



# Heat pumps & renewable energy solutions

2021



- Air-to-water heat pumps
- Hybrid heat pumps
- Ground source heat pumps
- Fan coils



## PROUD TO WEAR **GROUPE ATLANTIC COLOURS**



GROUPE ATLANTIC meets vital needs through its increasingly eco-efficient solutions for heating, sanitary hot water, air conditioning and ventilation, which are geared to millions of customers in the housing and tertiary markets. A French company operating on four continents, GROUPE ATLANTIC upholds strong family values: trust, responsibility and long-term commitment.

GROUPE ATLANTIC 2019 key figures: 9400 employees; 28 industrial sites; €2.2 bn net turnover.

Thermal comfort is life / Thermal comfort for all \*





























# 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 products 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 technologies and energy-saving solutions.

#### LATEST KEY FACTS:

2021 New factory opening in Boz, France

2020 GROUPE ATLANTIC has acquired the residential activity of the Russian group SST, called SST Warm floor.

**2019** Opening of a subsidiary office in Vietnam

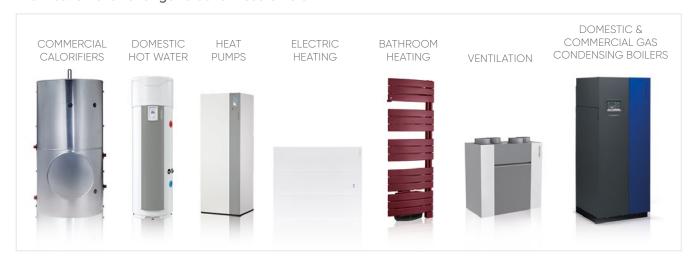
**2017** Factory opening in Georgia for electric water heaters manufacturing

**2016** Opening of a representative office in UAE

Creation of German subsidiary Austria Email GmBH

#### **ATLANTIC PRODUCTS PORTFOLIO:**

The most extensive range to benefit customers



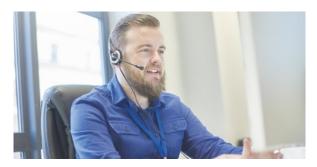
#### ATLANTIC FACTORIES AROUND THE WORLD



1

## Discover our services and trainings

As a service provider, we strive to bring you peace of mind every day. Atlantic offers exclusive services along with its products.



#### **AFTER SALES SERVICE**

Handling of spare parts, technical assistance and warranty management, set-up support (testing installation to ensure appliances are in full working order, adjusting required gauge or flow rates)



# Diagnosis assistance

For all technical assistance, installation, commissioning information, fault diagnosis and repairs. Contact our technical support with your serial number + product model code You can also share the diagnosis with an expert at our French industrial site either by email or videoconference.





### Warranty expertise

Warranties are handled according to incident tickets. If required, onsite or laboratory expertise is available. Once the part is replaced, you can then return the defective part. As a result, you will help us to constantly improve our products!



### PRACTICAL TRAINING

Useful training programs for your everyday work to help you be more efficient.



#### Why enrol in a training program?



#### Save time

- · Working equipment
- · Hands-on practical training in small groups
- Test benches and failure simulations
- · Expert trainers with extensive field experience





#### **Qualify** you

Training sessions on-site or in our training centres in France. Train on working equipment to develop your expertise and your business.



#### **Training details**



#### **On-site trainings**

- PAC 6-01: Heat pumps air to water discovery
- PAC 6-02: Install heat pumps air to water (all products)
- PAC 6-03: Install heat pumps air to water (New product)
- PAC 6-04: Commissioning & Maintenance heat pumps air to water (all products)
- PAC 6-05: Commissioning & Maintenance heat pumps air to water (New product)
- PAC 6-14: Commissioning, test and breakdowns diagnosis on refrigerant circuit





#### Online trainings

- PAC 6-21: Heat pump sizing calculation and Projipac 4
- PAC 6-13: Heat pump installation & commissioning
- PAC 6-15: Heat pump test & breakdowns





#### your design assistant tool

In preparation for project, it's important to start with designing the heat pump. This design study will help your customer avoid overconsumption and ensure them optimal day-to-day comfort.

Our Proji-PAC 4 design assistant tool helps you carry out a prospective study simply and reliably, all in less than **five minutes!** Using frame and installation configuration data, it gives you the appropriate heat pump solution for your customer.

The result: you save time and increase your chances of signing new heat pump projects.



methods

cold assessment

complete, tailor-made estimate that you can share with your customer with one clic

And tutorials included in the software to help you get started!



#### How to sign up for Proji-PAC 4?

#### IT'S VERY SIMPLE!

Connect to projipac.atlantic-pros.fr/"country number"/home from your computer, tablet or smartphone. You only need your login details (email address and personal password) to sign up for Proji-PAC 4 Account.



#### **Additional services:**

#### **Newsletters**

Subscribe to our twice-yearly e-mail newsletter for all of the latest business field news: regulations, products, tips and advice.







#### 4 training centers

- 1 Merville north of Paris on the manufacturing site for heat pumps and domestic boilers
- 2 Orléans south of Paris
- 3 Nancy east of Paris
- Meyzieu east of Lyon

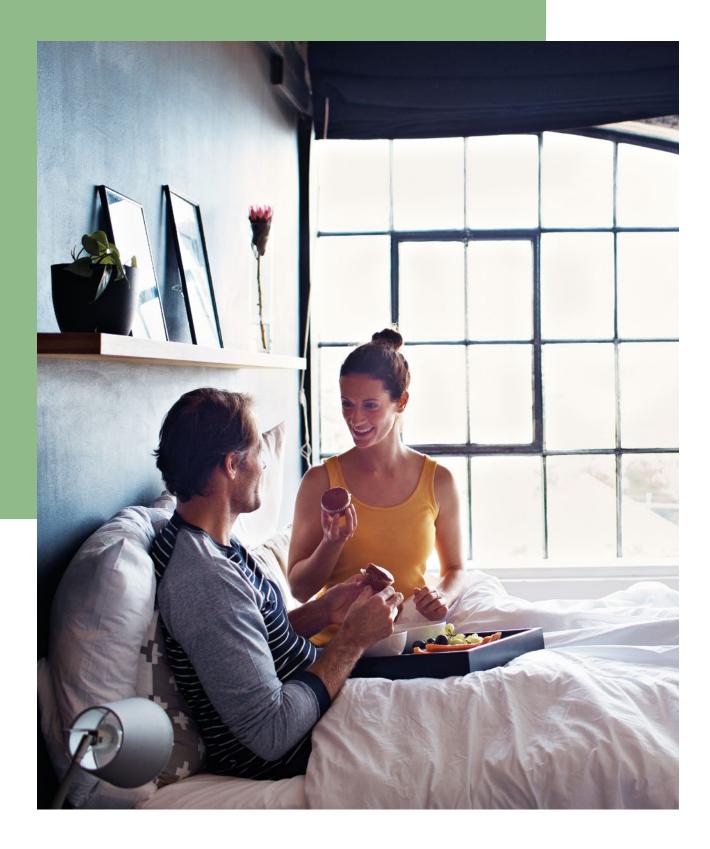
#### How to register and plan your training?

By Email:

spareparts-hpb@groupe-atlantic.com



## Contents



### Air-to-water heat pumps \_\_\_\_\_

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### Ground source heat pumps\_\_\_\_\_



# Fan coils for heating\_\_\_\_and cooling

Panama Access \_\_\_\_\_\_p.62



## Atlantic heat pumps

			Split air-to-wat	ter heat pumps		
	Alfea Extensa 🖭 R32	Alfea Extensa Duo 🔄 R32	Alfea Excellia <mark>Q</mark> 1	Alfea Excellia HP 🗃	Alfea Excellia Duo <mark>Qi</mark>	Alfea Excellia Duo HP 🔯
		730				
	55°C	55°C	60°C	60°C	60°C	60°C
3 kW		S				
4 kW						
5 kW	S	S				
6 kW	S	S				
7/8/9 kW	S	S				
10-11 kW	S	S	S T		ST	
13-14 kW			ST		ST	
15 kW				Т		Т
16-17 kW			Т	S T	Т	S T
2 HEATING ZONES	Optional	Optional	Optional	Optional	Optional	Optional
DOMESTIC HOT WATER	Optional	Standard supply	Optional	Optional	Standard supply	Standard supply
COOLING	Optional	Optional	Optional	Optional	Optional	Optional
BOILER CONNECTION	Optional	Optional	Optional	Optional	Optional	Optional
ELECTRIC BACK-UP HEATING	Standard supply	Standard supply	Standard supply	Standard supply	Standard supply	Standard supply
ENERGY CLASS HEATING	35°C 55°C	35°C 55°C	A**  35°C 55°C	A** A** 35°C 55°C	A** A* A* 35°C 55°C	A**  35°C 55°C
ENERGY CLASS DHW	-	A <sup>+</sup>	-	-	A	A
CONNECTIVITY	Cozytouch	Cazytouch	Cozytouch	Cazytouch	Cozytouch	Cozytouch

<sup>\*23</sup> kW boiler only. \*\*6 kW and 8 kW models only. \*\*\* Depending on models and types of collectors.

		Sp	lit air-to-water heat pum	ps	Ground source heat pumps
	Alfea Hybrid Duo Oil 🗿	Alfea Hybrid Duo Gas	Loria	Loria Duo	Atlantic Geolia
	80°C	80°C	55°C	55°C	60°C
3 kW					
4 KW			S	S	
5 KW					S
6 KW	<b>S</b> *	S	S	S	
7/8/9 KW	<b>S</b> *	s	S	S	S
10-11 KW	ST	ST	S	S	S
13-14 KW	ST	ST			Т
15 KW					
16-17 KW		T			Т
2 HEATING ZONES	Optional	Optional	Optional	Optional	Optional
DOMESTIC HOT WATER	Standard supply	Standard supply	Optional	Standard supply	Optional
COOLING	Optional	Optional**	Optional	Optional	Optional
BOILER CONNECTION	Standard supply (23 kW or 29 kW)	Standard supply	-	-	Optional
ELECTRIC BACK- UP HEATING	-	-	Standard supply	Standard supply	Standard supply
ENERGY CLASS HEATING	Up to	A <sup>†</sup> 55°C	Up to	Up to	Up to
ENERGY CLASS DHW	Up to	B	-	A <sup>+</sup>	-
CONNECTIVITY	Cozytouch				

## Atlantic guides you

#### WHAT IS ERP?

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

#### 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 European directive, also called the 20–20–20 target, is to:

- Decrease CO<sub>2</sub> 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 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\*.



#### REQUIREMENTS FOR ENERGY-RELATED PRODUCTS

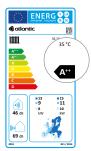
#### **ECODESIGN DIRECTIVE**

**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**

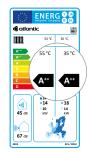
Well known to the end-user of white goods, energy efficiency labels (product labels) became mandatory for heating and water heating products, within the European Union market, since September 2015. These products must have energy efficiency labels to inform end-users about their real performance (energy consumption, noise level and other product-specific information).

Since September 26<sup>th</sup>, 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 has evolved since 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%).

Since Septembre 2019, energy efficiency classification has evolved: ErP labels for heat pumps include only 7 energy efficiency classes – from A+++ to D.

## through ErP regulation

#### 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.

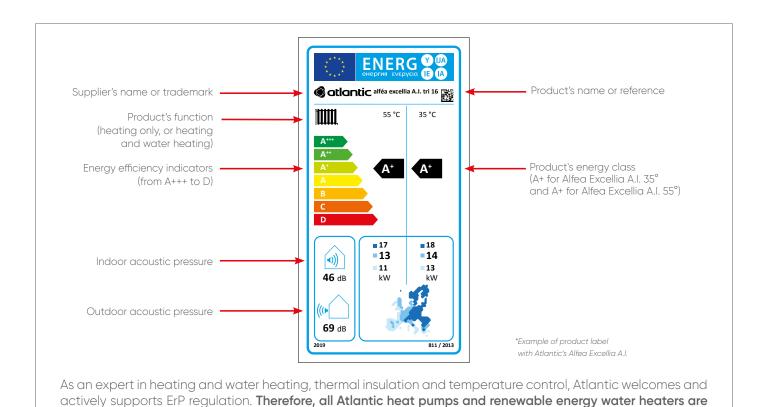
In particular, product labels for heat pumps and boilers are different from those for electric water heaters. Due to the higher performance of these products, product labels for heat pumps and boilers have two more energy classes (A+) and A+++), in addition to basic energy classes (from A to D) which 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.



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

highly performant in terms of energy efficiency and environmental protection (up to A+++)!

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.



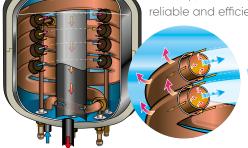
#### **ATLANTIC TECHNOLOGIES**

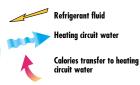


### A dedicated hydraulic conception for improved performances

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 functionning without any filter tap, which makes Alfea heat pump a reliable and efficient solution.





### Watch the video about the coaxial heat exchanger





Scan the QR code or visit our website:

https://www.atlantic-comfort.com/Sections-Home/Media-Library/Coaxial-exchanger-in-Alfea-heat-pumps



### Atlantic innovation for optimum 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.

60°C High performance

#### 55 °C Average temperature

Average temperature solution for all projects







#### 

High performance solution for renovation projects







## Alfea range

#### **Performances**

- 55°C average temperature solutions, 60°C highperformance solutions, 80°C hybrid solutions
- COP up to 4,52
- Full Inverter regulation
- · Low energy consumption circulation pump
- ErP-compliant: Up to A++

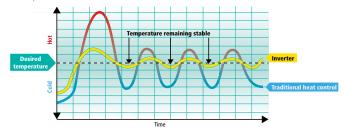
#### **Adaptability**

- · 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.









#### **Atlantic interface NAVISTEM 400S**

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



Devices' real-time monitoring



Daily energy consumption visualisation & optimisation

Available on App Store Google Play





in selected countries

#### 80 °C Hybrids

#### Alfea Hybrid Duo Oil 🗿 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 / 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



### **News**

#### Alfea heat pump range

#### **ALFEA EXTENSA A.I. R32**



Atlantic is bringing you the Alfea Extensa A.I. R32 with new output levels.

In 2020, the Alfea Extensa A.I. range got a makeover, with the addition of the new Extensa model that uses R32 refrigerant fluid.

These R32 models still come with our Atlantic expertise – like the coaxial exchanger – but are now even more efficient.

Starting in Q1 2021, you'll be able to carry out even more renovation projects, thanks to the two newly-launched output levels that are ideal for new builds: 3 and 10 kW.



#### Simplifix, a pre-connection system for heat pumps

AWARDS
INNOVATION
le mondial du bâtiment 2019
Lauréat • Winner

Always innovative, Atlantic is
offering pre connection systems
for Alfea Extensa Duo A.I. R32. These systems are

available for models of up to 8 kW. They can be adapted to all configurations, as well as allowing for easy hydraulic installation.



Non contractual image.







#### F-GAS: European regulations

The goal of European F-Gas regulation  $N^{\circ}$  517/2014 is reducing the use of HFC (hydrofluorocarbon) gases and outlawing the use of certain 'fluorinated greenhouse gases' by 2030.

Such measures have a direct effect on heat pump manufacturers:

- The establishment of quotas for producers since 2015
- The halt to trading in equipment using fluid, including by importers. R410A from 1 January 2025 according to interprofessional consensus.

No regulation forbids the use of a universal fluid that can be applied to all solutions.

FLUID	R744 (CO₂)	R410A	R134A	R32	R290 (propane)
GWP (kg CO <sub>2</sub> equivalent)	1	2088	1430	675	20

#### Term to know

**GWP:** Global warming potential, an indicator of the impact of fluids on global warming.

#### WHAT IS R32?

32 is an HFC fluid that is considered to be a good alternative to R410A.

#### It offers several advantages:

- One-third of the GWP of R410A
- Thermal capacity superior to that of R410A

#### **Shifting to R32**

✓ A certification of competence is required.

- It is a single-component coolant, which makes it easier to recapture and recycle
- ✓ R32 can be used in both its liquid and gas states.

In addition to the usual tools (pipe cutter, flaring tool, vacuum pump, etc.), additional equipment is required:



Specific recovery cylinder



for flammable coolants



Pressure gauge with dedicated scale



for flammable coolants

Adapter to be placed on the cylinder

Ventilation system



#### TRANSPORT AND OTHER USAGE PRECAUTIONS

R32 is classed as A2L, or 'mildly flammable'. R32 is neither toxic nor explosive.

To ensure the coolant's safety, including during installation, the installer should pay particular attention to the following aspects when transporting and handling R32.

#### FOR STORING AND TRANSPORTING THE FLUID:

- Ensure that the cylinder's valve is closed and not leaking
- Ensure sufficient ventilation on the premises and/or in the vehicle and preferably transport it in a vehicle whose transport component is separate from the driver's cabin
- · Avoid exposing the fluid to any source of ignition
- Store the fluid away from sunlight

#### WHILE HANDLING:

- Verify that there are no leaks during installation in order to prevent oxygen from entering the coolant circuit
- Regularly monitor the sealing of the system and the amount of coolant
- The regulatory framework (EN 60335) authorises the installation of R32 equipment without imposing specific measures for a heat pump + coolant attachments in an individual home that weigh under 1.84 kg. Alfea Extensa A.I. R32 heat pumps under 8 kW are not affected by these constraints.

## Alfea Extensa 🗖 R32 range

Split Air/water Inverter heat pump
Average temperature - Heating only



refrigerant fluid, was specifically designed to meet all the needs of the modern home.

### The expertise of Atlantic at the service of our customers

Atlantic teams are attentive to customer needs, to understand the issues they face and provide appropriate concrete solutions.

Thus, Alfea Extensa A.I. R32 ingeniously combines features to make day-to-day living easier: lighter product, pre-assembly of ECS/EFS connectors, simplification of remote diagnostics, etc. Its EASY START interface function enables rapid, user-friendly setting definition for the law of water.

Developed to meet current thermal comfort expectations, the Alfea Extensa A.I. R32 provides well-being to your home all year round thanks to its efficient performance.

With Alfea Extensa A.I. R32, Atlantic offers you performance, quality and efficiency.







## Alfea Extensa a R32 range

New 3 and 10 kW

models

R32 AIR-TO-WATER HEAT PUMP 5 models from 3 to 10 kW



## Alfea Extensa a R32

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







- Robust hydraulic conception due to patented coaxial heat exchanger
- Better performance, optimised acoustic pressure and increased energy efficiency
- Possibility of remote piloting via Cozytouch application due to NAVISTEM 400S control system
- Low acoustic level

#### DESCRIPTION

- · Average temperature solution for all projects
- 4 models :5 to 10 kW
- · Single-phase models
- Heating only
- · Patented coaxial heat exchanger
- Inverter regulation
- Integrated 16 L buffer tank

#### **AVAILABLE OPTIONS**

- 2 zones kit (plug-and-play kit)
- · Cooling kit
- Separate hot water tank
- · Boiler connection kit
- · Room controller

Practical trainings
that will help you save time and be more efficient



#### ⊕ ⊕ ⊕ On-site trainings

- PAC6-03-1: Install a new product 1 day
- PAC6-05-1: Commissioning, maintenance and service 1 day



#### **Online trainings**

- PAC 6-13-5: Installation & commissioning 1/2 day
- PAC 6-15-5: Services test & breakdowns 1/2 day













#### 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
- 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
- Refrigerating connection valves (flared connectors) with protective cover

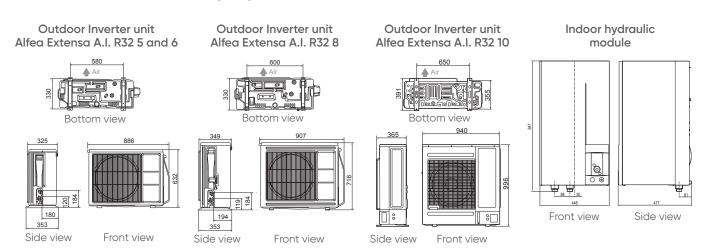


#### TECHNICAL CHARACTERISTICS AND PERFORMANCES

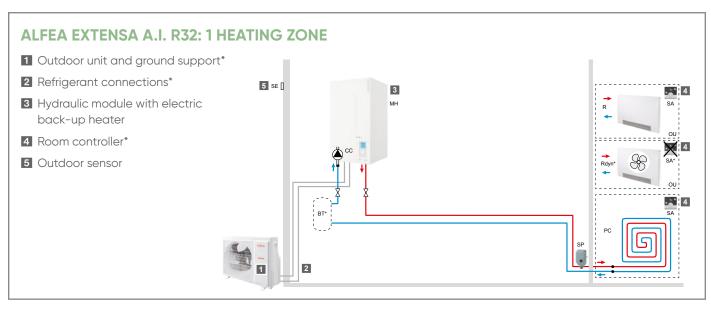
		UNIT	ALFEA EXTENSA A.I. 5 R32	ALFEA EXTENSA A.I. 6 R32	ALFEA EXTENSA A.I. 8 R32	ALFEA EXTENSA A.I. 10 R32
	REFRIGERANT		R32	R32	R32	R32
	ENERGY EFFICIENCY & ACOUSTIC CHARACTERISTICS					
	Energy class - Heating (35°C/55°C)	-	A+++ / A++	A+++ / A++	A+++ / A++	A+++ / A++
	Rated heat power (35°C/55°C)	kW	5/5	6/5	7/6	9/8
G.	Annual energy consumption - Heating (35°C/55°C)	kWh	2322 / 3035	2594 / 3411	2982 / 3903	3 875 / 5 083
ű	Seasonal energy efficiency - Heating (35°C/55°C)	%	175 / 125	175 / 125	177 / 128	178 / 130
	Seasonal energy efficiency - Heating (35°C/55°C) with outdoor sensor	%	177 / 127	177 / 127	179 / 130	180 / 132
	Sound power level (indoor/outdoor) <sup>[1]</sup>	dB(A)	40 / 57	40 / 57	40 / 60	40 / 62
	MAIN CHARACTERISTICS					
	SCOP 35 °C / 55 °C	-	4,45 / 3,20	4,46 / 3,21	4,5 / 3,28	4,53 / 3,33
	Heating capacity +7°C/+35°C - Underfloor Heating	kW	4.50	5.50	7.50	9.50
	COP +7°C/+35°C - Underfloor Heating		4.74	4.65	4.43	4.50
	Heating capacity -7°C/+35°C - Underfloor Heating	kW	4.40	5.00	5.70	8.90
	COP -7°C/+35°C - Underfloor Heating		2.76	2.63	2.68	3.36
	Heating capacity +7°C/+45°C - Low T°radiators	kW	4.50	5.50	7.25	2.65
	COP +7°C/+45°C – Low T°radiators		3.39	3.39	3.35	9.25
	Heating capacity -7°C/+45°C – Low T°radiators	kW	4.28	4.82	5.58	8.61
	COP -7°C/+45°C – Low T°radiator		2.26	2.21	2.17	2,27
	Heating capacity +7°C/+55°C - Radiators	kW	4.50	5.50	7.00	9.00
	COP +7°C/+55°C - Radiators		2.64	2.67	2.66	2,70
	Heating capacity -7°C/+55°C - Radiators	kW	3.90	4.25	5.30	8.00
	COP -7°C/+55°C - Radiators		1.85	1.89	1.90	1.95
	Additional electric back-up heater	kW	3/6	3/6	3/6	3/6
	INDOOR HYDRAULIC MODULE					
	Noise level <sup>[2]</sup>	dB(A)	32	32	32	32
	Net weight/filled weight <sup>[3]</sup>	kg	42 / ask for this information			
	Power supply	V / Hz	230 / 50	230 / 50	230 / 50	230 / 50
	OUTDOOR UNIT					
	Noise level <sup>[4]</sup>	dB(A)	35	35	38	40
	Operating weight	kg	43	43	46	62
	REFRIGERANT CHARACTERISTICS					
	Min./max. length	m	3/30	3 / 30	3/30	3/30
	Max. difference in height	m	20	20	20	20
	R32 factory load	g	970	970	1 020	1 630
	Quantity of refrigerant in tons of $CO_2$ equivalent	t	0,65	0,65	0,69	1.10

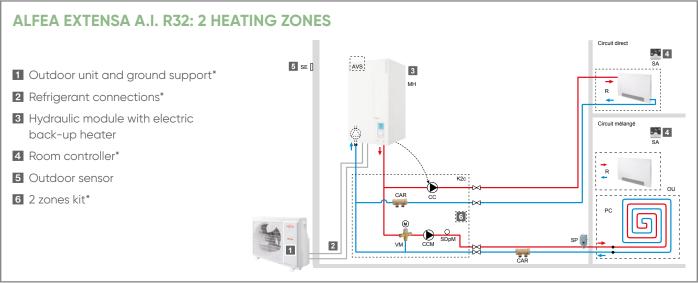
(1) Sound power level is a laboratory measurement of the sound power emitted by the product, but it does not correspond to the sound perceived. Used by acoustics specialists, it allows to measure the sound pressure level of the product in its working environment. - (2) Acoustic pressure at 1m from HP,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

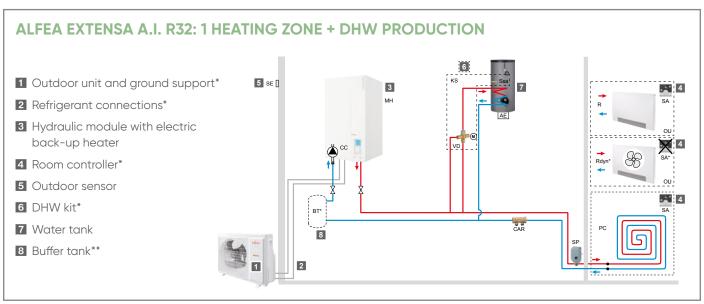
#### **INSTALLATION DIMENSIONS (mm)**



### **INSTALLATION SCHEMATICS**







## Alfea Extensa Duo 🗖 R32

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







- Robust hydraulic conception due to patented coaxial heat exchanger
- Better performance, optimised acoustic pressure and increased energy efficiency
- Possibility of remote piloting via Cozytouch application due to NAVISTEM 400S control system

#### DESCRIPTION

- Average temperature solution for all projects
- 5 models : 3 to 10 KW
- · Single-phase models
- · Heating and DHW integrated
- · Patented coaxial heat exchanger
- Inverter regulation
- Integrated 16 L buffer tank

#### **AVAILABLE OPTIONS**

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

### • DHW tank with high-performance regulation

### Practical trainings that will help you save time and be more efficient



#### ⇔⇔⇔ On-site trainings

- PAC6-03-1: Install a new product 1 day
- PAC6-05-1: Commissioning, maintenance and service 1 day



#### Online trainings

- PAC 6-13-5: Installation & commissioning 1/2 day
- PAC 6-15-5: Services test & breakdowns 1/2 day















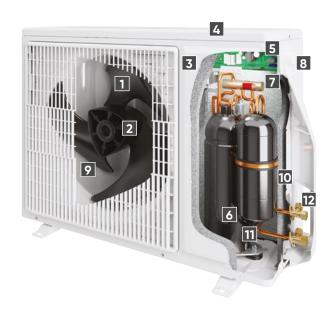
#### INDOOR HYDRAULIC MODULE-



- 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-up

#### **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
- Refrigerating connection valves (flared connectors) with protective cover

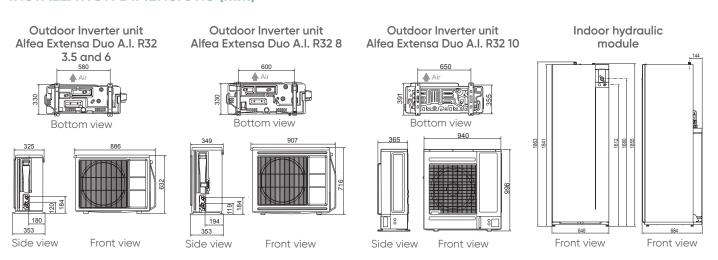


#### TECHNICAL CHARACTERISTICS AND PERFORMANCES

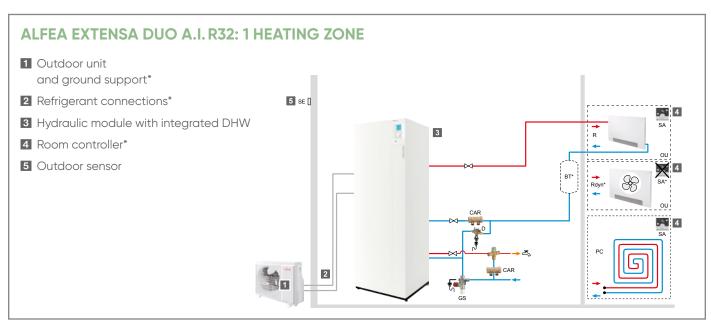
	UNIT	ALFEA EXTENSA	ALFEA EXTENSA	ALFEA EXTENSA	ALFEA EXTENSA	ALFEA EXTENSA
REFRIGERANT		DUO A.I. 3 R32	DUO A.I. 5 R32 R32	DUO A.I. 6 R32	DUO A.I. 8 R32 R32	DUO A.I. 10 R32
ENERGY EFFICIENCY & ACOUSTIC CHARACTERISTIC	25	R32	R3Z	R32	K3Z	R32
Energy class - Heating (35°C/55°C)	_	A+++ / A+	A+++ / A++	A+++ / A++	A+++ / A++	A+++ / A++
Rated heat power (35°C/55°C)	kW	ATTT / AT	5/5	6/5	7/6	9/8
Annual energy consumption - Heating (35°C/55°C)	kWh		2322 / 3035	2594 / 3411	2982 / 3903	3 875 / 5 083
Seasonal energy efficiency - Heating (35°C/55°C)	%		175 / 125	175 / 125	177 / 128	178 / 130
Seasonal energy efficiency - Heating (35 °C/55 °C)		to be confirmed				
with outdoor sensor	%		177 / 127	177 / 127	179 / 130	180 / 132
Sound power level (indoor/outdoor) <sup>[1]</sup>	dB(A)		40 / 57	40 / 57	40 / 60	40 / 62
Declared load profile - DHW	-	L	L	L	L	L
Energy class - DHW	-	A+	A+	A+	A+	A+
Annual energy consumption - DHW	kWh	793	793	793	793	793
Seasonal energy efficiency (%) - DHW	%	130	130	130	130	130
MAIN CHARACTERISTICS						
SCOP 35 °C / 55 °C	-		4.45 / 3.20	4.46 / 3.21	4.5 / 3.28	4.53 / 3.33
Heating capacity +7°C/+35°C – Underfloor Heating	kW		4.50	5.50	7.50	9.50
COP +7°C/+35°C - Underfloor Heating			4.74	4.65	4.43	4.50
Heating capacity -7°C/+35°C – Underfloor Heating	kW		4.40	5.00	5.70	8.90
COP -7°C/+35°C - Underfloor Heating			2.76	2.63	2.68	2,65
Heating capacity +7°C/+45°C – Low T°radiators	kW		4.50	5.50	7.25	9.25
COP +7°C/+45°C – Low T°radiators		to be confirmed	3.39	3.39	3.35	3.40
Heating capacity -7°C/+45°C - Low T°radiators	kW	to be commined	4.28	4.82	5.58	8.61
COP -7°C/+45°C - Low T°radiator			2.26	2.21	2.17	2.27
Heating capacity +7°C/+55°C - Radiators	kW		4.50	5.50	7.00	9.00
COP +7°C/+55°C - Radiators			2.64	2.67	2.66	2.70
Heating capacity -7°C/+55°C - Radiators	kW		3.90	4.25	5.30	8.00
COP -7°C/+55°C - Radiators			1.85	1.89	1.90	1.95
Additional electric back-up heater	kW		3/6	3/6	3/6	3/6
INDOOR HYDRAULIC MODULE						
Noise level <sup>(2)</sup>	dB(A)	to be confirmed	32	32	32	34
Net weight/filled weight <sup>[3]</sup>	kg	143 / 373	143 / 373	143 / 373	143 / 373	145 / 363
Power supply	V/Hz	230 / 50	230 / 50	230 / 50	230 / 50	230 / 50
OUTDOOR UNIT						
Noise level <sup>[4]</sup>	dB(A)	to be confirmed	35	35	38	38
Operating weight	kg	39	43	43	46	62
REFRIGERANT CHARACTERISTICS						
Min./max. length	m	3/30	3/30	3/30	3/30	3 / 30
Max. difference in height	m	20	20	20	20	20
R32 factory load	g	970	970	970	1 020	1 630
Quantity of refrigerant in tons of CO <sub>2</sub> equivalent	t	0,65	0,65	0,65	0.69	1.10

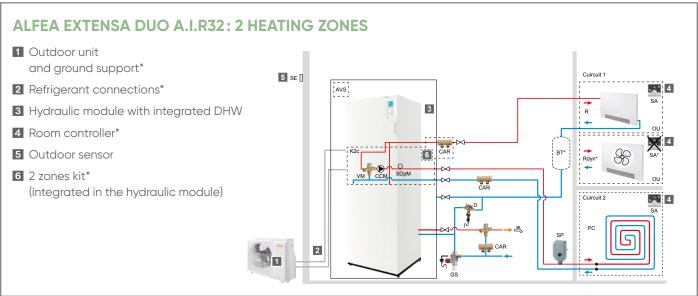
<sup>(1)</sup> Sound power level is a laboratory measurement of the sound power emitted by the product, but it does not correspond to the sound perceived. Used by acoustics specialists, it allows to measure the sound pressure level of the product in its working environment. - (2) Acoustic pressure at 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.

#### **INSTALLATION DIMENSIONS (mm)**



#### **INSTALLATION SCHEMATICS**





\*Optional

## Alfea Excellia

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









### **BENEFITS**

- Robust hydraulic conception due to patented coaxial heat exchanger
- Intuitive interface and simplified use
- High-performance solution for large houses and/or cold climate
- Possibility of remote piloting via Cozytouch application due to NAVISTEM 400S control system

#### **DESCRIPTION**

- · Suitable for new build and renovation
- 8 models: 11 to 17 kW
- Single-phase or three-phase models
- Heating only
- · Patented coaxial heat exchanger
- Inverter regulation
- Integrated buffer tank 16 L (24 L for HP models)

#### **AVAILABLE OPTIONS**

- 2 zones kit (plug-and-play kit)
- · Cooling kit
- Separate hot water tank
- · Boiler connection kit
- Room controller

#### **INNOVATION**

Alfea Excellia HP A.I. models are equipped with a new extended coaxial heat exchanger for higher performance.



#### Practical trainings

that will help you save time and be more efficient



#### ⊕ ⊕ ⊕ On-site trainings

- PAC 6-02: Install heat pumps air to water 2 days
- PAC 6-04: Commissioning, maintenance and service of heat pumps air to water - 2 days

#### Alfea Excellia HP A.I.

- PAC 6-03-2: Install a new product 1 day
- PAC 6-05-2: Commissioning, maintenance and service 1 day



#### **Online trainings**

- PAC 6-13-1: Split heat pump installation commissioning 1 day
- PAC 6-15-2: Heat pump Services test & breakdowns 1 day

#### Alfea Excellia HP A.I.

• PAC 6-15-3: Heat pump service test & breakdowns - 1/2 day



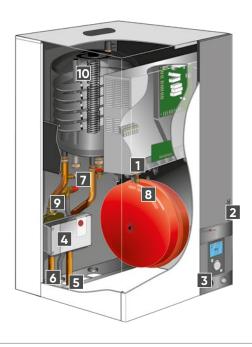








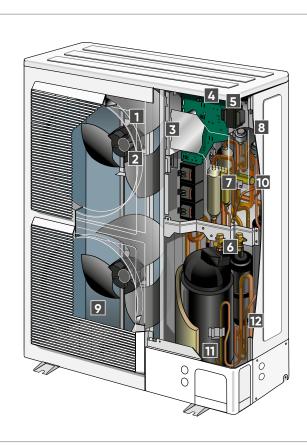
#### INDOOR HYDRAULIC MODULE-



- 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

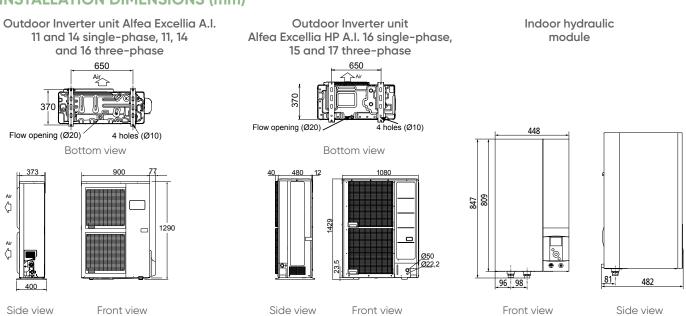


#### TECHNICAL CHARACTERISTICS AND PERFORMANCES

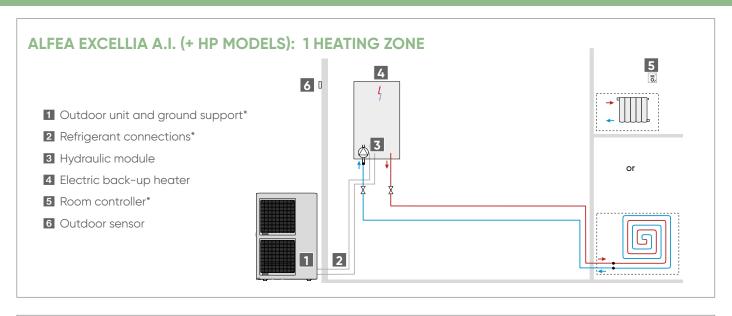
		UNIT	ALFEA EXCELLIA A.I. 11	ALFEA EXCELLIA A.I. 14	ALFEA EXCELLIA A.I. TRI 11	ALFEA EXCELLIA A.I. TRI 14	ALFEA EXCELLIA A.I. TRI 16	ALFEA EXCELLIA HP A.I. 16	ALFEA EXCELLIA HP A.I. TRI 15	ALFEA EXCELLIA HP A.I. TRI 17
	Refrigerant		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	ENERGY EFFICIENCY & ACOUSTIC CHARACTERISTIC	cs								
	Energy class - Heating (35°C/55°C)	-	A++ / A+	A++ / A+	A++ / A+	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	16 / 14	17 / 16	18 / 17
Ę.	Annual energy consumption - Heating (35°C/55°C)	kWh	6062 / 6623	6824 / 8041	5930 / 6669	6738 / 7803	7408 / 9062	8014 / 8757	8606/9915	9059 / 10232
	Seasonal energy efficiency - Heating (35°C/55°C)	%	151 / 112	148/ 113	154 / 112	150 / 117	149 / 117	163 / 125	164 / 130	161 / 130
	Seasonal energy efficiency - Heating (35°C/55°C) with outdoor sensor	%	153 / 114	150 / 115	156 / 114	152 / 119	151 / 119	165 / 127	166 / 132	163 / 132
	Sound power level (indoor/outdoor) <sup>[1]</sup>	dB(A)	46 / 69	46 / 69	46 / 68	46 / 69	46 / 69	45 / 67	45 / 67	45 / 67
	MAIN CHARACTERISTICS									
	SCOP 35 °C / 55 °C	-	3.85 / 2.97	3.77 / 2.90	3.92 / 2.17	3.82 / 3.00	3.80 / 3.00	4.25 / 3.21	4.18 / 3.33	4.12 / 3.33
	Heating capacity +7°C/+35°C – Underfloor Heating	kW	10.80	13.50	10.80	13.00	15.17	16.00	15.00	17.00
	COP +7°C/+35°C - Underfloor Heating		4.25	4.18	4.30	4.18	4.10	4.15	4.33	4.15
	Heating capacity -7°C/+35°C – Underfloor Heating	kW	10.38	11.54	10.38	12.20	12.98	14.50	13.20	15.00
	COP -7°C/+35°C - Underfloor Heating		2.40	2.27	2.43	2.38	2.40	5.27	4.55	5.32
	Heating capacity +7°C/+55°C - Radiators	kW	7.59	9.48	9.29	10.60	12.24	14.50	13.20	15.00
	COP +7°C/+55°C - Radiators		2.47	2.40	2.64	2.41	2.48	2.60	2.77	2.73
	Heating capacity -7°C/+55°C - Radiators	kW	7.57	9.20	9.27	10.10	12.00	10.90	13.20	14.20
	COP -7°C/+55°C - Radiators		1.66	1.81	1.82	1.79	1.74	1.85	1.95	1.92
	Heating capacity -7°C / +60°C - Radiators	kW	6.71	8.42	8.48	10.10	10.9	10.80	11.20	11.70
	Additional adjustable electric back-up heater	kW	6	6	9	9	9	6	9	9
	INDOOR HYDRAULIC MODULE									
	Noise level <sup>[2]</sup>	dB(A)	39	39	39	39	39	37	37	37
	Net weight/filled weight <sup>[3]</sup>	kg	46 / 62	46 / 62	46 / 62	46 / 62	46 / 62	53 / 75	53 / 75	53 / 75
	Power supply	V/Hz	230 / 50	230 / 50	400 / 50	400 / 50	400 / 50	230 / 50	400 / 50	400 / 50
	OUTDOOR UNIT									
	Noise level <sup>[4]</sup>	dB (A)	47	47	46	47	47	45	45	45
	Operating weight	kg	92	92	99	99	99	137	138	138
	REFRIGERANT CHARACTERISTICS									
	Min./max. length	m	5/20	5/20	5/20	5/20	5/20	5/30	5/30	5/30
	Max. difference in height	m	15	15	15	15	15	15	15	15
	R410A factory load	g	2500	2500	2500	2500	2500	3800	3800	3800
	Quantity of refrigerant in tons of CO <sub>2</sub> equivalent	t	5	5	5	5	5	8	8	8

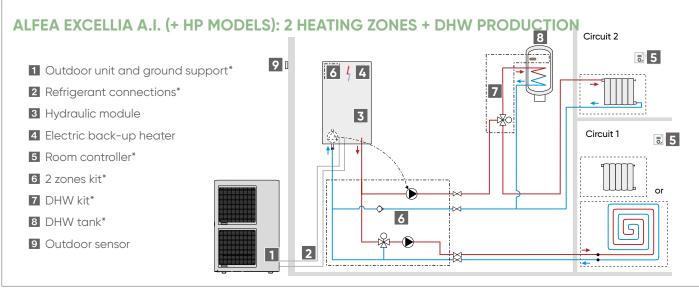
<sup>(1)</sup> Sound power level is a laboratory measurement of the sound power emitted by the product, but it does not correspond to the sound perceived. Used by acoustics specialists, it allows to measure the sound pressure level of the product in its working environment. - (2) Acoustic pressure at 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.

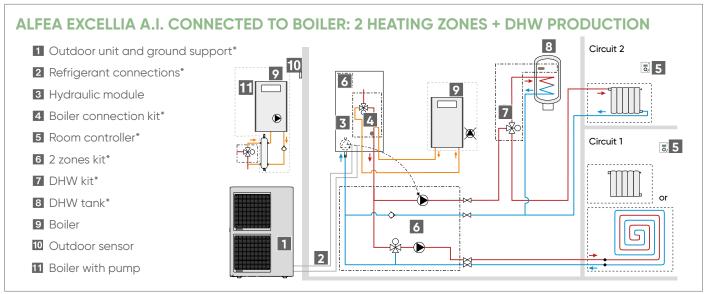
#### **INSTALLATION DIMENSIONS (mm)**



#### **INSTALLATION SCHEMATICS**







\*Optional

### Alfea Excellia Duo

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



- Robust hydraulic conception due to patented coaxial heat exchanger
- Intuitive interface and simplified use
- Possibility of remote piloting via Cozytouch application due to NAVISTEM 400S control system
- DHW tank with high-performance regulation

#### **DESCRIPTION**

- · Suitable for new build and renovation
- 8 models: 11 to 17 kW
- Single-phase or three-phase models
- · Heating and DHW integrated
- · Patented coaxial heat exchanger
- Inverter regulation
- Integrated buffer tank 16 L (24 L for HP models)

#### **AVAILABLE OPTIONS**

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

#### **INNOVATION**

Alfea Excellia HP Duo A.I. models are equipped with a new extended coaxial heat exchanger for higher performance.



#### Practical trainings

that will help you save time and be more efficient



#### ⊕ ⊕ ⊕ On-site trainings

- PAC 6-02: Install heat pumps air to water 2 days
- PAC 6-04: Commissioning, maintenance and service of heat pumps air to water - 2 days

#### Alfea Excellia HP Duo A.I.

- PAC 6-03-2: Install a new product 1 day
- PAC 6-05-2: Commissioning, maintenance and service 1 day



#### Online trainings

- PAC 6-13-1: Split heat pump installation commissioning 1 day
- PAC 6-15-2: Heat pump Services test & breakdowns 1 day

#### Alfea Excellia HP Duo A.I.

• PAC 6-15-3: Heat pump service test & breakdowns - 1/2 day













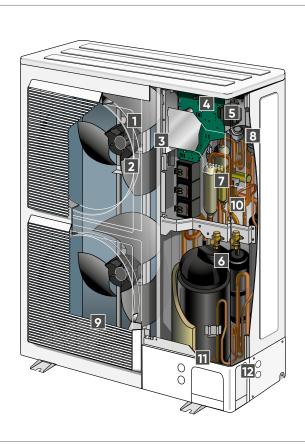
#### INDOOR HYDRAULIC MODULE-



- 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-up

#### **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
- Refrigerating connection valves (flared connectors) with protective cover

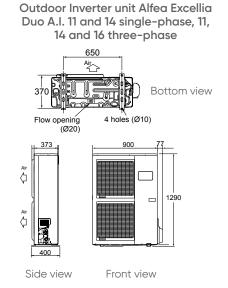


#### **TECHNICAL CHARACTERISTICS AND PERFORMANCES**

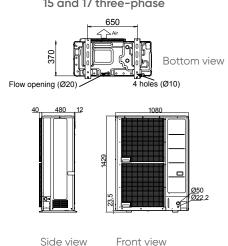
	UNIT	ALFEA EXCELLIA DUO A.I. 11	ALFEA EXCELLIA DUO A.I. 14	ALFEA EXCELLIA DUO	ALFEA EXCELLIA DUO	ALFEA EXCELLIA DUO	ALFEA EXCELLIA HP DUO	ALFEA EXCELLIA HP DUO	ALFEA EXCELLIA HP DUO
REFRIGERANT		R410A	R410A	A.I. TRI 11 R410A	A.I. TRI 14 R410A	A.I. TRI 16 R410A	A.I. 16 R410A	A.I. TRI 15 R410A	A.I. TRI 17 R410A
ENERGY EFFICIENCY & ACOUSTIC CHARACTERISTIC	re .	K410A	K410A	K410A	K410A	K410A	K410A	K410A	K410A
Energy class - Heating (35°C/55°C)	- -	A++ / A+	A++ / A+	A++ / A+	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	16 / 14	17 / 14	18 / 17
Annual energy consumption - Heating (35°C/55°C)	kWh	,	6824 / 8041	5930 / 6669		7408 / 9062		,	9059 / 10232
Seasonal energy efficiency - Heating (35°C/55°C)	%	151 / 112	148 / 113	154 / 112	150 / 117	149 /117	163 /125	164 /130	161 /130
Seasonal energy efficiency - Heating (35°C/55°C) with outdoor sensor	%	153 / 114	150 / 115	156 / 114	152 / 119	151 / 119	165 / 127	166 / 132	163 / 132
Sound power level (indoor/outdoor) <sup>[1]</sup>	dB(A)	46 / 69	46 / 69	46 / 68	46 / 69	46 / 69	45 / 67	45 / 67	45 / 67
Declared load profile - DHW	-	L	L	L	L	L	L	L	L
Energy class - DHW	-	Α	Α	Α	Α	Α	Α	Α	Α
Annuel water heating energy consumption	kWh	1166	1166	1166	1166	1166	941	941	941
Seasonal water heating energy efficiency (%)	%	88	88	88	88	88	109	109	109
MAIN CHARACTERISTICS									
SCOP 35 °C / 55 °C	-	3.85 / 2.87	3.77 / 2.90	3.92 / 2.17	3.82 / 3.00	3.80 / 3.00	4.25 / 3.21	4.18 / 3.33	4.12 / 3.33
Heating capacity +7°C/+35°C – Underfloor Heating	kW	10.80	13.50	10.80	13.00	15.17	16.00	15.00	17.00
COP +7°C/+35°C - Underfloor Heating		4.25	4.18	4.30	4.18	4.10	4.15	4.33	4.15
Heating capacity -7°C/+35°C – Underfloor Heating	kW	10.38	11.54	10.38	12.20	12.98	14.50	13.20	15
COP -7°C/+35°C - Underfloor Heating		2.40	2.27	2.43	2.38	2.40	2.75	2.90	2.82
Heating capacity +7°C/+55°C - Radiators	kW	7.59	9.48	9.29	10.60	12.24	14.5	13.20	15
COP +7°C/+55°C - Radiators		2.47	2.40	2.64	2.41	2.48	2.6	2.77	2.73
Heating capacity -7°C/+55°C - Radiators	kW	7.57	9.20	9.27	10.10	12.00	10.9	13.2	14.2
COP -7°C/+55°C - Radiators		1.66	1.81	1.82	1.79	1.74	1.85	1.95	1.92
Heating capacity -7°C / +60°C - Radiators	kW	6.71	8.42	8.48	10.10	10.9	10.8	11.2	11.7
Additional electric back-up heater	kW	6	6	9	9	9	6	9	9
INDOOR HYDRAULIC MODULE									
Noise level <sup>(2)</sup>	dB(A)	39	39	39	39	39	37	37	37
Net weight/filled weight <sup>(3)</sup>	kg	155 / 373	155 / 373	155 / 373	155 / 373	155 / 373	166 / 390	166 / 390	166 / 390
Power supply	V / Hz	230 / 50	230 / 50	400 / 50	400 / 50	400 / 50	230 / 50	400 / 50	400 / 50
OUTDOOR UNIT									
Noise level <sup>(4)</sup>	dB(A)	47	47	46	47	47	45	45	45
Operating weight	kg	92	92	99	99	99	137	138	138
REFRIGERANT CHARACTERISTICS									
Min./max. length	m	5/20	5 / 20	5/20	5 / 20	5 / 20	5/30	5/30	5/30
Max. difference in height	m	15	15	15	15	15	15	15	15
R410A factory load	g	2500	2500	2500	2500	2500	3800	3800	3800
Quantity of refrigerant in tons of CO <sub>2</sub> equivalent	t	5	5	5	5	5	8	8	8

<sup>(1)</sup> 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.

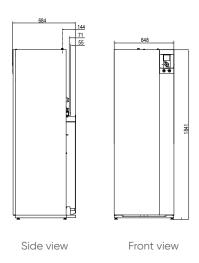
#### **INSTALLATION DIMENSIONS (mm)**



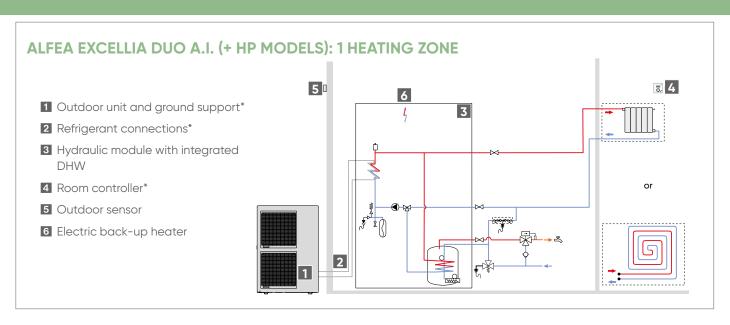
#### Outdoor Inverter unit Alfea Excellia HP Duo A.I. 16 single-phase, 15 and 17 three-phase

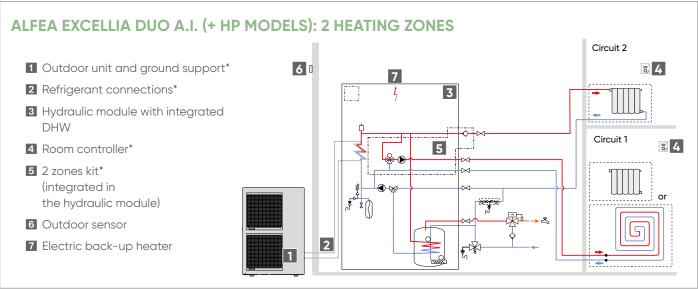


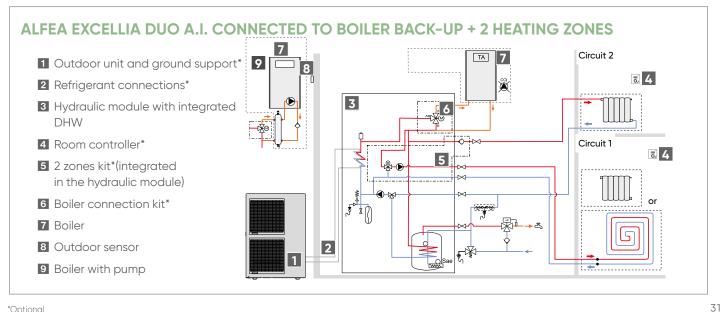
#### Indoor hydraulic module



#### **INSTALLATION SCHEMATICS**







\*Optional

## Alfea Hybrid Duo Oil 🔍

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







- Multi-energy solution for an optimum comfort even in conditions of very cold weather
- Possibility of remote piloting via Cozytouch application due to NAVISTEM 400S control system
- Energy savings due to new controls with energy input option
- 2 burners integrated: 23 kW and 29 kW

#### **DESCRIPTION**

- Solution for renovation projects
- Flow temperature of up to 80°C
- 6 models from 6 to 14 kW with 23 kW burner
- 4 models from 11 to 14 kW with 29 kW burner
- Single-phase or three-phase models

#### **AVAILABLE OPTIONS**

- 2 zones kit
- Room controller
- Boiler connection kit (optional)
- Cooling kit (optional)

### Practical trainings that will help you save time and be more efficient

**Tailor-Made Training Programs** 







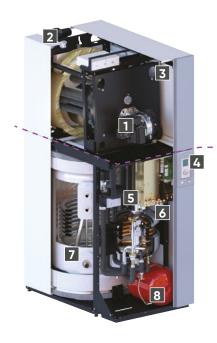








INDOOR HYDRAULIC MODULE-



#### Condensing oil burner

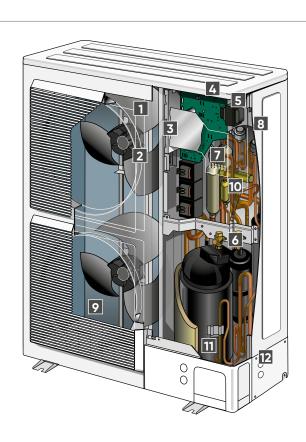
- 1 Oil burner
- 2 Chimeny and room sealed models
- 3 Easy access to lifting bars

#### Alfea heat pump

- 4 Navistem 400S regulator
- 5 Low consumption circulation pump
- 6 Patented coaxial heat exchanger
- 7 190 L storage tank with ACI anti-corrosive protection
- 8 Expansion vessel

#### **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
- Refrigerating connection valves (flared connectors) with protective cover



#### TECHNICAL CHARACTERISTICS AND PERFORMANCES

	UNIT	ALFEA HYBRID DUO OIL A.I. 6 – 23 KW	ALFEA HYBRID DUO OIL A.I. 8 – 23 KW	ALFEA HYBRID DUO OIL A.I. 11 – 23 KW	ALFEA HYBRID DUO OIL A.I. 14 – 23 KW
REFRIGERANT		R410A	R410A	R410A	R410A
ENERGY EFFICIENCY CHARACTERISTICS - HEATING	- AVERA	GE CLIMAT			
Energy class - Heating (35°C / 55°C)	-	A++ / A+	A++ / A +	A++ / A+	A+ / A+
Thermal power - heat pump (55°C)	kW	5/5	7/6	11 / 9	11/9
Annual energy consumption - Heating (55°C)	kWh	2505 / 3180	3375 / 3886	6062 / 6623	6824 / 8041
Seasonal energy efficiency - Heating (55°C)	%	169 / 115	156 / 118	151 / 112	148 / 113
Seasonal energy efficiency - Heating (55°C) with outdoor sensor	%	171 / 117	158 / 120	153 / 114	150 / 115
Sound power level (indoor/outdoor) <sup>(1)</sup>	dB(A)	48 / 63	48 / 69	48 / 69	48 /69
ENERGY EFFICIENCY CHARACTERISTICS - DHW - A	VERAGE (	CLIMAT			
Declared load profile	-	L	L	L	L
Energy class - DHW	-	A+	A+	Α	A
Annual energy consumption - DHW	kWh	880	880	1166	1166
Seasonal energy efficiency (%) - DHW	%	120	120	88	88
MAIN CHARACTERISTICS					
SCOP 35 °C / 55 °C		4.3 / 2.95	3.97 / 3;02	3.85 / 2.87	3.77 / 2.90
Heating capacity +7°C/+35°C - Underfloor Heating	kW	6.00	7.50	10.80	13.50
COP +7°C/+35°C	-	4.26	4.08	4.25	4.18
Heating capacity -7°C/+35°C - Underfloor Heating	kW	4.60	5.70	10.38	11.54
COP -7°C /+35°C	-	2.64	2.56	2.40	2.27
Heating capacity +7°C/+45°C - Low T° radiators	kW	5.10	6.20	9.05	11.32
COP +7°C/+55°C		2.18	3.32	3.21	3.07
	-				
Heating capacity -7°C/+45°C - Low T° radiators	kW	4.45	5.05	9.16	11.41
COP -7°C/+45°C	- 1.34/	2.18	2.04	2.00	1.93
Nominal thermal power of oil back-up	kW	23.00	23.00	23.00	23.00
INDOOR HYDRAULIC MODULE	dB(A)	40	40	40	40
Noise level on Thermodynamic mode <sup>(2)</sup>		40			40
Dim. chimney version h x w x d	mm 1880x680x1206 mm 1200x1710x1206				
Dim. room sealed system version h x w x d	mm	202/201			200/201
Net weight/filled weight	kg	299/586	299/586	299/586	299/586
HYDRAULIC CHARACTERISTICS		40	/0	40	/0
Combustion chamber capacity	L	63	63	63	63
Max working pressure	bar	3	3	3	3
Expansion vessel capacity	L	18	18	18	18
DHW tank capacity	L	190	190	190	190
ELECTRICAL CONNECTIONS					
Power supply	V/Hz	230 / 50	230 / 50	230 / 50	230 / 50
Standby mode consumption	W	0.15	0.15	0.15	0.15
HYDRAULIC CONNECTIONS					
Ø Heating circ. inlet and outlet	"/mm	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
CHIMNEY CONNECTION DEPENDING ON MODEL					
Ø Chimney inlet and outlet	mm	80	80	80	80
Burner optimum depression	Pa	15	15	15	15
ROOM SEALED SYSTEM CONNECTION DEPENDING	ON MODI	EL			
Ø Pipe	mm	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
Heating flow water max T°	°C	80	80	80	80
Max water T°(heat pump)	°C	60	60	60	60
OUTDOOR UNIT					
Noise level <sup>(2)</sup>	dB(A)	41	47	47	47
Operating weight	kg	41	42	92	92
REFRIGERANT CHARACTERISTICS			Y4-	·-	,-
R410A factory load	a	1100	1400	2500	2500
·	g	2.2957	2.9218	5.2175	5.2175
Quantity of refrigerant in tons of CO <sub>2</sub> equivalent Min./max. length	-	5/30	2.9218 5 /30	5.2175	5.2175
•	m				
Max. difference in height	m	20	20	15	15

<sup>(1)</sup> 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

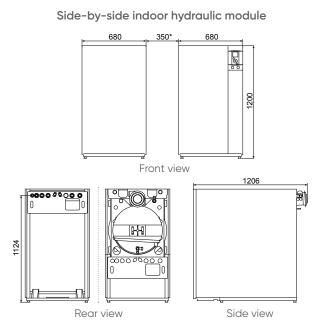
R410A R410A R410A R410A R410A R410A R410A R410A R410A  A+-/A+ A+-/A+-/A+-/A+-/A+-/A+-/A+-/A+-/A+-/A+-/	ALFEA HYBRID DUO OIL A.I. TRI 11 – 23 KW ALFEA HYBRID DUO OIL A.I. TRI 14 – 23 KW		ALFEA HYBRID DUO OIL A.I. 11 – 29 KW	ALFEA HYBRID DUO OIL A.I. 14 – 29 KW	ALFEA HYBRID DUO OIL A.I. TRI 11 – 29 KW	ALFEA HYBRID DUO OIL A.I. TRI 14 – 29 KW
13/11 13/11 13/11 11/9 11/9 11/9 13/11 13/11 15930 6469 6738 /7800 6662 64523 6824 /8041 5930 6469 6738 /7800 154/112 159/117 151/112 12 148/113 154/112 159/117 151/112 159/117 151/112 159/117 151/112 159/115 156/114 152/119 153/114 159/115 156/114 152/119 68/69 4	R410A	R410A	R410A	R410A	R410A	R410A
13/11 13/11 13/11 11/9 11/9 11/9 13/11 13/11 15930 6469 6738 /7800 6662 64523 6824 /8041 5930 6469 6738 /7800 154/112 159/117 151/112 12 148/113 154/112 159/117 151/112 159/117 151/112 159/117 151/112 159/115 156/114 152/119 153/114 159/115 156/114 152/119 68/69 4	A., /A.	A., /A.	A., /A.	A . / A .	A., /A.	A., /A.
\$930   \$449						
154/112						
156/114						
A8/69						
L L L L L L L L L L L L L L L L L L L						
A A A A A A A A A A A A A A A A A A A	48 / 69	48 / 69	48 / 69	48 /69	48 / 69	48 / 69
A A A A A A A A A A A A A A A A A A A	1	1	1	1	-	-
1166						
88						
392/2.87   3.82/3.00   3.85/2.87   3.77/2.90   3.92/2.87   3.82/3.00   10.80   13.00   10.80   13.50   10.80   13.00   4.30   4.18   4.25   4.18   4.30   4.18   10.38   12.20   10.38   11.54   10.38   12.20   2.43   2.38   2.40   2.27   2.43   2.38   2.40   2.27   2.43   2.38   9.90   12.10   9.05   11.32   9.90   12.10   3.32   3.20   3.21   3.07   3.32   3.20   3.21   3.07   3.32   3.20   3.21   3.07   3.32   3.20   3.21   3.07   3.32   3.20   3.20   3.20   3.20   2.900   29.00						
10.80	30				- 50	35
4.30         4.18         4,25         4,18         4,30         4,18           10.38         12.20         10,38         11,54         10,38         12,24         2,23         2,43         2,38           9.90         12.10         9,05         11,32         9,90         12,10           3.32         3.20         3,21         3,07         3,32         3,20           9.98         10.70         9,16         11,41         9,98         10,70           2.16         2.08         2,00         1,93         2,16         2.08           23.00         23.00         29,00         29,00         29,00         29,00         29,00           40         40         40         40         40         40         40         40           40         40         40         40         40         40         40         40           299/586         303/590         303/590         303/590         303/590         303/590         303/590         303/590         303/590         303/590         303/590         303/590         303/590         400/50         400/50         400/50         400/50         400/50         400/50         400/50         400/50 </td <td>3.92 / 2.87</td> <td>3.82 / 3.00</td> <td>3,85 / 2,87</td> <td>3,77 / 2,90</td> <td>3,92 / 2,87</td> <td>3,82 / 3,00</td>	3.92 / 2.87	3.82 / 3.00	3,85 / 2,87	3,77 / 2,90	3,92 / 2,87	3,82 / 3,00
10.38 12.20 10.38 11,54 10,38 12,20 2.43 2.38 2.40 2.27 2.43 2.38 2.40 2.27 2.43 2.38 2.40 2.27 2.43 2.38 2.40 2.27 2.43 2.38 2.99 12.10 9,05 11,32 9,90 12,10 3.32 3.20 3.21 3.07 3.32 3.20 3.21 3.07 3.32 3.20 9,98 10,70 9,16 11,41 9,98 10,70 2.16 2.08 2.00 1.93 2.16 2.08 2.00 23.00 29,00 303/590 303	10.80	13.00	10,80	13,50	10,80	13,00
2.43         2.38         2.40         2.27         2.43         2.38           9.90         12.10         9,05         11,32         9,90         12.10           3.32         3.20         3.21         3.07         3,32         3.20           9.98         10.70         9,16         11,41         9,98         10,70           2.16         2.08         2.00         1,93         2,16         2.06           23.00         23.00         29,00         29,00         29,00         29,00           40         40         40         40         40         40           40         40         40         40         40         40           43         63         59         59         59         59           3         3         3         3         3         3         3           38         18	4.30	4.18	4,25	4,18	4,30	4,18
9,90 12,10 9,05 11,32 9,90 12,10 3.32 3.20 3,21 3,07 3,32 3,20 9,98 10,70 9,16 11,41 9,98 10,70 2.16 2.08 2,00 1,93 2,16 2.08 23.00 23.00 29,00 29,00 29,00 29,00 29,00  40 40 40 40 40 40 40 40 40 40 40 40  1880x880x1206  2299/586 299/586 303/590 303/590 303/590 303/590  63 63 59 59 59 59 59 3 3 3 3 3 3 3 3 3 3 3 3 3 3 18 18 18 18 18 18 18 18 18 18 18 18 18	10.38	12.20	10,38	11,54	10,38	12,20
3.32 3.20 3.21 3,07 3,32 3,20 9.98 10.70 9,16 11.41 9,98 10.70 2.16 2.08 2.00 1,93 2.16 2.08 23.00 23.00 29.00 29.00 29.00 29.00 40 40 40 40 40 40 40 40 40 40 40 40 40 29.97586 299/586 303/590 303/590 303/590 303/590 63 63 59 59 59 59 59 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	2.43	2.38	2,40	2,27	2,43	2,38
9.98 10.70 9,16 11,41 9,98 10,70 2.16 2.08 2.00 1,93 2,16 2.08 23.00 23.00 29,00 29,00 29,00 29,00 40 40 40 40 40 40 40 40  1880x680x1206  1200x1710x1206  299/586 299/586 303/590 303/590 303/590 303/590 63 63 63 59 59 59 59 59 59 3 3 3 3 3 3 3 3 3 3 3 3 3 18 18 18 18 18 18 18 18 18 18 18 18 18	9.90	12.10	9,05	11,32	9,90	12,10
2.16         2.08         2,00         1,93         2,16         2,08           23.00         23.00         29,00         29,00         29,00         29,00           40         40         40         40         40         40           1200x1710x1206           299/586         303/590         303/590         303/590         303/590           63         63         59         59         59         59           3         400/50         400/50         400/50         400/50         400/50         400/50	3.32	3.20	3,21	3,07	3,32	3,20
23.00         23.00         29,00         20,00 <th< td=""><td>9.98</td><td>10.70</td><td>9,16</td><td></td><td></td><td>10,70</td></th<>	9.98	10.70	9,16			10,70
40 40 40 40 40 40 40 40 40 40 40 40 40 4						
1880x680x1206           1200x1710x1206           299/586         299/586         303/590         303/590         303/590           63         63         59         59         59         59           3         3         3         3         3         3           18         18         18         18         18         18           190         190         190         190         190         190           400/50         400/50         230/50         230/50         400/50         400/50         400/50           400/50         400/50         230/50         230/50         400/50         400/50         400/50           0.15         0.15         0,15         0,15         0,15         0,15         0,15         0,15           1"/26x34         1"/26x34         1"/26x34         1"/26x34         1"/26x34         1"/26x34         1"/26x34         1"/26x34         3/4"/20x27         3/4"/20x27 <td>23.00</td> <td>23.00</td> <td>29,00</td> <td>29,00</td> <td>29,00</td> <td>29,00</td>	23.00	23.00	29,00	29,00	29,00	29,00
1880x680x1206           1200x1710x1206           299/586         299/586         303/590         303/590         303/590         303/590           63         63         59         59         59         59         59           3         3         3         3         3         3         3         3           18         18         18         18         18         18         18         18           190         190         190         190         190         190         190         190           400/50         400/50         230/50         230/50         400/50         400/50         400/50           0.15         0.15         0.15         0,15         0,15         0,15         0,15           1"/26x34         1"/26x34         1"/26x34         1"/26x34         1"/26x34         1"/26x34         1"/26x34         1"/26x34         3/4"/20x27         3	/0	/0	/0	/0	/0	/0
1200x1710x1206           299/586         299/586         303/590         303/590         303/590           63         63         59         59         59         59           3         3         3         3         3         3         3           18         19         190         190         190         190         190         190         190         190         190         190         190         190         190         190         190	40	40			40	40
299/586         299/586         303/590         303/590         303/590         303/590           63         63         59         59         59         59           3 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
63 63 63 59 59 59 59 59 59 39 3 3 3 3 3 3 3 3 3	299/586	299/586			303/590	303/590
3         3         3         3         3         3         3         18						
18         18         18         18         18         18         18         190	63	63	59	59	59	59
190         2500         2500         2500         2500         2500         2500         2500         2500         2500         2500         2500         2500         2500         2500         2500         2500         5,2175	3	3	3	3	3	3
400/50         400/50         230/50         230/50         400/50         400/50         400/50           0.15         0.15         0,15         0,15         0,15         0,15         0,15         0,15           1"/26x34         1"/	18	18	18	18	18	18
0.15         0.15         0,15         0,15         0,15         0,15           1"/26x34	190	190	190	190	190	190
0.15         0.15         0,15         0,15         0,15         0,15           1"/26x34						
1"/26x34         3/4"/20x27         3/4	400 / 50	400 / 50	230 / 50	230 / 50	400 / 50	400 / 50
3/4" / 20x27     3	0.15	0.15	0,15	0,15	0,15	0,15
3/4" / 20x27       3/4" / 20x27 <td< td=""><td>·</td><td></td><td></td><td></td><td></td><td></td></td<>	·					
80     80     80     80     80     80       15     15     15     15     15     15       80/125     80/125     80/125     80/125     80/125     80/125       80/125     80/125     80/125     80/125     80/125     80/125       80     80     80     80     80     80     80       60     60     60     60     60     60     60       46     47     47     47     46     47       99     99     92     92     99     99       2500     2500     2500     2500     2500     2500       5.2175     5,2175     5,2175     5,2175     5,2175     5,2175						
15     15     15     15     15     15       80 / 125     80 / 125     80 / 125     80 / 125     80 / 125       -25/35     -25/35     -25/35     -25/35     -25/35       80     80     80     80     80       60     60     60     60     60       46     47     47     47     46     47       99     99     92     92     99     99       2500     2500     2500     2500     2500     2500       5.2175     5,2175     5,2175     5,2175     5,2175     5,2175	3/4" / 20x27	3/4" / 20x27	3/4" / 20x27	3/4" / 20x27	3/4" / 20x27	3/4" / 20x27
15     15     15     15     15     15       80 / 125     80 / 125     80 / 125     80 / 125     80 / 125       -25/35     -25/35     -25/35     -25/35     -25/35       80     80     80     80     80       60     60     60     60     60       46     47     47     47     46     47       99     99     92     92     99     99       2500     2500     2500     2500     2500     2500       5.2175     5,2175     5,2175     5,2175     5,2175     5,2175	00	00	00	00	00	00
80 / 125     80 / 125     80 / 125     80 / 125     80 / 125       -25/35     -25/35     -25/35     -25/35     -25/35       80     80     80     80     80       60     60     60     60     60     60       46     47     47     47     46     47       99     99     92     92     99     99       2500     2500     2500     2500     2500     2500       5.2175     5.2175     5,2175     5,2175     5,2175     5,2175						
-25/35         -25/35         -25/35         -25/35         -25/35           80         80         80         80         80           60         60         60         60         60         60           46         47         47         47         46         47           99         99         92         92         99         99           2500         2500         2500         2500         2500         2500           5,2175         5,2175         5,2175         5,2175         5,2175         5,2175	10	15	15	15	15	15
-25/35         -25/35         -25/35         -25/35         -25/35           80         80         80         80         80           60         60         60         60         60         60           46         47         47         47         46         47           99         99         92         92         99         99           2500         2500         2500         2500         2500         2500           5.2175         5.2175         5,2175         5,2175         5,2175         5,2175	80 / 125	80 / 125	80 / 125	80 / 125	80 / 125	80 / 125
80     80     80     80     80       60     60     60     60     60       46     47     47     47     46     47       99     99     92     92     99     99       2500     2500     2500     2500     2500     2500       5.2175     5.2175     5,2175     5,2175     5,2175	007 120	00 / 120	007 120	007 120	007 120	007 120
80     80     80     80     80       60     60     60     60     60       46     47     47     47     46     47       99     99     92     92     99     99       2500     2500     2500     2500     2500     2500       5.2175     5.2175     5,2175     5,2175     5,2175	-25/35	-25/35	-25/35	-25/35	-25/35	-25/35
60     60     60     60     60     60       46     47     47     47     46     47       99     99     92     92     99     99       2500     2500     2500     2500     2500     2500       5.2175     5.2175     5,2175     5,2175     5,2175						
99         99         92         92         92         99         99           2500         2500         2500         2500         2500         2500         2500         2500         2500         5,2175 <td>60</td> <td></td> <td></td> <td></td> <td></td> <td>60</td>	60					60
99         99         92         92         92         99         99           2500         2500         2500         2500         2500         2500         2500         2500         2500         5,2175 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
2500         2500         2500         2500         2500         2500         2500         2500         2500         5,2175         5						
5.2175     5.2175     5,2175     5,2175     5,2175	99	99	92	92	99	99
5.2175     5.2175     5,2175     5,2175     5,2175	2500	2500	2500	2500	2500	2500
6720 6720 6720 6720 6720 6720 6720						
5/20     5/20     5/20     5/20     5/20     5/20       15     15     15     15     15     15						

### **INSTALLATION DIMENSIONS (mm)**

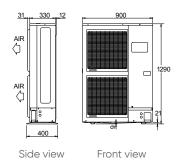
On-top indoor hydraulic module

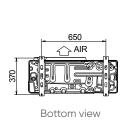
1206
680

Rear view
Side view
Front view

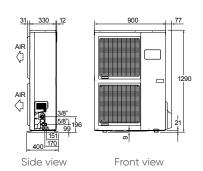


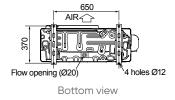
#### Outdoor Inverter unit Alfea Hybrid Duo Oil A.I. 11 and 14 single-phase



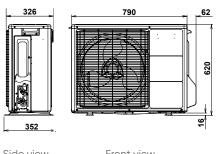


#### Outdoor Inverter unit Alfea Hybrid Duo Oil A.I. 11 and 14 three-phase

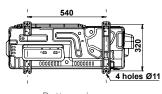




#### Outdoor Inverter unit Alfea Hybrid Duo Oil A.I. 6 and 8 single-phase

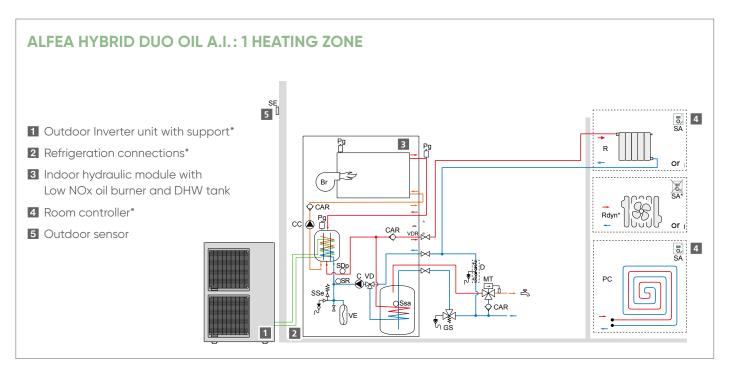


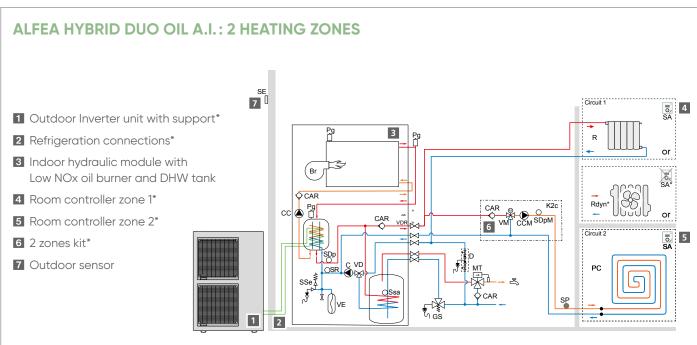




Bottom view

### **INSTALLATION SCHEMATICS**





\*Optional

## 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



- BENEFITS
- High performance with patented coaxial heat exchanger and condensing gas unit
- Equipped with 120 L enamelled steel DHW storage tank with ACI anti-corrosive protection
- **DESCRIPTION**
- Replacement of existing gas boiler
- 7 models: 6 to 16 kW
- Single-phase and three-phase models
- Heating and DHW integrated
- · Patented coaxial heat exchanger
- Inverter regulation
- Navistem 200S control system

- Ergonomic outdoor sensor control and programmable indoor temperature
- Innovation with Gas R models: Cooling mode & new control option with energy cost input for more energy savings

#### **AVAILABLE OPTIONS**

- 2 zones kit (plug-and-play kit)
- · Boiler connection kit
- · Cooling kit\*
- · Room controller

### Practical trainings that will help you save time and be more efficient

**Tailor-Made Training Programs** 







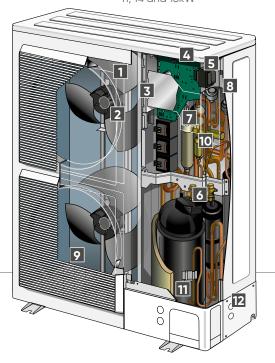


#### INDOOR HYDRAULIC MODULE-



- 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

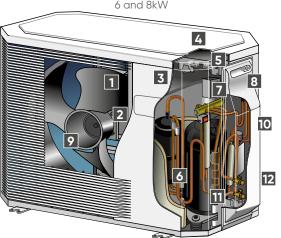
Outdoor Inverter unit 11, 14 and 16kW



#### **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
- 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
- Refrigerating connection valves (flared connectors) with protective cover



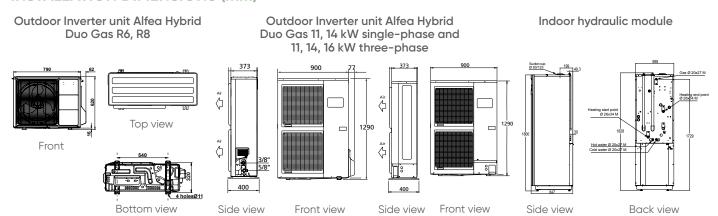


#### TECHNICAL CHARACTERISTICS AND PERFORMANCES

			ALEEA	ALEEA	ALEEA	ALEEA	ALEEA	ALEEA	ALEEA
		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
	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
Ģ.	Annual energy consumption - Heating (55°C)	kWh	3180	3836	6841	8041	6669	7803	9062
ш	Seasonal energy efficiency - Heating (55°C)	%	115	118	112	113	112	117	117
	Seasonal energy efficiency - Heating (55°C) with outdoor sensor	%	117	120	114	115	114	119	119
	Sound power level (indoor/outdoor) <sup>(1)</sup>	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
Er.P	Energy class - DHW	-	В	В	В	В	В	В	В
ű.	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
	THERMODYNAMIC PERFORMANCE								
	SCOP 35 °C / 55 °C		4.30 / 2.95	3.97 / 3.02	3.85 / 2.87	3.77 / 2.90	3.92 / 2.87	3.82 / 3.00	3.80 / 3.00
	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 PERFORMA	ANCES							
	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
	BALANCE FLUE CONNECTION (VERTICAL AND HO	DRIZON	TAL)						
	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 <sup>[2]</sup>	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 <sup>(3)</sup>	dB(A)	41	47	47	48	44	46	47
	Operating weight	kg	41	42	92	92	99	99	99
	Power supply	V / Hz	230 / 50	230 / 50	230 / 50	230 / 50	400 / 50	400 / 50	400 / 50
	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 <sup>2</sup> equivalent	-	2	3	5	5	5	5	5

<sup>(1)</sup> 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.

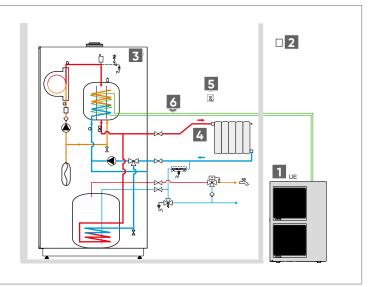
#### **INSTALLATION DIMENSIONS (mm)**



### **INSTALLATION SCHEMATICS**

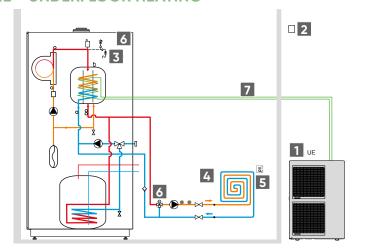
#### **ALFEA HYBRID DUO GAS: 1 HEATING ZONE**

- 1 Outdoor Inverter unit
- 2 Outdoor sensor
- Indoor hydraulic module with back-up boiler and DHW tank
- 4 Radiators
- 5 Room controller\*
- 6 Refrigeration connections\*



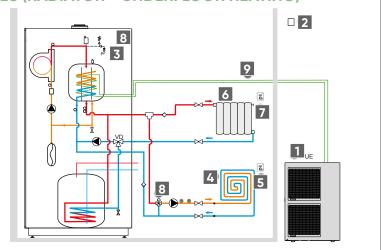
#### ALFEA HYBRID DUO GAS: 1 HEATING ZONE + UNDERFLOOR HEATING

- 1 Outdoor Inverter unit
- 2 Outdoor sensor
- 3 Indoor hydraulic module with back-up boiler and DHW tank
- 4 Underfloor heating
- 5 Room controller\*
- 6 2 zones kit or floor heating\*
- 7 Refrigeration connections\*



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

- 1 Outdoor Inverter unit
- 2 Outdoor sensor
- 3 Indoor hydraulic module with back-up boiler and DHW tank
- 4 Underfloor heating
- 5 Room controller zone 1\*
- 6 Radiators
- 7 Room controller zone 2\*
- 8 2 zones kit or underfloor heating\*
- 9 Refrigeration connections\*



## Alfea range accessories

#### **MODULATING CONTROLLER NAVILINK A59 NB**



#### PRODUCT

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

#### **DESCRIPTION**

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

### **ROOM CONTROLLERS NAVILINK A75 / A78**



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 and full access to set-up
- Energy consumption indicator

#### **DESCRIPTION**

- Wireless communication
- 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:
  - High-performance coil for air-to-water heat pumps (Mileo)
  - Extra-high performance coil for air-to-water and ground source heat pumps (Mileo+)

#### **DESCRIPTION**

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

### **2 ZONES KIT**



2 zones kit for single service heat pump

#### PRODUCT

- 2 zones kit for dual service heat pump
- Integrated low consumption circulation pump

#### **DESCRIPTION**

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

### **HEAT PUMP ADDITIONAL RELAY KIT**



### 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 6 kW

#### **DESCRIPTION**

- · 6 kW 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

<sup>\*</sup>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.







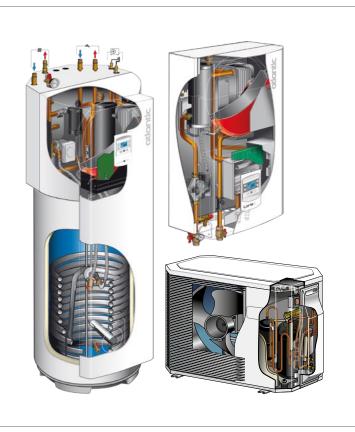
#### **TECHNICAL BENEFITS**

### 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)



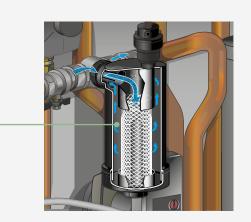
\*Optional

## Loria range



#### **Easy maintenance**

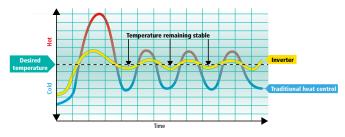
- Hinged electric cabinet to access internal components
- Loria: filter valve (as standard), easy to remove and clean
- · Loria Duo: Magnetic mud filter (as standard)



#### Easy set-up

- Inverter regulation
- · Configurable temperature control
- · Choice of control options:
- 2 heating zones
- Cooling
- DHW storage tank
- Floor drying programme

Comparison between Inverter and traditional heat control



#### **Performances**

- COP up to 4.96
- Energy efficiency class up to A+++
- Full Inverter regulation
- · Low energy consumption circulation pump

### Atlantic control system NAVISTEM 100H

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



## Loria

Split air-to-water heat pump Energy-efficient solution for new build projects



- Space-saving indoor hydraulic module with plate heat exchanger
- One or two heating zone(s) management
- Compact solution for new build projects

#### **DESCRIPTION**

- Energy-efficient solution for new build projects
- 4 models: 4 to 10 kW
- · Single-phase models
- Navistem 100H control system
- · Integrated electric back-up heater
- Inverter regulation

#### **AVAILABLE OPTIONS**

- Magnetic mud filter
- 2 zones kit (plug-and-play kit)
- · Cooling kit\*
- Separate hot water tank
- Room controller

#### **NEW MODULATING CONTROLLER NAVILINK 105**



- Modern design
- · Simplified programming through integrated assistance

#### **Practical trainings**



### On-site trainings

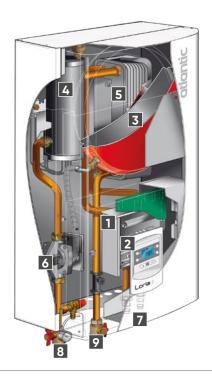
- PAC 6-03-4: Heat pumps air to water 1 day
- PAC 6-05-4: Commissioning maintenance and service 1 day



#### Online trainings

- PAC 6-13-2: Heat pump installation commissioning 1/2 day
- PAC 6-15-4: Heat pump installation commissioning ½ day

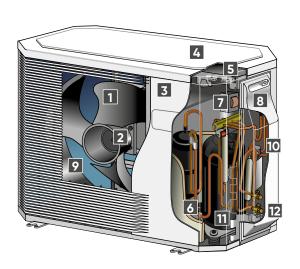
#### INDOOR HYDRAULIC MODULE



- 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
- Refrigerating connection valves (flared connectors) with protective cover



#### TECHNICAL CHARACTERISTICS AND PERFORMANCES

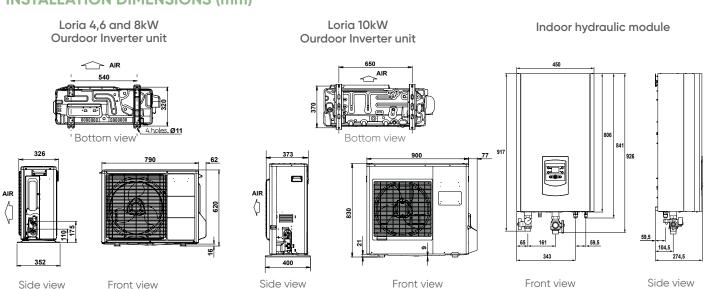
	UNIT	LORIA 6004	LORIA 6006	LORIA 6008	LORIA 6010
REFRIGERANT		R410A	R410A	R410A	R410A
ENERGY EFFICIENCY CHARACTERISTICS					
Energy class - Heating (35°C/55°C)		A+++ / A++	A+++ / A++	A+++	A++ / A++
Rated heat output (35°C/55°C)	kW	4/4	6/5	7/6	9/7
Annual energy consumption - Heating (35°C/55°C)	kWh	1884 / 2708	2588 / 2933	3147 / 4132	4481 / 5256
Seasonal energy efficiency - Heating (35°C/55°C)	%	181 / 127	186 / 128	176 / 129	154 / 116
Seasonal energy efficiency - Heating (35°C/55°C) with outdoor sensor	%	183 / 129	188 / 130	178 / 131	156 / 118
Sound power level (indoor/outdoor) <sup>[1]</sup>	dB(A)	44 / 62	44 / 62	44 / 69	44 / 68
MAIN CHARACTERISTICS					
SCOP 35 °C / 55 °C		4.6 / 3.25	4.72 / 3.27	4.46 / 3.30	4.22 / 3.20
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
INDOOR HYDRAULIC MODULE					
Noise level <sup>[2]</sup>	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	V / Hz	230 / 50	230 / 50	230 / 50	230 / 50
OUTDOOR UNIT					
Noise level <sup>[3]</sup>	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 <sub>2</sub> equivalent	t	2	2	3	4

<sup>(1)</sup> 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.

#### **INSTALLATION DIMENSIONS (mm)**

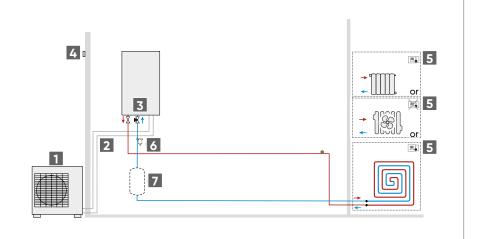


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### **INSTALLATION SCHEMATICS**

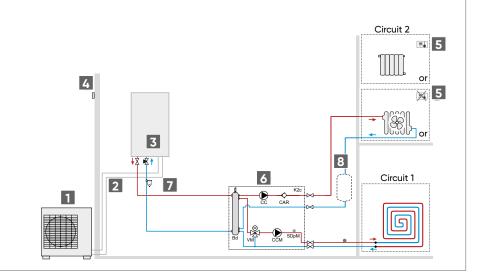
#### **LORIA: 1 HEATING ZONE**

- 1 Outdoor unit and ground support\*
- 2 Refrigerant connections\*
- 3 Hydraulic module
- 4 Outdoor sensor
- 5 Room controller\*
- 6 Magnetic mud filter\*
- 7 Buffer tank\*\*



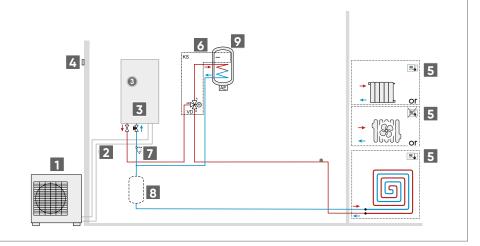
#### **LORIA: 2 HEATING ZONES**

- 1 Outdoor unit and ground support\*
- 2 Refrigerant connections\*
- 3 Hydraulic module
- 4 Outdoor sensor
- 5 Room controller\*
- 6 2 zones kit\*
- 7 Magnetic mud filter\*
- 8 Buffer tank\*\*



#### **LORIA: 1 HEATING ZONE + DHW PRODUCTION**

- 1 Outdoor unit and ground support\*
- 2 Refrigerant connections\*
- 3 Hydraulic module
- 4 Outdoor sensor
- 5 Room controller\*
- 6 DHW kit\*
- 7 Magnetic mud filter\*
- 8 Buffer tank\*\*
- 9 DHW tank\*



## Loria Duo

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





- Space-saving indoor hydraulic module
- Magnetic mud filter
- High performance of DHW service
- DHW tank (190 L) with high-performance regulation

#### **DESCRIPTION**

- Average temperature solution for new build projects
- 4 models: 4 to 10 kW
- Single-phase models
- Heating and DHW integrated
- Navistem 100H control system
- Inverter regulation

#### **AVAILABLE OPTIONS**

- 2 zones kit (plug-and-play kit)
- · Cooling kit
- · Room controller

#### **NEW MODULATING CONTROLLER NAVILINK 105**



- · Modern design
- · Simplified programming through integrated assistance



### **Practical trainings**



### On-site trainings

- PAC 6-03-4: Heat pumps air to water 1 day
- PAC 6-05-4: Commissioning maintenance and service 1 day



#### Online trainings

- PAC 6-13-2: Heat pump installation commissioning ½ day
- PAC 6-15-4: Heat pump installation commissioning 1/2 day





35°C

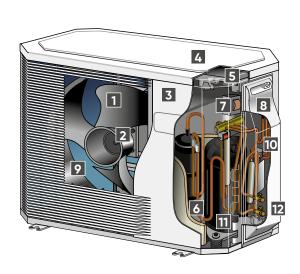
#### INDOOR HYDRAULIC MODULE



- 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 HW 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
- 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
- Refrigerating connection valves (flared connectors) with protective cover

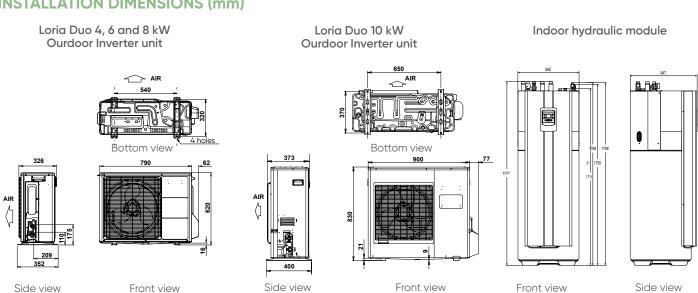


#### TECHNICAL CHARACTERISTICS AND PERFORMANCES

		UNIT	LORIA DUO 6004	LORIA DUO 6006	LORIA DUO 6008	LORIA DUO 6010				
	REFRIGERANT		R410A	R410A	R410A	R410A				
	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				
	Annual energy consumption - Heating (35°C/55°C)	kWh	1884 / 2708	2588 / 2933	3147 / 4132	4481 / 5256				
	Seasonal energy efficiency - Heating (35°C/55°C)	%	181 / 127	186 / 128	176 / 129	154 / 116				
P P	Seasonal energy efficiency - Heating (35°C/55°C) with outdoor sensor	%	183 / 129	188 / 130	178 / 131	156 / 118				
	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				
	MAIN CHARACTERISTICS									
	SCOP 35 °C / 55 °C		4.6 / 3.25	4.72 / 3.27	4.46 / 3.30	3.9 / 2.95				
	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				
	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	V / Hz	230 / 50	230 / 50	230 / 50	230 / 50				
	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 <sub>2</sub> equivalent	t	2	2	3	4				

<sup>(1)</sup> 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.

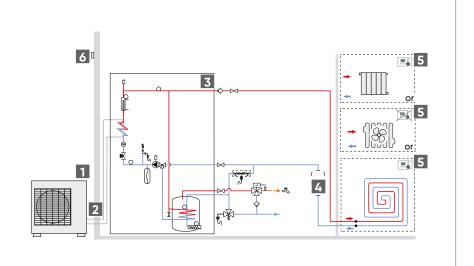
#### **INSTALLATION DIMENSIONS (mm)**



### **INSTALLATION SCHEMATICS**

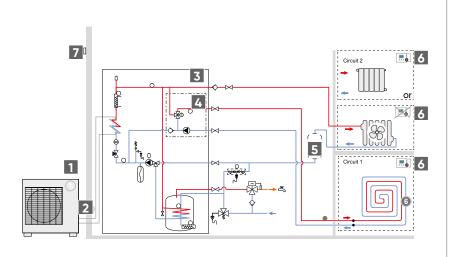
#### **LORIA DUO: 1 HEATING ZONE**

- Outdoor unit and ground support\*
- 2 Refrigerant connections\*
- 3 Hydraulic module with integrated DHW
- 4 Buffer tank\*\*
- 5 Room controller (optional, except for fan coil)
- 6 Outdoor sensor



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

- 1 Outdoor unit and ground support\*
- 2 Refrigerant connections\*
- 3 Hydraulic module with integrated DHW
- 4 2 zones kit\*
- 5 Buffer tank\*\*
- 6 Room controller (optional, except for fan coil)
- 7 Outdoor sensor



<sup>\*</sup>Optional - \*\*Depending on type of collectors and volume of water in heating curcuit, it may be necessary to install a buffer tank

## Loria range accessories

#### **MODULATING ROOM CONTROLLER NAVILINK 105**



#### ♣ PRODUCT

- · Large modern interface
- Simplified programming through integrated assistance
- DHW control
- Quick access to all useful information: energy consumption, active mode, ambiant and outdoor temperature
- Made in France

#### **DESCRIPTION**

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

#### **MAGNETIC MUD FILTER (FOR LORIA)**



### ■ PRODUCT

Capture impurities in the heating circuit

#### **DESCRIPTION**

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

#### **DOMESTIC HOT WATER TANK MILEO / MILEO+**



#### ■ PRODUCT

- DHW kit allowing quick connection between DHW tank and heat pump
- 2 ranges:
  - High-performance coil for air-to-water and ground source heat pumps (Mileo)
- Extra-high performance coil for air-to-water and ground source heat pumps (Mileo+)

#### **DESCRIPTION**

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

### **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

#### **DESCRIPTION**

• 2 zones kit to control two hydraulic zones independently

#### **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)

### ASSEMBLY SUPPORT



#### PRODUCT

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

#### **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

<sup>\*</sup>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



- Outdoor unit invisible from the outside
- Performant mechanical separation to avoid transfer of vibrations
- Condensate 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 Loria up to 8 kW
- For spaces without thermal insulation

#### **PACKING**

• 3 packing units: grid, frame and box

#### **Assembly steps**

- Grid: To avoid air / water to enter the room
- ${}^{\scriptscriptstyle \bullet}$  Frame: Support to be fixed on the wall
- Box: Complete cover of the outdoor unit (supplied assembled)

#### **AVAILABLE OPTIONS**

#### Grid

- Anti-corrosive protection
- No 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



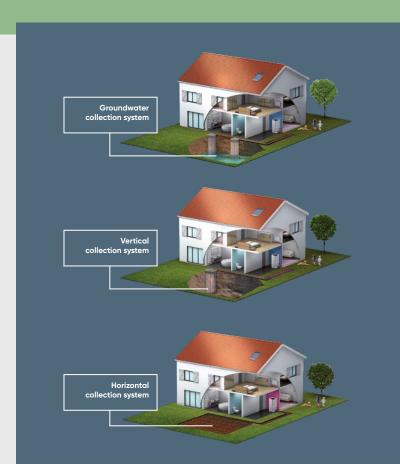


## Ground source heat pumps

# With Atlantic Geolia, use the energy of the earth for your everyday comfort!

Installed indoor of the housing, the Atlantic Geolia heat pump receives calories from the ground with its collectors, and use themto 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 flow temperature and an efficiency up to 233%.



#### **ATLANTIC GEOLIA**

### 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.

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



Heating only



DHW tank (Mileo+ only)

<sup>\*</sup> Depending on models and type of collectors

## **Atlantic Geolia**

Ground source heat pump
Perfect solution for all geothermal projects







- Compatible with all types of collectors (horizontal, vertical, groundwater)
- Seasonal energy efficiency up to A+++

#### **DESCRIPTION**

- Perfect solution for all geothermal projects
- 5 models: 5 to 17 kW
- Single-phase or three-phase models
- Heating only

 Intuitive control and simplified use with NAVISTEM 200S control system

#### **AVAILABLE OPTIONS**

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

Practical trainings that will help you save time and be more efficient.

**Tailor-Made Training Programs** 



#### **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	q	900	950	1450	1700	2300
Amount of fluid expressed in CO <sub>2</sub> equivalent	t	2	2	3	4	5
ENERGY EFFICIENCY & ACOUSTIC VALUES WITH OUTDOOR S	ENSOR					
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) <sup>(1)</sup>	dB(A)	56	57	56	55	55
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 steps of 1.5 kW)	4.5 (3 steps of 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
MODULE						
Noise level <sup>(2)</sup>	dB(A)	49	49	49	48	48
Net weight/filled weight	kg	140 / 145	150 / 155	155 / 160	175 / 180	185 / 190

<sup>(1)</sup> 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.

#### **INSTALLATION DIMENSIONS (mm)**

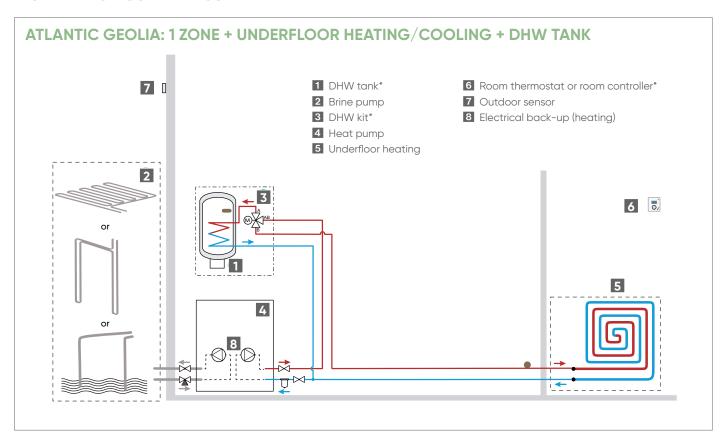


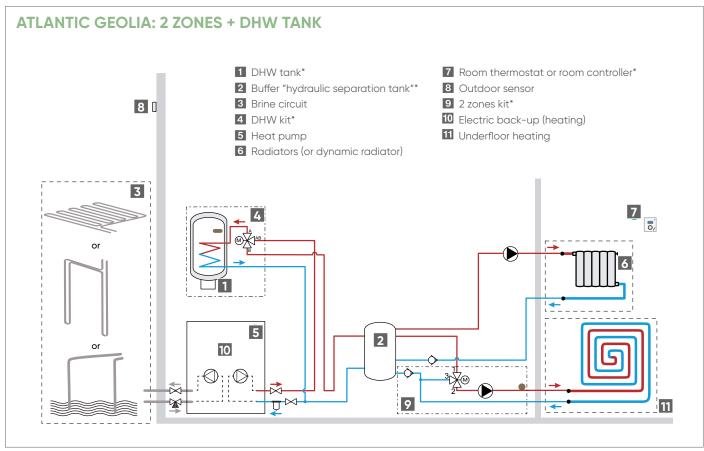


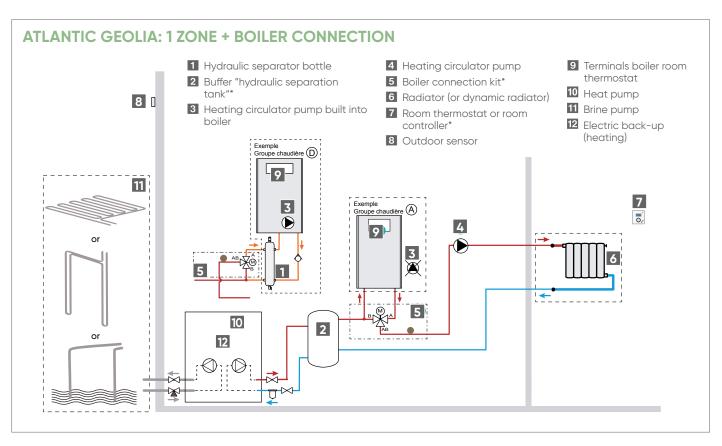
<sup>\*</sup>Depending on models

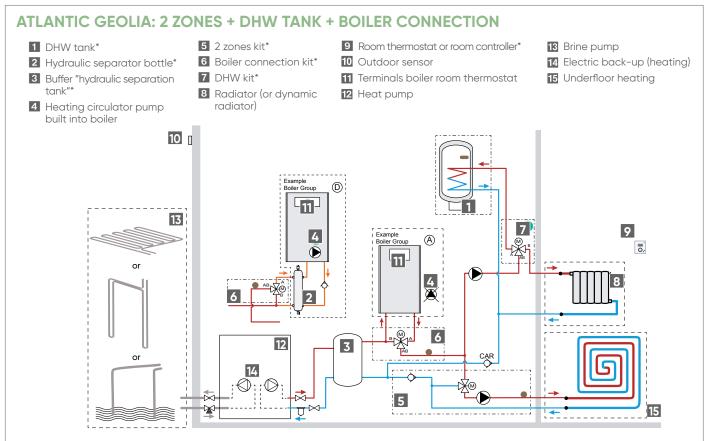
## **Atlantic Geolia**

#### **INSTALLATION SCHEMATICS**









\*Optional

## Panama Access

Fan coil for heating and cooling

Thermal comfort solution in all seasons!







- Innovative solution for domestic thermal confort on hydraulic circuit
- Heating and cooling functions if connected to reversible heat pump

#### **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**

- Electronic thermostat for more energy savings
- 5 functions: Comfort/Eco Quiet/Heating/Cooling/Off

- Electric heating film in the front panel
- Integrated thermostat

#### **DESIGN**

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

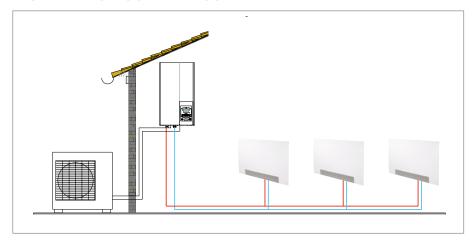
#### **USER-FRIENDLINESS**

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

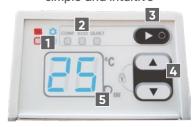
#### **TECHNICAL CHARACTERISTICS**

TECHNICAL DATA	FAN CDEED	PANAMA ACCESS 350		PANAMA A	PANAMA ACCESS 500		CCESS 1000	
TECHNICAL DATA	FAN SPEED	QUIET	MAXI	QUIET	MAXI	QUIET	MAXI	
Power supply voltage	V/Ph/Hz	230	/1/50	230	230/1/50		1/50	
Electrical insulation class			II		II	- 1	I	
Hydraulic connection		2 male con	nections 1/2"	2 male coni	nections 1/2''	2 male conn	ections 1/2"	
Water capacity	l	(	0.5	(	0.5		.8	
Condensates connection		Inner diame	eter of 16 mm	Inner diame	eter of 16 mm	Inner diameter of 16 mm		
55°C/45°C								
Total power	W	690	950	1020	1400	2010	2780	
Air intake temperature	°C		20		20	2	0	
Water flow rate	l/h	1	20	1	20	24	40	
Load loss on water	kPa	į	5.0	Ę	5.0	13	3.3	
45°C/40°C								
Total power	W	470	650	700	954	1300	1 905	
Air intake temperature	°C		20		20	2	0	
Water flow rate	l/h	1	66	1	66	33	31	
Load loss on water	kPa	7	7.4	7	7.4	24	4.4	
35°C/30°C								
Total power	W	255	350	370	507	700	1 0 2 5	
Air intake temperature	°C	20			20		20	
Water flow rate	l/h	1	88	1	88	178		
Load loss on water	kPa		4.1		4.1	10	).4	
7°C/12°C								
Total power	W	320	530	480	780	703	1520	
Sensitive capacity	W	260	430	400	640	550	1220	
Air intake temperature	°C/%	27/	/50%	27/	/50%	27/5	50%	
Water flow rate	l/h	1	36	1	36	26	64	
Load loss on water	kPa		6.0		5.0	17	7.2	
ELECTRICAL CHARACTERISTICS								
Fan consumption (Vmin/ Vinter/Vmax)	W	3.2/5.4/10.2		3.2/5.4/10.2		4.2/9/17.2		
On-board auxiliary (1)	W	1	20	1	90	29	90	
ACOUSTIC CHARACTERISTICS								
Power	dB(A)	37	42	37	42	37	43	
Pressure (2)	dB(A)	23	29	23	29	23	31	
AIR SYSTEM								
Air flow rate	m³/h	1	50	1	50	29	90	
PHYSICAL CHARACTERISTICS								
Height	mm	680		680			30	
Width	mm		35	635			20	
Depth	mm		64		64		64	
Installation height	mm		50	150		150		
Net weight/package weight	Kg	13.5	5/14.5	13.5	5/14.5	18.5,	/19.5	
(4)								

#### **INSTALLATION SCHEMATICS**



#### Digital control panel: simple and intuitive



- 1 Heating / Cooling indicator
- 2 Active mode light indicator
- 3 On/Off button and changing mode button
- 4 Temperature setting buttons and functions lock system
- 5 Heating panel light indicator

<sup>(1)</sup> Heating panel electric power (2) Acoustic pressure measured at 1.5 meters from the product

## Notes



WORLD LEADING BRAND OF INDOOR THERMAL COMFORT



www.atlantic-comfort.com



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

> Tel.: +(33)1.46.83.60.00 Fax: +(33)1.46.83.60.01

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