

HEAT PUMPS & RENEWABLE ENERGY SOLUTIONS 2017-18

- AIR-TO-WATER HEAT PUMPS
- HYBRID HEAT PUMPS
- GROUND SOURCE HEAT PUMPS
- FAN COILS



+
more
thermal
comfort

less
energy
losses





A BRAND OF GROUPE ATLANTIC

Water heating, air heating, air conditioning and ventilation, GROUPE ATLANTIC develops high-performance solutions that are both competitive and environmentally-friendly. Distributed in over 70 countries, they are designed for individual homes, collective housing, offices, shops, schools, airports, hospitals and all other commercial buildings.



- **14 strategic and leading brands**
- **6500 employees**, including 2900 outside of France
- **20 industrial sites**: 10 in France and 10 in several other countries
- **€1.5 bn in turnover**, 38% of which is generated outside of France
- **4% of turnover** allocated to R&D



www.groupe-atlantic.com



ATLANTIC - WORLDWIDE EXPERT IN THERMAL COMFORT SOLUTIONS

Atlantic is a **multi-energy brand** manufacturing heating, water heating and ventilation solutions for residential and commercial markets across the globe. It aims at constantly **strengthening its customers' satisfaction** by increasing and **improving its product portfolio**, as well as **getting closer to its customers**.

To this end, Atlantic has succeeded in improving and completing its water heating solutions to comply with new European environmental standards, and offers a coherent **range of water heaters from 10 L to 3000 L**. It also keeps focusing its **R&D investments** on developing new **eco-friendly solutions for heating and water heating**.

With this new extended and improved offer, customers benefit from Atlantic's latest technology and energy-savings solutions.

Latest key facts:

- 2017** Factory opening in Georgia for electric water heaters manufacturing
- 2016** Opening of a representative office in Dubai
Creation of German subsidiary Austria Email GmbH
- 2015** Factory opening in France for heat pumps and boilers manufacturing
Acquisition of a UK market leader for wall mounted condensing gas boiler and commercial gas boiler
- 2014** Factory opening in Thailand for electric water heaters manufacturing

Atlantic products portfolio: the broadest choice for the customer's benefit



COMMERCIAL
CALORIFIERS



DOMESTIC
HOT WATER



HEAT
PUMPS



ELECTRIC
HEATING



BATHROOM
HEATING



VENTILATION



DOMESTIC &
COMMERCIAL GAS
CONDENSING BOILERS

Atlantic factories around the world







- 10 industrial sites in France
- 10 industrial sites abroad preserving French know-how

To learn more about Atlantic, visit our website www.atlantic-comfort.com



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Alfea Extensa 



Alfea Extensa Duo 



Alfea Excellia 



Alfea Excellia Duo 



Alfea Hybrid Duo
Oil Low NOx



Alfea Hybrid Duo
Gas / Gas R



Loria



Loria Duo

GROUND SOURCE HEAT PUMPS

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Atlantic Geolia

FAN COILS CONNECTED WITH HEAT PUMPS

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Panama Access

ATLANTIC HEAT PUMPS



Split air-to-water heat pumps



	Loria	Loria Duo	Alfea Extensa Qi	Alfea Extensa Duo Qi
4 kW	S	S		
5 kW			S	S
6 kW	S	S	S	S
7/8/9 kW	S	S	S	S
10-11 kW	S	S	S	S
13-14 kW				
16-17 kW				
2 heating zones	Optional	Optional	Optional	Optional
Domestic hot water	Optional	Standard supply	Optional	Standard supply
Cooling	Optional	Optional	Optional	Optional
Boiler connection	—	—	Optional	Optional
Electric back-up heating	Standard supply	Standard supply	Standard supply	Standard supply
Energy class heating (35°C / 55°C)	Up to A ⁺⁺⁺ / A ⁺⁺	Up to A ⁺⁺⁺ / A ⁺⁺	A ⁺ / A ⁺	A ⁺ / A ⁺
Energy class DHW	—	A ⁺	—	A ⁺

* Depending on models

** Depending on models and types of collectors

S Single - phase 230 V

T Three - phase 400 V

Split air-to-water heat pumps

Ground source heat pumps



60°C

60°C

80°C

80°C

60°C**

4 kW					
5 kW					S
6 kW				S	
7/8/9 kW				S	S
10-11 kW	S T	S T	S T	S T	S
13-14 kW	S T	S T	S T	S T	T
16-17 kW	T	T	T	T	T
2 heating zones	Optional	Optional	Optional	Optional	Optional
Domestic hot water	Optional	Standard supply	Optional	Standard supply	Optional
Cooling	Optional	Optional	Optional	Optional*	Optional
Boiler connection	Optional	Optional	Optional	Optional	Optional
Electric back-up heating	Standard supply	Standard supply	Standard supply	Standard supply	Standard supply
Energy class heating (35°C / 55°C)	A ⁺ / A ⁺	A ⁺ / A ⁺	- / A ⁺	- / A ⁺	Up to A ⁺⁺⁺
Energy class DHW	-	A	A	B	-

ATLANTIC GUIDES YOU

► What is ErP?

The acronym ErP stands for Energy related Products. It is linked to the Ecodesign directive of the European Union, which defines minimum efficiency requirements for energy-related products such as water heaters, heat pumps, boilers and solar water heaters.

► Why is it important?

Energy savings and environmental protection will be the main challenges for the European Union for years to come. In this matter, as some heating and water heating products can be very energy-consuming, the goal of the new European directive, also called the 20-20-20 target, is to:

- **Decrease CO² emissions by 20%**
- **Reduce the use of primary energy by 20%**
- **Increase renewable energy share by 20% by 2020**

Ultimately, regarding heating and water heating products, the result of these new standards will be an annual energy saving in Europe of around 56 Mtoe (Million tonnes of oil equivalent) by 2020. It represents roughly 20% of France's total annual primary energy consumption.*

► Two requirements for energy-related products

Ecodesign Directive

Ecodesign defines the acceptable energy efficiency levels, as well as environmental requirements for energy-related products. Therefore, heating and water heating products must comply with all Ecodesign requirements in order to get the CE mark and be sold within the European Union market.

Energy Labelling Directive

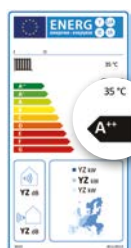
Well known to the end-user of white goods, energy efficiency labels (product labels) became mandatory for heating and water heating products, within the European Union market, since September 2015.

These products must have energy efficiency labels to inform end-users about their real performance (energy consumption, noise level and other product-specific information).

► What's new in 2017

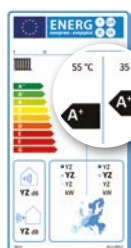
Since September 26th, 2015, new performance criteria (seasonal energy efficiency and energy efficiency class) are applied on all heating products, including heat pumps.

This regulation distinguishes two heat pump types:



Low temperature

For heat pumps that cannot reach **55 °C**, seasonal efficiency is indicated only at **35 °C**.



Average / High temperature

For heat pumps working at **55 °C**, seasonal efficiency must be indicated at **55 °C**.

Performance criteria for these two heat pump types evolve from September 2017: for low temperature heat pumps, requested energy efficiency will be 125% (instead of 115%); for average/high temperature heat pumps, requested energy efficiency will be 110% (instead of 100%).

*According to the European Commission website.

THROUGH ErP REGULATIONS

► What is the product label?

Products energy efficiency labels are mandatory for all energy-related products which fall under the ErP regulations, including heat pumps, water heaters, boilers, etc.

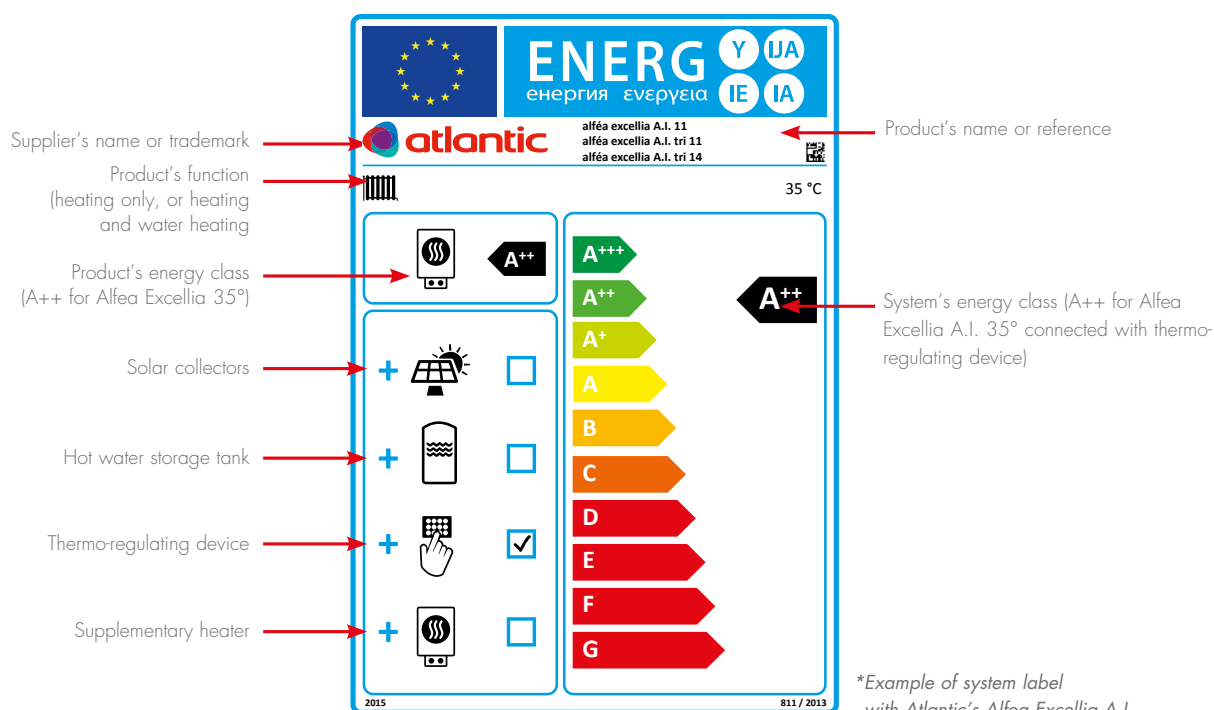
There are different product labels, depending on the product's function.

In particular, product labels for heat pumps and boilers are different from those for electric water heaters. Due to the higher performance of these products, product labels for heat pumps and boilers have two more energy classes (**A⁺** and **A⁺⁺**), in addition to basic energy classes (from A to G) which are common for all products. Moreover, the product label for heat pumps has a seasonal energy efficiency indicator for different climate areas, in order to give a full picture of the product's energy efficiency.

► What is the system label?

Due to the new European directive, all products intended to be connected in systems need to be provided with a system label, also called a package label.

The system label shows the system's performance, in addition to the product's performance. In system labels, **A⁺**, **A⁺⁺** and **A⁺⁺⁺** classes indicate products with the highest performances.



As an expert in heating and water heating, thermal insulation and temperature control, Atlantic welcomes and actively supports ErP regulation. **Therefore, all Atlantic heat pumps and renewable energy water heaters are highly performant in terms of energy efficiency and environmental protection (up to A+++)!**

You can find detailed information about Atlantic products energy classification on product pages of this catalogue and in the ErP section of our website

www.atlantic-comfort.com

AIR-TO-WATER HEAT PUMPS

ALFEA RANGE: LEADING HEAT PUMPS DESIGNED AND MADE IN FRANCE



Alfea is a split air-to-water heat pump range, composed by an outdoor Inverter unit connected with an indoor hydraulic module by a refrigerant connection.

Calories absorbed in outdoor air go through these units to ensure heating and, for dedicated models, domestic hot water (DHW) production.

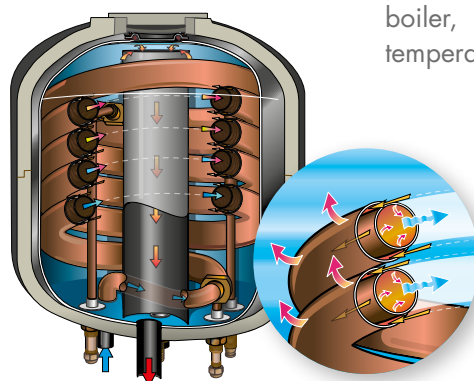
▶ ATLANTIC TECHNOLOGIES



A dedicated hydraulic conception for improved performances

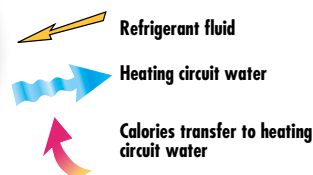
The Alfea range benefits from a coaxial heat exchanger, a technology developed and patented by Atlantic to maximise the heat pump performance.

The coaxial heat exchanger is immersed in a buffer tank allowing its functioning without any filter tap or water flow controller, which makes Alfea heat pump a reliable and efficient solution.



Hybrid technology: Atlantic latest innovation for maximised comfort and savings!

Atlantic is the first manufacturer to commercialise heat pump integrated with oil-fired boiler; it develops Hybrid Oil and Gas solutions allowing heating and DHW production by integrating heat pump and boiler, in order to achieve 80°C working temperature for renovation projects.



AVERAGE TEMPERATURE

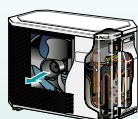
55°C

HIGH PERFORMANCE

60°C

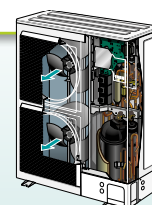
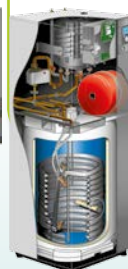
ALFEA EXTENSA 
ALFEA EXTENSA DUO 

Simplicity and performance
Low temperature solution for all projects



ALFEA EXCELLIA 
ALFEA EXCELLIA DUO 

High performance
High performance solution for renovation projects



ALFEA RANGE

Performances

- 55°C average temperature solutions, 60°C high performance solutions, 80°C hybrid solutions
- COP of up to 4,52
- Full Inverter regulation
- Low energy consumption circulation pump
- ErP-Best: up to A++

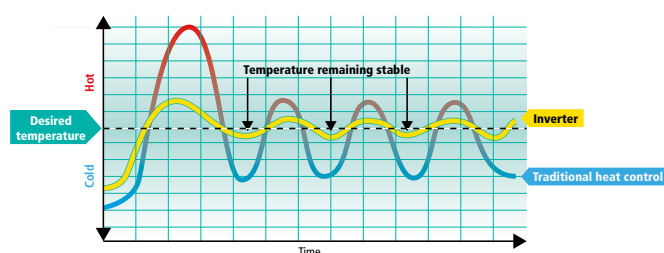
Adaptability

- Perfect solution for new build or renovation projects, with or without DHW production
- Easy installation and maintenance
- Accessories kit allowing to meet all specific requests

An optimised control to maximise savings

The Inverter control adapts its power supply according to outside temperature in order to provide the exact amount of energy for a constant and economical heat.

Comparison between Inverter and traditional heat control



► MORE BENEFITS WITH ALFEA A.I. RANGE

Connectivity

- Compatible with Cozytouch due to integrated IO-Homecontrol® protocol, allowing heat pump remote piloting through a smartphone or a tablet



Devices' real-time monitoring



Daily energy consumption visualisation & optimisation

Available on



Atlantic regulator

NAVISTEM 400S

- Easy Start: quick heat pump setting
- Simplified use with intuitive interface
- User-friendly menu adapting to the user's choice of settings



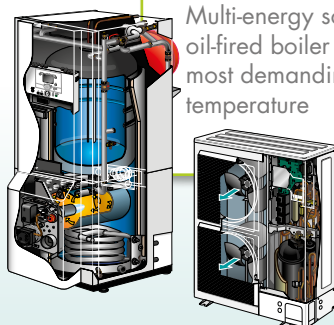
HYBRIDS

80°C

ALFEA HYBRID DUO OIL LOW NOx

High temperature

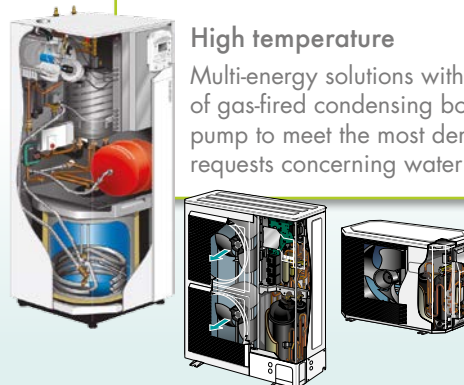
Multi-energy solutions with combination of oil-fired boiler and heat pump to meet the most demanding requests concerning water temperature



ALFEA HYBRID DUO GAS ALFEA HYBRID DUO GAS R

High temperature

Multi-energy solutions with combination of gas-fired condensing boiler and heat pump to meet the most demanding requests concerning water temperature



ALFEA EXTENSA

Split air-to-water heat pump for improved performances
Average temperature solution for all projects



Indoor hydraulic module



Outdoor Inverter unit



Product

- COP up to 4.52 (+7°C / +35°C)
- Compatible with all kinds of low temperature heating devices (underfloor heating/cooling, radiators, fan coils)
- Intuitive interface and simplified use
- **NAVISTEM 400S** regulator
- Integrated 16L buffer tank
- Patented coaxial heat exchanger
- Inverter regulation
- Possibility to manage an electric radiator heating zone from the heat pump control panel (option)
- Possibility of remote piloting through a smartphone or a tablet, thanks to the Cozytouch compatibility

DESCRIPTION

- Suitable for new build and renovation
- 4 models: 5 to 10 kW - single-phase
- Performing heat pump working with outside temperature from -20°C to +35°C
- Average temperature heating (max. 55°C)

AVAILABLE OPTIONS

- 2 zones kit (plug-and-play kit)
- Cooling kit
- Separated hot water tank
- Boiler connection kit
- Room sensor

SUPPLIES

Indoor hydraulic module

- Coaxial exchanger immersed in buffer tank
- Low consumption circulation pump
- Outdoor sensor
- Expansion vessel, pressure meter, etc
- Electric back-up heater*

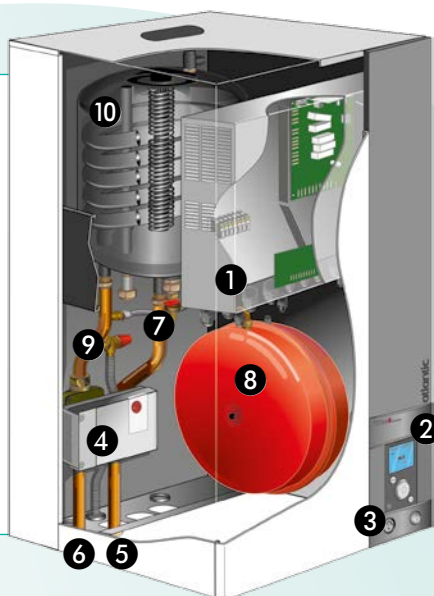
Outdoor Inverter unit

- Refrigerant circuit (R410A)
- Twin Rotary compressor

*Models without electric back-up available

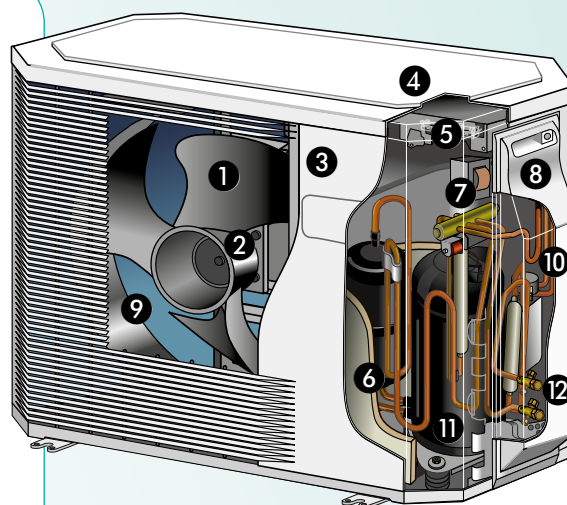
INDOOR HYDRAULIC MODULE

- 1 Electric board
- 2 User interface/regulator
- 3 Manometer
- 4 Low consumption circulation pump
- 5 Heating flow
- 6 Heating return
- 7 Refrigerant connections
- 8 Expansion vessel
- 9 Safety valve
- 10 Coaxial heat exchanger



OUTDOOR INVERTER UNIT

- 1 Low-noise, high-output ventilator
- 2 Electric variable speed motor
- 3 "Inverter" control module
- 4 Control lights and buttons
- 5 Connection terminals (power supply and interconnection)
- 6 Refrigerant accumulator bottle
- 7 Cycle reversing valve
- 8 Anti-corrosion treated metal cover
- 9 High performance exchange surface evaporator; anti-corrosion treated hydrophilic aluminium fins and grooved copper tubes
- 10 Electronic expansion valve
- 11 Noise and temperature insulated "Inverter" compressor
- 12 Refrigerating connection valves (flared connectors) with protective cover



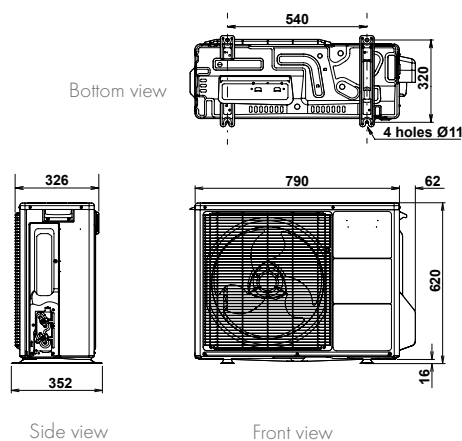
TECHNICAL CHARACTERISTICS AND PERFORMANCES

	UNIT	ALFEA EXTENSA A.I. 5	ALFEA EXTENSA A.I. 6	ALFEA EXTENSA A.I. 8	ALFEA EXTENSA A.I. 10
REFRIGERANT		R410A	R410A	R410A	R410A
MAIN CHARACTERISTICS					
Heating capacity +7°C/+35°C - Underfloor Heating	kW	4.50	6.00	7.50	10.00
COP +7°C/+35°C - Underfloor Heating		4.52	4.26	4.08	4.02
Heating capacity -7°C/+35°C - Underfloor Heating	kW	4.10	4.60	5.70	7.40
COP -7°C/+35°C - Underfloor Heating		2.79	2.64	2.56	2.49
Heating capacity +7°C/+45°C - Low T° radiators	kW	4.50	5.10	6.20	8.27
COP +7°C/+45°C - Low T° radiators		3.44	3.40	3.32	3.27
Heating capacity -7°C/+45°C - Low T° radiators	kW	4.10	4.45	5.05	7.40
COP -7°C/+45°C - Low T° radiator		2.20	2.18	2.04	2.00
Heating capacity +7°C/+55°C - Radiators	kW	4.50	4.50	5.00	7.00
COP +7°C/+55°C - Radiators		2.51	2.51	2.58	2.45
Heating capacity -7°C/+55°C - Radiators	kW	3.70	3.85	5.20	7.00
COP -7°C/+55°C - Radiators		1.68	1.65	1.56	1.69
Additional electric back-up heater	kW	3	3	3	3
ENERGY EFFICIENCY & ACOUSTIC CHARACTERISTICS					
Energy class - Heating (35°C/55°C)	-	A++ / A+	A++ / A+	A++ / A+	A++ / A+
Thermal power (35°C/55°C)	kW	4 / 4	5 / 5	7 / 6	8 / 8
Seasonal energy efficiency - Heating (35°C/55°C) with outdoor sensor	%	171 / 117	171 / 117	158 / 120	157 / 115
Seasonal energy efficiency - Heating (35°C/55°C)	%	169 / 115	169 / 115	156 / 118	155 / 113
Annual energy consumption - Heating (35°C/55°C)	kWh	2160 / 3027	2505 / 3180	3375 / 3886	4415 / 5415
Sound power level (indoor/outdoor) ⁽¹⁾	dB(A)	46 / 63	46 / 63	46 / 69	46 / 69
INDOOR HYDRAULIC MODULE					
Noise level ⁽²⁾	dB(A)	39	39	39	39
Net weight/filled weight ⁽³⁾	kg	46 / 62	46 / 62	46 / 62	46 / 62
Power supply		230V / 50Hz	230V / 50Hz	230V / 50Hz	230V / 50Hz
OUTDOOR UNIT					
Noise level ⁽⁴⁾	dB(A)	41	41	47	47
Operating weight	kg	41	41	42	60
REFRIGERANT CHARACTERISTICS					
Min./max. length	m	5 / 30	5 / 30	5 / 30	5 / 30
Max. difference in height	m	20	20	20	20
R410A factory load	g	1100	1100	1400	1800
Quantity of refrigerant in tons of CO ₂ equivalent	t	2	2	3	4

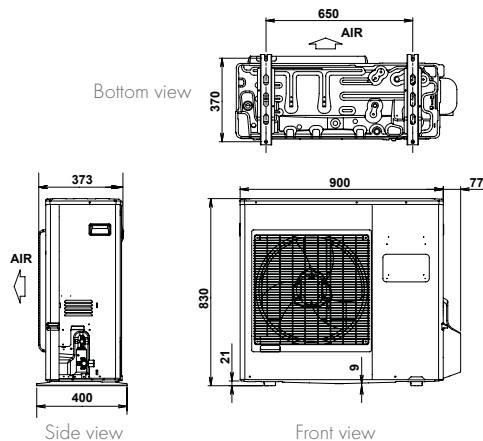
(1) Sound power level is a laboratory measurement of the sound power emitted by the product, but it does not correspond to the sound perceived. Used by acoustics specialists, it allows to measure the sound pressure level of the product in its working environment. - (2) Acoustic pressure at 1m from HP, 1,5 m height, open field, directivity 2. (3) Models with electric back-up. - (4) Acoustic pressure at 5m from HP, 1,5 m height, open field, directivity 2.

DIMENSIONS (MM)

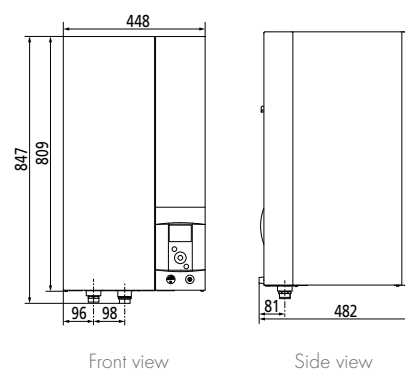
**Outdoor Inverter unit
Alfea Extensa A.I. 5, 6 and 8**



**Outdoor Inverter unit
Alfea Extensa A.I. 10**



**Indoor hydraulic
module**

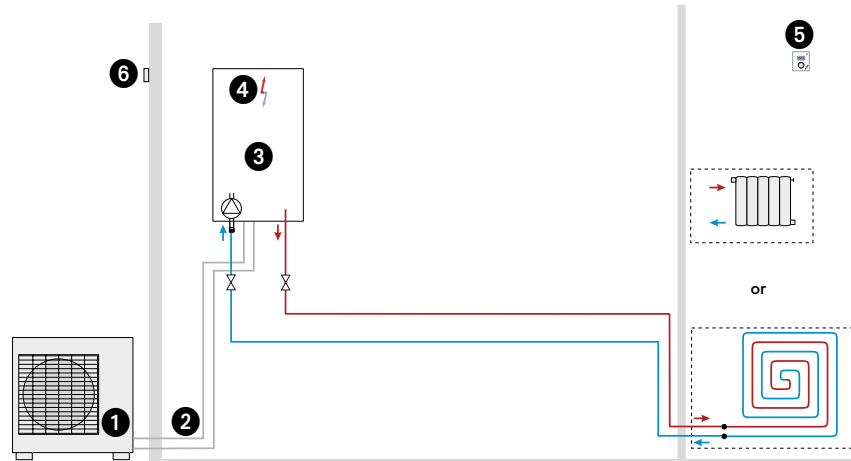


ALFEA EXTENSA

Installation schematics

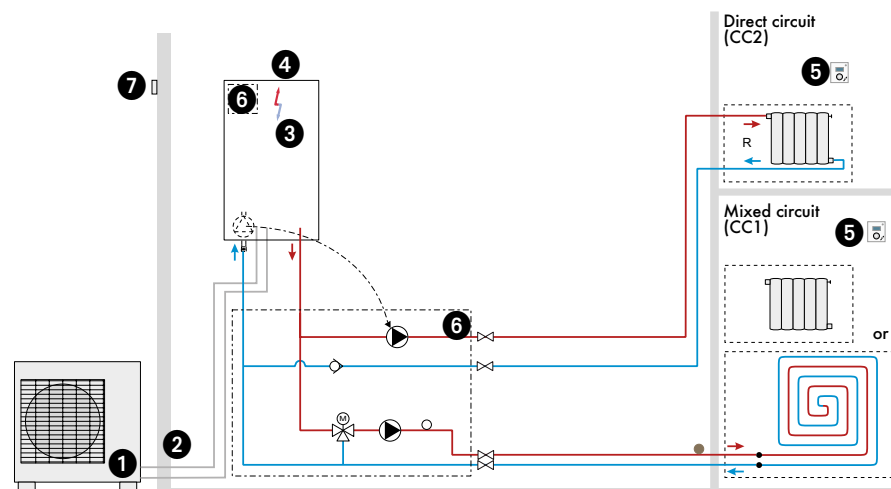
ALFEA EXTENSA A.I.: 1 HEATING ZONE

- ❶ Outdoor unit and ground support*
- ❷ Refrigerant connections*
- ❸ Hydraulic module
- ❹ Electric back-up heater
- ❺ Room sensor*
- ❻ Outdoor sensor



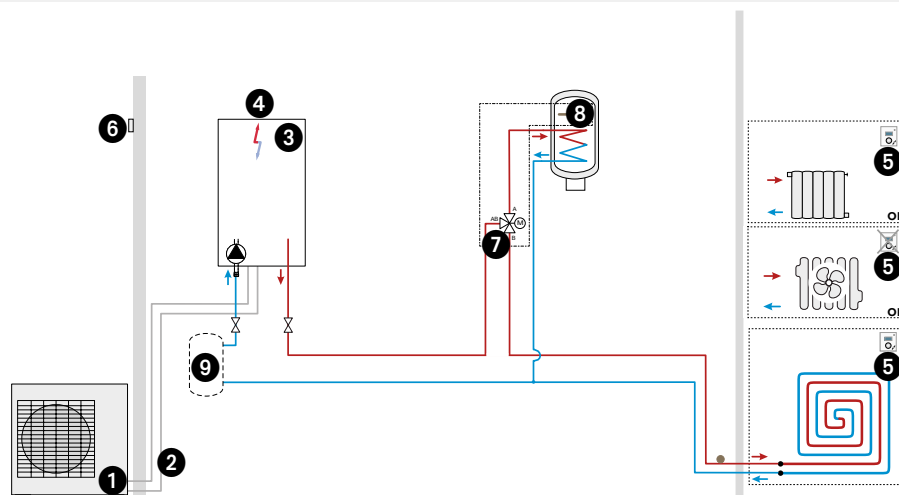
ALFEA EXTENSA A.I.: 2 HEATING ZONES

- ❶ Outdoor unit and ground support*
- ❷ Refrigerant connections*
- ❸ Hydraulic module
- ❹ Electric back-up heater
- ❺ Room sensor*
- ❻ 2 zones kit*
- ❼ Outdoor sensor



ALFEA EXTENSA A.I.: 1 HEATING ZONE + WATER TANK

- ❶ Outdoor unit and ground support*
- ❷ Refrigerant connections*
- ❸ Hydraulic module
- ❹ Electric back-up heater
- ❺ Room sensor*
- ❻ Outdoor sensor
- ❼ DHW kit*
- ❽ Water tank*
- ❾ Buffer tank**



*Option - **Depending on type of heating devices and volume of water in heating zone

ALFEA EXTENSA DUO

Split air-to-water heat pump for improved performances (heating + DHW)
Average temperature solution for all projects



Indoor hydraulic module



Outdoor Inverter unit



Product

- Integrated DHW storage tank (190L)
- COP up to 4.52 (+7°C / +35°C)
- Compatible with all kinds of low temperature heating devices (underfloor heating/cooling, radiators, fan coils)
- Intuitive interface and simplified use
- **NAVISTEM 400S** regulator
- Integrated 16L buffer tank
- Patented coaxial heat exchanger
- Inverter regulation
- Possibility to manage an electric radiator heating zone from the heat pump control panel (option)
- Possibility of remote piloting through a smartphone or a tablet, thanks to the Cozytouch compatibility

DESCRIPTION

- Suitable for new build and renovation
- 4 models: 5 to 10 kW - single-phase
- Heating and DHW integrated
- Performing heat pump working with outside temperature from -20°C to +35°C
- Average temperature heating (max. 55°C)

AVAILABLE OPTIONS

- 2 zones kit (plug-and-play)
- Cooling kit
- Boiler connection kit
- Room sensor

SUPPLIES

Indoor hydraulic module

- DHW storage tank integrated (190L)
- Coaxial exchanger immersed in buffer tank
- Low consumption circulation pump
- Outdoor sensor
- Expansion vessel, pressure meter, etc.
- Electric back-up heater*

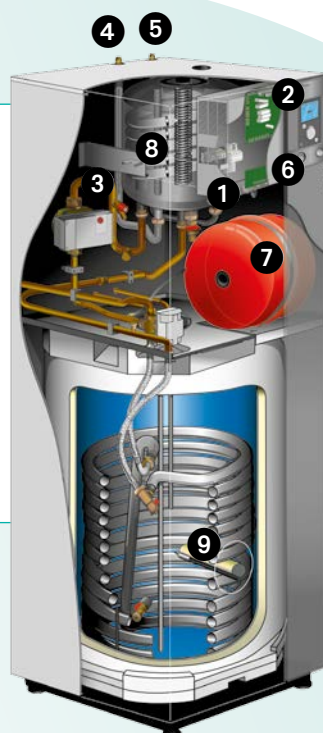
Outdoor Inverter unit

- Refrigerant circuit (R410A)
- Twin Rotary compressor

*Models without electric back-up available

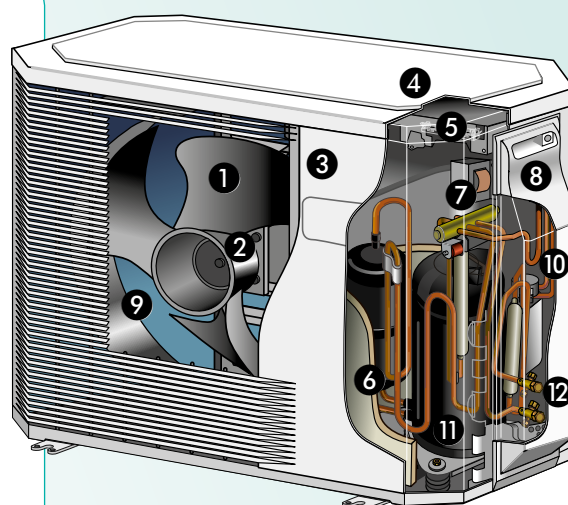
INDOOR HYDRAULIC MODULE

- 1 Electric board
- 2 User interface/regulator
- 3 Low consumption circulation pump
- 4 "Gas" refrigeration connection
- 5 "Liquid" refrigeration connection
- 6 Manometer
- 7 Expansion vessel
- 8 Coaxial heat exchanger
- 9 DHW electric back-ups



OUTDOOR INVERTER UNIT

- 1 Low-noise, high-output ventilator
- 2 Electric variable speed motor
- 3 "Inverter" control module
- 4 Control lights and buttons
- 5 Connection terminal blocks (power supply and interconnection)
- 6 Refrigerant accumulator bottle
- 7 Cycle reversing valve
- 8 Anti-corrosion treated metal cover
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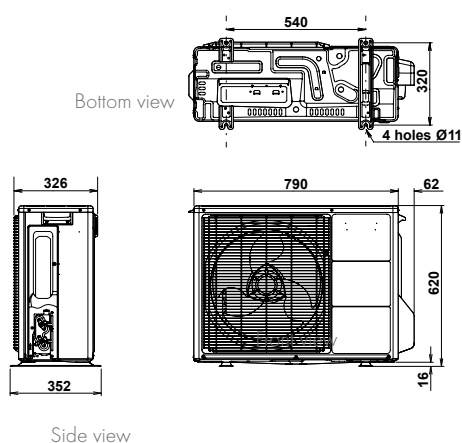
TECHNICAL CHARACTERISTICS AND PERFORMANCES

	UNIT	ALFEA EXTENSA DUO A.I. 5	ALFEA EXTENSA DUO A.I. 6	ALFEA EXTENSA DUO A.I. 8	ALFEA EXTENSA DUO A.I. 10
REFRIGERANT		R410A	R410A	R410A	R410A
MAIN CHARACTERISTICS					
Heating capacity +7°C/+35°C – Underfloor Heating	kW	4.50	6.00	7.50	10.00
COP +7°C/+35°C – Underfloor Heating		4.52	4.26	4.08	4.02
Heating capacity -7°C/+35°C – Underfloor Heating	kW	4.10	4.60	5.70	7.40
COP -7°C/+35°C – Underfloor Heating		2.79	2.64	2.56	2.49
Heating capacity +7°C/+45°C – Low T°radiators	kW	4.50	5.10	6.20	8.27
COP +7°C/+45°C – Low T°radiators		3.44	3.40	3.32	3.27
Heating capacity -7°C/+45°C – Low T°radiators	kW	4.10	4.45	5.05	7.40
COP -7°C/+45°C – Low T°radiator		2.20	2.18	2.04	2.00
Heating capacity +7°C/+55°C – Radiators	kW	4.50	4.50	5.00	7.00
COP +7°C/+55°C – Radiators		2.51	2.51	2.58	2.45
Heating capacity -7°C/+55°C – Radiators	kW	3.70	3.85	5.20	7.00
COP -7°C/+55°C – Radiators		1.68	1.65	1.56	1.69
Additional electric back-up heater	kW	3	3	3	3
ENERGY EFFICIENCY & ACOUSTIC CHARACTERISTICS					
Energy class - Heating (35°C/55°C)	-	A++ / A+	A++ / A+	A++ / A+	A++ / A+
Thermal power (35°C/55°C)	kW	4 / 4	5 / 5	7 / 6	8 / 8
Seasonal energy efficiency - Heating (35°C/55°C) with outdoor sensor	%	171 / 117	171 / 117	158 / 120	157 / 115
Seasonal energy efficiency - Heating (35°C/55°C)	%	169 / 115	169 / 115	156 / 118	155/113
Annual energy consumption - Heating (35°C/55°C)	kWh	2160 / 3027	2505 / 3180	3375 / 3886	4415 / 5415
Sound power level (indoor/outdoor) ⁽¹⁾	dB(A)	46 / 63	46 / 63	46 / 69	46 / 69
Declared load profile - DHW	-	L	L	L	L
Energy class - DHW	-	A+	A+	A+	A+
Annual energy consumption - DHW	kWh	880	880	880	880
Seasonal energy efficiency (%) - DHW	%	120	120	120	120
INDOOR HYDRAULIC MODULE					
Noise level ⁽²⁾	dB(A)	39	39	39	39
Net weight/filled weight ⁽³⁾	kg	152 / 373	152 / 373	152 / 373	152 / 373
Power supply		230V / 50Hz	230V / 50Hz	230V / 50Hz	230V / 50Hz
OUTDOOR UNIT					
Noise level ⁽⁴⁾	dB(A)	41	41	47	47
Operating weight	kg	41	41	42	60
REFRIGERANT CHARACTERISTICS					
Min./max. length	m	5 / 30	5 / 30	5 / 30	5 / 30
Max. difference in height	m	20	20	20	20
R410A factory load	g	1100	1100	1400	1800
Quantity of refrigerant in tons of CO ₂ equivalent	t	2	2	3	4

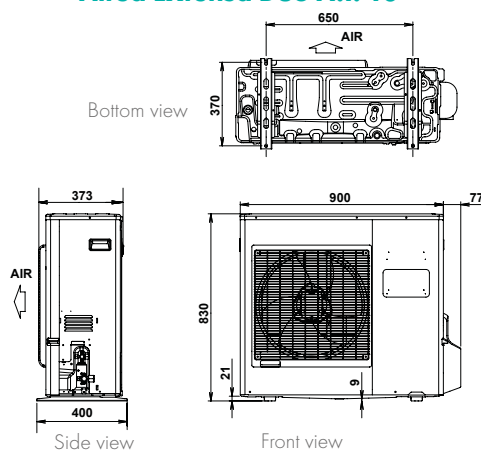
(1) Sound power level is a laboratory measurement of the sound power emitted by the product, but it does not correspond to the sound perceived. Used by acoustics specialists, it allows to measure the sound pressure level of the product in its working environment. - (2) Acoustic pressure at 1m from HP, 1,5 m height, open field, directivity 2. - (3) Models with electric back-up. - (4) Acoustic pressure at 5m from HP, 1,5 m height, open field, directivity 2.

DIMENSIONS (MM)

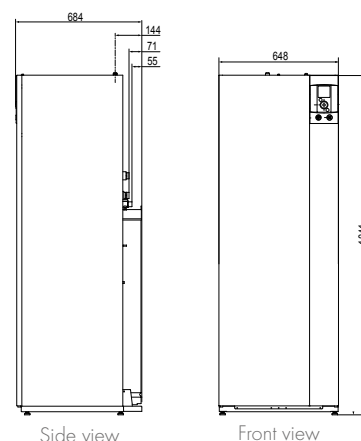
**Outdoor Inverter unit
Alfea Extensa Duo A.I. 5, 6 and 8**



**Outdoor Inverter unit
Alfea Extensa Duo A.I. 10**



**Indoor hydraulic
module**

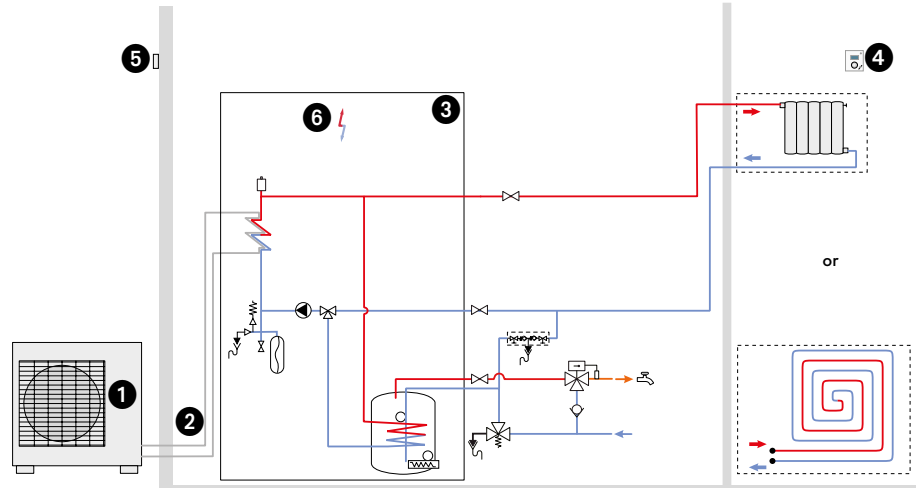


ALFEA EXTENSA DUO

Installation schematics

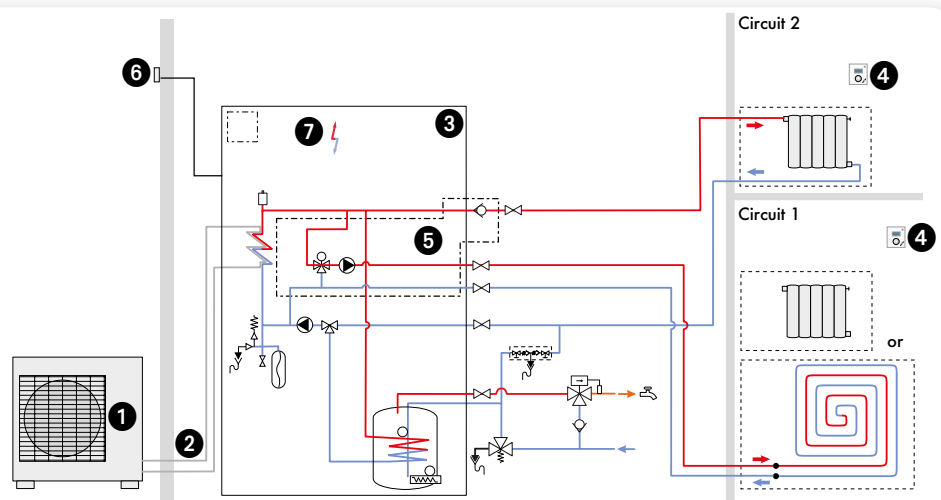
ALFEA EXTENSA DUO A.I.: 1 HEATING ZONE

- ❶ Outdoor unit and ground support*
- ❷ Refrigerant connections*
- ❸ Hydraulic module with integrated DHW
- ❹ Room sensor*
- ❺ Outdoor sensor
- ❻ Electric back-up water heater



ALFEA EXTENSA DUO A.I.: 2 HEATING ZONES

- ❶ Outdoor unit and ground support*
- ❷ Refrigerant connections*
- ❸ Hydraulic module with integrated DHW
- ❹ Room sensor*
- ❺ 2 zones (integrated in the hydraulic module)*
- ❻ Outdoor sensor
- ❼ Electric back-up water heater



ALFEA EXCELLIA

Split air-to-water heat pump for improved performances
High performance solution for large houses and/or cold climate



Indoor hydraulic module



Outdoor Inverter unit



Product

- COP up to 4.3 (+7°C / +35°C)
- Compatible with all kinds of heating devices (underfloor heating/cooling, radiators, fan coils)
- Intuitive interface and simplified use
- **NAVISTEM 400S** regulator
- Perfect solution for high heating demand
- Integrated 16L buffer tank
- Patented coaxial heat exchanger
- Inverter regulation
- Possibility to manage an electric radiator heating zone from the heat pump control panel (option)
- Possibility of remote piloting through a smartphone or a tablet, thanks to the Cozytouch compatibility

DESCRIPTION

- Suitable for new build and renovation
- 2 models: 11 and 14 kW - single-phase
- 3 models: 11, 14 and 16kW - three-phase
- Heating only
- Performing heat pump working with outside temperature from -25°C to +35°C
- Working temperature of 60°C, down to -20°C outside temperature

AVAILABLE OPTIONS

- 2 zones kit (plug-and-play kit)
- Cooling kit
- Separated hot water tank
- Boiler connection kit
- Room sensor

SUPPLIES

Indoor hydraulic module

- Coaxial exchanger immersed in buffer tank
- Low consumption circulation pump
- Expansion vessel, valve, etc.
- Electric panel and terminal blocks
- Electric back-up heater*

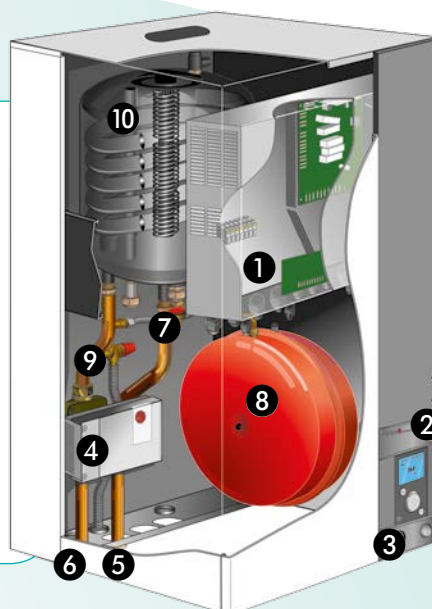
Outdoor Inverter unit

- Refrigerant circuit uses liquid reinjection technology during compression phase (R410A)
- Twin Rotary compressor
- Double fan

*Models without electric back-up available

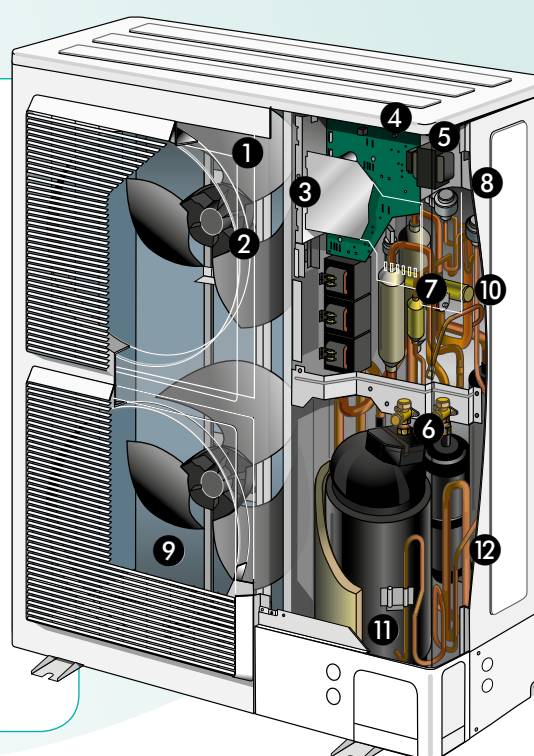
INDOOR HYDRAULIC MODULE

- ① Electric board
- ② User interface/regulator
- ③ Manometer
- ④ Low consumption circulation pump
- ⑤ Heating flow
- ⑥ Heating return
- ⑦ Refrigerant connections
- ⑧ Expansion vessel
- ⑨ Safety valve
- ⑩ Coaxial heat exchanger



OUTDOOR INVERTER UNIT

- ① Low-noise, high-output ventilator
- ② Electric variable speed motor
- ③ "Inverter" control module
- ④ Control lights and buttons
- ⑤ Connection terminal blocks (power supply and interconnection)
- ⑥ Refrigerant accumulator bottle
- ⑦ Cycle reversing valve
- ⑧ Anti-corrosion treated metal cover
- ⑨ High performance exchange surface evaporator; anti-corrosion treated hydrophilic aluminium fins and grooved copper tubes
- ⑩ Electronic expansion valve
- ⑪ Noise and temperature insulated "Inverter" compressor
- ⑫ Refrigerating connection valves (flared connectors) with protective cover



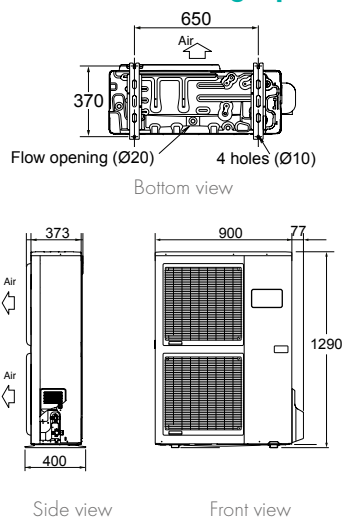
TECHNICAL CHARACTERISTICS AND PERFORMANCES

	UNIT	ALFEA EXCELLIA A.I. 11	ALFEA EXCELLIA A.I. 14	ALFEA EXCELLIA A.I. TRI 11	ALFEA EXCELLIA A.I. TRI 14	ALFEA EXCELLIA A.I. TRI 16
REFRIGERANT		R410A	R410A	R410A	R410A	R410A
MAIN CHARACTERISTICS						
Heating capacity +7°C/+35°C – Underfloor Heating	kW	10.80	13.50	10.80	13.00	15.17
COP +7°C/+35°C - Underfloor Heating		4.25	4.18	4.30	4.18	4.10
Heating capacity -7°C/+35°C – Underfloor Heating	kW	10.38	11.54	10.38	12.20	12.98
COP -7°C/+35°C - Underfloor Heating		2.40	2.27	2.43	2.38	2.40
Heating capacity +7°C/+45°C – Low T°radiators	kW	9.05	11.32	9.90	12.10	12.75
COP +7°C/+45°C – Low T°radiators		3.21	3.07	3.32	3.20	3.21
Heating capacity -7°C/+45°C – Low T°radiators	kW	9.16	11.41	9.98	10.70	12.95
COP -7°C/+45°C – Low T°radiator		2.00	1.93	2.16	2.08	2.03
Heating capacity +7°C/+55°C – Radiators	kW	7.59	9.48	9.29	10.60	12.24
COP +7°C/+55°C – Radiators		2.47	2.40	2.64	2.41	2.48
Heating capacity -7°C/+55°C – Radiators	kW	7.57	9.20	9.27	10.10	12.00
COP -7°C/+55°C – Radiators		1.66	1.81	1.82	1.79	1.74
Additional adjustable electric back-up heater	kW	6	6	9	9	9
ENERGY EFFICIENCY & ACOUSTIC CHARACTERISTICS						
Energy class - Heating (35°C/55°C)	-	A++ / A+	A++ / A+	A++ / A+	A++ / A+	A++ / A+
Rated heat output (35°C/55°C)	kW	11 / 9	13 / 11	11 / 9	13 / 11	14 / 13
Seasonal energy efficiency - Heating (35°C/55°C) with outdoor sensor	%	153 / 114	150 / 115	156 / 114	152 / 119	151 / 119
Seasonal energy efficiency - Heating (35°C/55°C)	%	151 / 112	148 / 113	154 / 112	150 / 117	149 / 117
Annual energy consumption - Heating (35°C/55°C)	kWh	6062 / 6623	6824 / 8041	5930 / 6669	6738 / 7803	7408 / 9062
Sound power level (indoor/outdoor) ⁽¹⁾	dB(A)	46 / 69	46 / 69	46 / 68	46 / 69	46 / 69
INDOOR HYDRAULIC MODULE						
Noise level ⁽²⁾	dB(A)	39	39	39	39	39
Net weight/filled weight ⁽³⁾	kg	46 / 62	46 / 62	46 / 62	46 / 62	46 / 62
Power supply		230 V / 50 Hz	230 V / 50 Hz	400 V / 50 Hz	400 V / 50 Hz	400 V / 50 Hz
OUTDOOR UNIT						
Noise level ⁽⁴⁾	dB (A)	47	47	46	47	47
Operating weight	kg	92	92	99	99	99
REFRIGERANT CHARACTERISTICS						
Min./max. length	m	5 / 20	5 / 20	5 / 20	5 / 20	5 / 20
Max. difference in height	m	15	15	15	15	15
R410A factory load	g	2500	2500	2500	2500	2500
Quantity of refrigerant in tons of CO ₂ equivalent	t	5	5	5	5	5

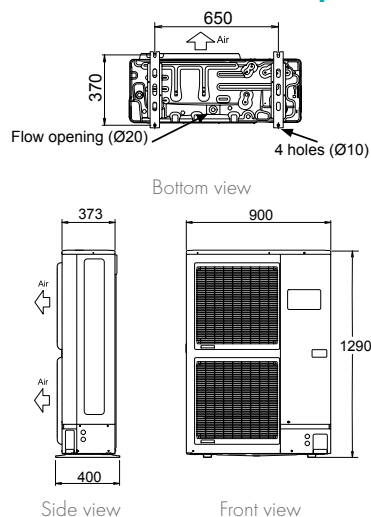
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DIMENSIONS (MM)

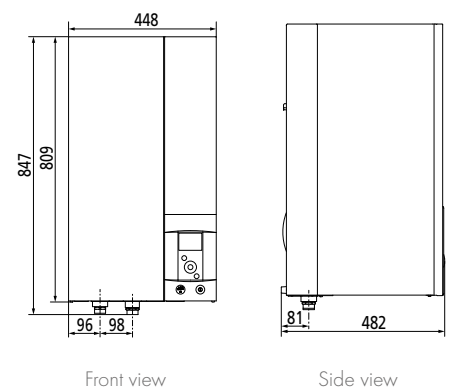
**Outdoor Inverter unit Alfea Excellia
A.I. 11 and 14 single-phase**



**Outdoor Inverter unit Alfea Excellia
A.I. 11, 14 and 16 three-phase**



**Indoor hydraulic
module**

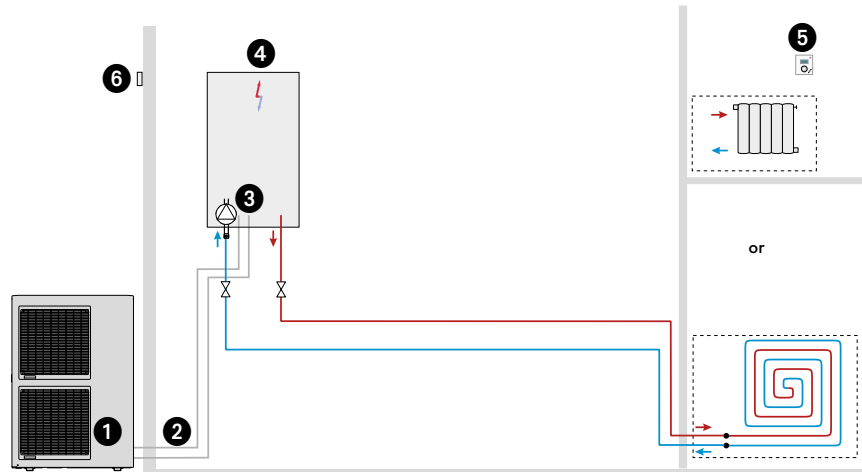


ALFEA EXCELLIA

Installation schematics

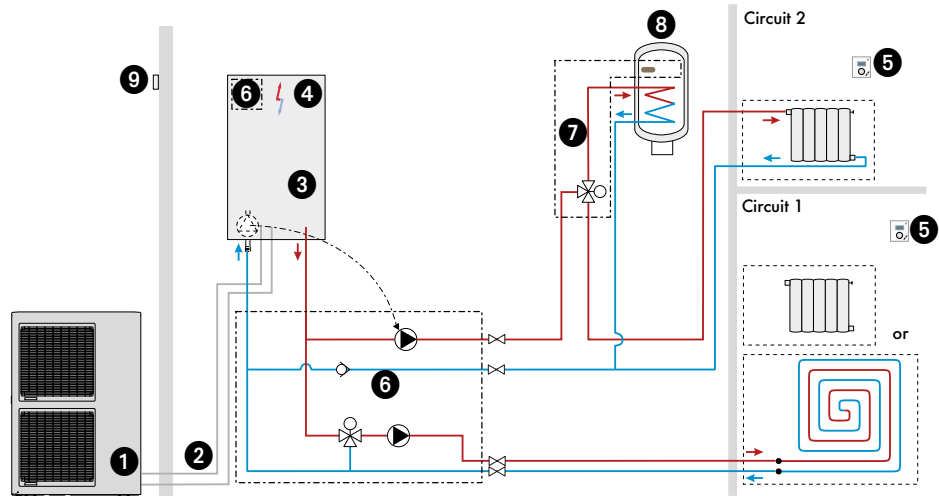
ALFEA EXCELLIA A.I.: 1 HEATING ZONE

- ❶ Outdoor unit and ground support*
- ❷ Refrigerant connections*
- ❸ Hydraulic module
- ❹ Electric back-up heater
- ❺ Room sensor*
- ❻ Outdoor sensor



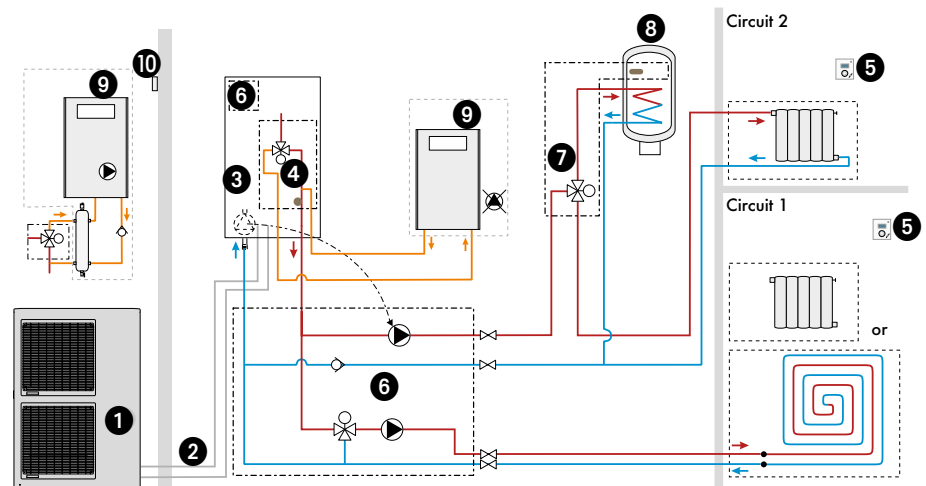
ALFEA EXCELLIA A.I.: 2 HEATING ZONES AND DHW PRODUCTION

- ❶ Outdoor unit and ground support*
- ❷ Refrigerant connections*
- ❸ Hydraulic module
- ❹ Electric back-up heater
- ❺ Room sensor*
- ❻ 2 zones kit*
- ❼ DHW kit*
- ❽ DHW tank*
- ❾ Outdoor sensor



ALFEA EXCELLIA A.I. CONNECTED TO BOILER: 2 HEATING ZONES + DHW PRODUCTION

- ❶ Outdoor unit and ground support*
- ❷ Refrigerant connections*
- ❸ Hydraulic module
- ❹ Boiler connection kit*
- ❺ Room sensor*
- ❻ 2 zones kit*
- ❼ DHW kit*
- ❽ DHW tank*
- ❾ Boiler
- ❿ Outdoor sensor



ALFEA EXCELLIA DUO

Split air-to-water heat pump for improved performances (heating + DHW)
High performance solution for large houses and/or cold climate



Indoor hydraulic module



Outdoor Inverter unit

Product

- Integrated DHW storage tank (190L)
- COP up to 4.3 (+7°C / +35°C)
- Compatible with all kinds of heating devices (underfloor heating/cooling, radiators, fan coils)
- Intuitive interface and simplified use
- **NAVISTEM 400S** regulator
- Perfect solution for high heating demand
- Integrated 16L buffer tank
- Patented coaxial heat exchanger
- Inverter regulation
- Possibility to manage an electric radiator heating zone from the heat pump control panel (option)
- Possibility of remote piloting through a smartphone or a tablet, thanks to the Cozytouch compatibility

DESCRIPTION

- Suitable for new build and renovation
- 2 models: 11 and 14 kW - single-phase
- 3 models: 11, 14 and 16 kW - three-phase
- Heating and DHW integrated
- Performing heat pump working with outside temperature from -25°C to +35°C
- Working temperature of 60°C, down to -20°C outside temperature

AVAILABLE OPTIONS

- 2 zones kit (plug-and-play)
- Cooling kit
- Boiler connection kit
- Room sensor

SUPPLIES

Indoor hydraulic module

- DHW storage tank integrated (190L)
- Coaxial exchanger immersed in buffer tank
- Low consumption circulation pump
- Expansion vessel, pressure meter, etc.
- Outdoor sensor
- Electric back-up heater*

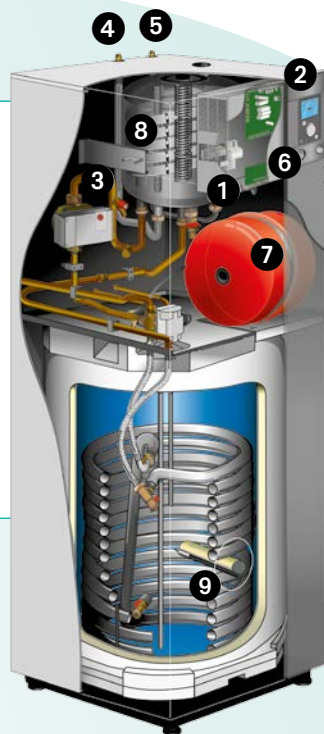
Outdoor Inverter unit

- Refrigerant circuit with liquid reinjection technology during compression phase (R410A)
- Double fan
- Full Inverter control

*Models without electric back-up available

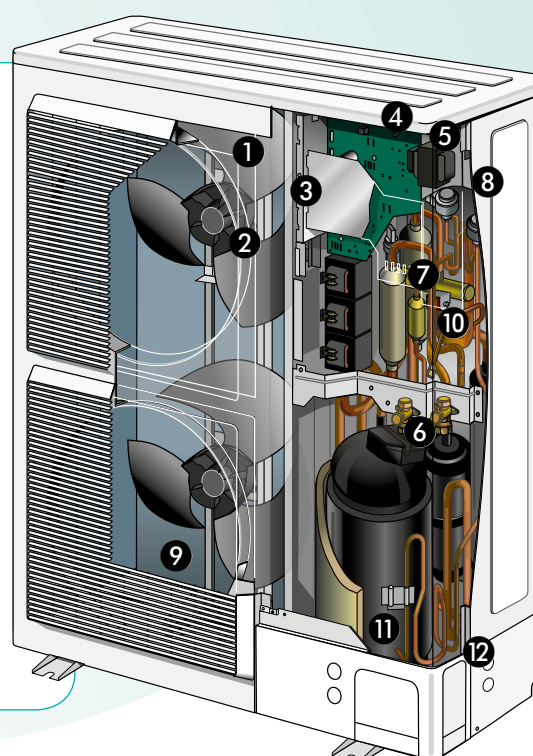
INDOOR HYDRAULIC MODULE

- 1 Electric board
- 2 User interface/regulator
- 3 Low consumption circulation pump
- 4 "Gas" refrigeration connection
- 5 "Liquid" refrigeration connection
- 6 Manometer
- 7 Expansion vessel
- 8 Coaxial heat exchanger
- 9 DHW electric back-ups



OUTDOOR INVERTER UNIT

- 1 Low-noise, high-output ventilator
- 2 Electric variable speed motor
- 3 "Inverter" control module
- 4 Control lights and buttons
- 5 Connection terminal blocks (power supply and interconnection)
- 6 Refrigerant accumulator bottle
- 7 Cycle reversing valve
- 8 Anti-corrosion treated metal cover
- 9 High performance exchange surface evaporator; anti-corrosion treated hydrophilic aluminium fins and grooved copper tubes
- 10 Electronic expansion valve
- 11 Noise and temperature insulated "Inverter" compressor
- 12 Refrigerating connection valves (flared connectors) with protective cover



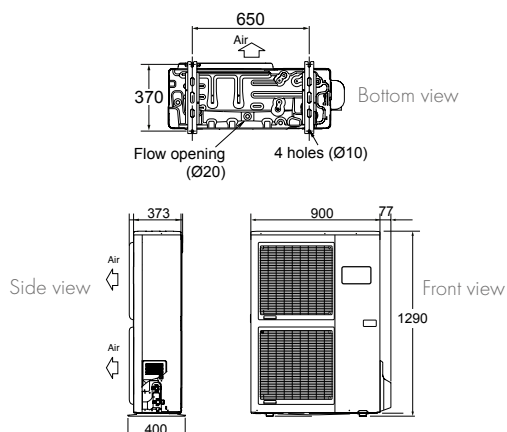
TECHNICAL CHARACTERISTICS AND PERFORMANCES

	UNIT	ALFEA EXCELLIA DUO A.I. 11	ALFEA EXCELLIA DUO A.I. 14	ALFEA EXCELLIA DUO A.I. TRI 11	ALFEA EXCELLIA DUO A.I. TRI 14	ALFEA EXCELLIA DUO A.I. TRI 16
REFRIGERANT		R410A	R410A	R410A	R410A	R410A
MAIN CHARACTERISTICS						
Heating capacity +7°C/+35°C – Underfloor Heating	kW	10.80	13.50	10.80	13.00	15.17
COP +7°C/+35°C - Underfloor Heating		4.25	4.18	4.30	4.18	4.10
Heating capacity -7°C/+35°C – Underfloor Heating	kW	10.38	11.54	10.38	12.20	12.98
COP -7°C/+35°C - Underfloor Heating		2.40	2.27	2.43	2.38	2.40
Heating capacity +7°C/+45°C – Low T°radiators	kW	9.05	11.32	9.90	12.10	12.75
COP +7°C/+45°C – Low T°radiators		3.21	3.07	3.32	3.20	3.21
Heating capacity -7°C/+45°C – Low T°radiators	kW	9.16	11.41	9.98	10.70	12.95
COP -7°C/+45°C – Low T°radiator		2.00	1.93	2.16	2.08	2.03
Heating capacity +7°C/+55°C - Radiators	kW	7.59	9.48	9.29	10.60	12.24
COP +7°C/+55°C – Radiators		2.47	2.40	2.64	2.41	2.48
Heating capacity -7°C/+55°C – Radiators	kW	7.57	9.20	9.27	10.10	12.00
COP -7°C/+55°C – Radiators		1.66	1.81	1.82	1.79	1.74
Additional electric back-up heater	kW	6	6	9	9	9
ENERGY EFFICIENCY & ACOUSTIC CHARACTERISTICS						
Energy class - Heating (35°C/55°C)	-	A++ / A+	A++ / A+	A++ / A+	A++ / A+	A++ / A+
Rated heat output (35°C/55°C)	kW	11 / 9	13 / 11	11 / 9	13 / 11	14 / 13
Seasonal energy efficiency - Heating (35°C/55°C) with outdoor sensor	%	153 / 114	150 / 115	156 / 114	152 / 119	151 / 119
Seasonal energy efficiency - Heating (35°C/55°C)	%	151 / 112	148 / 113	154 / 112	150 / 117	149 / 117
Annual energy consumption - Heating (35°C/55°C)	kWh	6062 / 6623	6824 / 8041	5930 / 6669	6738 / 7803	7408 / 9062
Sound power level (indoor/outdoor) ⁽¹⁾	dB(A)	46 / 69	46 / 69	46 / 68	46 / 69	46 / 69
Declared load profile - DHW	-	L	L	L	L	L
Energy class - DHW	-	A	A	A	A	A
Annual water heating energy consumption	kWh	1166	1166	1166	1166	1166
Seasonal water heating energy efficiency (%)	%	88	88	88	88	88
INDOOR HYDRAULIC MODULE						
Noise level ⁽²⁾	dB(A)	39	39	39	39	39
Net weight/filled weight ⁽³⁾	kg	155 / 373	155 / 373	155 / 373	155 / 373	155 / 373
Power supply		230 V / 50 Hz	230 V / 50 Hz	400 V / 50 Hz	400 V / 50 Hz	400 V / 50 Hz
OUTDOOR UNIT						
Noise level ⁽⁴⁾	dB(A)	47	47	46	47	47
Operating weight	kg	92	92	99	99	99
REFRIGERANT CHARACTERISTICS						
Min./max. length	m	5 / 20	5 / 20	5 / 20	5 / 20	5 / 20
Max. difference in height	m	15	15	15	15	15
R410A factory load	g	2500	2500	2500	2500	2500
Quantity of refrigerant in tons of CO ₂ equivalent	t	5	5	5	5	5

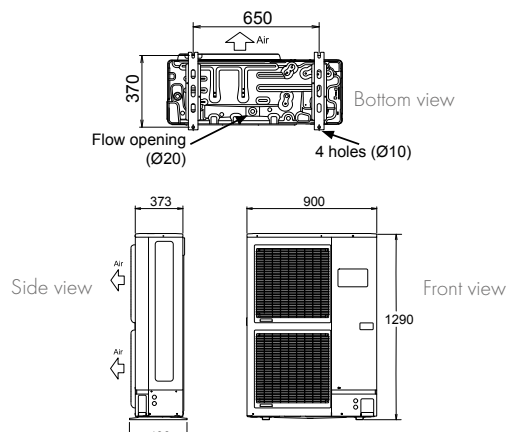
(1) Sound power level is a laboratory measurement of the sound power emitted by the product, but it does not correspond to the sound perceived. Used by acoustics specialists, it allows to measure the sound pressure level of the product in its working environment. - (2) Acoustic pressure at 1m from HP, 1,5 m height, open field, directivity 2. - (3) Models with electric back-up. - (4) Acoustic pressure at 5m from HP, 1,5 m height, open field, directivity 2.

DIMENSIONS (MM)

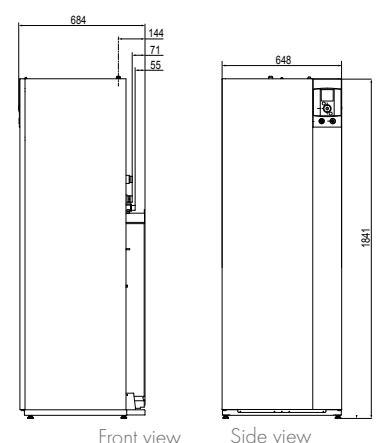
Outdoor Inverter unit Alfea Excellia Duo A.I. 11 and 14 single-phase



Outdoor Inverter unit Alfea Excellia Duo A.I. 11, 14 and 16 three-phases



Indoor hydraulic module

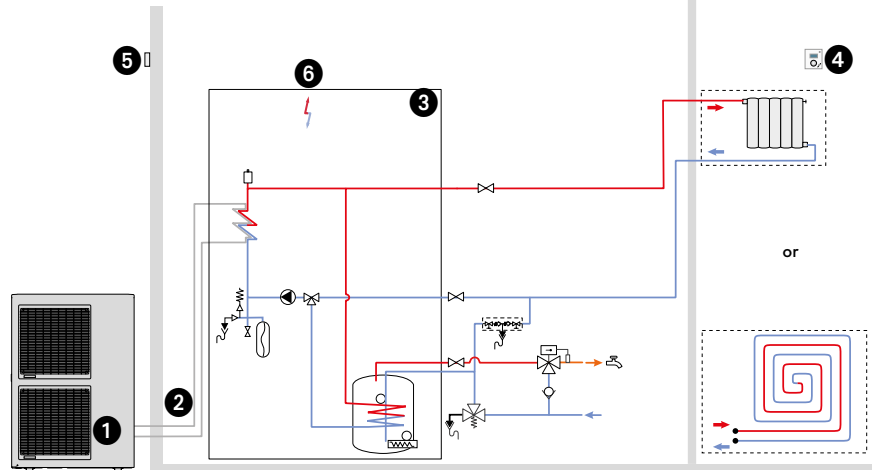


ALFEA EXCELLIA DUO

Installation schematics

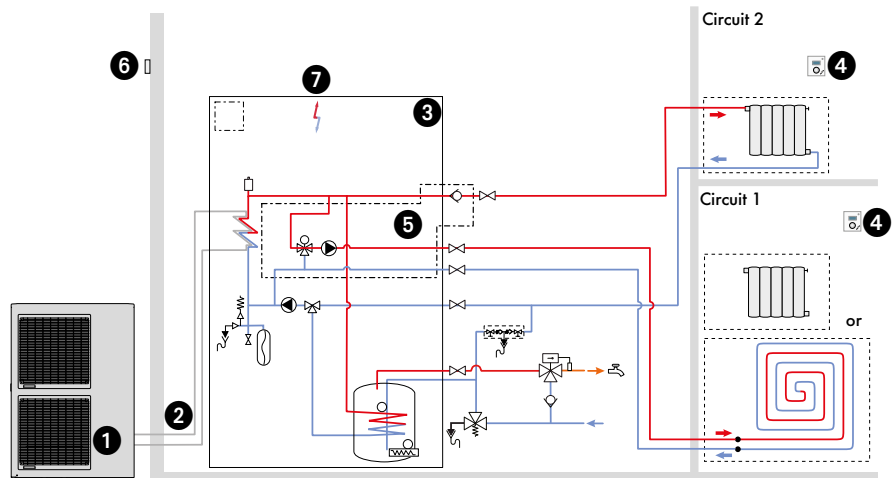
ALFEA EXCELLIA DUO A.I.: 1 HEATING ZONE

- ❶ Outdoor unit and ground support*
- ❷ Refrigerant connections*
- ❸ Hydraulic module with integrated DHW
- ❹ Room sensor*
- ❺ Outdoor sensor
- ❻ Electric back-up heater



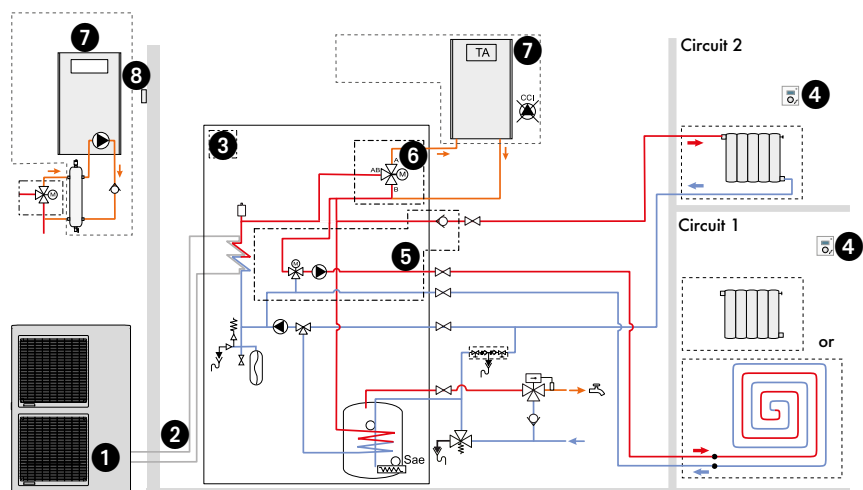
ALFEA EXCELLIA DUO A.I.: 2 HEATING ZONES

- ❶ Outdoor unit and ground support*
- ❷ Refrigerant connections*
- ❸ Hydraulic module with integrated DHW
- ❹ Room sensor*
- ❺ 2 zones kit*
(integrated in the hydraulic module)
- ❻ Outdoor sensor
- ❼ Electric back-up heater



ALFEA EXCELLIA DUO A.I. CONNECTED TO BOILER: BACK-UP AND 2 HEATING ZONES

- ❶ Outdoor unit and ground support*
- ❷ Refrigerant connections*
- ❸ Hydraulic module with integrated DHW
- ❹ Room sensor*
- ❺ 2 zones kit*
(integrated in the hydraulic module)
- ❻ Boiler connection kit*
- ❼ Boiler
- ❽ Outdoor sensor



ALFEA HYBRID DUO OIL LOW NOX

Split air-to-water heat pump with built-in oil burner (heating + DHW)
Hybrid heat pump solution for renovation projects



Indoor hydraulic module



Outdoor Inverter unit

Product

- Built-in 25 kW low NOx oil burner (<80 mg/kWh)
- Integrated 125L stainless steel DHW tank
- High temperature solution (80°C) for renovation projects
- Ergonomic control: outdoor sensor control (standard supply) and programmable indoor temperature
- **NAVISTEM 200S** regulator
- COP up to 4.08 (+7°C / +35°C)
- Patented coaxial heat exchanger
- Inverter regulation
- Low energy consumption circulation pump
- Easy installation and maintenance : hinged heating element access panel, accessible components, maintenance platform integrated in burner

DESCRIPTION

- Replacement of existing oil boiler
- 4 models: 11 to 14kW – single-phase (chimney/flue)
- 6 models: 11 to 16kW – three-phase (chimney/flue)
- Heating and DHW integrated
- 1 or 2 heating zones
- Performing heat pump working with outside temperature from -25°C to +35°C

AVAILABLE OPTIONS

- 2 zones kit (plug-and-play kit)
- Room sensor

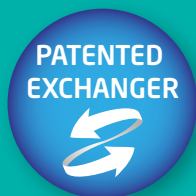
SUPPLIES

Indoor hydraulic module

- Fully integrated system with coaxial exchanger and oil exchanger
- 125L stainless steel DHW tank
- Built-in 25 kW low NOx oil burner (<80 mg/kWh)
- Heat circulation pump
- Expansion vessel, valve, pressure meter
- Outdoor sensor
- Motorised mixing valve

Outdoor Inverter unit

- Outdoor Inverter unit with Twin Rotary compressor



Energy class



55 °C

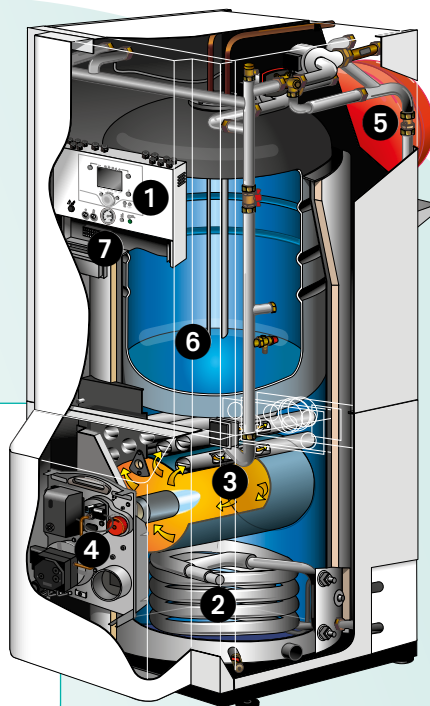
A+



A

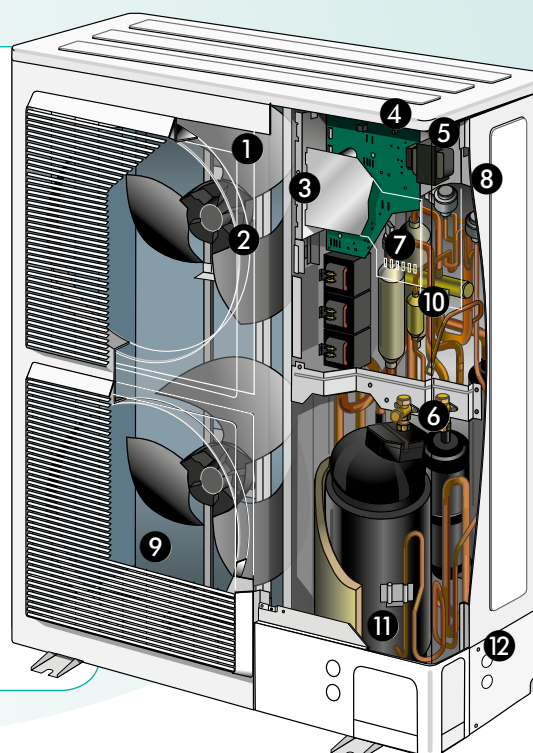
INDOOR HYDRAULIC MODULE

- ❶ Control panel
- ❷ Coaxial heat exchanger
- ❸ Heating element
- ❹ Oil burner
- ❺ Heating expansion vessel
- ❻ Hot water tank
- ❼ Electric distribution board



OUTDOOR INVERTER UNIT

- ❶ Low-noise, high-output ventilator
- ❷ Electric variable speed motor
- ❸ "Inverter" control module
- ❹ Control lights and buttons
- ❺ Connection terminal blocks (power supply and interconnection)
- ❻ Refrigerant accumulator bottle
- ❼ Cycle reversing valve
- ❽ Anti-corrosion treated metal cover
- ❾ High performance exchange surface evaporator; anti-corrosion treated hydrophilic aluminium fins and grooved copper tubes
- ❿ Electronic expansion valve
- ⓫ Noise and temperature insulated "Inverter" compressor
- ⓫ Refrigerating connection valves (flared connectors) with protective cover



TECHNICAL CHARACTERISTICS AND PERFORMANCES

	UNIT	ALFEA HYBRID DUO OIL LOW NO _x 11	ALFEA HYBRID DUO OIL LOW NO _x 14+	ALFEA HYBRID DUO OIL LOW NO _x TRI 11	ALFEA HYBRID DUO OIL LOW NO _x TRI 14	ALFEA HYBRID DUO OIL LOW NO _x TRI 16
REFRIGERANT		R410A	R410A	R410A	R410A	R410A
MAIN CHARACTERISTICS						
Heating capacity +7°C/+35°C - Underfloor Heating	kW	10.30	13.50	10.60	13.25	14.89
COP +7°C/+35°C	-	3.95	3.80	3.90	4.08	3.96
Heating capacity -7°C/+35°C - Underfloor Heating	kW	10.10	11.22	9.75	13.00	13.50
COP -7°C /+35°C	-	2.56	2.4	2.65	2.51	2.5
Heating capacity +7°C/+45°C - Low T° radiators	kW	9.05	11.32	10.10	12.60	13.00
COP +7°C/+55°C	-	3.21	3.07	3.36	3.31	3.25
Heating capacity -7°C/+45°C - Low T° radiators	kW	8.33	10.41	8.66	12.5	13
COP -7°C/+45°C	-	2.06	1.99	2.14	2.08	2.04
Nominal thermal power of oil back-up	kW	25	25	25	25	25
ErP	ENERGY EFFICIENCY CHARACTERISTICS - HEATING - AVERAGE CLIMAT					
Energy class - Heating (55°C)	-	A+	A+	A+	A+	A+
Thermal power - heat pump (55°C)	kW	10	13	11	13	14
Seasonal energy efficiency - Heating (55°C) with outdoor sensor	%	113	113	118	116	115
Seasonal energy efficiency - Heating (55°C)	%	111	111	116	114	113
Annual energy consumption - Heating (55°C)	kWh	7266	8806	7424	8896	9734
Sound power level (indoor/outdoor) ⁽¹⁾	dB(A)	44 / 69	44 / 70	44 / 68	44 / 68	44 / 69
ErP	ENERGY EFFICIENCY CHARACTERISTICS - DHW - AVERAGE CLIMAT					
Declared load profile	-	M	M	M	M	M
Energy class - DHW	-	A	A	A	A	A
Annual energy consumption - DHW	kWh	616	616	616	616	616
Seasonal energy efficiency (%) - DHW	%	82	82	82	82	82
INDOOR HYDRAULIC MODULE						
Noise level on Thermodynamic mode ⁽²⁾	dB(A)	36	36	36	36	36
Dim. chimney version h x w x d	mm	1711x670x1075	1711x670x1075	1711x670x1075	1711x670x1075	1711x670x1075
Dim. room sealed system version h x w x d	mm	1711x670x1206	1711x670x1206	1711x670x1206	1711x670x1206	1711x670x1206
Net weight/filled weight	kg	215 / 482	215 / 482	215 / 482	215 / 482	215 / 482
HYDRAULIC CHARACTERISTICS						
Combustion chamber capacity	L	142	142	142	142	142
Max working pressure	bar	3	3	3	3	3
Expansion vessel capacity	L	18	18	18	18	18
ELECTRICAL CONNECTIONS						
Power supply	V / Hz	230 V / 50 Hz	230 V / 50 Hz	230 V / 50 Hz	230 V / 50 Hz	230 V / 50 Hz
Standby mode consumption	W	5	5	5	5	5
HYDRAULIC CONNECTIONS						
Ø Heating circ. inlet and outlet	" - mm	1 / 26x34	1 / 26x34	1 / 26x34	1 / 26x34	1 / 26x34
Ø DHW circ. inlet and outlet (male thread)	" - mm	3/4 / 20x27	3/4 / 20x27	3/4 / 20x27	3/4 / 20x27	3/4 / 20x27
CHIMNEY CONNECTION						
Ø Chimney inlet and outlet	m	125 / 139	125 / 139	125 / 139	125 / 139	125 / 139
Burner optimum depression	Pa	15	15	15	15	15
ROOM SEALED SYSTEM CONNECTION DEPENDING ON MODEL						
Ø Pipe	mm	80 / 125	80 / 125	80 / 125	80 / 125	80 / 125
OPERATING RANGE						
Min./max. hot/cold outdoor temperature (heat pump)	°C	-25 / +35	-25 / +35	-25 / +35	-25 / +35	-25 / +35
Heating flow water max T°	°C	80	80	80	80	80
Max water T°(heat pump)	°C	60	60	60	60	60
OUTDOOR UNIT						
Noise level ⁽³⁾	dB(A)	46	47	46	47	48
Operating weight	kg	92	92	99	99	99
Power supply	V / Hz	230 V / 50 Hz	230 V / 50 Hz	400 V / 50 Hz	400 V / 50 Hz	400 V / 50 Hz
REFRIGERANT CHARACTERISTICS						
R410A factory load	g	2500	2500	2500	2500	2500
Quantity of refrigerant in tons of CO ₂ equivalent	-	5	5	5	5	5
Min./max. length	m	5 / 20	5 / 20	5 / 20	5 / 20	5 / 20
Max. difference in height	m	15	15	15	15	15
Volume of tank	L	125	125	125	125	125

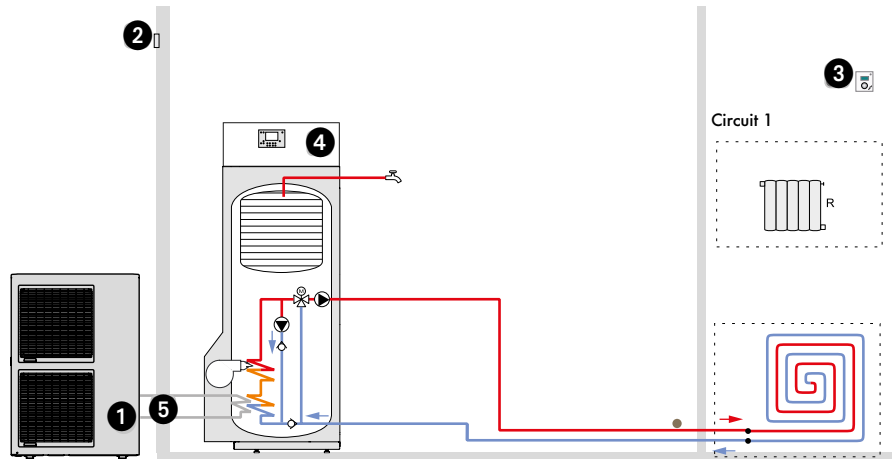
(1) Sound power level is a laboratory measurement of the sound power emitted by the product, but it does not correspond to the sound perceived. Used by acoustics specialists, it allows to measure the sound pressure level of the product in its working environment - (2) Acoustic pressure at 1m from HP, 1,5 m height, open field, directivity 2. - (3)Acoustic pressure at 5m from HP, 1,5 m height, open field, directivity 2.

ALFEA HYBRID DUO OIL LOW NOX

Installation schematics

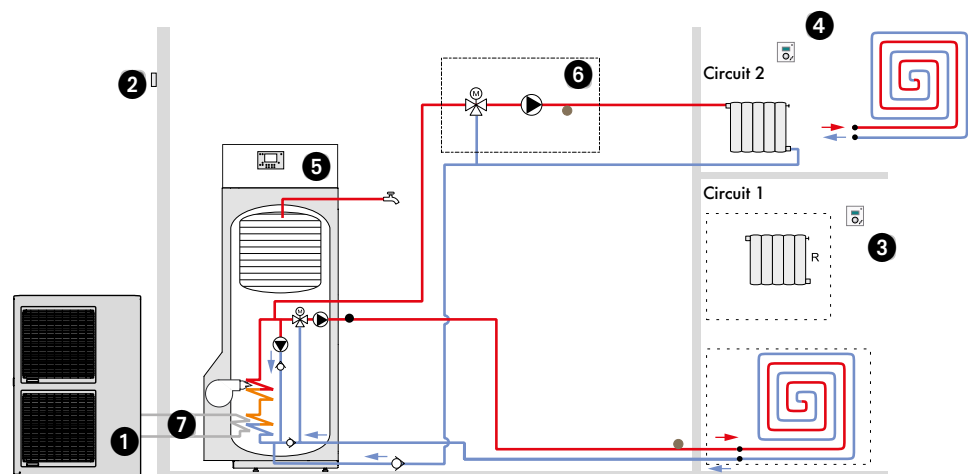
ALFEA HYBRID DUO OIL LOW NOX: 1 HEATING ZONE

- ❶ Outdoor Inverter unit
- ❷ Outdoor sensor
- ❸ Room sensor*
- ❹ Indoor hydraulic module with low NOx oil burner and DHW tank
- ❺ Refrigeration connections*



ALFEA HYBRID DUO OIL LOW NOX: 2 HEATING ZONES

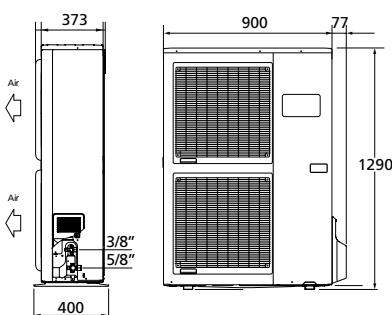
- ❶ Outdoor Inverter unit
- ❷ Outdoor sensor
- ❸ Room sensor zone 1*
- ❹ Room sensor zone 2*
- ❺ Indoor hydraulic module with low NOx oil burner and DHW tank
- ❻ 2 zones kit*
- ❼ Refrigeration connections*



*Option

DIMENSIONS (MM)

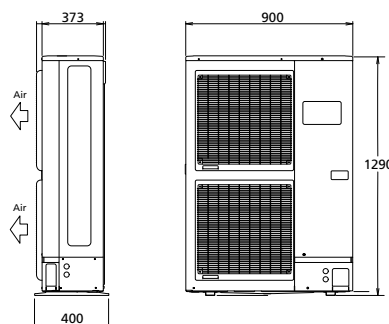
Outdoor Inverter unit Alfea Hybrid Duo Oil Low NOx 11 and 14 single-phase



Side view

Front view

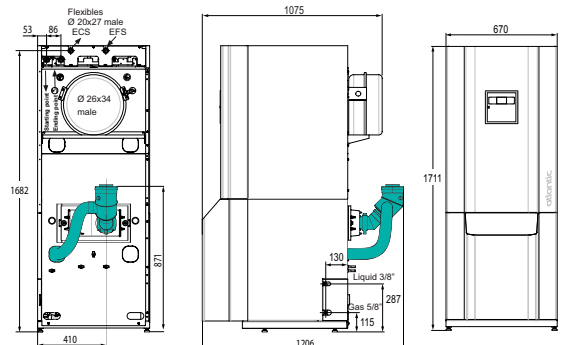
Outdoor Inverter unit Alfea Hybrid Duo Oil Low NOx 11, 14, 16 three-phase



Side view

Front view

Indoor hydraulic module



Rear view

Side view

Front view

ALFEA HYBRID DUO GAS / GAS R

Split air-to-water heat pump with built-in gas burner (heating + DHW)
Hybrid heat pump solution for renovation projects



Indoor hydraulic module



Outdoor Inverter unit
6 and 8kW



Outdoor Inverter unit
11, 14 and 16kW

Product

- Condensing and modulating gas generator
- Included 120L enamelled steel DHW storage tank
- High temperature solution (80°C) for renovation projects
- COP up to 4.37 (+7°C/+35°C)
- Ergonomic control: outdoor sensor control (standard supply) and programmable indoor temperature
- **NAVISTEM 200S** regulator
- Improved heat pump performance at low temperature
- Easy installation and maintenance : hinged heating element access panel, accessible components, maintenance platform integrated in burner
- Patented coaxial heat exchanger
- Inverter regulation
- Low energy consumption circulation pump
- **Innovation with Alfea Hybrid Duo Gas R models:** cooling mode & new control option allowing energy cost input to optimise heating with more energy savings

DESCRIPTION

- Replacement of existing gas boiler
- 4 models: 6, 8, 11 and 14kW – single-phase
- 3 models: 11, 14 and 16kW – three-phase
- Heating and DHW integrated
- Performing heat pump working with outside temperature from -25°C to +35°C
- 1 or 2 heating zones
- Control: new feature allowing energy cost input to optimise heating with more energy savings*
- Cooling mode*

AVAILABLE OPTIONS

- 2 zones kit (plug-and-play kit)
- Boiler connection kit
- Cooling kit*
- Room sensor

SUPPLIES

Indoor hydraulic module

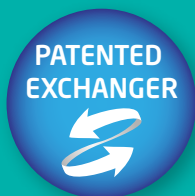
- Coaxial exchanger
- Condensing boiler, 24kW supplied with propane option (natural gas diaphragm supplied)

- 120L glass-lined steel hot water tank with ACI protection
- Low energy consumption circulation pump
- Expansion vessel, valve, pressure meter
- Outdoor sensor
- Motorised mixing valve

Outdoor Inverter unit

- Outdoor Inverter unit with Twin Rotary compressor

* Available for Alfea Hybrid Duo Gas R models



Energy class



55 °C

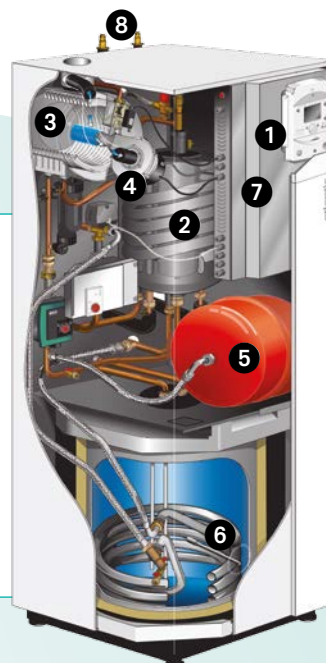
A+



B

INDOOR HYDRAULIC MODULE

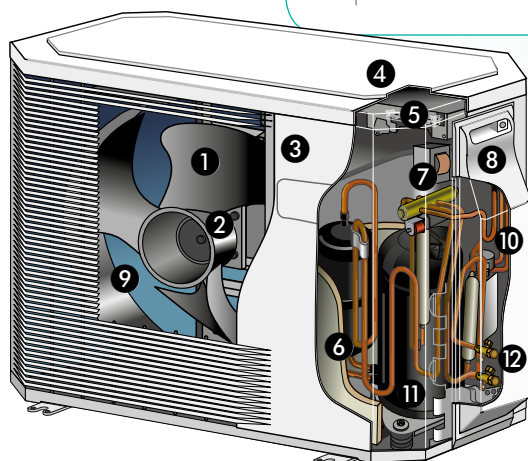
- 1 Control panel
- 2 Coaxial heat exchanger
- 3 Gas condensing unit
- 4 Gas burner
- 5 Heating expansion vessel
- 6 Hot water tank
- 7 Electric distribution board
- 8 Refrigerant connections



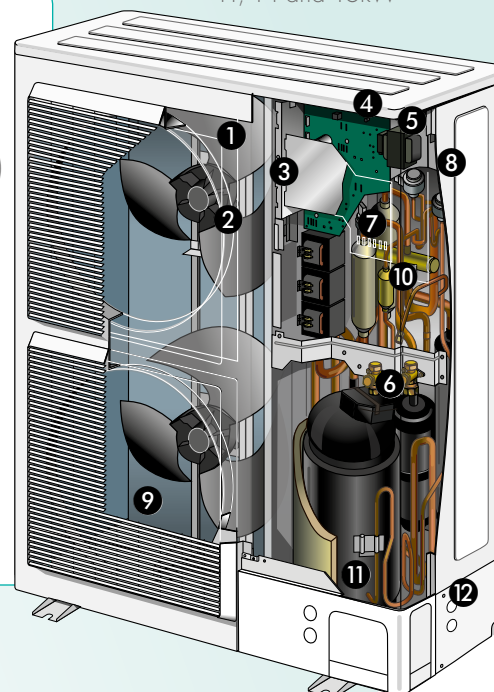
OUTDOOR INVERTER UNIT

- 1 Low-noise, high-output ventilator
- 2 Electric variable speed motor
- 3 "Inverter" control module
- 4 Control lights and buttons
- 5 Connector terminal blocks (power supply and interconnection)
- 6 Refrigerant accumulator bottle
- 7 Cycle reversing valve
- 8 Anti-corrosion treated metal cover
- 9 High performance exchange surface evaporator; anti-corrosion treated hydrophilic aluminium fins and grooved copper tubes
- 10 Electronic expansion valve
- 11 Noise and temperature insulated "Inverter" compressor
- 12 Refrigerating connection valves (flared connectors) with protective cover

Outdoor Inverter unit
6 and 8kW



Outdoor Inverter unit
11, 14 and 16kW



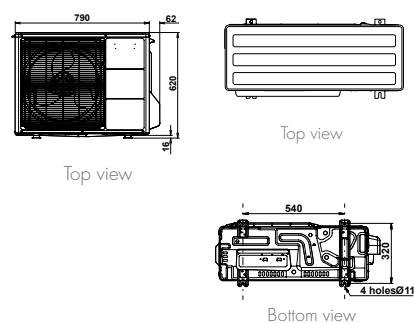
TECHNICAL CHARACTERISTICS AND PERFORMANCES

	UNIT	ALFEA HYBRID DUO GAS R 6	ALFEA HYBRID DUO GAS R 8	ALFEA HYBRID DUO GAS 11	ALFEA HYBRID DUO GAS 14	ALFEA HYBRID DUO GAS TRI 11	ALFEA HYBRID DUO GAS TRI 14	ALFEA HYBRID DUO GAS TRI 16
THERMODYNAMIC PERFORMANCE								
Heating capacity +7°C/+35°C – Underfloor Heating	kW	5.90	7.50	10.89	13.24	10.80	13.00	15.17
COP +7°C/35°C - Underfloor Heating	-	4.37	4.08	4.29	4.05	4.12	4.18	4.10
Heating capacity -7°C/+35°C – Underfloor Heating	kW	4.13	5.42	11.13	11.86	10.80	12.20	12.98
COP -7°C/+35°C - Underfloor Heating	-	2.60	2.47	2.71	2.48	2.52	2.38	2.28
Heating capacity +7°C/+45°C – Low T°radiators	kW	5.39	6.20	9.37	11.84	9.70	12.10	12.75
COP +7°C/45°C – Low T°radiators	-	3.33	3.32	3.30	3.24	3.15	3.20	3.21
Heating capacity -7°C/+45°C – Low T°radiators	kW	3.84	5.05	9.36	10.89	8.89	10.7	12.5
COP -7°C/+45°C – Low T°radiator	-	2.04	2.04	2.19	2.21	2.05	2.08	2.03
CONDENSING GAS BACK-UP BURNER PERFORMANCES								
Class according to efficiency directive 92/42/CEE	-	Condensation	Condensation	Condensation	Condensation	Condensation	Condensation	Condensation
Gas type	-	Natural/Propane	Natural/Propane	Natural/Propane	Natural/Propane	Natural/Propane	Natural/Propane	Natural/Propane
Charge 30 % - return water T° 30°C	%	109.3	109.3	109.3	109.3	109.3	109.3	109.3
Heating power range	kW	5.5 to 24	5.5 to 24	5.5 to 24	5.5 to 24	5.5 to 24	5.5 to 24	5.5 to 24
Indoor module tank capacity	L	23	23	23	23	23	23	23
Expansion vessel capacity	L	18	18	18	18	18	18	18
ENERGY EFFICIENCY & ACOUSTIC VALUES								
Energy class - Heating (55°C)	-	A+	A+	A+	A+	A+	A+	A+
Rated heat output (55°C) Pac	kW	5	6	9	11	9	11	13
Seasonal energy efficiency - Heating (55°C) with outdoor sensor	%	117	120	114	115	114	119	119
Seasonal energy efficiency - Heating (55°C)	%	115	118	112	113	112	117	117
Annual energy consumption - Heating (55°C)	kWh	3180	3836	6841	8041	6669	7803	9062
Sound power level (indoor/outdoor) ⁽¹⁾	dB (A)	46 / 63	46 / 69	46 / 69	46 / 70	46 / 66	46 / 68	46 / 69
DHW ENERGY EFFICIENCY								
Declared load profile	-	XXL	XXL	XXL	XXL	XXL	XXL	XXL
Energy class - DHW	-	B	B	B	B	B	B	B
Seasonal energy efficiency (%) - DHW	kWh	6446	6446	6446	6446	6446	6446	6446
Seasonal energy efficiency (%) - DHW	%	74	74	74	74	74	74	74
DHW flow according to regulation EN 13203	L/mn	20	20	20	20	20	20	20
DHW tank capacity	L	120	120	120	120	120	120	120
BALANCE FLUE CONNECTION (VERTICAL AND HORIZONTAL)								
Ø Smoke tubes/ air sucking (C13,C33)	mm	80 / 125	80 / 125	80 / 125	80 / 125	80 / 125	80 / 125	80 / 125
Ø Smoke tubes (C53)	mm	80	80	80	80	80	80	80
CHIMNEY CONNECTION								
Ø Smoke tubes	mm	80	80	80	80	80	80	80
INDOOR HYDRAULIC MODULE								
Noise level ⁽²⁾	dB (A)	39	39	39	39	39	39	39
Dimensions h x w x d	mm	1800x598x647	1800x598x647	1800x598x647	1800x598x647	1800x598x647	1800x598x647	1800x598x647
Operating weight	kg	135 / 278	135 / 278	135 / 278	135 / 278	135 / 278	135 / 278	135 / 278
OUTDOOR UNIT								
Noise level ⁽³⁾	dB(A)	41	47	47	48	44	46	47
Operating weight	kg	41	42	92	92	99	99	99
Power supply	V / Hz	230 V / 50 Hz	230 V / 50 Hz	230 V / 50 Hz	230 V / 50 Hz	400 V / 50 Hz	400 V / 50 Hz	400 V / 50 Hz
REFRIGERANT CHARACTERISTICS								
Min./max. length	m	5 / 30	5 / 30	5 / 20	5 / 20	5 / 20	5 / 20	5 / 20
Max. difference in height	m	20	20	15	15	15	15	15
Refrigerant	-	R410A	R410A	R410A	R410A	R410A	R410A	R410A
R410A factory load	g	1100	1400	2500	2500	2500	2500	2500
Quantity of refrigerant in tons of CO ² equivalent	-	2	3	5	5	5	5	5

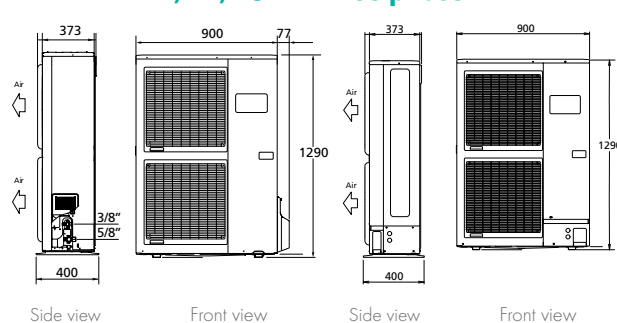
(1) Sound power level is a laboratory measurement of the sound power emitted by the product, but it does not correspond to the sound perceived. Used by acoustics specialists, it allows to measure the sound pressure level of the product in its working environment. - (2) Acoustic pressure at 1m from HP, 1,5 m height, directivity 2 - (3) Acoustic pressure at 1m from HP, 5 m height, directivity 2

DIMENSIONS (MM)

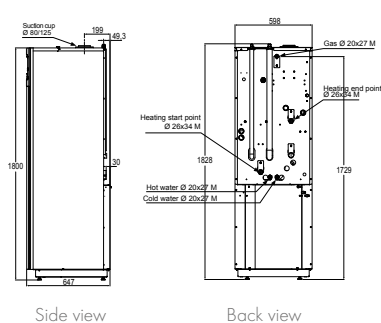
Outdoor Inverter unit Alfea Hybrid Duo Gas R6, R8



Outdoor Inverter unit Alfea Hybrid Duo Gas 11, 14kW single-phase and 11, 14, 16kW three-phase



Indoor hydraulic module

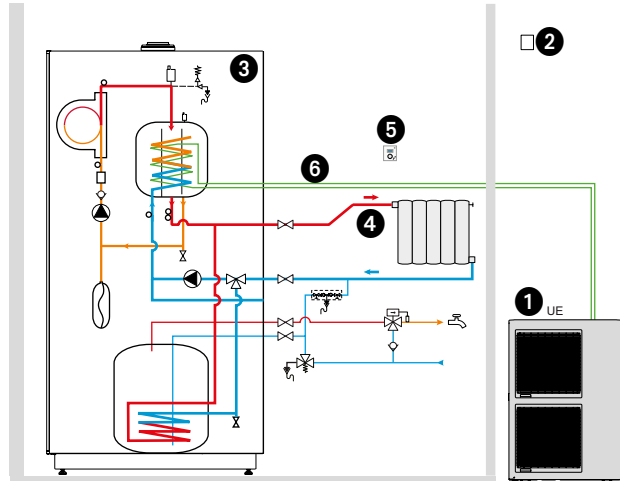


ALFEA HYBRID DUO GAS / GAS R

Installation schematics

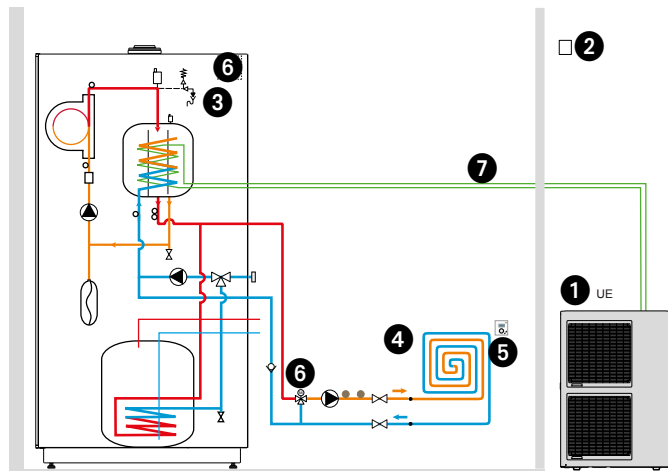
ALFEA HYBRID DUO GAS: 1 HEATING ZONE

- ❶ Outdoor Inverter unit
- ❷ Outdoor sensor
- ❸ Indoor hydraulic module with back-up boiler and DHW tank
- ❹ Radiators
- ❺ Room sensor*
- ❻ Refrigeration connections*



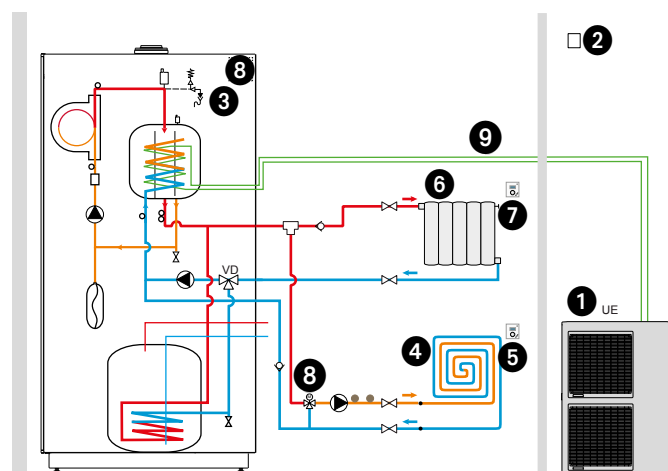
ALFEA HYBRID DUO GAS: 1 HEATING ZONE - UNDERFLOOR HEATING

- ❶ Outdoor Inverter unit
- ❷ Outdoor sensor
- ❸ Indoor hydraulic module with back-up boiler and DHW tank
- ❹ Underfloor heating
- ❺ Room sensor*
- ❻ 2 zones kit or floor heating*
- ❼ Refrigeration connections*



ALFEA HYBRID DUO GAS: 2 HEATING ZONES (RADIATOR + UNDERFLOOR HEATING)

- ❶ Outdoor Inverter unit
- ❷ Outdoor sensor
- ❸ Indoor hydraulic module with back-up boiler and DHW tank
- ❹ Underfloor heating
- ❺ Room sensor zone 1 *
- ❻ Radiators
- ❼ Room sensor zone 2 *
- ❽ 2 zones kit or underfloor heating *
- ❾ Refrigeration connections*



*Option

ALFEA RANGE ACCESSORIES

▶ ROOM SENSOR UNIT NAVILINK A59 NEW



Product

- Indoor temperature and operating mode display
- Possibility of set temperature modification
- Easy management of Absence and Vacation modes

DESCRIPTION

- Power supply by wire or by battery
- Indoor temperature measurement
- Main functions control: ambient temperature and operating modes settings

▶ ROOM SENSORS NAVILINK A75 / A78 NEW



Navilink A75

Navilink A78



Product

- Indoor temperature and operating mode display
- Possibility of set temperature modification
- Easy management of Absence and Vacation modes
- Possibility of hourly programming
- Energy consumption indicator

DESCRIPTION

- Power supply by wire (A75) or by battery (A78)
- Indoor temperature measurement
- All end-user functions of **NAVISTEM 400S** control unit

▶ DOMESTIC HOT WATER TANK MILEO / MILEO+



Product

- DHW kit allowing quick connection between DHW tank and heat pump
- 2 ranges:
 - standard (Mileo)
 - thermodynamique optimisation (Mileo+)

DESCRIPTION

- DHW storage tank range
- 160 to 500L tanks
- Glass-lined steel tank
- Electric back-up heater 3.3 kW supplied as standard

▶ 2 ZONES KIT



2 zones kit for single service heat pump

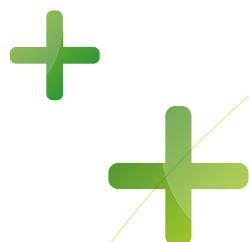
Product

- 2 zones kit for dual service heat pump (except Alfea Hybrid Duo Gas)
- Integrated low consumption circulation pump (except for Hybrid range)

DESCRIPTION

- 2 zones kit to control two hydraulic zones, together or separately
- Compatible with underfloor heating/cooling, radiators, fan coils pump control panel

▶ COOLING KIT



Product

- Kit integrates into hydraulic module
- Simple and quick installation
- Year-round comfort

DESCRIPTION

- Plug-in cooling kit
- Allows reversibility function (available for all Alfea models, except for Alfea Hybrid Duo Oil Low NOx)

▶ HEAT PUMP ADDITIONAL RELAY KIT

NEW



Product

- Compatible with Alfea Extensa A.I and Alfea Extensa Duo A.I.
- Allows to increase the power of electric back-up heater from 3 to 6kW

DESCRIPTION

- 6KW additional relay kit
- Integrable in electrical box of the heat pump

▶ ACCESSORIES FOR OUTDOOR UNIT



White PVC floor support (x2)



Black rubber floor support (x2)



Wall bracket* 600 mm (with bar)



Heating cable



Refrigerant pipes**



Protection pipes for refrigerant pipes

*Installer has to make sure that the wall bracket installation will not transmit vibration (ground position is being preferred)

**For a better protection of insulation against UV, Atlantic recommends the installation of protection pipes together with refrigerant pipes

AIR-TO-WATER HEAT PUMPS

Loria is our range of compact split air-to-water heat pumps, consisting of a new designed indoor hydraulic module connected by a refrigerant link to an outdoor unit.

The calories collected from the outside air are carried via this network to provide heating. Atlantic R&D teams have designed Loria hydraulic modules, benefiting from Atlantic's heat pump experience, in order to optimise the technology for the new-build market, with its particular needs.



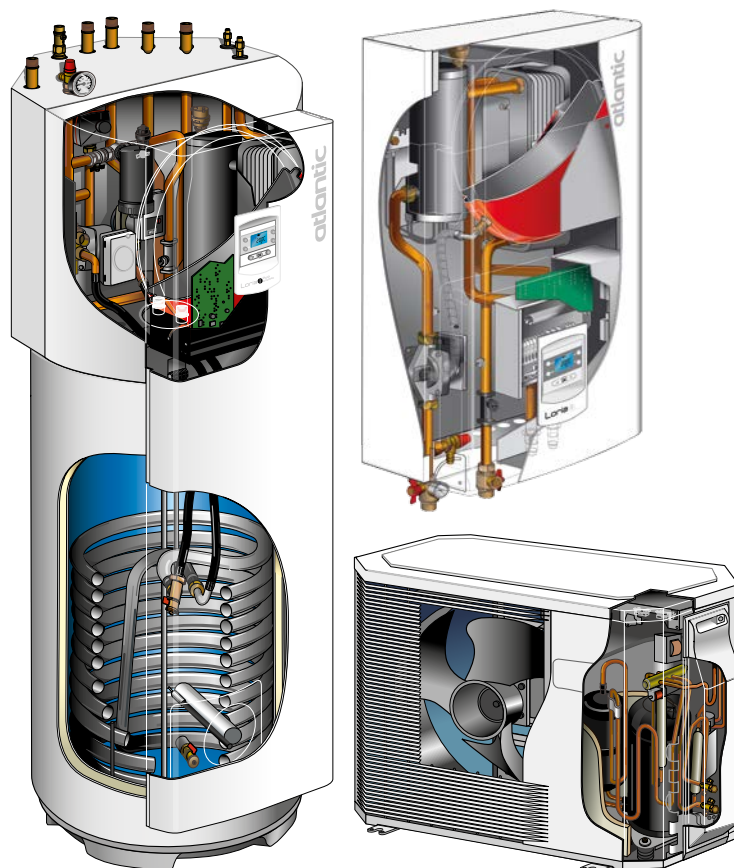
▶ TECHNICAL BENEFITS

Ergonomic design, in a small space!

The Loria range offers the best possible performance with a small footprint, thanks to optimised design and control performance together with a compact plate heat exchanger.

Complete and simple solution for new build projects

- Outdoor Inverter unit
- Built-in electric back-up as standard
- Possibility of 2 heating zones*
- Cooling*
- Magnetic mud filter (standard supply for Loria Duo)



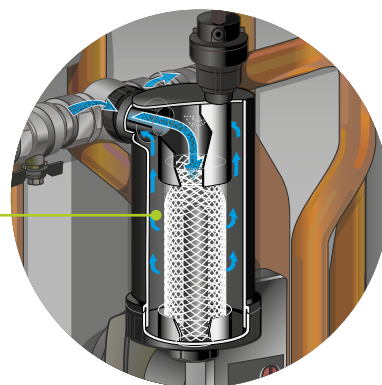
*Option

LORIA RANGE



Easy maintenance

- Hinged electric cabinet to access internal components
- Loria: filter valve (as standard) outside the hydraulic module, easy to remove and clean
- Loria Duo: built-in magnetic mud filter as standard



Easy set-up

- Inverter regulation, acting directly on the compressor rate
- Configurable temperature control
- Choice of control options:
 - 2 heating zones
 - Cooling
 - DHW storage tank
- Floor drying programme

Performances

- COP of up to 4.96
- Up to A+++
- Full Inverter regulation
- Low energy consumption circulation pump

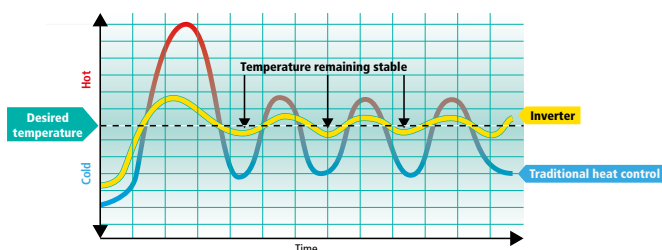
Atlantic regulator

NAVISTEM 100H

- A new Atlantic Navistem 100H interface gives you access to the main functions with:
 - Backlit display
 - Code navigation
 - Control of various modes (programming, permanent, vacation, etc.)



Comparison between Inverter and traditional heat control



LORIA

Split energy-efficient air-to-water heat pump Average temperature solution for new build projects



Indoor hydraulic module



Outdoor Inverter unit



Product

- COP up to 4.80 (+7°/+35°)
- Compatible with all kinds of low temperature heating devices (underfloor heating/cooling, radiators, fan coils)
- **NAVISTEM 100H** regulator
- Space-saving indoor hydraulic module
- Integrated electric back-up heater
- Inverter regulation
- One or two heating zone(s) management

DESCRIPTION

- Simple solution for new build projects
- 4 models: 4 to 10 kW – single-phase
- Performing heat pump working with outside temperature from -20°C to +35°C
- Heating departure temperature max. 55°C

AVAILABLE OPTIONS

- Magnetic mud filter
- 2 zones kit (plug-and-play kit)
- Cooling kit
- Separated hot water tank
- Room sensor

SUPPLIES

Indoor hydraulic module

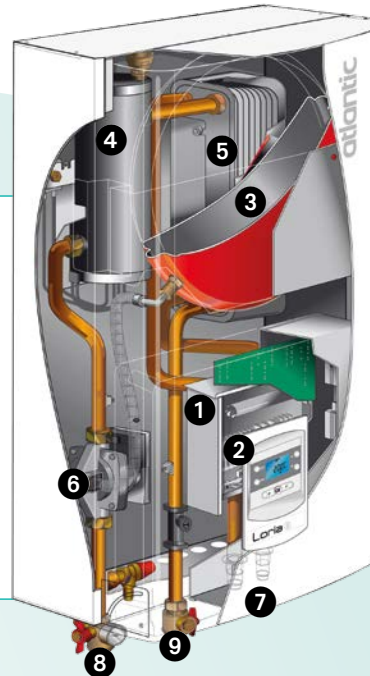
- Plate heat exchanger
- Low consumption circulation pump
- Outdoor sensor
- Expansion vessel, pressure meter
- Filter valve
- Electric back-up heater

Outdoor Inverter unit

- Refrigerant circuit (R410A)
- Twin Rotary compressor
- Full Inverter control

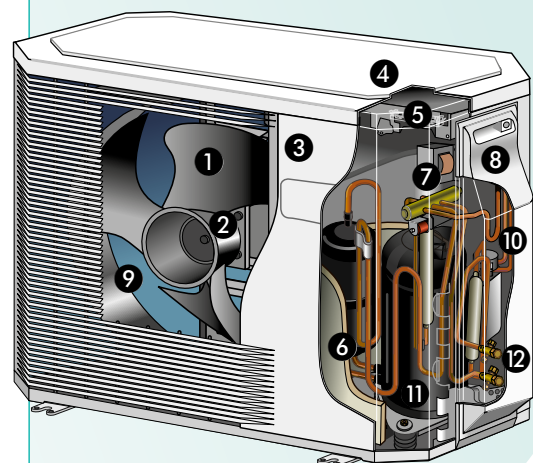
INDOOR HYDRAULIC MODULE

- 1 Electric board
- 2 User interface/regulator
- 3 Expansion vessel
- 4 Electric back-up
- 5 Plate heat exchanger
- 6 Low consumption circulation pump
- 7 Refrigerant connections
- 8 Heating flow
- 9 Heating return



OUTDOOR INVERTER UNIT

- 1 Low-noise, high-output ventilator
- 2 Electric variable speed motor
- 3 "Inverter" control module
- 4 Control lights and buttons
- 5 Connector terminal blocks (power supply and interconnection)
- 6 Refrigerant accumulator bottle
- 7 Cycle reversing valve
- 8 Anti-corrosion treated metal cover
- 9 High performance exchange surface evaporator; anti-corrosion treated hydrophilic aluminium fins and grooved copper tubes
- 10 Electronic expansion valve
- 11 Noise and temperature insulated "Inverter" compressor
- 12 Refrigerating connection valves (flared connectors) with protective cover



TECHNICAL CHARACTERISTICS AND PERFORMANCES

	UNIT	LORIA 6004	LORIA 6006	LORIA 6008	LORIA 6010
REFRIGERANT		R410A	R410A	R410A	R410A
MAIN CHARACTERISTICS					
Heating capacity +7°C/+35°C – Underfloor Heating	kW	4.00	6.00	7.50	10.42
COP +7°C/+35°C - Underfloor Heating		4.80	4.45	4.15	4.40
Heating capacity -7°C/+35°C – Underfloor Heating	kW	4.10	5.00	5.90	7.94
Power consumption -7°C/+35°C - Underfloor Heating	kW	1.46	1.79	2.46	3.11
COP -7°C/+35°C - Underfloor Heating		2.80	2.80	2.40	2.55
Heating capacity +7°C/+45°C – Low T°radiators	kW	4.00	5.10	6.20	8.51
COP +7°C/+45°C – Low T°radiators		3.50	3.50	3.35	3.54
Heating capacity -7°C/+45°C – Low T°radiators	kW	4.10	4.50	5.15	7.38
COP -7°C/+45°C – Low T°radiator		2.30	2.26	2.10	2.11
Heating capacity +7°C/+55°C – Low T°radiators	kW	3.68	4.27	5.53	6.98
COP +7°C/+55°C – Low T°radiators		2.65	2.67	2.68	2.65
Heating capacity -7°C/+55°C – Low T°radiators	kW	3.72	3.88	5.03	6.47
COP -7°C/+55°C – Low T°radiators		1.90	1.92	1.70	1.78
Electric back-up heater	kW	3	3	3	3
ENERGY EFFICIENCY CHARACTERISTICS					
Energy class - Heating (35°C/55°C)		A+++ / A++	A+++ / A++	A++ / A++	A++ / A++
Rated heat output (35°C/55°C)	kW	4 / 4	6 / 5	7 / 6	9/7
Seasonal energy efficiency - Heating (35°C/55°C) with outdoor sensor	%	183 / 129	188 / 130	168 / 126	156 / 118
Seasonal energy efficiency - Heating (35°C/55°C)	%	181 / 127	186 / 128	166 / 124	154 / 116
Annual energy consumption - Heating (35°C/55°C)	kWh	1884 / 2708	2588 / 2933	3226 / 4197	4481 / 5256
Sound power level (indoor/outdoor) ⁽¹⁾	dB(A)	44 / 64	44 / 64	44 / 69	44 / 68
INDOOR HYDRAULIC MODULE					
Noise level ⁽²⁾	dB(A)	36	36	36	36
Net weight/filled weight	kg	37.5 / 41.5	37.5 / 41.5	37.5 / 41.5	37.5 / 41.5
Min./Max. outdoor temperature for heating	°C	-20 / +35	-20 / +35	-20 / +35	-20 / +35
Power supply		230 V 50 Hz	230 V 50 Hz	230 V 50 Hz	230 V 50 Hz
OUTDOOR UNIT					
Noise level ⁽³⁾	dB(A)	42	42	47	47
Operating weight	kg	41	41	42	60
REFRIGERANT CHARACTERISTICS					
Min./max. length	m	5 / 30	5 / 30	5 / 30	5 / 30
Max. difference in height	m	20	20	20	20
R410A factory load	g	1100	1100	1400	1800
Quantity of refrigerant in tons of CO ₂ equivalent	t	2	2	3	4

(1) Sound power level is a laboratory measurement of the sound power emitted by the product, but it does not correspond to the sound perceived.

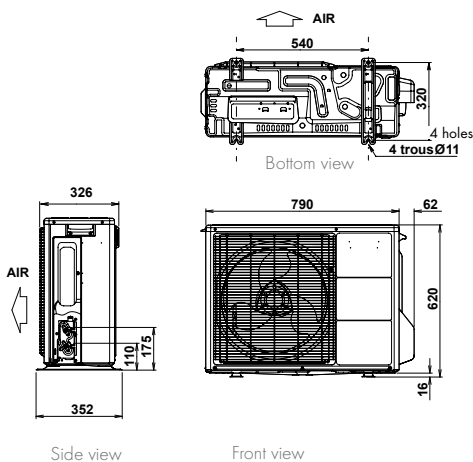
Used by acoustics specialists, it allows to measure the sound pressure level of the product in its working environment.

(2) Acoustic pressure at 1m from HP, 1.5 m height, open field, directivity 2.

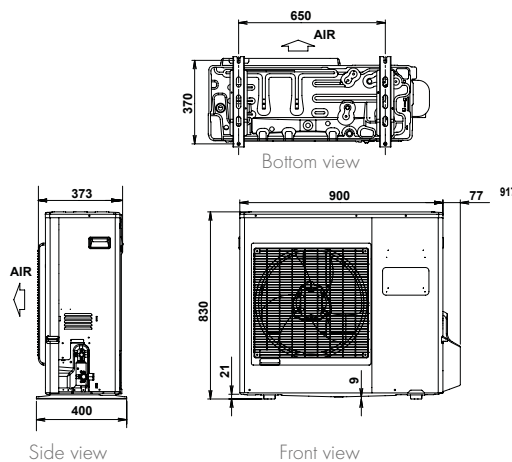
(3) Acoustic pressure at 5m from HP, 1.5 m height, open field, directivity 2.

DIMENSIONS (MM)

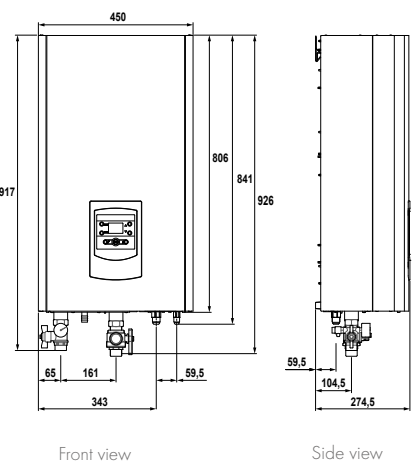
Loria 4,6 and 8kW
Outdoor Inverter unit



Loria Duo 10kW
Outdoor Inverter unit



Indoor hydraulic module

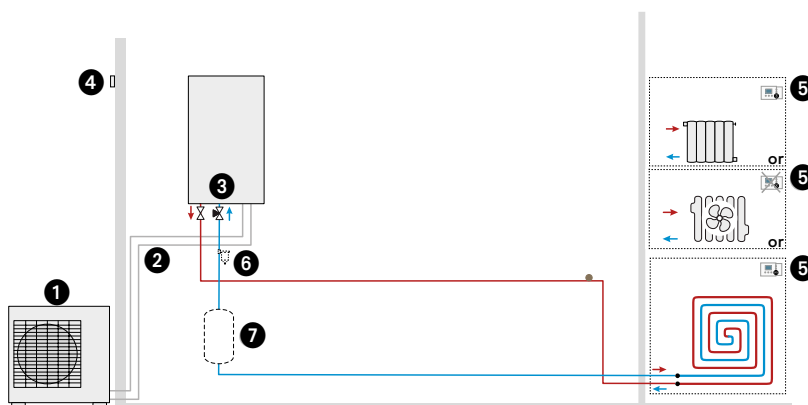


LORIA

Installation schematics

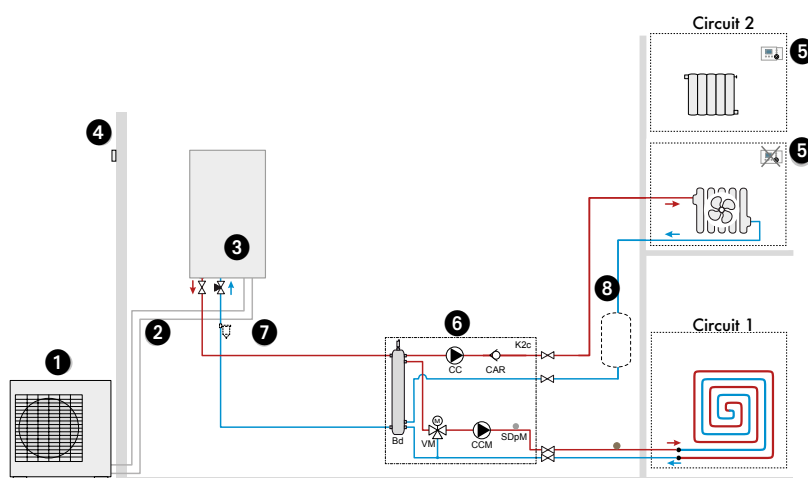
LORIA 6000: 1 HEATING ZONE

- ❶ Outdoor unit and ground support*
- ❷ Refrigerant connections*
- ❸ Hydraulic module
- ❹ Outdoor sensor
- ❺ Room sensor*
- ❻ Magnetic mud filter*
- ❼ Buffer tank**



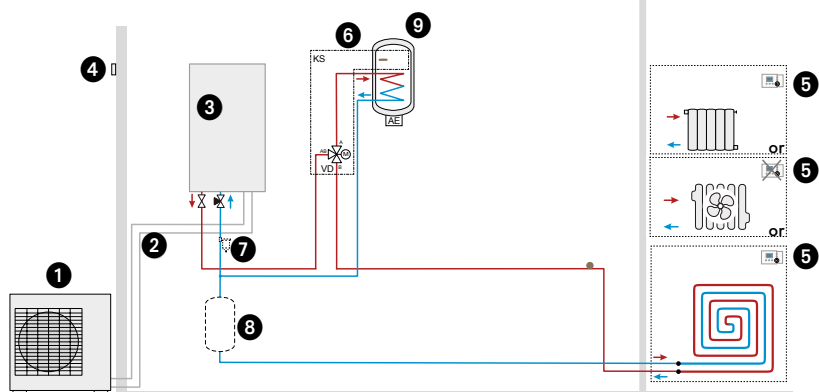
LORIA 6000: 2 HEATING ZONES

- ❶ Outdoor unit and ground support*
- ❷ Refrigerant connections*
- ❸ Hydraulic module
- ❹ Outdoor sensor
- ❺ Room sensor*
- ❻ 2 zones kit*
- ❼ Magnetic mud filter*
- ❽ Buffer tank**



LORIA 6000: 1 HEATING ZONE + DHW PRODUCTION

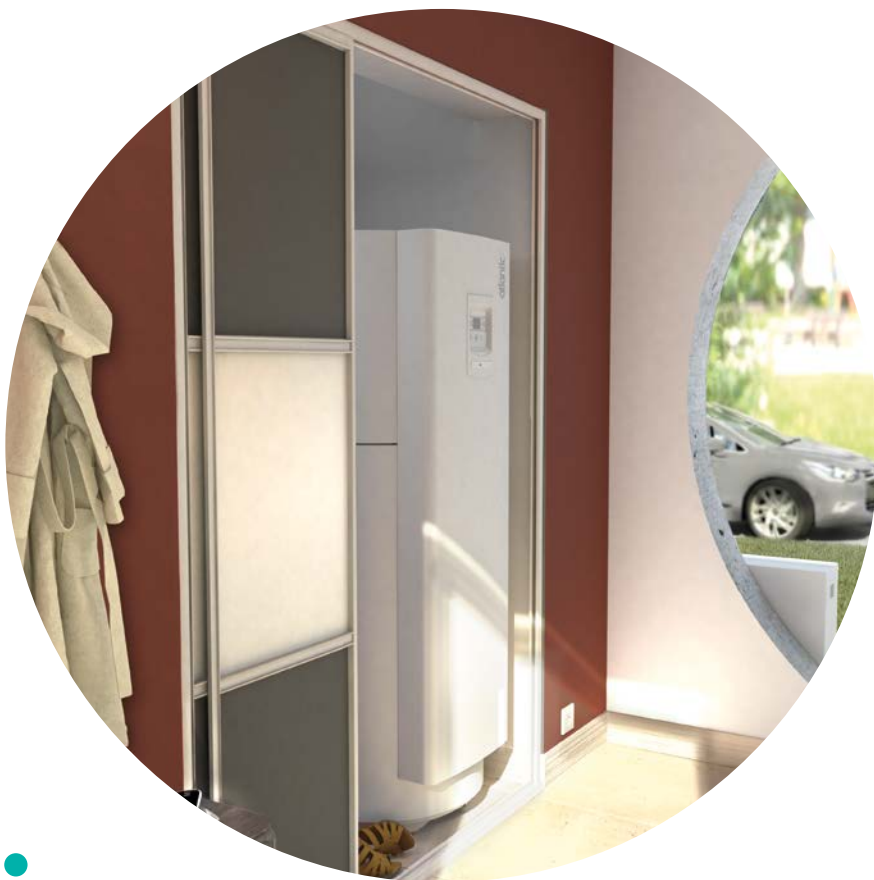
- ❶ Outdoor unit and ground support*
- ❷ Refrigerant connections*
- ❸ Hydraulic module
- ❹ Outdoor sensor
- ❺ Room sensor*
- ❻ DHW kit*
- ❼ Magnetic mud filter*
- ❽ Buffer tank**
- ❾ DHW tank*



*Option - **Depending on type of collectors and volume of water in heating circuit, it may be necessary to install a buffer tank

LORIA DUO

Split energy-efficient air-to-water heat pump (heating + DHW)
Average temperature solution for new build projects



Indoor hydraulic module



Outdoor Inverter unit



Product

- Integrated DHW storage tank (190L) with coil and electric back-up heater
- COP up to 4.96 (+7°/+35°)
- Compatible with all kinds of low temperature heating devices (underfloor heating/cooling, radiators, fan coils)
- NAVISTEM 100H regulator
- Space-saving indoor hydraulic module due to plate heat exchanger
- Integrated magnetic mud
- Inverter regulation
- One or two heating zones management

DESCRIPTION

- Simple solution for new build projects
- 4 models: 4 to 10 kW – single-phase
- Performing heat pump working with outside temperature from -20°C to +35°C
- Heating flow temperature max. 55°C

AVAILABLE OPTIONS

- 2 zones kit (plug-and-play kit)
- Cooling kit
- Room sensor

SUPPLIES

Indoor hydraulic module

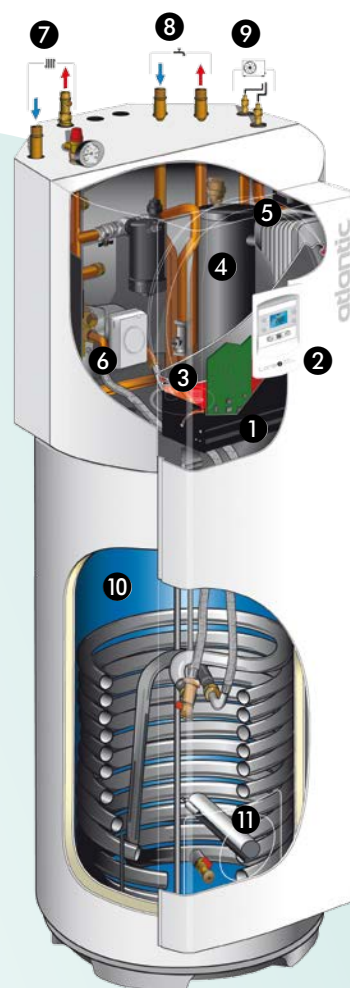
- Plate heat exchanger
- Magnetic mud filter with a screen filter, decanting effect and magnetic effect
- Low consumption circulation pump
- DHW storage tank integrated (190L)
- Outdoor sensor
- Expansion vessel, pressure meter
- Electric back-up heater

Outdoor Inverter unit

- Refrigerant circuit (R410A)
- Twin Rotary compressor
- Full Inverter control

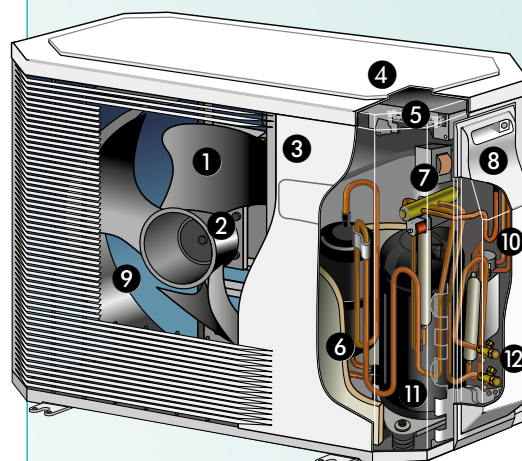
INDOOR HYDRAULIC MODULE

- 1 Electric board
- 2 User interface/regulator
- 3 Expansion vessel
- 4 Electric back-up
- 5 Plate heat exchanger
- 6 Low consumption circulation pump
- 7 Heating connections
- 8 DHW connections
- 9 Refrigerant connections
- 10 DHW tank
- 11 DHW electric back-ups



OUTDOOR INVERTER UNIT

- 1 Low-noise, high-output ventilator
- 2 Electric variable speed motor
- 3 "Inverter" control module
- 4 Control lights and buttons
- 5 Connector terminal blocks (power supply and interconnection)
- 6 Refrigerant accumulator bottle
- 7 Cycle reversing valve
- 8 Anti-corrosion treated metal cover
- 9 High performance exchange surface evaporator; anti-corrosion treated hydrophilic aluminium fins and grooved copper tubes
- 10 Electronic expansion valve
- 11 Noise and temperature insulated "Inverter" compressor
- 12 Refrigerating connection valves (flared connectors) with protective cover



TECHNICAL CHARACTERISTICS AND PERFORMANCES

	UNIT	LORIA DUO 6004	LORIA DUO 6006	LORIA DUO 6008	LORIA DUO 6010
REFRIGERANT		R410A	R410A	R410A	R410A
MAIN CHARACTERISTICS					
Heating capacity +7°C/+35°C – Underfloor Heating	kW	4.07	6.02	7.47	10.42
COP +7°C/+35°C - Underfloor Heating		4.96	4.70	4.22	4.40
Heating capacity -7°C/+35°C – Underfloor Heating	kW	4.42	5.20	5.96	7.94
Power consumption -7°C/+35°C - Underfloor Heating	kW	1.42	1.77	2.33	3.11
COP -7°C/+35°C - Underfloor Heating		3.11	2.94	2.56	2.55
Heating capacity +7°C/+45°C – Low T°radiators	kW	4.09	4.98	6.40	8.51
COP +7°C/+45°C – Low T°radiators		3.62	3.51	3.37	3.54
Heating capacity -7°C/+45°C – Low T°radiators	kW	4.24	4.62	5.74	7.38
COP -7°C/+45°C – Low T°radiator		2.48	2.38	2.21	2.11
Heating capacity +7°C/+55°C – Low T°radiators	kW	3.68	4.27	5.53	6.98
COP +7°C/+55°C – Low T°radiators		2.65	2.67	2.68	2.65
Heating capacity -7°C/+55°C – Low T°radiators	kW	3.72	3.88	5.03	6.47
COP -7°C/+55°C – Low T°radiators		1.90	1.92	1.70	1.78
Electric back-up heater	kW	3	3	3	3
ENERGY EFFICIENCY CHARACTERISTICS					
Energy class - Heating (35°C/55°C)		A+++ / A++	A+++ / A++	A++ / A++	A++ / A++
Rated heat output (35°C/55°C)	kW	4 / 4	6 / 5	7 / 6	9/7
Seasonal energy efficiency - Heating (35°C/55°C) with outdoor sensor	%	183 / 129	188 / 130	168 / 126	156 / 118
Seasonal energy efficiency - Heating (35°C/55°C)	%	181 / 127	186 / 128	166 / 124	154 / 116
Annual energy consumption - Heating (35°C/55°C)	kWh	1884 / 2708	2588 / 2933	3226 / 4197	4481 / 5256
Sound power level (indoor/outdoor) ⁽¹⁾	dB(A)	44 / 62	44 / 62	44 / 69	44 / 68
Declared load profile - DHW		L	L	L	L
Energy class - DHW		A+	A+	A+	A+
Annual water heating energy consumption	kWh	966	966	966	966
Seasonal water heating energy efficiency (%)	%	130	130	130	130
INDOOR HYDRAULIC MODULE					
Noise level ⁽²⁾	dB(A)	36	36	36	36
Net weight/filled weight	kg	138/ 332	138 / 332	138 /332	138 /332
Power supply		230 V 50 Hz	230 V 50 Hz	230 V 50 Hz	230 V 50 Hz
OUTDOOR UNIT					
Noise level ⁽³⁾	dB(A)	40	40	47	47
Operating weight	kg	41	41	42	60
REFRIGERANT CHARACTERISTICS					
Min./max. length	m	5 /30	5 /30	5 /30	5 /30
Max. difference in height	m	20	20	20	20
HFC R410A factory load	g	1100	1100	1400	1800
Quantity of refrigerant in tons of CO ₂ equivalent	t	2	2	3	4

(1) Sound power level is a laboratory measurement of the sound power emitted by the product, but it does not correspond to the sound perceived.

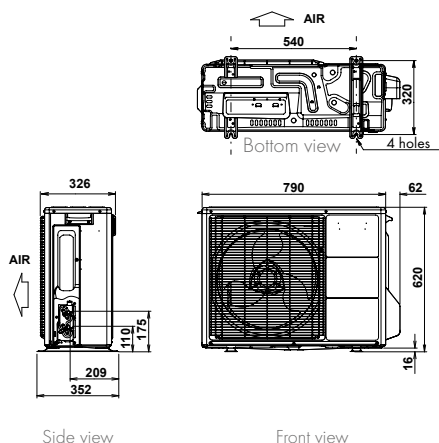
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(2) Acoustic pressure at 1m from HP, 1.5 m height, open field, directivity 2.

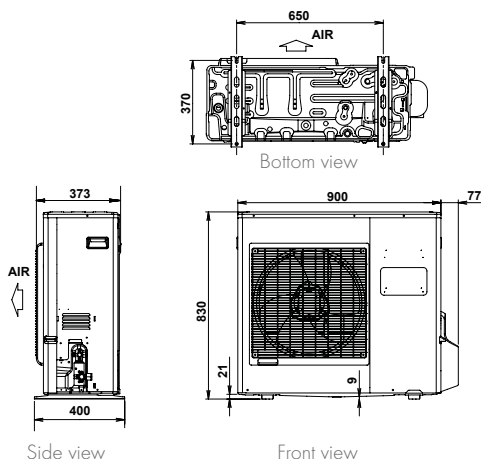
(3) Acoustic pressure at 5m from HP, 1.5 m height, open field, directivity 2.

DIMENSIONS (MM)

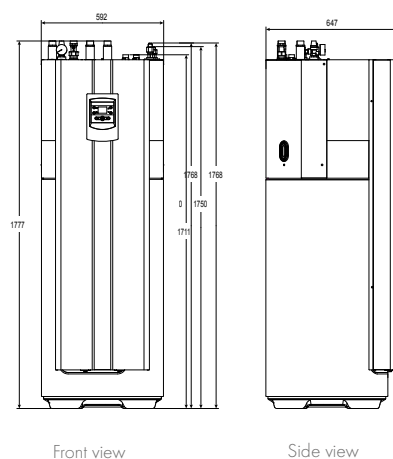
Loria Duo 4, 6 and 8kW
Outdoor Inverter unit



Loria Duo 10kW
Outdoor Inverter unit



Indoor hydraulic module

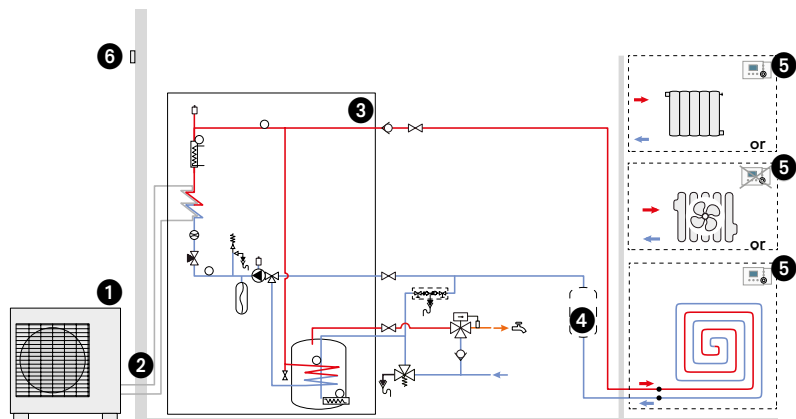


LORIA DUO

Installation schematics

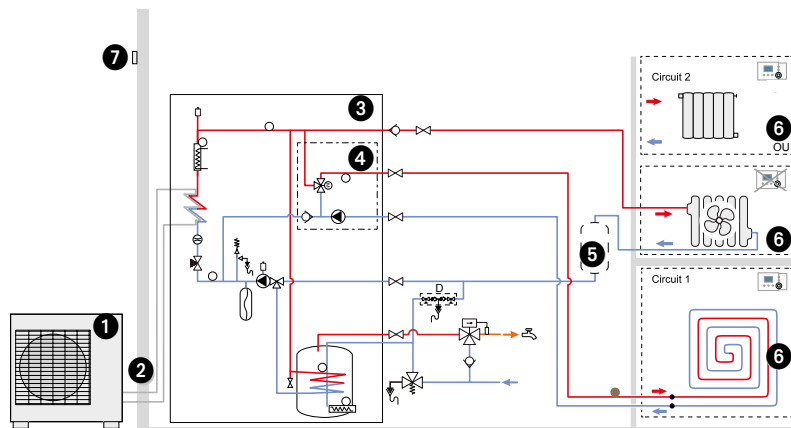
LORIA DUO 6000: 1 HEATING ZONE

- ❶ Outdoor unit and ground support*
- ❷ Refrigerant connections*
- ❸ Hydraulic module with integrated DHW
- ❹ Buffer tank**
- ❺ Room sensor (optional, except for fan coil)
- ❻ Outdoor sensor



LORIA DUO 6000: 2 HEATING ZONES (UNDERFLOOR HEATING + RADIATORS)

- ❶ Outdoor unit and ground support*
- ❷ Refrigerant connections*
- ❸ Hydraulic module with integrated DHW
- ❹ 2 zones kit*
- ❺ Buffer tank**
- ❻ Room sensor (optional, except for fan coil)
- ❼ Outdoor sensor



*Option - **Depending on type of collectors and volume of water in heating circuit, it may be necessary to install a buffer tank

LORIA RANGE ACCESSORIES

▶ ROOM SENSOR UA55



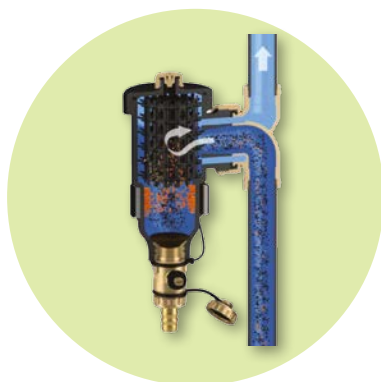
Product

- Indoor temperature and operating mode display
- Quick access to main installation functions
- Boost function

DESCRIPTION

- Wired model
- Full thermal comfort control
- Heating or cooling mode activation

▶ MAGNETIC MUD FILTER (FOR LORIA)



Product

- Capture impurities of the heating circuit

DESCRIPTION

- Magnetic mud filter with a screen filter, decanting effect and magnetic effect (for Loria)
- Integrated in Loria Duo

▶ DOMESTIC HOT WATER TANK MILEO / MILEO+



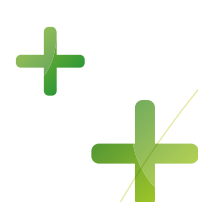
Product

- DHW kit allowing quick connection between DHW tank and heat pump
- 2 ranges:
 - standard (Mileo)
 - thermodynamique optimisation (Mileo+)

DESCRIPTION

- DHW storage tank range
- 160 to 500L tanks
- Glass-lined steel tank
- Electric back-up heater 3.3 kW supplied as standard

▶ MODEM HARNESS KIT



Product

- Remote piloting of your heat pump operating modes

DESCRIPTION

- Modem harness allowing to switch heat pump operating mode remotely

▶ 2 ZONES KIT



2 zones kit for single service heat pump

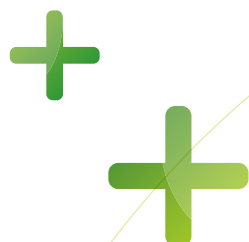
Product

- Integrated low consumption circulation pump
- Compatible with underfloor heating/cooling, radiators, fan coils
- Equipped with hydraulic compensator for Loria single service heat pump

DESCRIPTION

- 2 zones kit for dual service heat to control two hydraulic zones

▶ COOLING KIT



Product

- Kit integrates into hydraulic module
- Simple and quick installation
- Year-round comfort

DESCRIPTION

- Plug-in cooling kit
- Allows reversibility function (for Loria & Loria Duo)

▶ RETRACTOR STRUCTURE KIT



Product

- Hides the lower part of the hydraulic module installation
- Makes hydraulic module installation more user-friendly and aesthetic

DESCRIPTION

- Allowing to derive a heat pump pipes upwards behind hydraulic module

▶ ACCESSORIES FOR OUTDOOR UNIT



White PVC floor support (x2)



Black rubber floor support (x2)



Wall bracket* 600 mm (with bar)



Heating cable



Refrigerant pipes**



Protection pipes for refrigerant pipes

* Installer has to make sure that the wall bracket installation will not transmit vibration (ground position is being preferred)

** For a better protection of insulation against UV, Atlantic recommends the installation of protection pipes together with refrigerant pipes

WALL-IN

Integration system of the outdoor unit



Product

- Outdoor unit invisible from outside
- Mechanical separation to avoid transfer of vibrations
- Condensat collection and evacuation
- Patented separation of air flow to maintain the performance

DESCRIPTION

- Innovative solution to integrate the outdoor unit into the building
- Kit with 3 parts possible to supply to the building site according to the construction phase
- Compliant for outdoor units of ALFEA Extensa+ and Loria up to 8 kW
- For spaces without thermal insulation

SUPPLIES

Grid

- Anti-corrosive protection
- Condensat guides to avoid external water traces
- Bird-safe grid

Internal frame

- Integrated seals
- Reinforced supports

Internal box

- Condensate collector and basin heating cable
- Removable panels for easy access
- Rail with anti-vibration supports for the outdoor unit fixation
- Noise-reducing insulation

PACKING

- 3 packing units : grid, frame and box

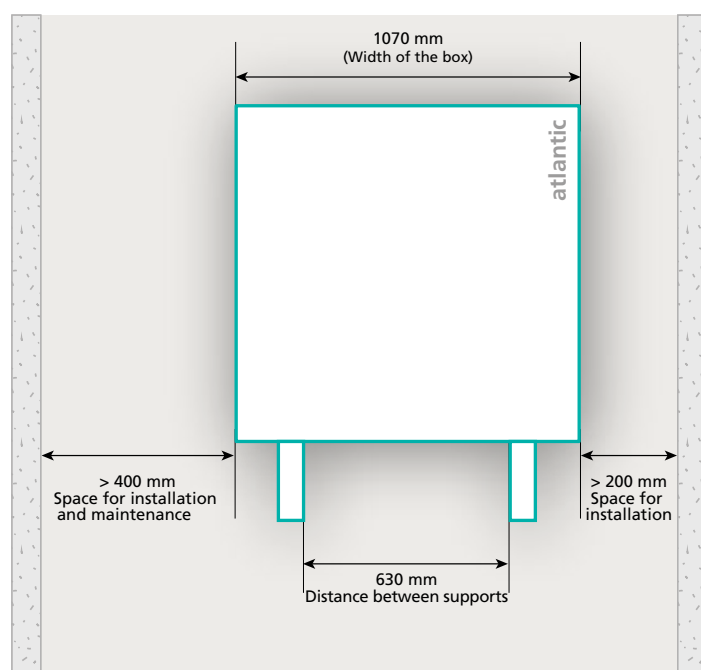
Assembly steps

- Grid : to avoid air / water to enter the room
- Frame : support to be fixed to the wall
- Box : complete cover of the outdoor unit (supplied assembled)

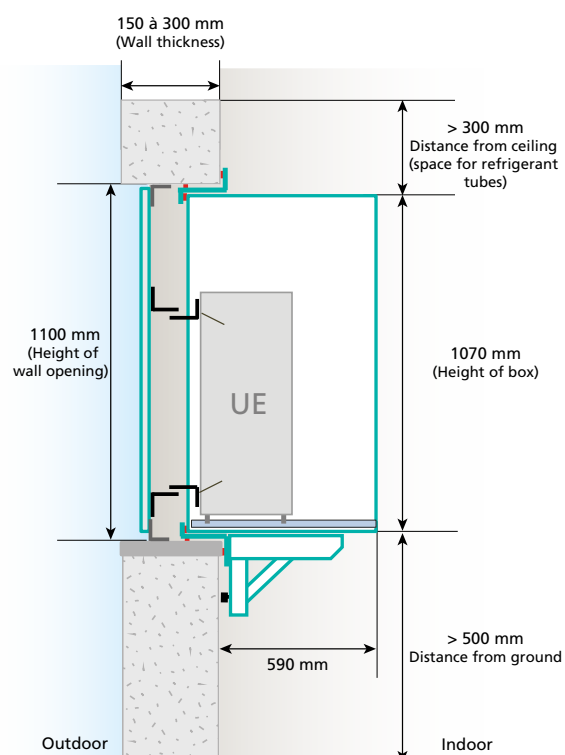


DIMENSIONS (MM)

Surface on the wall to plan : 1100 x 1100 mm



Front view (indoor)



Side view

GROUND SOURCE HEAT PUMPS

USING THE ENERGY OF THE EARTH FOR YOUR EVERYDAY COMFORT

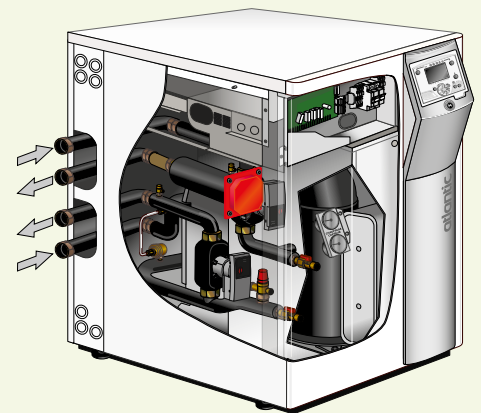
ATLANTIC GEOLIA

- ▶ Installed indoor of the housing, the Atlantic Geolia heat pump receives calories from the ground with its collectors, and use them to heat the house and, if needed, to produce domestic hot water.
- ▶ Insensitive to outdoor temperature variations, Atlantic Geolia has a high stability of its performance, which allows it to have 60°C* of water departure temperature.

* Depending on models and type of collectors

Reliable and multi-functional, Atlantic Geolia is our ground source solution for your projects.

Atlantic Geolia allows simplified installation and maintenance thanks to easy access to all its key components.



Heating only

Complete accessories kit is available to meet all requests in new build and renovation projects.



DHW tank

For more detailed information see p.52-55

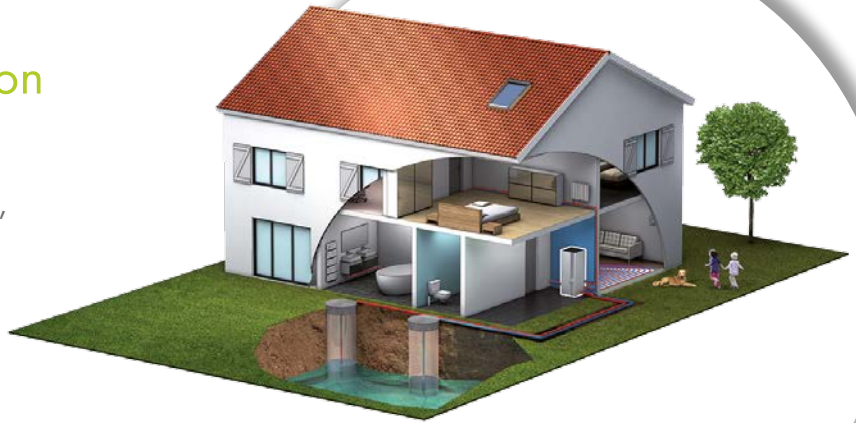


ATLANTIC GEOLIA RANGE



Groundwater collection system

- Groundwater collection system, considering the well pump consumption, ensures high and almost steady output.



Vertical collection system

Perfect solution for renovation projects or for houses with small land.



Horizontal collection system

- Perfect solution for houses with large land or garden.
- Atlantic offers complete kits to make sure that horizontal collection system is adapted to every heat pump power rate.



ATLANTIC GEOLIA

Ground source heat pump (heating + DHW*)
Perfect solution for all geothermal projects



Heating only



Product

- Compatible with all types of collectors (horizontal, vertical, groundwater)
- COP up to 4.35 (+0°C / +35°C)
- Compatible with all kinds of low temperature heating devices (underfloor heating/cooling, radiators, fan coils)
- Intuitive control and simplified use
- **NAVISTEM 200S** regulator
- Low energy consumption circulation pump
- Heating in one or two heating zones

DESCRIPTION

- 3 models: 5, 7 and 10kW - single-phase
- 2 models: 13 and 17kW - three-phase
- Working temperature up to 60°C*

AVAILABLE OPTIONS

- 2 zones kit (plug-and-play)
- Cooling kit
- Boiler connection kit
- DHW tank
- Room sensor

SUPPLIES

- Complete thermodynamic and hydraulic set
- Low energy consumption circulation pump
- Electric back-up heater
- Outdoor sensor
- Hydraulic accessories kit, including: flexible hoses, 2 filter valves, 2 stop valves, connectors, sensor expansion tank, heating expansion tank, 2 automatic bleed valves, 2 pressure meters, nipples, seals

* Depending on models and type of collectors

Energy class

Brine/Water

35 °C

A+++*



Groundwater/Water

35 °C

A+++

55 °C

A+++

TECHNICAL CHARACTERISTICS AND PERFORMANCES

	UNIT	ATLANTIC GEOLIA 5	ATLANTIC GEOLIA 7	ATLANTIC GEOLIA 10	ATLANTIC GEOLIA 13	ATLANTIC GEOLIA 17
REFRIGERANT		R410A	R410A	R410A	R410A	R410A
R410A factory load	g	900	950	1450	1700	2300
Amount of fluid expressed in CO ₂ equivalent	†	2	2	3	4	5
MAIN CHARACTERISTICS						
Heating capacity +10°C/+7°C/+30°C/+35°C - Underfloor heating	kW	7.14	9.37	13.33	16.78	22.13
Cop +10°C/+7°C/+30°C/+35°C - PCR		4.86	5.29	5.38	5.70	5.21
Heating capacity +10 °C/+7°C/+40°C/+45°C - Low T° radiators	kW	6.62	8.86	12.55	15.99	21.40
Cop +10°C/+7°C/+40°C/+45°C - Low T° radiators		3.81	4.04	4.18	4.35	4.21
Heating capacity +10°C/+7°C/+47°C/+55°C - Low T° radiators	kW	6.57	8.72	11.75	15.59	20.14
Cop +10°C/+7°C/+47°C/+55°C - Low T° radiators		3.26	2.87	3.34	3.33	3.54
Heating capacity +0°C/-3°C/+30°C/+35°C - Underfloor heating	KW	5.64	7.02	10.08	12.63	16.63
Cop +0°C/-3°C/+30°C/+35°C - Underfloor heating		3.94	3.86	4.06	4.35	4.31
Heating capacity +0°C/-3°C/+40°C/+45°C - Low T° radiators	kW	5.13	6.56	9.28	12.12	16,01
Cop +0°C/-3°C/+40°C/+45°C - Low T° radiators		3.09	2.92	3.14	3.50	3.51
Heating capacity +0°C/-3°C/+47°C/+55°C - Low T° radiators	kW	-	-	-	11.86	15.41
Cop +0°C/-3°C/+47°C/+55°C - Low T° radiators		-	-	-	2.92	2.80
Additional electric back-up	kW	4,5 (3 floors x 1.5 kW)	4,5 (3 floors x 1.5 kW)	4,5 (3 floors x 1.5 kW)	4,5 (3 floors x 1.5 kW)	4,5 (3 floors x 1.5 kW)
Power supply		230 V / 50 Hz	230 V / 50 Hz	230 V / 50 Hz	400 V 3ph + N 50 Hz	400 V 3ph + N 50 Hz

ErP ENERGY EFFICIENCY & ACOUSTIC VALUES WITH OUTDOOR SENSOR

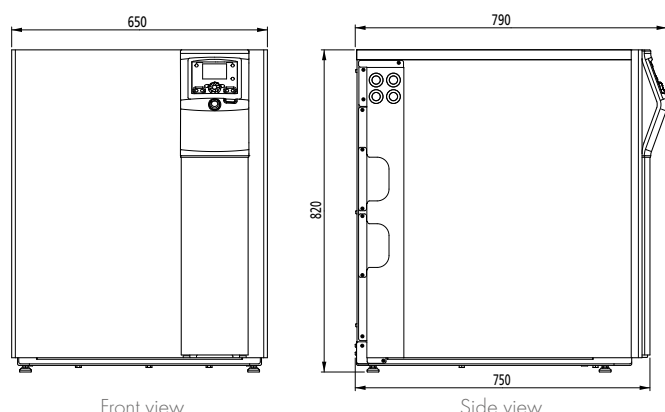
Energy class - Heating (35°C/55°C) - Pure water	-	A+++ / A+++	A+++ / A+++	A+++ / A+++	A+++ / A+++	A+++ / A+++
Rated heat output (35°C/55°C) - Pure water	kW	8 / 8	11 / 10	15 / 14	18 / 16	25 / 23
Seasonal energy efficiency - Heating (35°C/55°C) - Pure water	%	213 / 153	196 / 151	233 / 179	212 / 166	219 / 177
Annual energy consumption - Heating (35°C/55°C) - Pure water	kWh	3138 / 3973	4323 / 4997	5225 / 6242	6912 / 7576	9057 / 10272
Energy class - Heating (35°C/55°C) - brine	-	A++ / -	A++ / -	A++ / -	A+++ / A++	A+++ / A++
Rated heat output (35°C/55°C) - brine	kW	6 / -	8 / -	12 / -	14 / 13	19 / 18
Seasonal energy efficiency - Heating (35°C/55°C) - brine	%	157 / -	155 / -	166 / -	179 / 142	179 / 136
Annual energy consumption - Heating (35°C/55°C) - brine	kWh	3369 / -	4074 / -	5644 / -	6386 / 7546	8604 / 10337
Acoustic level (indoor) ⁽¹⁾	dB(A)	56	57	56	55	55

MODULE						
Noise level ⁽²⁾	dB(A)	49	49	49	48	48
Net weight/filled weight	kg	140 / 145	150 / 155	155 / 160	175 / 180	185 / 190

(1) Acoustic power at 0/35°C according to EN12102. (2) Sound pressure level 5m from the device at 0/35°C, according to EN ISO 11203.

DIMENSIONS (MM)

Atlantic Geolia 5, 7 and 10 kW

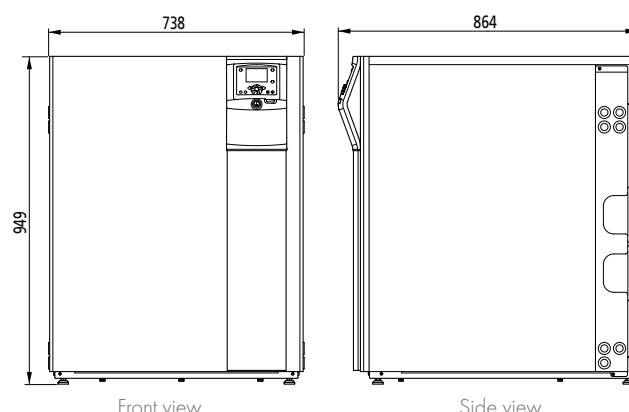


Front view

Side view

*Depending on models

Atlantic Geolia 13 and 17 kW



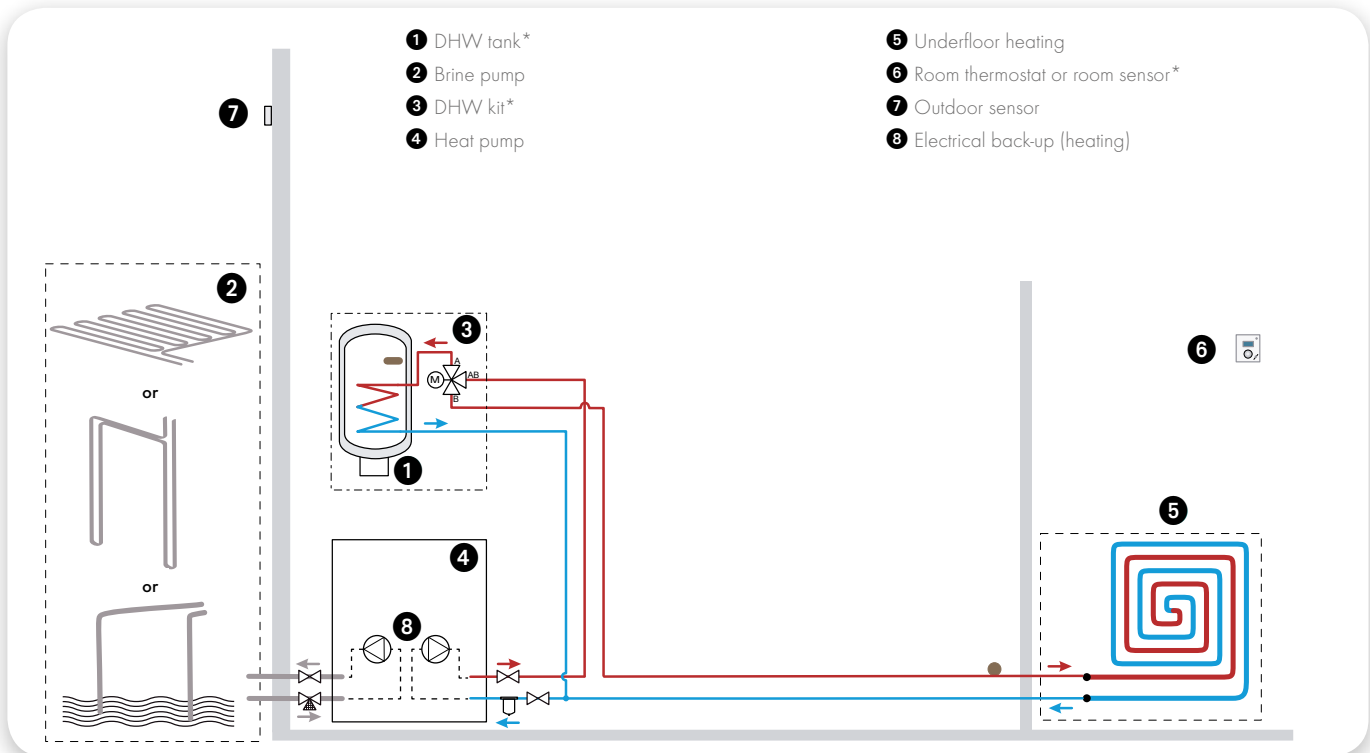
Front view

Side view

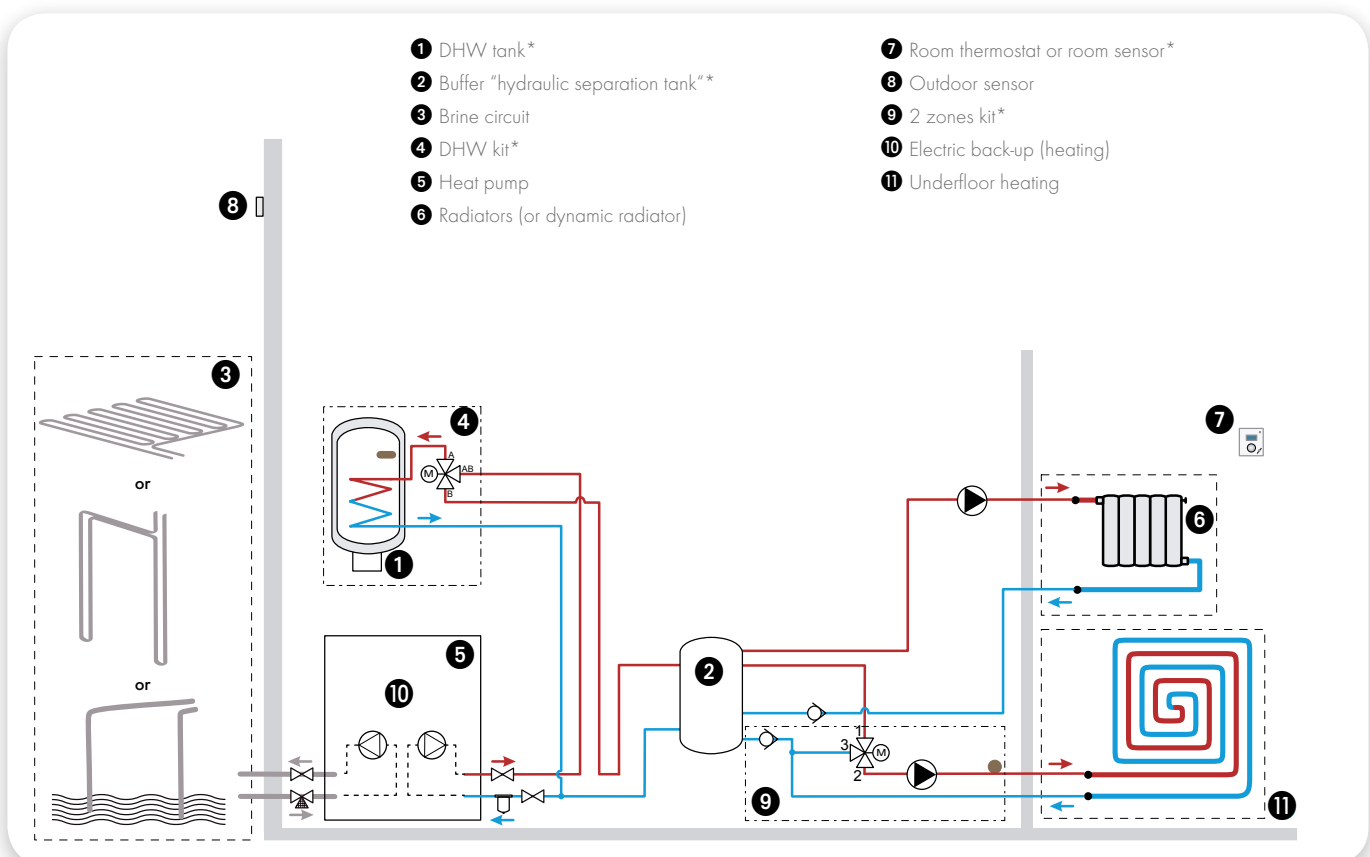
ATLANTIC GEOLIA

Installation schematics

ATLANTIC GEOLIA: 1 ZONE + UNDERFLOOR HEATING/COOLING + DHW TANK

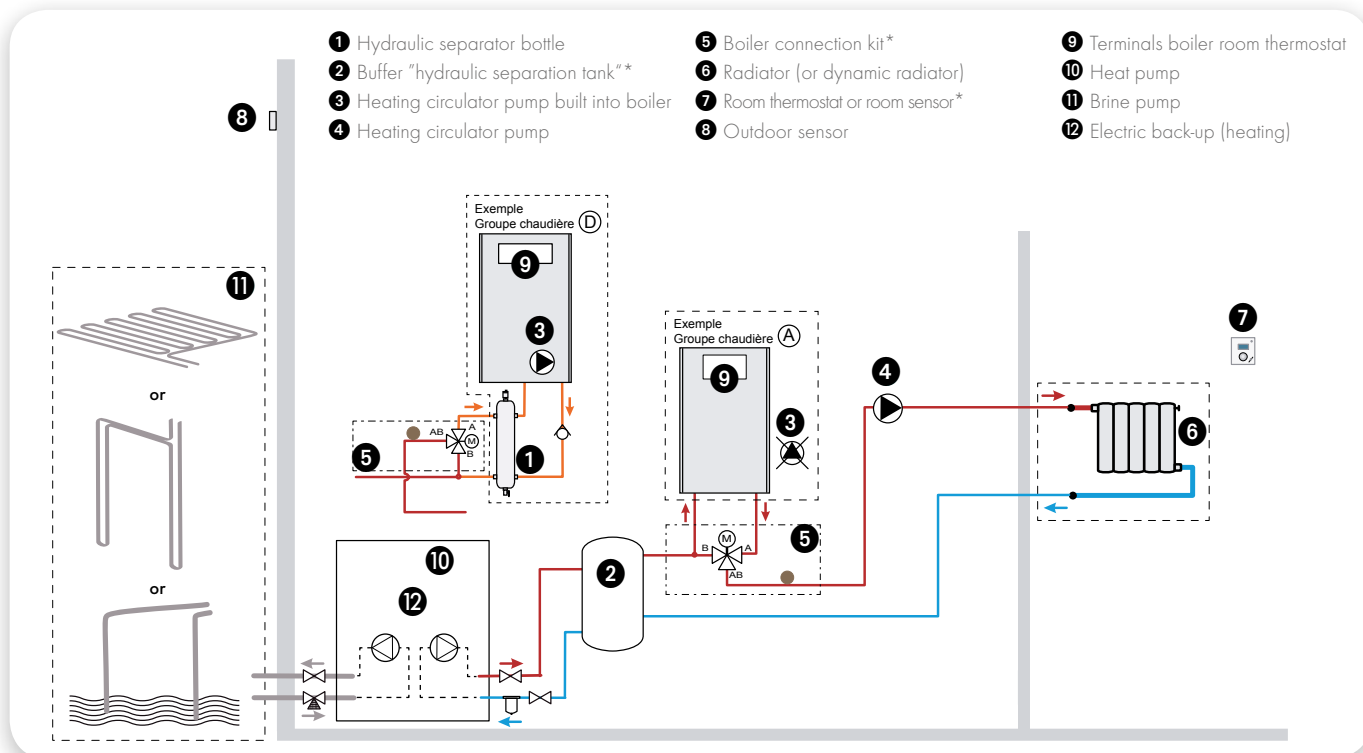


ATLANTIC GEOLIA: 2 ZONES + DHW TANK

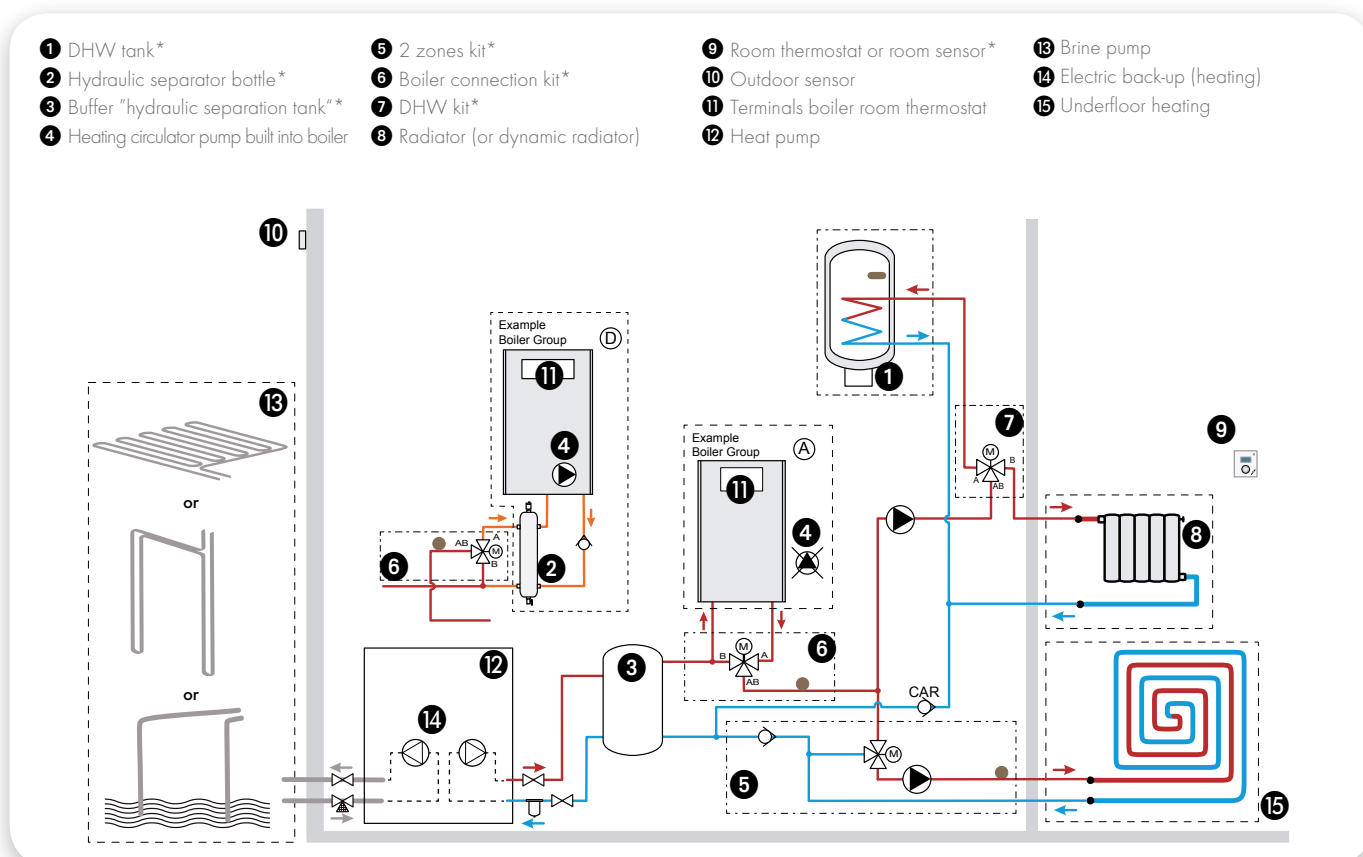


*Option

ATLANTIC GEOLIA: 1 ZONE + BOILER CONNECTION



ATLANTIC GEOLIA: 2 ZONES + DHW TANK + BOILER CONNECTION



*Option

PANAMA ACCESS

Fan coil connected with heat pumps
Thermal comfort solution in all seasons!



Product

- Innovative solution for domestic thermal confort on hot water loop
- Heating and cooling functions if connected to reversible heat pump
- Electric back-up heater in the front panel
- Compatible with heat pumps
- Heat exchanger integrated
- Homogeneous and gentle heating
- First certified fan coil on the French market

COMFORT

- Homogeneous heat diffusion
- Extended heating surface
- Cooling function during the summer if connected to reversible heat pump
- Filtered air for clean walls and healthy environment
- Ultra-silent radiator (<23 dB at Quite mode)

SAVINGS

- Thermal control using hot water loop for more energy savings
- 5 functions: Comfort/Eco Quiet/Heating/Cooling/Off

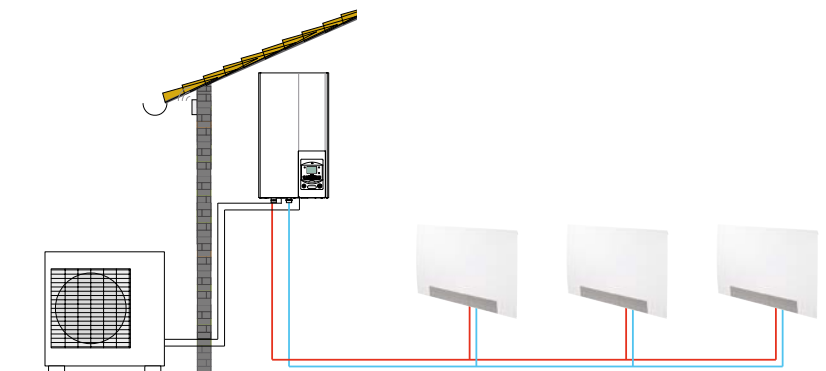
DESIGN

- Modern and compact design easily integrating all rooms
- Colour shade: white (RAL 9016)

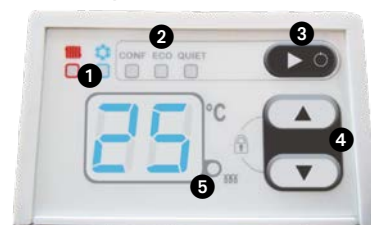
USER-FRIENDLINESS

- Simple and intuitive control panel
- Digital display showing temperature in degrees

INSTALLATION SCHEMATICS



Digital control panel:
simple and intuitive



- ❶ Heating / Cooling indicator
- ❷ Active mode light indicator
- ❸ On / Off button and changing mode button
- ❹ Temperature setting buttons and functions lock system
- ❺ Heating panel light indicator

TECHNICAL CHARACTERISTICS

TECHNICAL DATA	Fan Speed	PANAMA Access 500W		PANAMA Access 1000 W	
		Quiet*	Maxi	Quiet*	Maxi
Power supply voltage	V/Ph/Hz	230/1/50		230/1/50	
Electrical insulation class		II		II	
Hydraulic connection		2 male connectors 1/2"		2 male connectors 1/2"	
Water capacity	L	0.5		0.8	
Condensates connection		inner diameter of 16mm		inner diameter of 16mm	
50 °C / 45 °C					
Total power	W	780	1070	1500	2210
Air intake temperature	°C	20		20	
Water flow rate	l/h	99	136	180	264
Pressure loss	kPa	3.6	5.0	9.0	13.3
45 °C / 40 °C					
Total power	W	700	954	1300	1905
Air intake temperature	°C	20		20	
Water flow rate	l/h	121	166	226	331
Pressure loss	kPa	5.4	7.4	16.7	24.4
35 °C / 30 °C					
Total power	W	370	507	700	1025
Air intake temperature	°C	20		20	
Water flow rate	l/h	64	88	121	178
Pressure loss	kPa	3.0	4.1	7.1	10.4
7 °C / 12 °C					
Total power	W	480	780	703	1520
Sensible capacity	W	400	640	550	1220
Air intake temperature	°C / %	27°C / 50%		27°C / 50%	
Water flow rate	l/h	83	136	122	264
Pressure loss	kPa	3.3	6.0	5.6	17,2
Electrical characteristics					
Fan consumption (Vmin / Vinter / Vmax)	W	3.2 / 5.4 / 10.2		4.2 / 9 / 17.2	
On-board auxiliary ⁽¹⁾	W	190		290	
Acoustic characteristics					
Power	dB(A)	37	42	37	43
Acoustic pressure ⁽²⁾	dB(A)	23	29	23	31
Air system					
Air flow rate	(m³/h)	103	150	193	290
Dimensions					
Height	mm	680		680	
Width	mm	635		920	
Depth	mm	164		164	
Installation height	mm	150		150	
Net weight / package weight	kg	13.5/ 14.5		18.5/ 19.5	

(1) Heating panel electric power

(2) Acoustic pressure measured at 1,5 meters from the product

Notes

Notes



WORLD LEADING BRAND OF INDOOR THERMAL COMFORT

ATLANTIC INTERNATIONAL
58, avenue du Général Leclerc
92340 Bourg-la-Reine
France

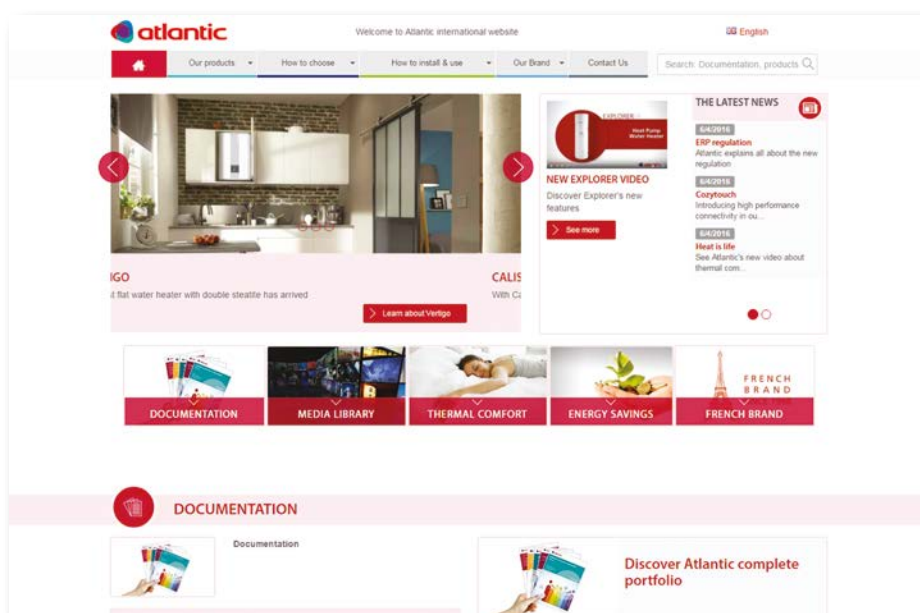


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