

# Efficiency at its best

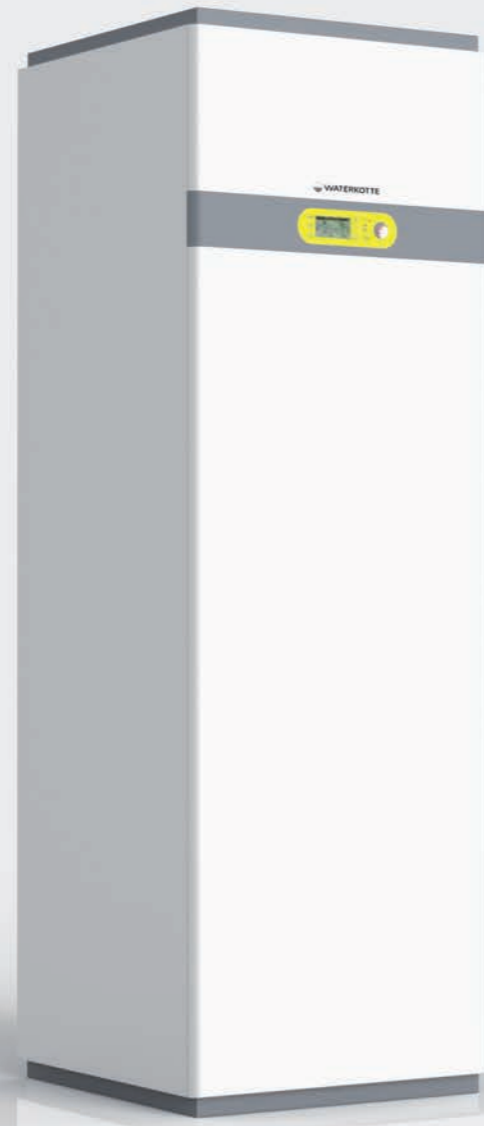
High-end heat pump | Basic Line Ai1 Geo



# Basic Line Ai1 Geo | Power range from 5 – 13 kW



reddot award 2016  
winner



A+++ und A+: Energy-efficiency class combined system (incl. WWPR II controller) heating W10/W55 and DHW preparation. Variations within the series possible.

## Everything in one unit

The Ai1 Geo offers a perfect solution for cost-conscious clients. Ai1 stands for "All in One". The complete system provides all the heating functions you need. The Ai1 is a complete central heating system.

## The advantages of a geothermal system

The Ai1 Geo provides heat in the winter, cooling in the summer, and hot water year round. Energy from the ground means: very good efficiency, low operating costs and almost silent operation.

## Well-equipped – easy to operate

Standard features include the high-quality control unit, a 170 l hot water tank and the weather-based controller. With the optional Web Interface NetBase the Ai1 can be controlled via the Internet.

## Suitable for every living room

The slender unit requires only little space. With the attractive design you can integrate it ideally into your living area. The Basic Line Ai1 Geo is a robust unit that will give you many years of pleasure.

## Features

- Compact heat pump Basic
- Monochrome, semi-graphic, 8-line display
- Central power switch
- 6 buttons and 3 indicator LEDs
- Numerous sensors in the refrigerant circuit
- Intuitive BasicPro control software
- Controlled operation for energy-saving pumps
- Hot water tank with 170-litre capacity
- Automatic Legionella protection circuit
- Integrated electrical heating element 6 kW
- Chlorine-free, environment-friendly refrigerant R410A
- Speed-controlled circulation pumps of efficiency class A
- Integrated vibration damper Silenter®
- Modular design for optimised transport and installation
- Easy to service unit design
- Connections installed on rear
- Unit dimensions: (H x W x D) 1743 x 600 x 650 mm

## Optional features

- Connection set
- Starting current damping (400 V)
- Integrated cooling module
- Controller expansion for a mixer circuit
- WebInterface NetBase BN Web

## Highlights

- High quality control unit
- Low operating costs due to COP values up to 4.9
- Automatic Legionella protection circuit
- Integrated vibration damper Silenter®
- Reduced space requirement 0.39 m<sup>2</sup>

## Technical data | Basic Line Ai1 Geo

Technical data Basic Line Ai1 Geo		5005.5	5006.5	5008.5	5010.5
<b>Heat source groundwater <sup>1)</sup></b>					
Power cons./output W10/W35	kW <sup>2)</sup>	1,1/6,6	1,3/7,7	1,6/10,2	2,2/13,5
Coefficient of performance (COP) at W10/W35		6,3	6,2	6,5	6,0
Space heating energy efficiency class <sup>2)</sup> /water heating energy efficiency class load profile L	A+++ / A+		A+++ / A+	A+++ / A+	A+++ / A
Space heating energy efficiency class of the package <sup>3)</sup> /water heating load profile L	A+++ / A+		A+++ / A+	A+++ / A+	A+++ / A
Groundwater flow rate	m <sup>3</sup> /h ( $\Delta T=3K$ )	1,6	1,8	2,5	3,3
Groundwater flow rate, minimum	m <sup>3</sup> /h ( $\Delta T=6K$ ) <sup>4)</sup>	0,7	0,9	1,3	1,7
Heating water flow rate	m <sup>3</sup> /h ( $\Delta T=5K$ )	1,1	1,3	1,7	2,5
Operating limit				W10/W60	
<b>Ground source heating</b>					
Power cons./output B0/W35	kW	1,1/4,8	1,3/5,7	1,7/7,6	2,2/10,1
Coefficient of performance (COP) at B0/W35		4,6	4,6	4,9	4,7
Space heating energy efficiency class <sup>2)</sup> /water heating energy efficiency class load profile L	A++ / A		A++ / A	A++ / A	A++ / A
Space heating energy efficiency class of the package <sup>3)</sup> /water heating load profile L	A++ / A		A++ / A	A++ / A	A++ / A
Heat source flow rate <sup>5)</sup>	m <sup>3</sup> /h ( $\Delta T=3K$ )	1,2	1,4	1,9	2,5
Heating water flow rate	m <sup>3</sup> /h ( $\Delta T=5K$ )	0,8	1,0	1,3	1,7
Operating limit				B-5/W60; B0/W65	
Sound power level at A7/W35 B0/W35		46	47	48	48

<b>Electrical data</b>					
Electrical data	V, AC, Hz	400, 3, 50 (230, 1, 50)			
Starting current (unreduced)		28 (52)	28 (60)	43 (83)	51,5 (108)
Starting current soft start	A	14 (45)	14 (45)	22 (45)	26 (45)
Max. operating current	A	4,8 (10,5)	4,8 (12,8)	6,2 (17,1)	7,4 (22,8)
Main fuse, compressor (provided by customer)	A	C16A (C16A)	C16A (C16A)	C16A (C20A)	C16A (C25A)
Control fuse (provided by customer)	A	B10A	B10A	B10A	B10A
Electrical heating element	kW	6			

<b>Filling capacities, dimension, weights, connections</b>					
Unit weight, not including tank	kg	192	192	209	209
Connections: Heat source / use		flat-sealing R 1¼ "a / R 1¼ "a			
Dimensions W x H x D	mm	600 x 1850 x 650 (+ 35 mm connections)			
Hot water tank	l	170			
Connections hot water tank		G ¾" i			

**Subject to technical change. Tolerances as per EN 12900, EN 14511 and EN 12102 apply to the performance data listed above.**

<sup>1)</sup> Groundwater source heating is to be used with intermediate circuit; for solutions, please refer to our product range. Our performance data are based on this system configuration. <sup>2)</sup> Medium-temperature application, average climate conditions <sup>3)</sup> When the composite label WATERKOTTE controller WWPR class III as considered (without room temperature sensor). <sup>4)</sup> At W10/W35 and  $\Delta T=6K$ . <sup>5)</sup> (70 % water + 30 % ethylene glycol).



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