)	8,2–12,9 m³/min	≤ 45 m³/min
	Cooling (min–max)	6,7–11,3 m³/min	≤ 45 m³/min
Dimensions and weight	Dimensions (WxDxH)	889 x 215 x 299 mm	790 x 285 x 548 mm
	Weight	10,4 kg	33 kg

1) COP = Coefficient of Performance in accordance with the international EN14511 standard. Applies to outdoor air temperature 7°C dry air, 6°C moist air and 20°C dry indoor air

2) SCOP = Seasonal Coefficient of Performance. A measure of how efficiently the heat pump works calculated for an entire heating season. Meets the conditions for A++ classification of air/ air source heat pumps in accordance with EN14825.

3) SEER = Seasonal Energy Efficiency Ratio. A measure of how efficiently the heat pump operates in cooling operation calculated for a whole season according to EN14825



Control Aura T2 and Aura S2 via the SmartThings app

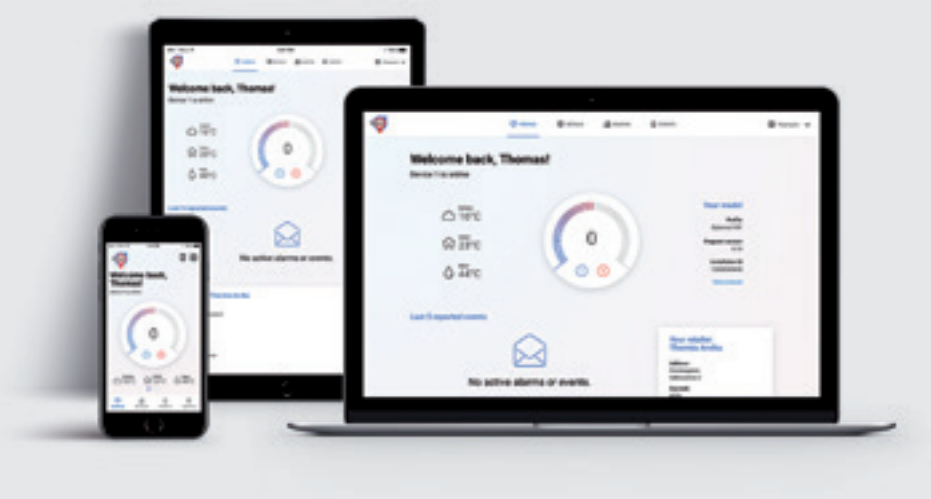
T2 and S2 have Wi-Fi as standard, which enables the heat pump to be remotely controlled via the app. Aura T2 and S2 is one of the products that have been selected to be part of SmartThings - a system that connects different smart devices in home and gives customer the opportunity to control them via an app. Visit website **www.smartthings.com/products** and read more about SmartThings.

Get it on Google play

Available on the App Store

Thermia Online

Thermia Online – Remote control operation of the heat pump provides convenience both for your customer and for you.



Thermia Online is a service that enables heat pump operation to be controlled from any location by means of any smartphone, computer or tablet with Internet access.

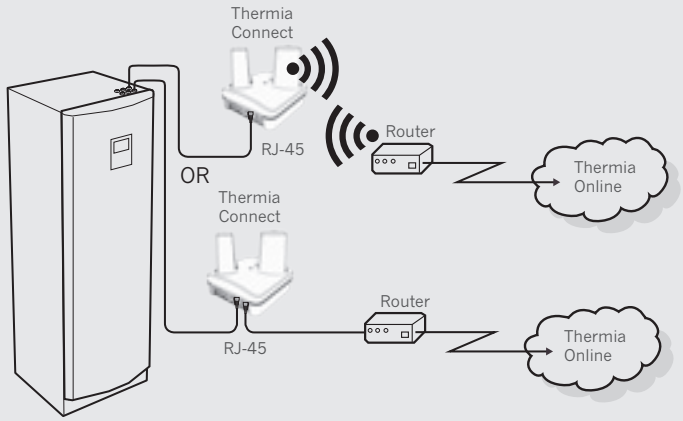
Functions and benefits:

» **COMFORT ON DEMAND** Via the Internet, the Online system enables the customer/Authorized Partner to check the system and current operational status of the heat pump or to change its settings. Online features might differ depending on the heat pump model and software version.

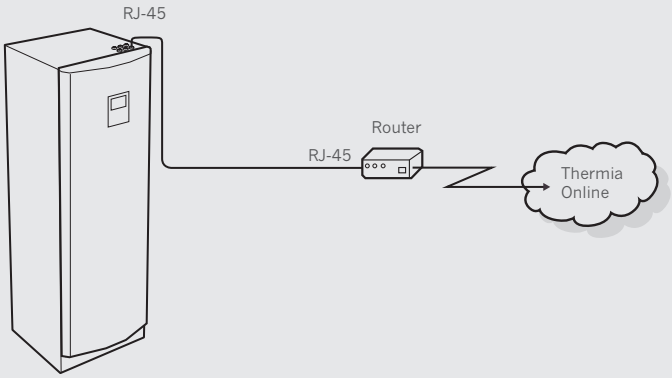
» **WARNING** The Online system includes alarm functions – if a fault is detected, the customer and/or Authorized Partner will automatically receive information in the form of an email or push notification (app).

» **SIMPLE INSTALLATION** For iTec heat pumps and Legend an accessory is needed to connect heat pumps to the internet and the Thermia Online service. The installation owner can set up their own user account and contact their installer to onboard the accessory.

For Atlas, Calibra, Athena and Mega no accessory is needed. The factory-installed equipment enables you to simply connect a ethernet cable (RJ45 connector) between the heatpump and your local router. The installation owner can set up their own user account and add a new installation or contact their installer.



Thermia Connect is required for Legend, Legend Duo, iTec XT, iTec Eco. Therrmia Connect can be connected to the router wirelessly or via an Ethernet cable (RJ45 connector).



Online connection for Mega Eco, Mega, Atlas, Atlas Duo, Calibra Eco Cool, Calibra Eco, Calibra Eco Duo, Athena

Thermia Online	Catalog number
Thermia Connect for Legend, Legend Duo, iTec XT, iTec Eco	206495
Mega Eco, Mega, Atlas, Atlas Duo, Calibra Eco Cool, Calibra Eco, Calibra Eco Duo, Athena	Factory-installed heat pump equipment

Other accessories for air and ground source heat pumps

Selected accessories	Catalog number
Accessories for Mega / Mega Eco	
Reversing valve kit DN40 + 230V, 15 sec	086L3426
Reversing valve kit DN50 + 230V, 15 sec	086L3427
Control valve 2-way. For charge output up to 110 kW	086U3730
Switching valve for hot water DN 32 with 230 V motor	086U9938
Network cable 10 m	086U4841
3-way shunt valve DN50 (Kvs 40)	086U5232
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
3-way shunt valve DN32 (Kvs 16)	086U5267
3-way shunt valve DN40 (Kvs 25)	086U5268
Room sensor Genesis (with display)	086L3937
Valve actuator, 2-point 230 V, 15 sec	086U5271
Valve actuator, 2-point, 24 V, 45 - 120 sec (0-10 V)	086U5272
Accessories for Mega / Mega Eco (hot gas circuit)	
A circulation pump for the hot gas circuit (Wilo Yonos Para 25/6-180)	086L3004
Flow Adjustment Valve 2-16 l/min. Connection = 22 mm clamp ring connection	086U3757
Flow Adjustment Valve 4-36 l/min. Connection = 22 mm clamp ring connection	086U3758
Flow Adjustment Valve 5-50 l/min. DN 25 internal thread	086U3756
Expansions cards, Sensors, Distribution circuit	
Hot water sensor PT1000	086L3350
Strap on temperature sensor with connection box PT1000	086U3356
Submersible sensor PT1000	086U3364
Strap on PT 1000 temperature sensor with 2 m cable	086U3365
Valve actuator, 3-point 24 V, 240 sec.	086U5269
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
3-way shunt valve DN32 (Kvs 16)	086U5267
Expansion card for Legend /Legend Duo (cooling, pool heating, 2nd heat curve or reducing power of auxiliary heater)	086U6009
Expansion card EM3 for external mounting	086L5981
Expansion card EM3 for internal mounting (Calibra/Atlas)	086L5983
Power limiter (Athena, Atlas, Calibra)	086L4535
Temperature sensor 4m - Legend/iTec Eco	086U2773
Passive / Active cooling	
Passive cooling module (Legend)	205413
Passive cooling module PT1000 (Atlas/Calibra)	086L6358
Accessories for iTec Eco / iTec XT	
Thermia Connect	206495
Room sensor Modbus	086U9563
Flexible hose kit W. 2X hose L=1000 mm and gasket	206909
Flexible metal hose Ø28mm, L=1000 mm, press fittings	086L0586
Circulation Pump kit Grundfos UPM2 25-75 (0-10V)	206723

Selected accessories	Catalog number
Intermediate Heat exchanger 6 kW	086L0767
Intermediate Heat exchanger 9-16 kW	086L0768
The dew point sensor kit	086L0635
Expansion card for pool	086L3047
Ground stand 150 mm - 200 mm for iTec Eco 8 - 16	086L5969
Ground stand 350 mm - 400 mm for iTec Eco 5 - 16	086L5970
Ground stand 200 - for iTec XT	206721
Ground stand 400 - for iTec XT	206720
Electric heated driptray with thermostat and vibration dampers for iTec Eco 5 - 8	086L5155
Electric heated driptray with thermostat and vibration dampers for iTec Eco 12 - 16	086L5156
Vibration dampers for iTec Eco 5 - 8	086L5987
Vibration dampers for iTec Eco 12 - 16	086L5988
Drainage kit 1 m (Insulated hose, Self-regulating heating cable with thermostat, Clips for the cable)	086L5157
Drainage kit 3 m (Insulated hose, Self-regulating heating cable with thermostat, Clips for the cable)	086L5158
Drainage kit 5 m (Insulated hose, Self-regulating heating cable with thermostat, Clips for the cable)	086L5159
Other accessories for ground source heat pumps	
Thermia Connect	206495
Room thermostat (Legend)	086U6003
Thermia Vent - exhaust air module (Diplomat series)	086U5122
Auxiliary heater 4,5kW 230V	086U8668
3-way valve with actuator (LK 8) 230V, 28 mm	086U7999
Rubber Compensator DN 25	086L2339
Rubber Compensator DN 40	086L3260
Rubber Compensator DN 50	086L3261
Brine pipe kit - the brine pipe connection on top of heat pump	351857
Level guard to fit in brine vessel	086U9122
Extension Socket Kit (additional base for extra space under the indoor unit)	086L6340
Connector kit ø28mm to install additional MBH hot water tank 200/300 (Atlas / Calibra)	086L5766
Connector kit ø22mm to install additional MBH hot water tank 200/300 (Legend)	205561
Hot water circulation pipe kit	086L2260
Filling device for brine	
Filling device for brine with insulation DN 25 <12kW	086L0403
Filling device for brine with insulation DN 32 >12kW	086L0404
Flexibel hoses and filters	
Shut off valve with dirt strainer DN40	086L3431
Shut off valve with dirt strainer DN50	086L3432
Shut off valve with dirt strainer DN20	086L0400
Shut off valve with dirt strainer DN25	086L0401
Shut off valve with dirt strainer DN 32	086L0402
Magnetite filter for heating installations 1 1/4”	086L3894
Magnetite filter for heating installations 1 1/2”	086L3895
Magnetite filter for heating installations 2”	086L3896
Dirt strainer 1”	086U3776
Dirt strainer 1 1/2”	086U3778
Dirt strainer 1 1/4”	086U3777
Dirt strainer 2”	086U3779
Hydrocyclonic and magnetic in-line system filter Ø22	086L3231

Selected accessories	Catalog number
Hydrocyclonic and magnetic in-line system filter Ø28	086L3232
Flexible hose for heating system, 22Cu/DN20, lenght 600 mm	086U6015
Flexible hose for heating system, 28Cu/DN25, lenght 600 mm	086U6000
Flexible hose for heating system, 35Cu/DN32, length 620 mm, 1 ¼" External thread	086U6001
Flexible hose for heating system, 42Cu/DN40, length 820 mm, 1 ½" External thread	356807
Rubber hose for brine, 35Cu/DN32, length 620 mm, 1 ¼" External thread	086L3435
Rubber hose for brine, 42Cu/DN40, L= 820 mm, 1 ½" External thread	086L3436
Rubber hose for brine, 54Cu/DN50 L= 820 mm, 2" External thread	356806
Rubber hose for brine L= 671 mm (2 x 28 mm connection for press fittings)	086U6012
Rubber Compensator DN 40	086L3260
Rubber Compensator DN 50	086L3261
Shunt valve and valve actuators	
Actuator (ESBE ARA673) 3-point 24V, 240 sec.	086U5269
Actuator (ESBE ARA635) 2-point 230 , 15 sec.	086U5271
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
3-way shunt valve DN32 (Kvs 16)	086U5267
3-way shunt valve DN32 with actuator 24V, 15 sec.	086U2471
3-way shunt valve DN32 with actuator 230V, 15 sec.	086U9938
3-way shunt valves	
3-way shunt valve DN20 (Kvs 6.3)	086U5265
3-way shunt valve DN25 (Kvs 10)	086U5266
3-way shunt valve DN32 (Kvs 16)	086U5267
3-way shunt valve DN40 (Kvs 25)	086U5268
Valve actuators	
Valve actuator, 3-point 24 V, 240 sec.	086U5269
Valve actuator, 3-point 230 V, 240 sec	086U5270
Valve actuator, 2-point 230 V, 15 sec	086U5271
Valve actuator, 2-point, 24 V, 45 - 120 sec (0-10 V)	086U5272
Valve actuator, 3-point 230 V, 120 sec.	086L3146
Circulation pumps	
Circulation pump for hot water circulation (GRUNDFOS UP 25-45 -180 NV ¾")	086U1830
System circulation pump (GRUNDFOS UPML 32-95 180 AUTO)	086L4138
Auxiliary heater	
Auxiliary heater for external mounting with control box K11 - 3,0 kW	086L3461
Auxiliary heater for external mounting with control box K11 - 6,0 kW	086L3462
Auxiliary heater for external mounting with control box K11 - 9,0 kW	086L3463
Auxiliary heater for hot water cylinders (WT- series) *	
Auxiliary heater for external mounting with control box K11 - 3,0 kW, 2" length = 280 mm	086U3645
Auxiliary heater for external mounting with control box K11 - 6,0 kW, 2" length = 410 mm	086U3646
Auxiliary heater for external mounting with control box K11 - 9,0 kW, 2" length = 410 mm	086U3647
Auxiliary heater for hot water cylinders (not WT- series)	
Auxiliary heater for external mounting with control box K11 - 3,0 kW installed depth 320 mm with flange	086U3640
Auxiliary heater for external mounting with control box K11 - 4,5 kW installed depth 480 mm with flange	086U3641
Auxiliary heater for external mounting with control box K11 - 5,25 kW installed depth 480 mm with flange	086U3642
Auxiliary heater for external mounting with control box K11 - 7,5 kW installed depth 480 mm with flange	086U3643
Auxiliary heater for external mounting with control box K11 - 9,0 kW installed depth 480 mm with flange	086U3644

** – listed auxillary heaters can't be combined with WT-V 100, WT-V 200, WT-V 300*

Thermia

Thermia Hot Water Cylinders

Thermia

HEAT PUMPS

And Buffer Tanks

WT-C

WT-T

WT-S

Hot Water Cylinders And Buffer Tanks

Model	Description	Heat transfer
MBH 200 Opti	Hot water cylinder with a TWS coil, stainless steel	Heat transfer via coil
MBH 300 Opti		
MBH Legend 200		
MBH Legend 300		
MBH 200 Calibra		
MBH 300 Calibra		
MBH 200 Atlas		
MBH 300 Atlas		
WT-T 300		
WT-T 500		
WT-C 500 FC 3bar	Buffers with coils for domestic hot water production, black carbon steel	Tap water is heated using cam flange coils (4 pcs.) via direct exchange with the radiator water.
WT-C 500 FC 6bar		
WT-C 750 FC 3bar		Tap water is heated using cam flange coils (6 pcs.) via direct exchange with the radiator water.
WT-C 750 FC 6bar		
WT-C 1000 FC 3bar		Tap water is heated using cam flange coils (8 pcs.) via direct exchange with the radiator water.
WT-C 1000 FC 6bar		
WT-S 500	Hot water cylinder without coil, stainless steel	Charging via external intermediate exchanger (WCS)
WT-S 1000		
WT-V 100	Buffer tanks	Direct charging
WT-V 200		
WT-V 300		
WT-V 500 FC 3bar		
WT-V 500 FC 6bar		
WT-V 500 FC DN 80 3bar		
WT-V 500 FC DN 80 6bar		
WT-V 750 FC 3bar		
WT-V 750 FC 6bar		
WT-V 750 FC DN 80 3bar		
WT-V 750 FC DN 80 6bar		
WT-V 1000 FC 3bar		
WT-V 1000 FC 6bar		
WT-V 1000 FC DN 80 3bar		
WT-V 1000 FC DN 80 6bar		

All tanks and buffers with FC abbreviation has all connections on the front, making it is easier to transport and install.

Mega / Mega Eco	Atlas / Athena	Atlas Duo	Calibra Eco / Calibra Eco Cool	Calibra Eco Duo	Legend	Legend Duo	iTec Eco (Standard, Plus) / iTec XT (Standard, Plus)	Catalog number
							✓	086U5406
							✓	086U4859
					✓ [1)]	✓ [1)]		204596
					✓ [1, 2)]	✓ [1, 2)]		204596
			✓ [3)]	✓				086L6170
			✓ [3)]	✓				086L5701
	✓ [4)]	✓						086L6169
	✓ [4)]	✓						086L6302
✓		✓		✓		✓	✓	086L4900
✓		✓		✓		✓	✓	086L4901
✓		✓		✓		✓	✓	086L5880
✓		✓		✓		✓	✓	086L6515
✓								086L5881
✓								086L6516
✓								086L5882
✓								086L6517
✓								086L4898
✓								086L4899
	✓	✓	✓	✓	✓	✓	✓	086L4926
	✓	✓	✓	✓	✓	✓	✓	086L4927
✓	✓	✓				✓	✓	086L4928
✓								086L5883
✓								086L6509
✓								086L6520
✓								086L6556
✓								203960
✓								086L6510
✓								086L6521
✓								086L6557
✓								203961
✓								086L6511
✓								086L6555
✓								086L6558

[1)] models with built-in hot water tank require connector kit to MBH Legend 200/300. [2)] 13 kW 17 kW only recommended with MBH Legend 300.
[3)] Models with built-in hot water tank require connector kit to MBH Calibra 200/300. [4)] Models with built-in hot water tank require connector kit to MBH Atlas 200/300.

HPC 2.0

– a professional program for selecting and dimensioning the heat pump

HPC 2.0 (Heat Pump Calculator) – this modern software application is a powerful and practical tool for installers or heating system designers who specialize in renewable energy sources.

The program allows the correct heat pump to be selected based on the heat demand, and presents a range of simulations concerning system operation, such as energy consumption, savings, SPF (Seasonal Performance Factor), as well as the length and parameters of the ground collector. The program was designed by Thermia engineers in Sweden with the involvement of a third-party provider of engineering software and web applications.

HPC 2.0 features at a glance

In a group
Within one firm or office, users can share the same project depending on their role or level of expertise.

Default values
Default value functions are provided (fuel, energy prices, hot water demand, etc.) and assigned to the profile, which significantly reduces the amount of time needed to design the system.

Attachments
A question from the customer/ investor, documentation in PDF or project photos can be attached to the design.

Climate data
The program features an integrated an interactive map with climate data, which allows the outdoor temperature parameters for the system to be selected automatically.

Selection and simulations
Heat pump selection based on multiple precise data, simulation of maintenance costs and simulation of different heat pumps for the same building.

Analyses and comparisons
By using copy functions, a "what-if?" analysis can be performed very quickly or a comparative "ground or air-source pump?" analysis carried out. In addition to typical comparisons of operating costs, investment and maintenance costs can also be compared for several different heating systems.

The program is available in many European languages.

Design your own heating system online

Make your design process easier and faster with the Thermia System Solution Generator. Whether you're building a home or installing a new system in an existing home as part of a renovation, it can be tricky to work out which heating system would best suit your needs.

How it works?
Using our online System Solution Generator tool, it's easy to design your own heating system with a Thermia heat pump. You can choose heating only, heating with hot water or add pool heating or a cooling or shunt group. You can even add additional hot water cylinders or auxiliary heating. Best of all, when your system design is complete, you automatically receive a full list of system components.

Benefits
The online System Solution Generator tool has two main advantages:

1) fast and simple system design and
2) heating schematic diagram approved by the Thermia.

Using Thermia's online System Solution Generator tool, engineers can design anything from single-family homes to large hotels or apartments buildings.

Product files for CAD drawings

Make your design process and project easier and faster with BIM-ready models.

You can now download Thermia products BIM ready models and start working with Thermia products in 3D building information modelling programs, such as Autodesk REVIT and MagiCad.

The comprehensive new Thermia library of BIM models allow specifiers to create custom drawings with a high degree of accuracy and system intelligence for use throughout the building's lifecycle. The Thermia catalogue includes the Mega ground source heat pumps as well range of hot water and buffer tanks.

Thermia drawings are already included in the MagiCAD program, whereas the products will need to be downloaded into Revit.

Professional installer

Heat pumps are amongst the most efficient and economical renewable systems available, but only as long as the systems are properly designed and installed. Through our authorised resellers, we are committed to ensuring installations are delivered to the highest possible standards, to maximise energy savings and customer satisfaction.

"For us, working with Thermia is a „matter of the heart". Selling Thermia's high quality products with impeccable reliability, high efficiency and excellent technical support & service is great for us and all our customers.

Jan Tomášek,
IVAR CS spol. s r.o, Czech Republik

"Our company has been selling Thermia heat pumps since 2005. The product range and quality are fantastic. As a sales partner, we feel very much at home in the Thermia family and are satisfied with our long-term, successful cooperation.

Monika Frese,
IWS GmbH Intelligente WärmeSysteme, Germany

"We started working with Thermia 10 years ago and were so impressed by the quality and state-of-the-art performance of Thermia heat pumps that we became Thermia's Dutch distributor. Today, we only use Thermia products and have enough to generate more than 5 gigawatts of power, to supply heat to more than 1,000 end users through rental (lease) agreements.

Hessel Kok,
Nordic Energy Solutions, Netherlands

"To motivate the customer to choose a heat pump from Thermia is rather effortless part of our daily busniness. It's an well-established brand with a good reputation. We have solutions that others lack, and we often get the deal even if a competitor had offered a quote with a lower price. Guarantees, Swedish-made products – and a brand that has developed and refined its portfolio for many years – is the argument which gives additional benefits.

Jan Johansson, CEO Åseda Värme & Sanitet AB, Sweden (in the photo)

Financial Incentives for heat pumps

The European Union passed legislation to encourage the use of renewable energy sources (RES) in 2009 (2009/28/EC). The RES Directive's article two defines which sources of energy are deemed renewable. It includes aerothermal (energy stored in air), hydrothermal (energy stored in water) and geothermal (energy stored below the earth's crust). The Directive explicitly recognizes heat pump technology as necessary to make use of these renewable sources.

The European Union supports renewable energy from heat pumps, which is why the majority of EU member states offer subsidies for such projects. There are various discount schemes and financial incentives that reduce investment and occasionally operational costs too by double-digit percentages.

Thermia heat pumps provide up to 80% energy savings, 50-75% savings on running costs and can reduce your carbon footprint around 50-90%. However, decision to install a renewable energy heating system involves a major investment. This is a relatively new technology area and you should ensure that you are fully informed and proceed carefully to ensure that you get a system that truly meets your requirements and expectations.

Please contact with authorized Thermia installer for more information about grants and initiatives available in your country.

NOTES

1973

BEFORE OUR TIME

Thermia celebrates 100 years anniversary in 2023. We also celebrate the 50 years anniversary of the first standard heat pump in series production featuring single cabinet design and integrated hot water storage.

AHEAD OF OUR TIME

Atlas holds the world championship for efficiency. With an SCOP (Seasonal Coefficient of Performance) of 6.15 it is better than any other residential heat pump.

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THERMIA
HEAT PUMPS
AHEAD OF OUR TIME
SINCE 1923

For over a century, we have strived to be the best, ahead of our time, over time. We continue to improve and pioneer new products ahead of their time from coke-fired stoves 100 years ago to the cutting-edge heat pumps of today: Here the first ground source heat pump, Calibra Eco featuring the climate-friendly refrigerant for 50% lower Global Warming Potential. Join the celebration and see more!

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