ALFEA EXTENSA

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

Indoor hydraulic module

Outdoor Inverter unit

Product

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

DESCRIPTION

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

AVAILABLE OPTIONS

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

SUPPLIES

Indoor hydraulic module

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

Outdoor Inverter unit

- Refrigerant circuit (R410A)
- Twin Rotary compressor

*Models without electric back-up available

IO-Homecontrol®

COZYTOUCH atlantic

PATENTED EXCHANGER

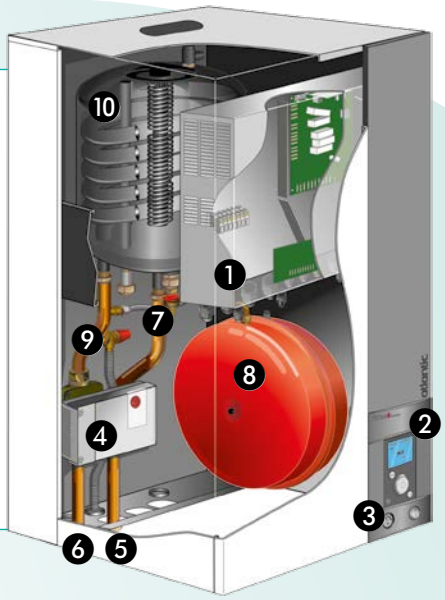
ErP best

Energy class

35 °C A++ 55 °C A+

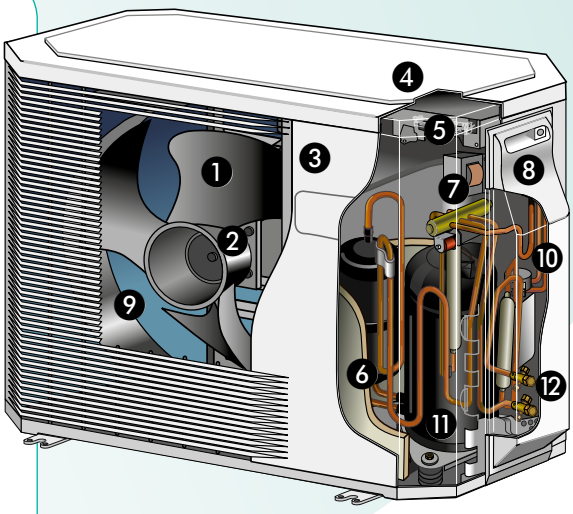
INDOOR HYDRAULIC MODULE

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



OUTDOOR INVERTER UNIT

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



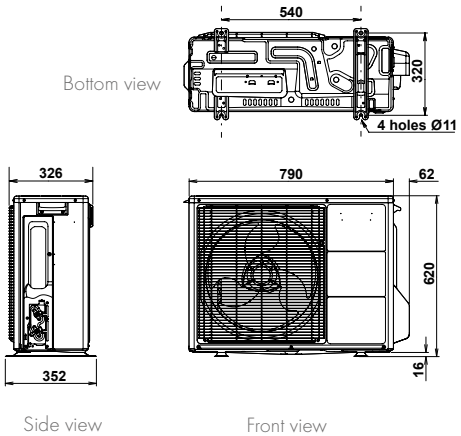
TECHNICAL CHARACTERISTICS AND PERFORMANCES

	UNIT	ALFEA EXTENSA A.I. 5	ALFEA EXTENSA A.I. 6	ALFEA EXTENSA A.I. 8	ALFEA EXTENSA A.I. 10
REFRIGERANT		R410A	R410A	R410A	R410A
MAIN CHARACTERISTICS					
Heating capacity +7°C/+35°C - Underfloor Heating	kW	4.50	6.00	7.50	10.00
COP +7°C/+35°C - Underfloor Heating		4.52	4.26	4.08	4.02
Heating capacity -7°C/+35°C - Underfloor Heating	kW	4.10	4.60	5.70	7.40
COP -7°C/+35°C - Underfloor Heating		2.79	2.64	2.56	2.49
Heating capacity +7°C/+45°C - Low T°radiators	kW	4.50	5.10	6.20	8.27
COP +7°C/+45°C – Low T°radiators		3.44	3.40	3.32	3.27
Heating capacity -7°C/+45°C – Low T°radiators	kW	4.10	4.45	5.05	7.40
COP -7°C/+45°C – Low T°radiator		2.20	2.18	2.04	2.00
Heating capacity +7°C/+55°C - Radiators	kW	4.50	4.50	5.00	7.00
COP +7°C/+55°C - Radiators		2.51	2.51	2.58	2.45
Heating capacity -7°C/+55°C - Radiators	kW	3.70	3.85	5.20	7.00
COP -7°C/+55°C - Radiators		1.68	1.65	1.56	1.69
Additional electric back-up heater	kW	3	3	3	3
ErP ENERGY EFFICIENCY & ACOUSTIC CHARACTERISTICS					
Energy class - Heating (35°C/55°C)	-	A++ / A+	A++ / A+	A++ / A+	A++ / A+
Thermal power (35°C/55°C)	kW	4 / 4	5 / 5	7 / 6	8 / 8
Seasonal energy efficiency - Heating (35°C/55°C) with outdoor sensor	%	171 / 117	171 / 117	158 / 120	157 / 115
Seasonal energy efficiency - Heating (35°C/55°C)	%	169 / 115	169 / 115	156 / 118	155/ 113
Annual energy consumption - Heating (35°C/55°C)	kWh	2160 / 3027	2505 / 3180	3375 / 3886	4415 / 5415
Sound power level (indoor/outdoor)(1)	dB(A)	46 / 63	46 / 63	46 / 69	46 / 69
INDOOR HYDRAULIC MODULE					
Noise level(2)	dB(A)	39	39	39	39
Net weight/filled weight(3)	kg	46 / 62	46 / 62	46 / 62	46 / 62
Power supply		230V / 50Hz	230V / 50Hz	230V / 50Hz	230V / 50Hz
OUTDOOR UNIT					
Noise level(4)	dB(A)	41	41	47	47
Operating weight	kg	41	41	42	60
REFRIGERANT CHARACTERISTICS					
Min./max. length	m	5 / 30	5 / 30	5 / 30	5 / 30
Max. difference in height	m	20	20	20	20
R410A factory load	g	1100	1100	1400	1800
Quantity of refrigerant in tons of CO_2 equivalent	t	2	2	3	4

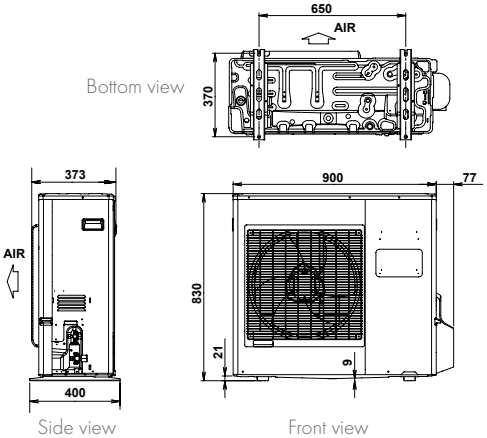
(1) Sound power level is a laboratory measurement of the sound power emitted by the product, but it does not correspond to the sound perceived. Used by acoustics specialists, it allows to measure the sound pressure level of the product in its working environment. - (2) Acoustic pressure at 1m from HP,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

DIMENSIONS (MM)

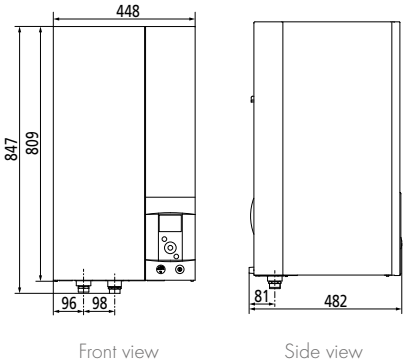
Outdoor Inverter unit Alfea Extensa A.I. 5, 6 and 8



Outdoor Inverter unit Alfea Extensa A.I. 10



Indoor hydraulic module

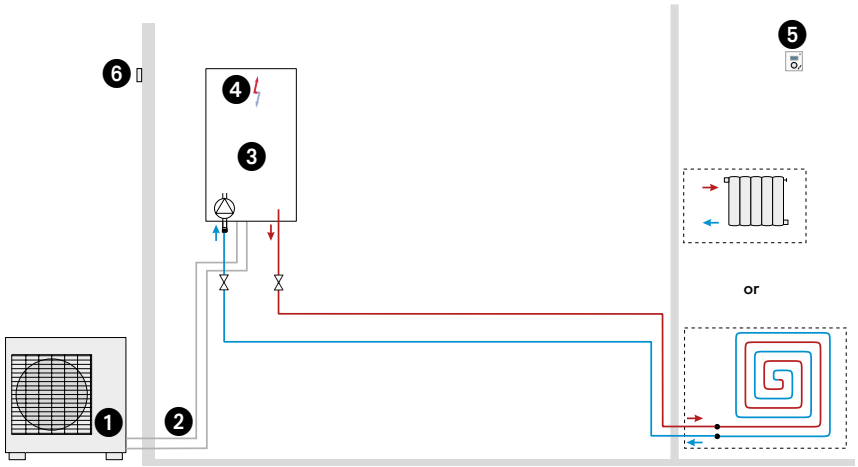


ALFEA EXTENSA ai

Installation schematics

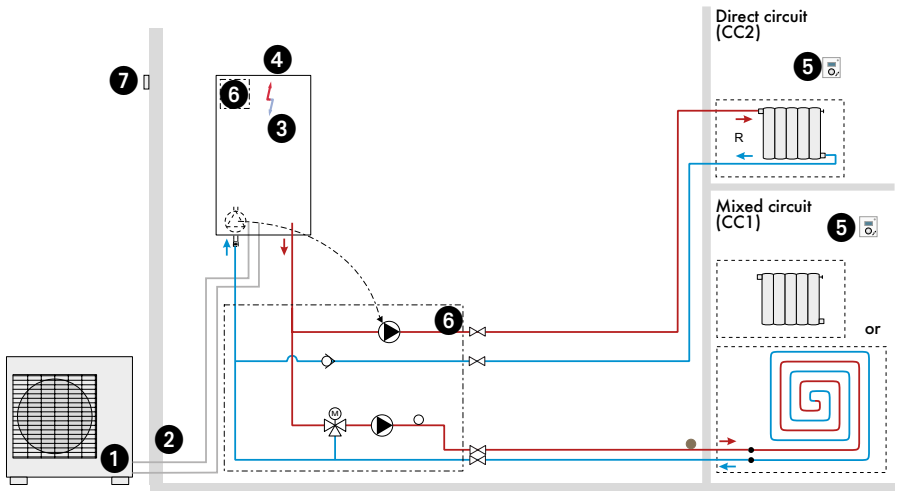
ALFEA EXTENSA A.I.:1 HEATING ZONE

1. Outdoor unit and ground support*
2. Refrigerant connections*
3. Hydraulic module
4. Electric back-up heater
5. Room sensor*
6. Outdoor sensor



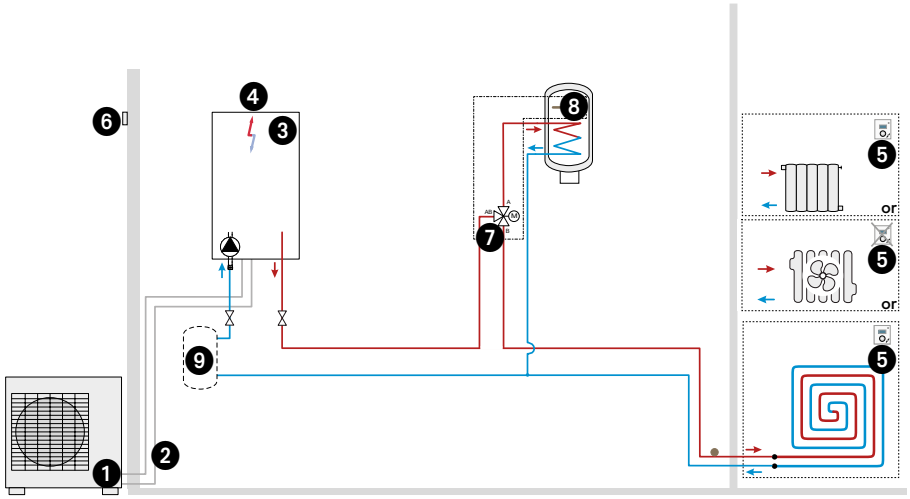
ALFEA EXTENSA A.I.: 2 HEATING ZONES

1. Outdoor unit and ground support*
2. Refrigerant connections*
3. Hydraulic module
4. Electric back-up heater
5. Room sensor*
6. 2 zones kit*
7. Outdoor sensor



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

1. Outdoor unit and ground support*
2. Refrigerant connections*
3. Hydraulic module
4. Electric back-up heater
5. Room sensor*
6. Outdoor sensor
7. DHW kit*
8. Water tank*
9. Buffer tank**



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

ALFEA EXTENSA DUO

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

Indoor hydraulic module

Outdoor Inverter unit

Product

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

DESCRIPTION

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

AVAILABLE OPTIONS

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

SUPPLIES

Indoor hydraulic module

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

Outdoor Inverter unit

- Refrigerant circuit (R410A)
- Twin Rotary compressor

*Models without electric back-up available

IO-Homecontrol®

COZYTOUCH atlantic

PATENTED EXCHANGER

ErP best

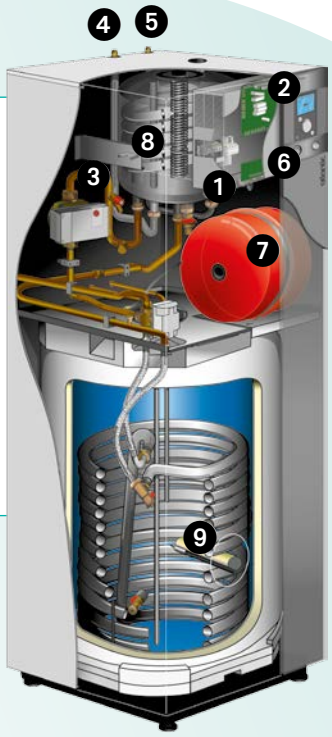
Energy class

35 °C A++ 55 °C A+

A+

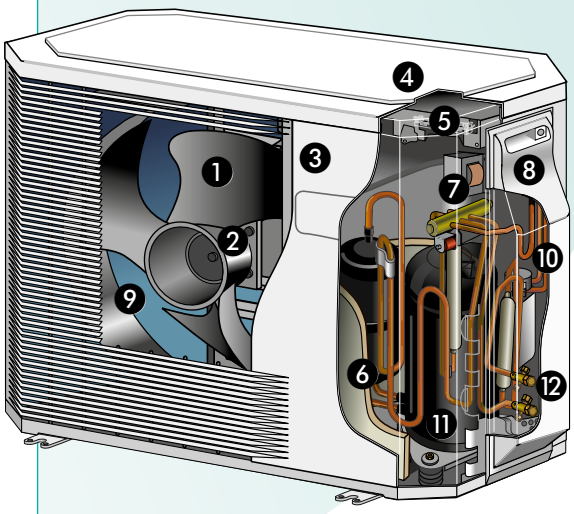
INDOOR HYDRAULIC MODULE

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



OUTDOOR INVERTER UNIT

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



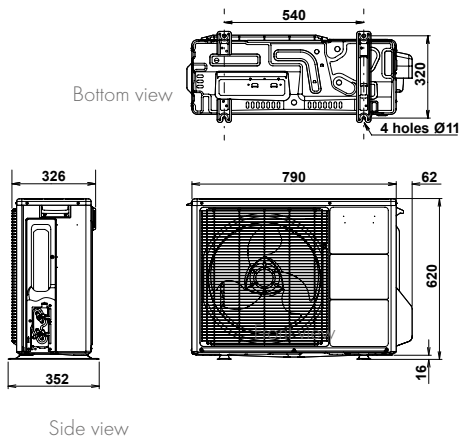
TECHNICAL CHARACTERISTICS AND PERFORMANCES

	UNIT	ALFEA EXTENSA DUO A.I. 5	ALFEA EXTENSA DUO A.I. 6	ALFEA EXTENSA DUO A.I. 8	ALFEA EXTENSA DUO A.I. 10
REFRIGERANT		R410A	R410A	R410A	R410A
MAIN CHARACTERISTICS					
Heating capacity +7°C/+35°C – Underfloor Heating	kW	4.50	6.00	7.50	10.00
COP +7°C/+35°C - Underfloor Heating		4.52	4.26	4.08	4.02
Heating capacity -7°C/+35°C – Underfloor Heating	kW	4.10	4.60	5.70	7.40
COP -7°C/+35°C - Underfloor Heating		2.79	2.64	2.56	2.49
Heating capacity +7°C/+45°C – Low T°radiators	kW	4.50	5.10	6.20	8.27
COP +7°C/+45°C – Low T°radiators		3.44	3.40	3.32	3.27
Heating capacity -7°C/+45°C – Low T°radiators	kW	4.10	4.45	5.05	7.40
COP -7°C/+45°C – Low T°radiator		2.20	2.18	2.04	2.00
Heating capacity +7°C/+55°C - Radiators	kW	4.50	4.50	5.00	7.00
COP +7°C/+55°C - Radiators		2.51	2.51	2.58	2.45
Heating capacity -7°C/+55°C - Radiators	kW	3.70	3.85	5.20	7.00
COP -7°C/+55°C - Radiators		1.68	1.65	1.56	1.69
Additional electric back-up heater	kW	3	3	3	3
ErP ENERGY EFFICIENCY & ACOUSTIC CHARACTERISTICS					
Energy class - Heating (35°C/55°C)	-	A++ / A+	A++ / A+	A++ / A+	A++ / A+
Thermal power (35°C/55°C)	kW	4 / 4	5 / 5	7 / 6	8 / 8
Seasonal energy efficiency - Heating (35°C/55°C) with outdoor sensor	%	171 / 117	171 / 117	158 / 120	157 / 115
Seasonal energy efficiency - Heating (35°C/55°C)	%	169 / 115	169 / 115	156 / 118	155/113
Annual energy consumption - Heating (35°C/55°C)	kWh	2160 / 3027	2505 / 3180	3375 / 3886	4415 / 5415
Sound power level (indoor/outdoor)(1)	dB(A)	46 / 63	46 / 63	46 / 69	46 / 69
Declared load profile - DHW	-	L	L	L	L
Energy class - DHW	-	A+	A+	A+	A+
Annual energy consumption - DHW	kWh	880	880	880	880
Seasonal energy efficiency (%) - DHW	%	120	120	120	120
INDOOR HYDRAULIC MODULE					
Noise level(2)	dB(A)	39	39	39	39
Net weight/filled weight(3)	kg	152 / 373	152 / 373	152 / 373	152 / 373
Power supply		230V / 50Hz	230V / 50Hz	230V / 50Hz	230V / 50Hz
OUTDOOR UNIT					
Noise level(4)	dB(A)	41	41	47	47
Operating weight	kg	41	41	42	60
REFRIGERANT CHARACTERISTICS					
Min./max. length	m	5 / 30	5 / 30	5 / 30	5 / 30
Max. difference in height	m	20	20	20	20
R410A factory load	g	1100	1100	1400	1800
Quantity of refrigerant in tons of CO_2 equivalent	t	2	2	3	4

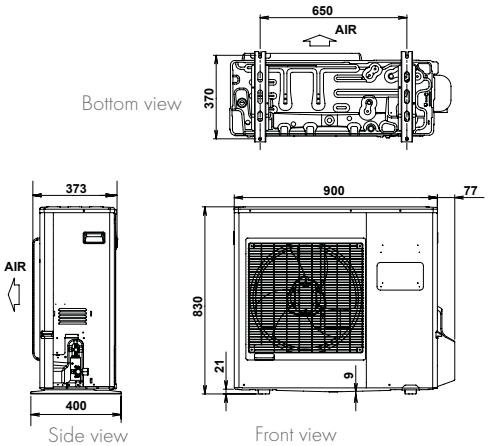
(1) Sound power level is a laboratory measurement of the sound power emitted by the product, but it does not correspond to the sound perceived. Used by acoustics specialists, it allows to measure the sound pressure level of the product in its working environment. - (2) Acoustic pressure at 1m from HP,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

DIMENSIONS (MM)

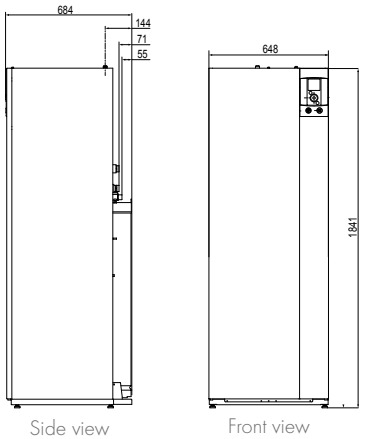
Outdoor Inverter unit Alfea Extensa Duo A.I. 5, 6 and 8



Outdoor Inverter unit Alfea Extensa Duo A.I. 10



Indoor hydraulic module

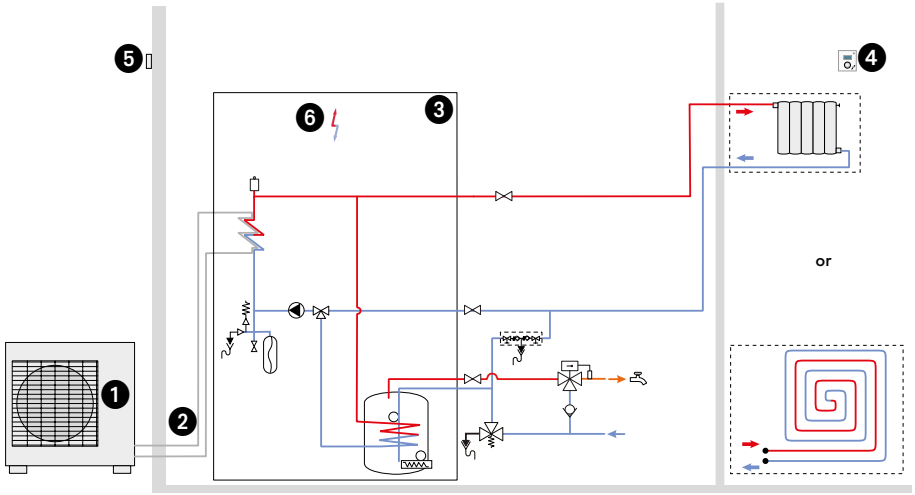


ALFEA EXTENSA DUO

Installation schematics

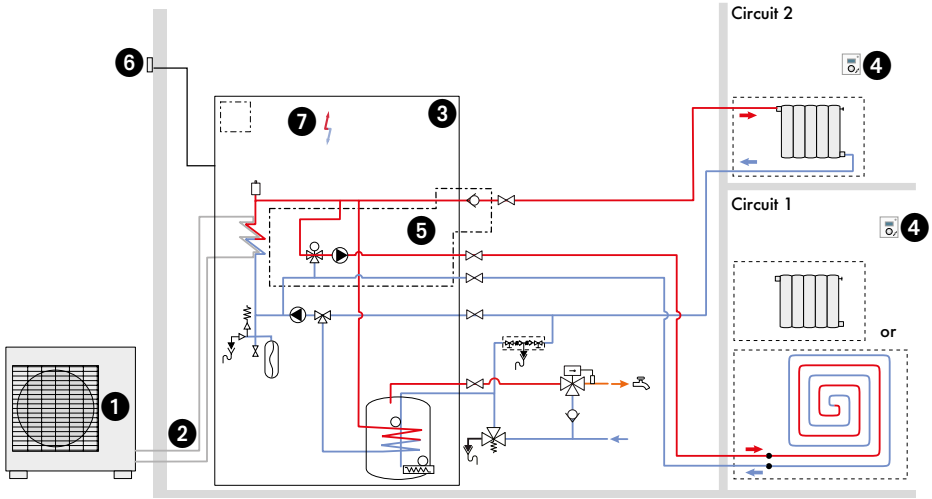
ALFEA EXTENSA DUO A.I.: 1 HEATING ZONE

1. Outdoor unit and ground support*
2. Refrigerant connections*
3. Hydraulic module with integrated DHW
4. Room sensor*
5. Outdoor sensor
6. Electric back-up water heater



ALFEA EXTENSA DUO A.I.: 2 HEATING ZONES

1. Outdoor unit and ground support*
2. Refrigerant connections*
3. Hydraulic module with integrated DHW
4. Room sensor*
5. 2 zones (integrated in the hydraulic module)*
6. Outdoor sensor
7. Electric back-up water heater



*Option

ALFEA EXCELLIA

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

Indoor hydraulic module

Outdoor Inverter unit

Product

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

DESCRIPTION

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

AVAILABLE OPTIONS

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

SUPPLIES

Indoor hydraulic module

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

Outdoor Inverter unit

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

*Models without electric back-up available

IO-Homecontrol®

COZYTOUCH atlantic

PATENTED EXCHANGER

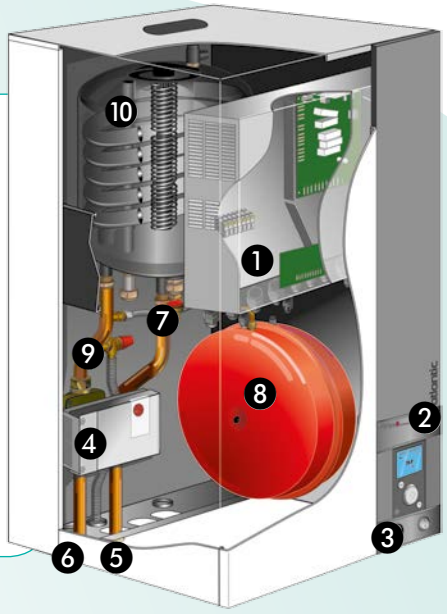
ErP best

Energy class

35 °C A++ 55 °C A+

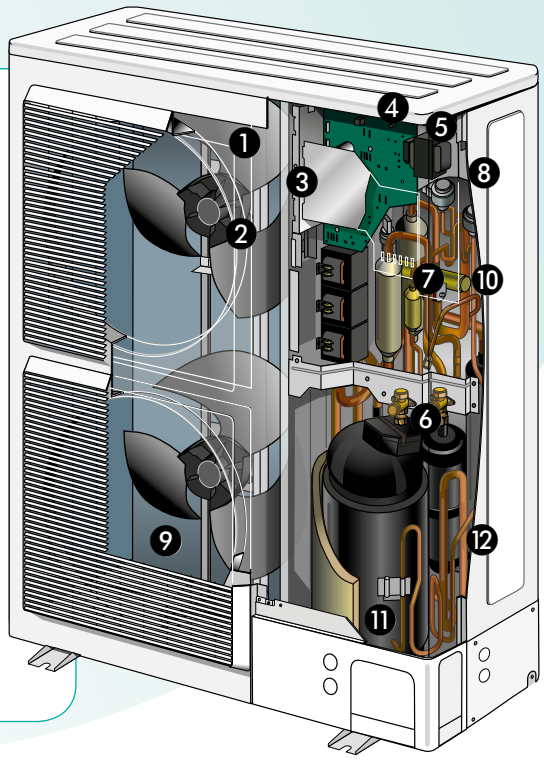
INDOOR HYDRAULIC MODULE

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



OUTDOOR INVERTER UNIT

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



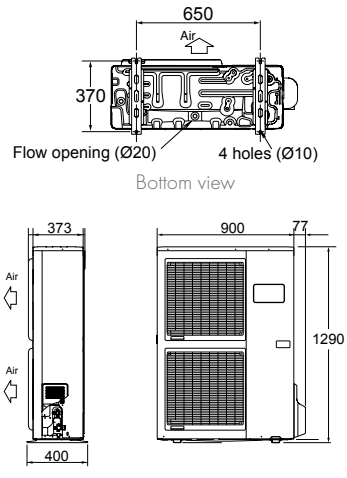
TECHNICAL CHARACTERISTICS AND PERFORMANCES

	UNIT	ALFEA EXCELLIA A.I. 11	ALFEA EXCELLIA A.I. 14	ALFEA EXCELLIA A.I. TRI 11	ALFEA EXCELLIA A.I. TRI 14	ALFEA EXCELLIA A.I. TRI 16
REFRIGERANT		R410A	R410A	R410A	R410A	R410A
MAIN CHARACTERISTICS						
Heating capacity +7°C/+35°C – Underfloor Heating	kW	10.80	13.50	10.80	13.00	15.17
COP +7°C/+35°C - Underfloor Heating		4.25	4.18	4.30	4.18	4.10
Heating capacity -7°C/+35°C – Underfloor Heating	kW	10.38	11.54	10.38	12.20	12.98
COP -7°C/+35°C - Underfloor Heating		2.40	2.27	2.43	2.38	2.40
Heating capacity +7°C/+45°C – Low T°radiators	kW	9.05	11.32	9.90	12.10	12.75
COP +7°C/+45°C – Low T°radiators		3.21	3.07	3.32	3.20	3.21
Heating capacity -7°C/+45°C – Low T°radiators	kW	9.16	11.41	9.98	10.70	12.95
COP -7°C/+45°C – Low T°radiator		2.00	1.93	2.16	2.08	2.03
Heating capacity +7°C/+55°C – Radiators	kW	7.59	9.48	9.29	10.60	12.24
COP +7°C/+55°C – Radiators		2.47	2.40	2.64	2.41	2.48
Heating capacity -7°C/+55°C – Radiators	kW	7.57	9.20	9.27	10.10	12.00
COP -7°C/+55°C – Radiators		1.66	1.81	1.82	1.79	1.74
Additional adjustable electric back-up heater	kW	6	6	9	9	9
ErP ENERGY EFFICIENCY & ACOUSTIC CHARACTERISTICS						
Energy class - Heating (35°C/55°C)	-	A++ / A+	A++ / A+	A++ / A+	A++ / A+	A++ / A+
Rated heat output (35°C/55°C)	kW	11 / 9	13 / 11	11 / 9	13 / 11	14 / 13
Seasonal energy efficiency - Heating (35°C/55°C) with outdoor sensor	%	153 / 114	150 / 115	156 / 114	152 / 119	151 / 119
Seasonal energy efficiency - Heating (35°C/55°C)	%	151 / 112	148/ 113	154 / 112	150 / 117	149 / 117
Annual energy consumption - Heating (35°C/55°C)	kWh	6062 / 6623	6824 / 8041	5930 / 6669	6738 / 7803	7408 / 9062
Sound power level (indoor/outdoor)(1)	dB(A)	46 / 69	46 / 69	46 / 68	46 / 69	46 / 69
INDOOR HYDRAULIC MODULE						
Noise level(2)	dB(A)	39	39	39	39	39
Net weight/filled weight(3)	kg	46 / 62	46 / 62	46 / 62	46 / 62	46 / 62
Power supply		230 V / 50 Hz	230 V / 50 Hz	400 V / 50 Hz	400 V / 50 Hz	400 V / 50 Hz
OUTDOOR UNIT						
Noise level(4)	dB (A)	47	47	46	47	47
Operating weight	kg	92	92	99	99	99
REFRIGERANT CHARACTERISTICS						
Min./max. length	m	5 / 20	5 / 20	5 / 20	5 / 20	5 / 20
Max. difference in height	m	15	15	15	15	15
R410A factory load	g	2500	2500	2500	2500	2500
Quantity of refrigerant in tons of CO_2 equivalent	t	5	5	5	5	5

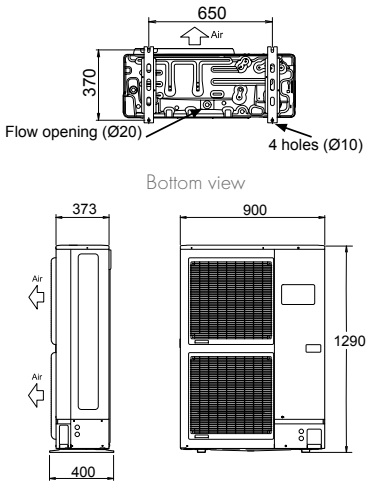
(1) Sound power level is a laboratory measurement of the sound power emitted by the product, but it does not correspond to the sound perceived. Used by acoustics specialists, it allows to measure the sound pressure level of the product in its working environment. - (2) Acoustic pressure at 1m from HP,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

DIMENSIONS (MM)

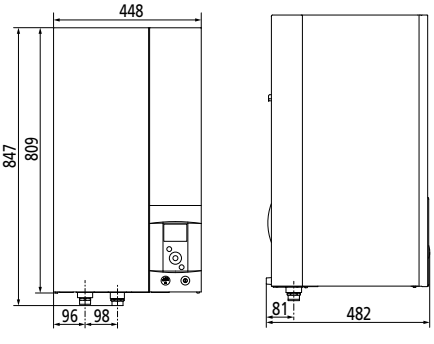
Outdoor Inverter unit Alfea Excellia A.I. 11 and 14 single-phase



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



Indoor hydraulic module

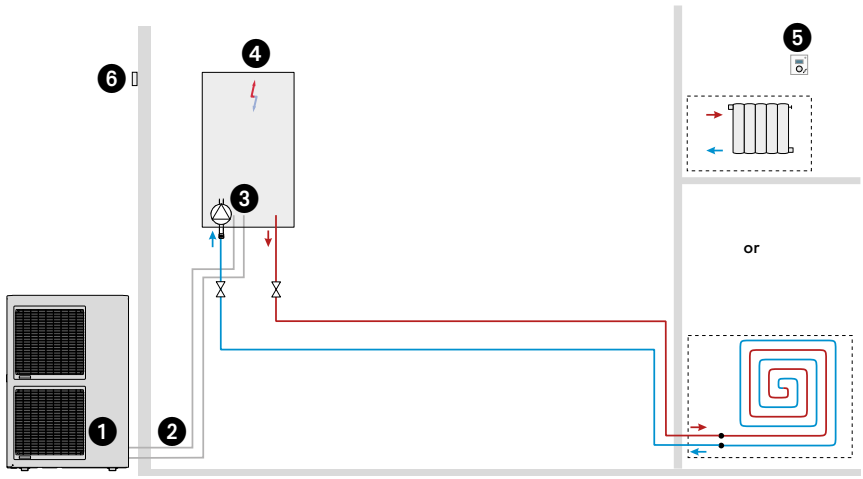


ALFEA EXCELLIA ai

Installation schematics

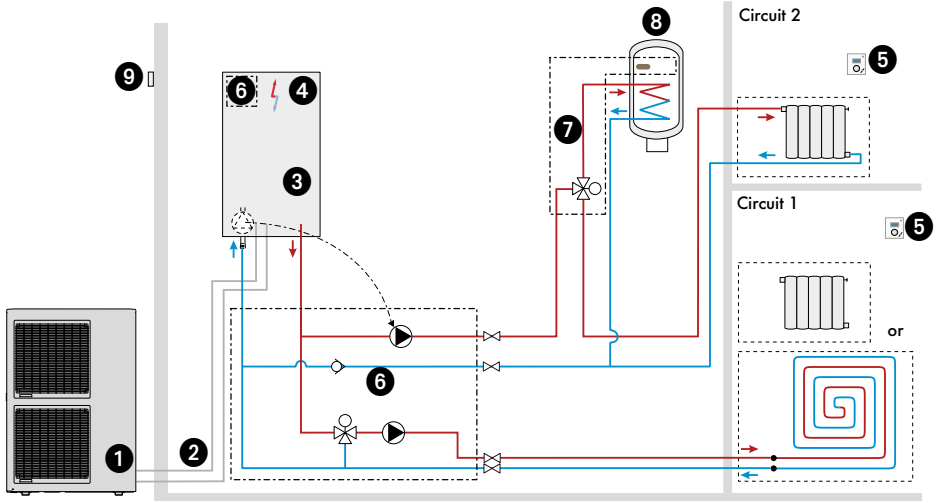
ALFEA EXCELLIA A.I.: 1 HEATING ZONE

1. Outdoor unit and ground support*
2. Refrigerant connections*
3. Hydraulic module
4. Electric back-up heater
5. Room sensor*
6. Outdoor sensor



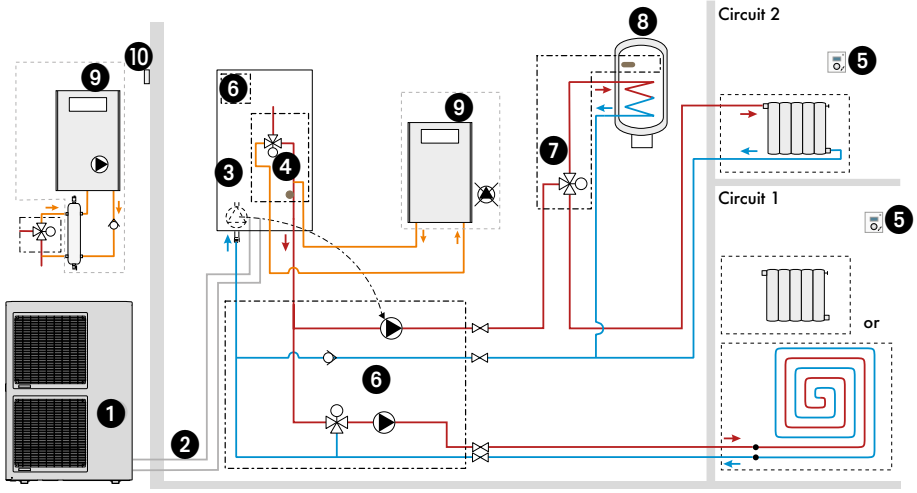
ALFEA EXCELLIA A.I.: 2 HEATING ZONES AND DHW PRODUCTION

1. Outdoor unit and ground support*
2. Refrigerant connections*
3. Hydraulic module
4. Electric back-up heater
5. Room sensor*
6. 2 zones kit*
7. DHW kit*
8. DHW tank*
9. Outdoor sensor



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

1. Outdoor unit and ground support*
2. Refrigerant connections*
3. Hydraulic module
4. Boiler connection kit*
5. Room sensor*
6. 2 zones kit*
7. DHW kit*
8. DHW tank*
9. Boiler
10. Outdoor sensor



*Option

ALFEA EXCELLIA DUO

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

Indoor hydraulic module

Outdoor Inverter unit

Product

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

DESCRIPTION

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

AVAILABLE OPTIONS

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

SUPPLIES

Indoor hydraulic module

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

Outdoor Inverter unit

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

*Models without electric back-up available

IO-Homecontrol®

COZYTOUCH atlantic

PATENTED EXCHANGER

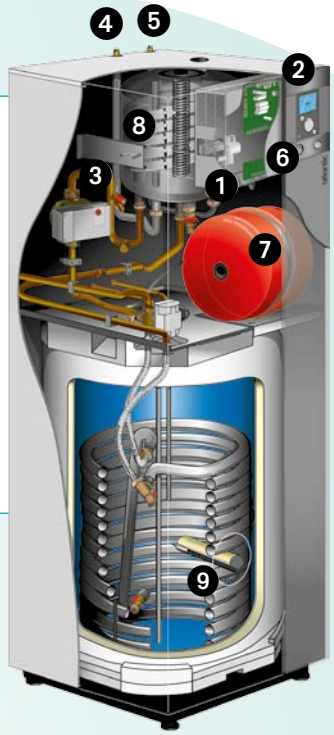
ErP best

Energy class

35 °C A++ | 55 °C A+ | A

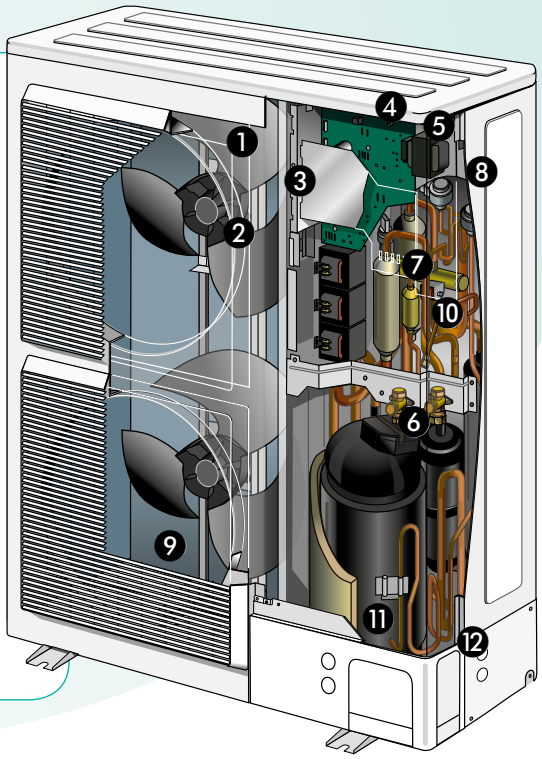
INDOOR HYDRAULIC MODULE

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



OUTDOOR INVERTER UNIT

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



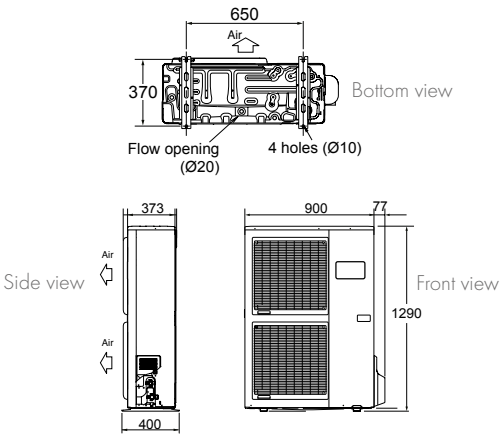
TECHNICAL CHARACTERISTICS AND PERFORMANCES

	UNIT	ALFEA EXCELLIA DUO A.I. 11	ALFEA EXCELLIA DUO A.I. 14	ALFEA EXCELLIA DUO A.I. TRI 11	ALFEA EXCELLIA DUO A.I. TRI 14	ALFEA EXCELLIA DUO A.I. TRI 16
REFRIGERANT		R410A	R410A	R410A	R410A	R410A
MAIN CHARACTERISTICS						
Heating capacity +7°C/+35°C – Underfloor Heating	kW	10.80	13.50	10.80	13.00	15.17
COP +7°C/+35°C - Underfloor Heating		4.25	4.18	4.30	4.18	4.10
Heating capacity -7°C/+35°C – Underfloor Heating	kW	10.38	11.54	10.38	12.20	12.98
COP -7°C/+35°C - Underfloor Heating		2.40	2.27	2.43	2.38	2.40
Heating capacity +7°C/+45°C – Low T°radiators	kW	9.05	11.32	9.90	12.10	12.75
COP +7°C/+45°C – Low T°radiators		3.21	3.07	3.32	3.20	3.21
Heating capacity -7°C/+45°C – Low T°radiators	kW	9.16	11.41	9.98	10.70	12.95
COP -7°C/+45°C – Low T°radiator		2.00	1.93	2.16	2.08	2.03
Heating capacity +7°C/+55°C - Radiators	kW	7.59	9.48	9.29	10.60	12.24
COP +7°C/+55°C – Radiators		2.47	2.40	2.64	2.41	2.48
Heating capacity -7°C/+55°C – Radiators	kW	7.57	9.20	9.27	10.10	12.00
COP -7°C/+55°C – Radiators		1.66	1.81	1.82	1.79	1.74
Additional electric back-up heater	kW	6	6	9	9	9
ErP ENERGY EFFICIENCY & ACOUSTIC CHARACTERISTICS						
Energy class - Heating (35°C/55°C)	-	A++ / A+	A++ / A+	A++ / A+	A++ / A+	A++ / A+
Rated heat output (35°C/55°C)	kW	11 / 9	13 / 11	11 / 9	13 / 11	14 / 13
Seasonal energy efficiency - Heating (35°C/55°C) with outdoor sensor	%	153 / 114	150 / 115	156 / 114	152 / 119	151 / 119
Seasonal energy efficiency - Heating (35°C/55°C)	%	151 / 112	148 / 113	154 / 112	150 / 117	149 /117
Annual energy consumption - Heating (35°C/55°C)	kWh	6062 / 6623	6824 / 8041	5930 / 6669	6738 / 7803	7408 / 9062
Sound power level (indoor/outdoor)(1)	dB(A)	46 / 69	46 / 69	46 / 68	46 / 69	46 / 69
Declared load profile - DHW	-	L	L	L	L	L
Energy class - DHW	-	A	A	A	A	A
Annuel water heating energy consumption	kWh	1166	1166	1166	1166	1166
Seasonal water heating energy efficiency (%)	%	88	88	88	88	88
INDOOR HYDRAULIC MODULE						
Noise level(2)	dB(A)	39	39	39	39	39
Net weight/filled weight(3)	kg	155 / 373	155 / 373	155 / 373	155 / 373	155 / 373
Power supply		230 V / 50 Hz	230 V / 50 Hz	400 V / 50 Hz	400 V / 50 Hz	400 V / 50 Hz
OUTDOOR UNIT						
Noise level(4)	dB(A)	47	47	46	47	47
Operating weight	kg	92	92	99	99	99
REFRIGERANT CHARACTERISTICS						
Min./max. length	m	5 / 20	5 / 20	5 / 20	5 / 20	5 / 20
Max. difference in height	m	15	15	15	15	15
R410A factory load	g	2500	2500	2500	2500	2500
Quantity of refrigerant in tons of CO_2 equivalent	t	5	5	5	5	5

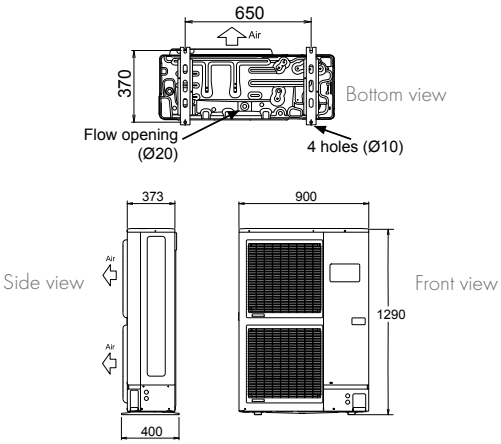
(1) Sound power level is a laboratory measurement of the sound power emitted by the product, but it does not correspond to the sound perceived. Used by acoustics specialists, it allows to measure the sound pressure level of the product in its working environment. - (2) Acoustic pressure at 1m from HP,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

DIMENSIONS (MM)

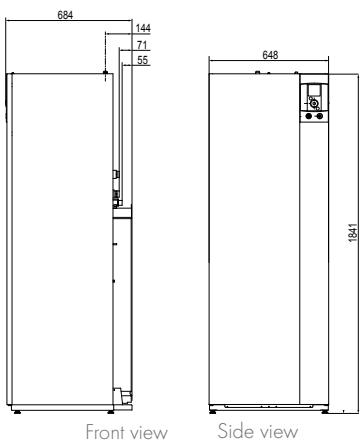
Outdoor Inverter unit Alfea Excellia Duo A.I. 11 and 14 single-phase



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



Indoor hydraulic module

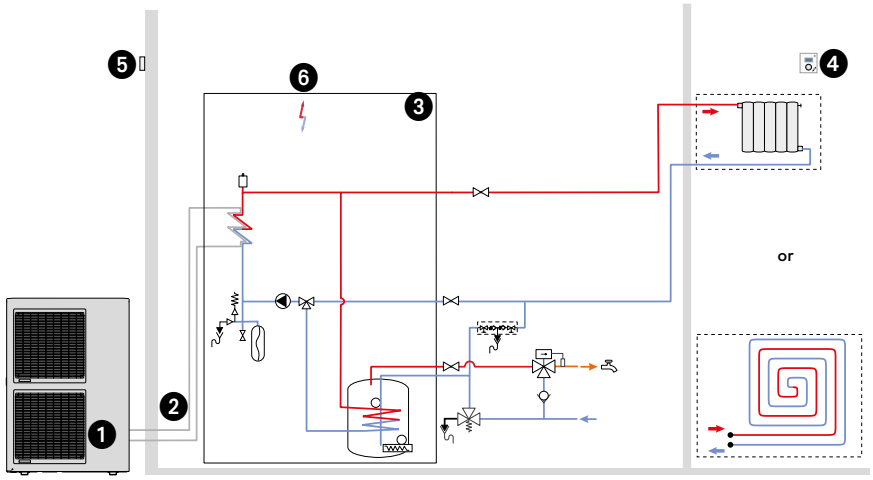


ALFEA EXCELLIA DUO

Installation schematics

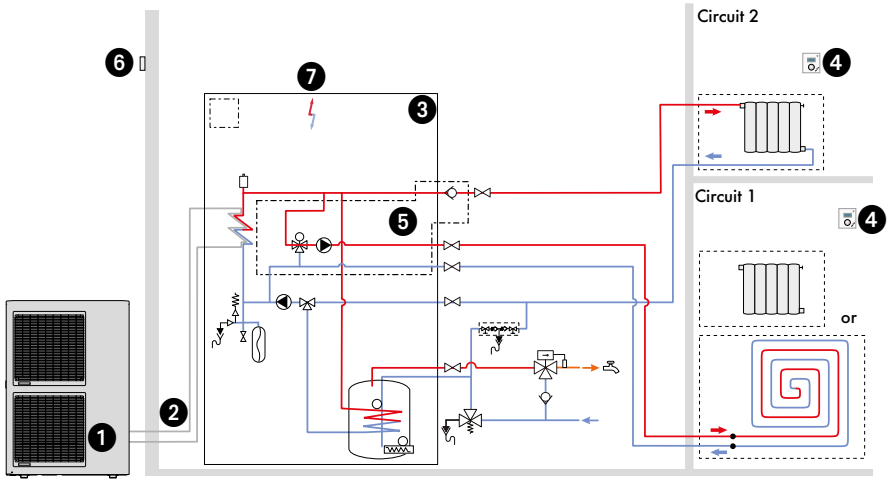
ALFEA EXCELLIA DUO A.I.: 1 HEATING ZONE

1. Outdoor unit and ground support*
2. Refrigerant connections*
3. Hydraulic module with integrated DHW
4. Room sensor*
5. Outdoor sensor
6. Electric back-up heater



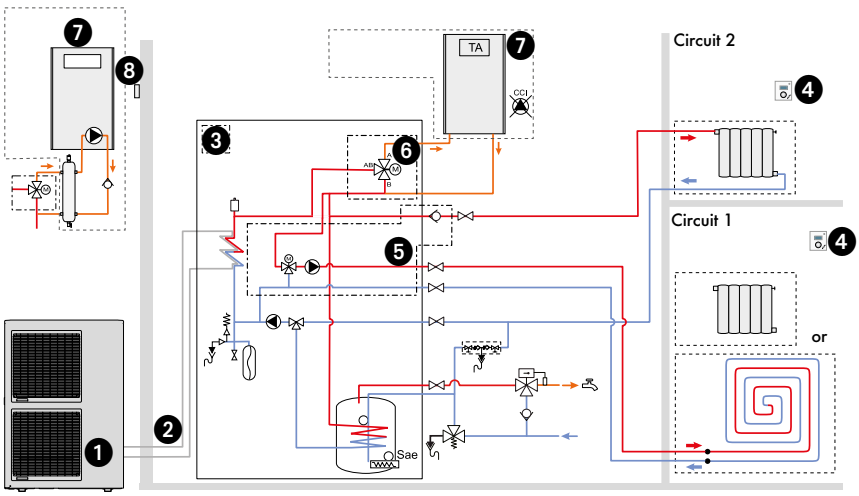
ALFEA EXCELLIA DUO A.I.: 2 HEATING ZONES

1. Outdoor unit and ground support*
2. Refrigerant connections*
3. Hydraulic module with integrated DHW
4. Room sensor*
5. 2 zones kit* (integrated in the hydraulic module)
6. Outdoor sensor
7. Electric back-up heater



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

1. Outdoor unit and ground support*
2. Refrigerant connections*
3. Hydraulic module with integrated DHW
4. Room sensor*
5. 2 zones kit* (integrated in the hydraulic module)
6. Boiler connection kit*
7. Boiler
8. Outdoor sensor



*Option

ALFEA HYBRID DUO OIL LOW NOX

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

Indoor hydraulic module

Outdoor Inverter unit

Product

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

DESCRIPTION

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

AVAILABLE OPTIONS

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

SUPPLIES

Indoor hydraulic module

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

Outdoor Inverter unit

- Outdoor Inverter unit with Twin Rotary compressor

PATENTED EXCHANGER

HYBRID TECHNOLOGY

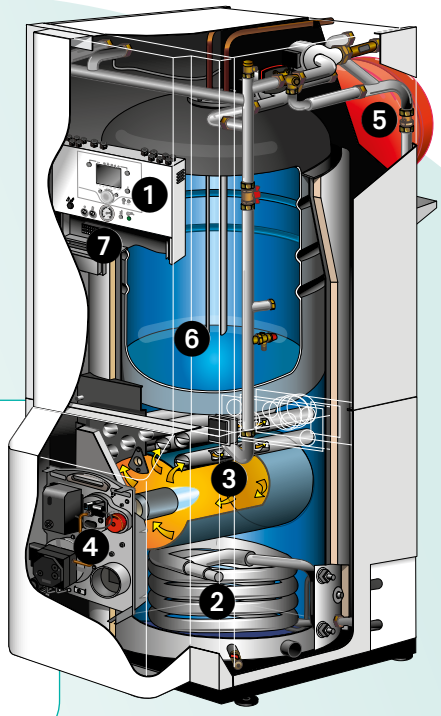
ErP best

Energy class

55 °C A+

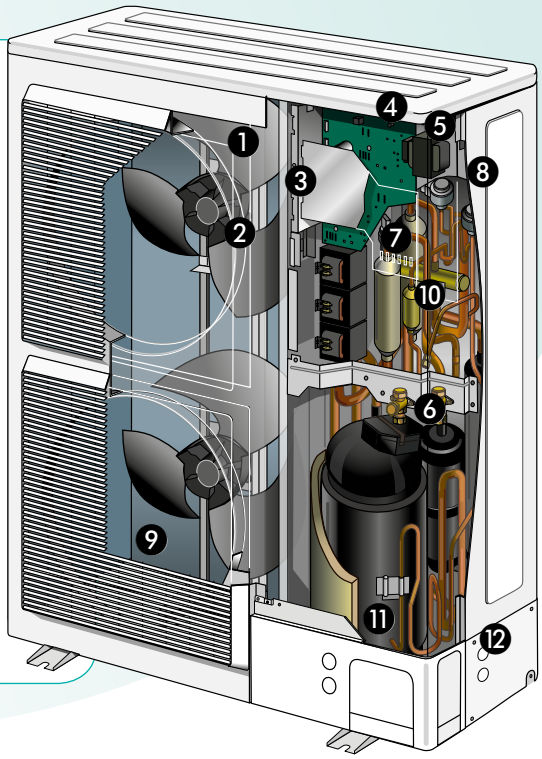
A

INDOOR HYDRAULIC MODULE



1. Control panel
2. Coaxial heat exchanger
3. Heating element
4. Oil burner
5. Heating expansion vessel
6. Hot water tank
7. Electric distribution board

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 HYBRID DUO OIL LOW NOx 11	ALFEA HYBRID DUO OIL LOW NOx 14+	ALFEA HYBRID DUO OIL LOW NOx TRI 11	ALFEA HYBRID DUO OIL LOW NOx TRI 14	ALFEA HYBRID DUO OIL LOW NOx TRI 16
REFRIGERANT		R410A	R410A	R410A	R410A	R410A
MAIN CHARACTERISTICS						
Heating capacity +7°C/+35°C - Underfloor Heating	kW	10.30	13.50	10.60	13.25	14.89
COP +7°C/+35°C	-	3.95	3.80	3.90	4.08	3.96
Heating capacity -7°C/+35°C - Underfloor Heating	kW	10.10	11.22	9.75	13.00	13.50
COP -7°C /+35°C	-	2.56	2.4	2.65	2.51	2.5
Heating capacity +7°C/+45°C - Low T° radiators	kW	9.05	11.32	10.10	12.60	13.00
COP +7°C/+55°C	-	3.21	3.07	3.36	3.31	3.25
Heating capacity -7°C/+45°C - Low T° radiators	kW	8.33	10.41	8.66	12.5	13
COP -7°C/+45°C	-	2.06	1.99	2.14	2.08	2.04
Nominal thermal power of oil back-up	kW	25	25	25	25	25
ErP ENERGY EFFICIENCY CHARACTERISTICS - HEATING - AVERAGE CLIMAT						
Energy class - Heating (55°C)	-	A+	A+	A+	A+	A+
Thermal power - heat pump (55°C)	kW	10	13	11	13	14
Seasonal energy efficiency - Heating (55°C) with outdoor sensor	%	113	113	118	116	115
Seasonal energy efficiency - Heating (55°C)	%	111	111	116	114	113
Annual energy consumption - Heating (55°C)	kWh	7266	8806	7424	8896	9734
Sound power level (indoor/outdoor)(1)	dB(A)	44 / 69	44 / 70	44 / 68	44 / 68	44 / 69
ErP ENERGY EFFICIENCY CHARACTERISTICS - DHW - AVERAGE CLIMAT						
Declared load profile	-	M	M	M	M	M
Energy class - DHW	-	A	A	A	A	A
Annual energy consumption - DHW	kWh	616	616	616	616	616
Seasonal energy efficiency (%) - DHW	%	82	82	82	82	82
INDOOR HYDRAULIC MODULE						
Noise level on Thermodynamic mode(2)	dB(A)	36	36	36	36	36
Dim. chimney version h x w x d	mm	1711x670x1075	1711x670x1075	1711x670x1075	1711x670x1075	1711x670x1075
Dim. room sealed system version h x w x d		1711x670x1206	1711x670x1206	1711x670x1206	1711x670x1206	1711x670x1206
Net weight/filled weight	kg	215 / 482	215 / 482	215 / 482	215 / 482	215 /482
HYDRAULIC CHARACTERISTICS						
Combustion chamber capacity	L	142	142	142	142	142
Max working pressure	bar	3	3	3	3	3
Expansion vessel capacity	L	18	18	18	18	18
ELECTRICAL CONNECTIONS						
Power supply	V / Hz	230 V / 50 Hz	230 V / 50 Hz	230 V / 50 Hz	230 V / 50 Hz	230 V / 50 Hz
Standby mode consumption	W	5	5	5	5	5
HYDRAULIC CONNECTIONS						
Ø Heating circ. inlet and outlet	" - mm	1 / 26x34	1 / 26x34	1 / 26x34	1 / 26x34	1 / 26x34
Ø DHW circ. inlet and outlet (male thread)	" - mm	3/4 / 20x27	3/4 / 20x27	3/4 / 20x27	3/4 / 20x27	3/4 / 20x27
CHIMNEY CONNECTION						
Ø Chimney inlet and outlet	m	125 / 139	125 / 139	125 / 139	125 / 139	125 / 139
Burner optimum depression	Pa	15	15	15	15	15
ROOM SEALED SYSTEM CONNECTION DEPENDING ON MODEL						
Ø Pipe	mm	80 / 125	80 / 125	80 / 125	80 / 125	80 / 125
OPERATING RANGE						
Min./max. hot/cold outdoor temperature (heat pump)	°C	-25 / +35	-25 / +35	-25 / +35	-25 / +35	-25 / +35
Heating flow water max T°	°C	80	80	80	80	80
Max water T°(heat pump)	°C	60	60	60	60	60
OUTDOOR UNIT						
Noise level(3)	dB(A)	46	47	46	47	48
Operating weight	kg	92	92	99	99	99
Power supply	V / Hz	230 V / 50 Hz	230 V / 50 Hz	400 V / 50 Hz	400 V / 50 Hz	400 V / 50 Hz
REFRIGERANT CHARACTERISTICS						
R410A factory load	g	2500	2500	2500	2500	2500
Quantity of refrigerant in tons of CO^2 equivalent	-	5	5	5	5	5
Min./max. length	m	5 / 20	5 / 20	5 / 20	5 / 20	5 / 20
Max. difference in height	m	15	15	15	15	15
Volume of tank	L	125	125	125	125	125

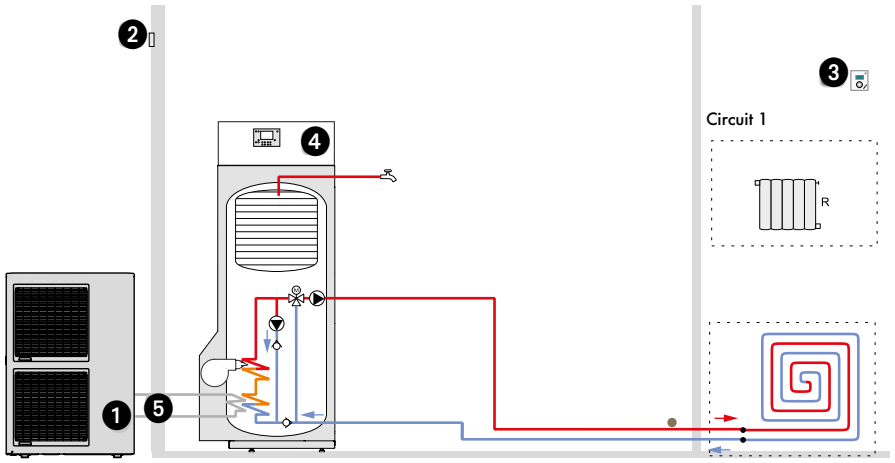
(1) Sound power level is a laboratory measurement of the sound power emitted by the product, but it does not correspond to the sound perceived. Used by acoustics specialists, it allows to measure the sound pressure level of the product in its working environment - (2) Acoustic pressure at 1m from HP,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

ALFEA HYBRID DUO OIL LOW NOX

Installation schematics

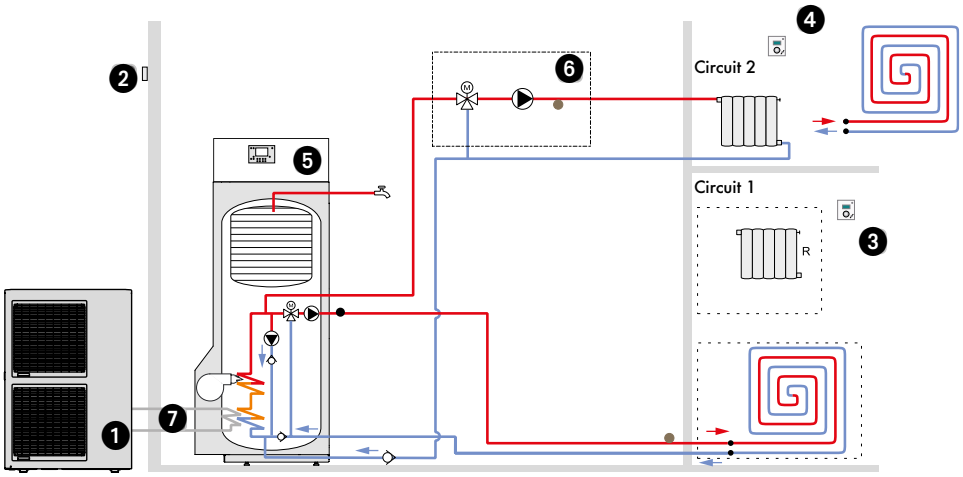
ALFEA HYBRID DUO OIL LOW NOX: 1 HEATING ZONE

1. Outdoor Inverter unit
2. Outdoor sensor
3. Room sensor*
4. Indoor hydraulic module with low NOx oil burner and DHW tank
5. Refrigeration connections*



ALFEA HYBRID DUO OIL LOW NOX: 2 HEATING ZONES

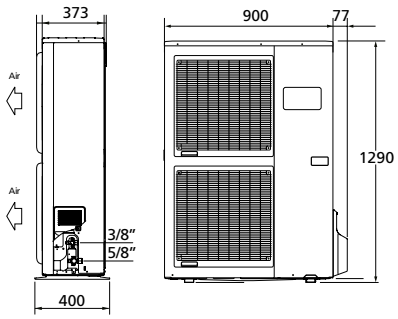
1. Outdoor Inverter unit
2. Outdoor sensor
3. Room sensor zone 1*
4. Room sensor zone 2*
5. Indoor hydraulic module with low NOx oil burner and DHW tank
6. 2 zones kit*
7. Refrigeration connections*



*Option

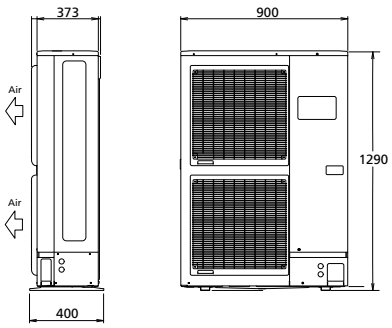
DIMENSIONS (MM)

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



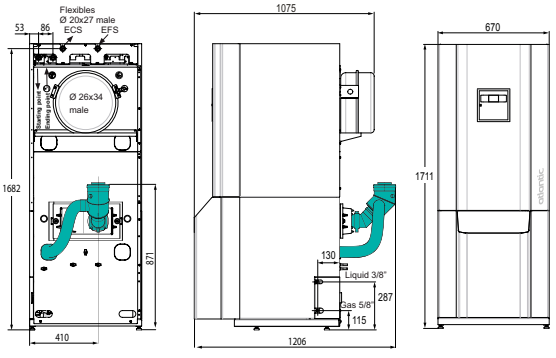
Side view | Front view

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



Side view | Front view

Indoor hydraulic module



Rear view | Side view | Front view

ALFEA HYBRID DUO GAS / GAS R

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

Indoor hydraulic module

Outdoor Inverter unit
6 and 8kW

Outdoor Inverter unit
11, 14 and 16kW

Product

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

DESCRIPTION

- Replacement of existing gas boiler
- 4 models: 6, 8, 11 and 14kW – single-phase
- 3 models: 11, 14 and16kW – three-phase
- Heating and DHW integrated
- Performing heat pump working with outside temperature from -25°C to +35°C
- 1 or 2 heating zones
- Control: new feature allowing energy cost input to optimise heating with more energy savings*
- Cooling mode*

AVAILABLE OPTIONS

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

SUPPLIES

Indoor hydraulic module

- Coaxial exchanger
- Condensing boiler, 24kW supplied with propane option (natural gas diaphragm supplied)
- 120L glass-lined steel hot water tank with ACI protection
- Low energy consumption circulation pumpl
- Expansion vessel, valve, pressure meter
- Outdoor sensor
- Motorised mixing valve

Outdoor Inverter unit

- Outdoor Inverter unit with Twin Rotary compressor

*Available for Alfea Hybrid Duo Gas R models

PATENTED EXCHANGER

HYBRID TECHNOLOGY

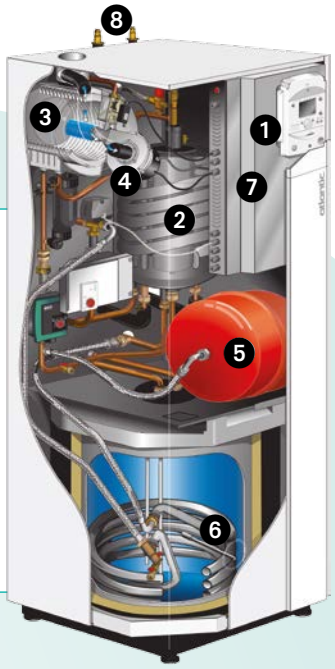
ErP best

Energy class

55 °C A+ | B

INDOOR HYDRAULIC MODULE

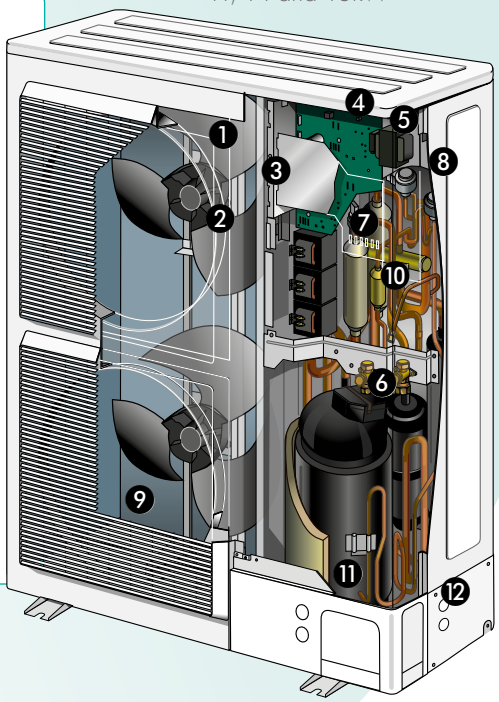
1. Control panel
2. Coaxial heat exchanger
3. Gas condensing unit
4. Gas burner
5. Heating expansion vessel
6. Hot water tank
7. Electric distribution board
8. Refrigerant connections



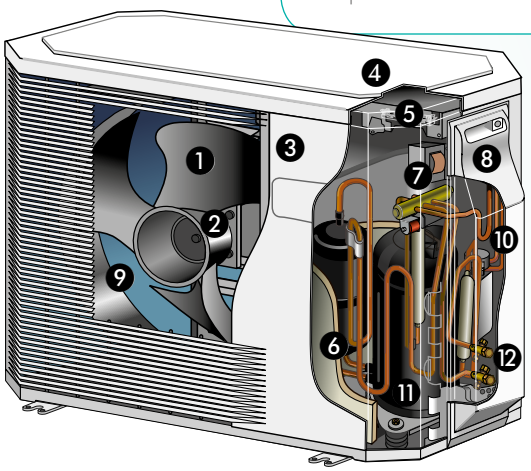
OUTDOOR INVERTER UNIT

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

Outdoor Inverter unit
11, 14 and 16kW



Outdoor Inverter unit
6 and 8kW



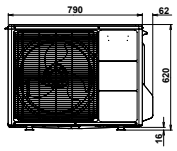
TECHNICAL CHARACTERISTICS AND PERFORMANCES

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

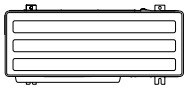
(1) Sound power level is a laboratory measurement of the sound power emitted by the product, but it does not correspond to the sound perceived. Used by acoustics specialists, it allows to measure the sound pressure level of the product in its working environment. - (2) Acoustic pressure at 1m from HP,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

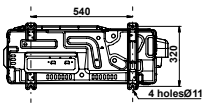
DIMENSIONS (MM)

Outdoor Inverter unit Alfea Hybrid Duo Gas R6, R8



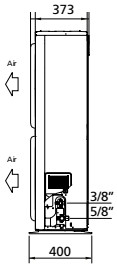
Top view


Top view

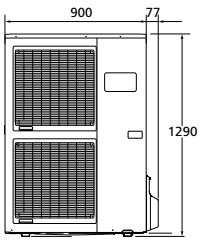


Bottom view

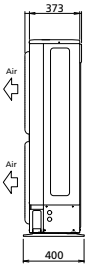
Outdoor Inverter unit Alfea Hybrid Duo Gas 11, 14kW single-phase and 11, 14, 16kW three-phase



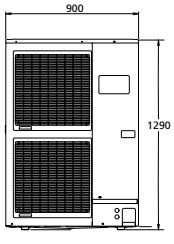
Side view



Front view

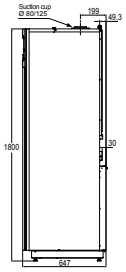


Side view

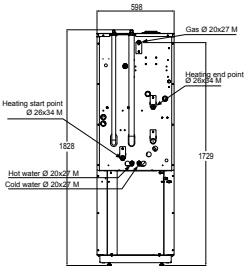


Front view

Indoor hydraulic module



Side view



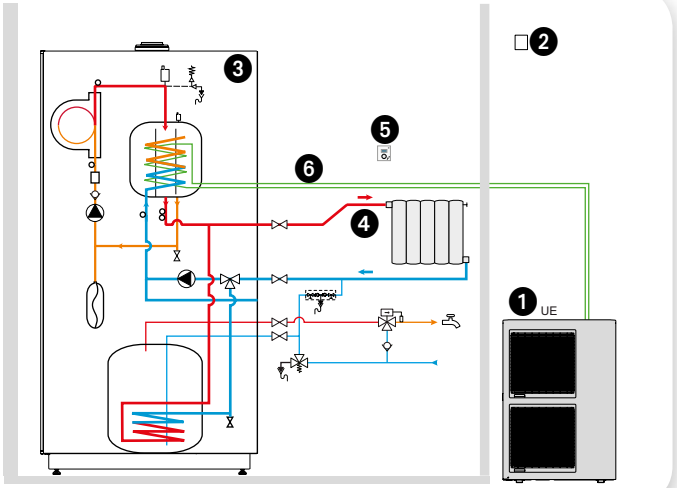
Back view

ALFEA HYBRID DUO GAS / GAS R

Installation schematics

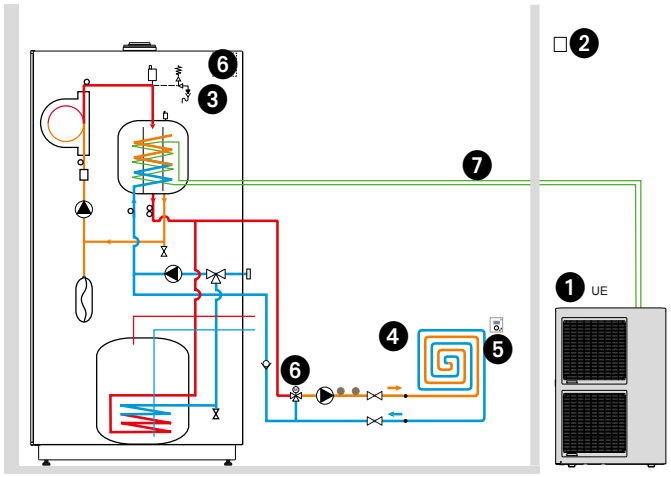
ALFEA HYBRID DUO GAS: 1 HEATING ZONE

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



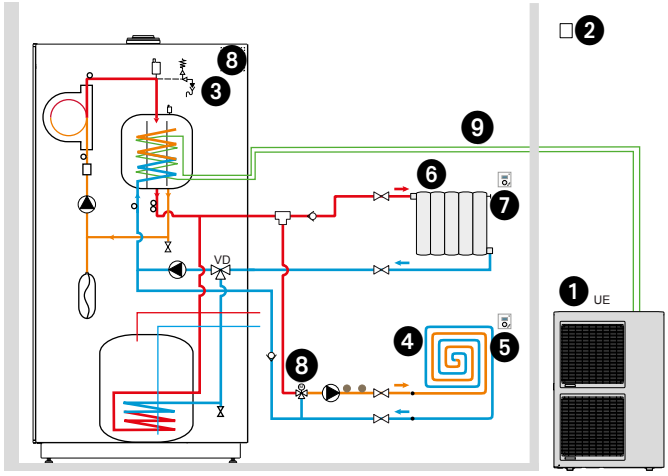
ALFEA HYBRID DUO GAS: 1 HEATING ZONE - UNDERFLOOR HEATING

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



*Option

ALFEA RANGE ACCESSORIES

ROOM SENSOR UNIT NAVILINK A59

NEW

Product

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

DESCRIPTION

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

ROOM SENSORS NAVILINK A75 / A78

NEW

Navilink A75

Navilink A78

Product

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

DESCRIPTION

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

DOMESTIC HOT WATER TANK MILEO / MILEO+

Product

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

DESCRIPTION

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

2 ZONES KIT

2 zones kit for single service heat pump

Product

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

DESCRIPTION

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

COOLING KIT

Product

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

DESCRIPTION

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

HEAT PUMP ADDITIONAL RELAY KIT NEW

Product

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

DESCRIPTION

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

ACCESSORIES FOR OUTDOOR UNIT

White PVC floor support (x2)

Black rubber floor support (x2)

Wall bracket* 600 mm (with bar)

Heating cable

Refrigerant pipes**

Protection pipes for refrigerant pipes

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

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

AIR-TO-WATER HEAT PUMPS

Loria is our range of compact split air-to-water heat pumps, consisting of a new designed indoor hydraulic module connected by a refrigerant link to an outdoor unit.
The calories collected from the outside air are carried via this network to provide heating. Atlantic R&D teams have designed Loria hydraulic modules, benefiting from Atlantic's heat pump experience, in order to optimise the technology for the new-build market, with its particular needs.

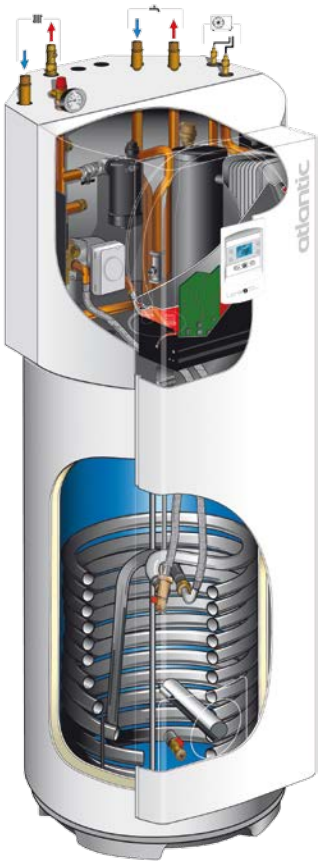
TECHNICAL BENEFITS

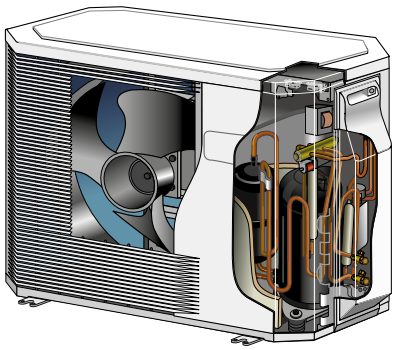
Ergonomic design, in a small space!

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

Complete and simple solution for new build projects

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



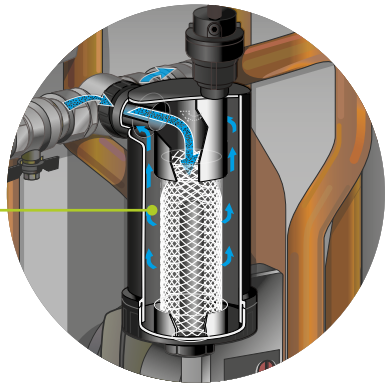


*Option

LORIA RANGE

Easy maintenance

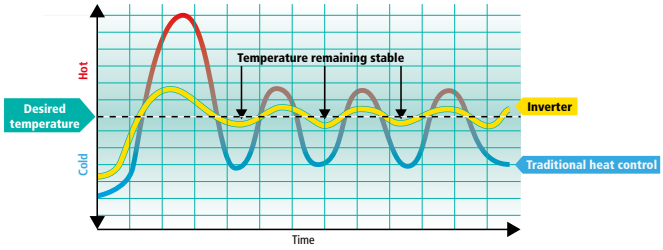
- Hinged electric cabinet to access internal components
- Loria: filter valve (as standard) outside the hydraulic module, easy to remove and clean
- Loria Duo: built-in magnetic mud filter as standard



Easy set-up

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

Comparison between Inverter and traditional heat control



Performances

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

Atlantic regulator

NAVISTEM **100H**

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

LORIA

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

Indoor hydraulic module

Outdoor Inverter unit

Product

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

DESCRIPTION

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

AVAILABLE OPTIONS

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

SUPPLIES

Indoor hydraulic module

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

Outdoor Inverter unit

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

ErP best

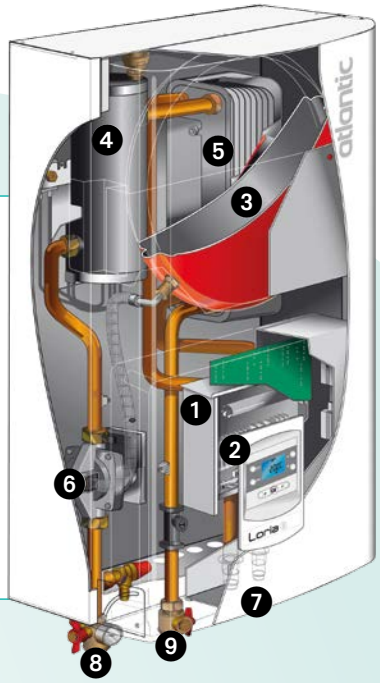
Energy class

35 °C A+++*

55 °C A++

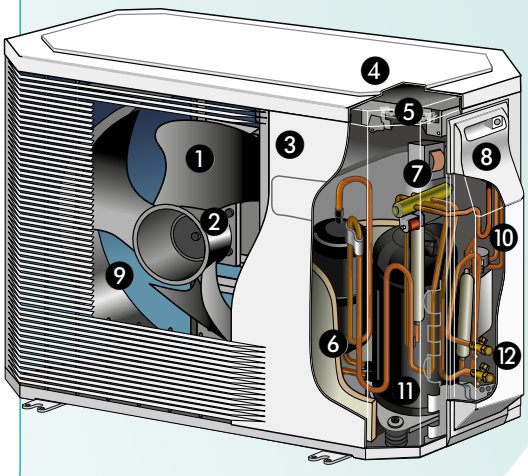
INDOOR HYDRAULIC MODULE

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



OUTDOOR INVERTER UNIT

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



*Depending on models

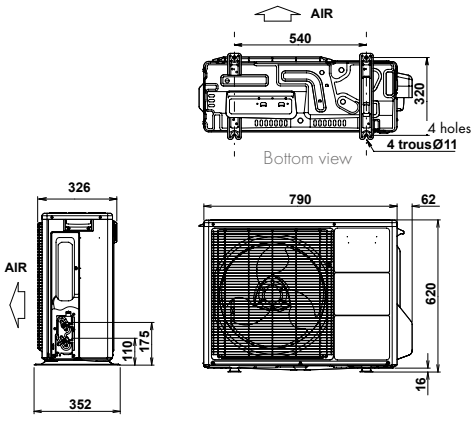
TECHNICAL CHARACTERISTICS AND PERFORMANCES

	UNIT	LORIA 6004	LORIA 6006	LORIA 6008	LORIA 6010
REFRIGERANT		R410A	R410A	R410A	R410A
MAIN CHARACTERISTICS					
Heating capacity +7°C/+35°C – Underfloor Heating	kW	4.00	6.00	7.50	10.42
COP +7°C/+35°C - Underfloor Heating		4.80	4.45	4.15	4.40
Heating capacity -7°C/+35°C – Underfloor Heating	kW	4.10	5.00	5.90	7.94
Power consumption -7°C/+35°C - Underfloor Heating	kW	1.46	1.79	2.46	3.11
COP -7°C/+35°C - Underfloor Heating		2.80	2.80	2.40	2.55
Heating capacity +7°C/+45°C – Low T°radiators	kW	4.00	5.10	6.20	8.51
COP +7°C/+45°C – Low T°radiators		3.50	3.50	3.35	3.54
Heating capacity -7°C/+45°C – Low T°radiators	kW	4.10	4.50	5.15	7.38
COP -7°C/+45°C – Low T°radiator		2.30	2.26	2.10	2.11
Heating capacity +7°C/+55°C – Low T°radiators	kW	3.68	4.27	5.53	6.98
COP +7°C/+55°C – Low T°radiators		2.65	2.67	2.68	2.65
Heating capacity -7°C/+55°C – Low T°radiators	kW	3.72	3.88	5.03	6.47
COP -7°C/+55°C – Low T°radiators		1.90	1.92	1.70	1.78
Electric back-up heater	kW	3	3	3	3
ErP ENERGY EFFICIENCY CHARACTERISTICS					
Energy class - Heating (35°C/55°C)		A+++ / A++	A+++ / A++	A++ / A++	A++ / A++
Rated heat output (35°C/55°C)	kW	4 / 4	6 / 5	7 / 6	9/7
Seasonal energy efficiency - Heating (35°C/55°C) with outdoor sensor	%	183 / 129	188 / 130	168 / 126	156 / 118
Seasonal energy efficiency - Heating (35°C/55°C)	%	181 / 127	186 / 128	166 / 124	154 / 116
Annual energy consumption - Heating (35°C/55°C)	kWh	1884 / 2708	2588 / 2933	3226 / 4197	4481 / 5256
Sound power level (indoor/outdoor)(1)	dB(A)	44 / 64	44 / 64	44 / 69	44 / 68
INDOOR HYDRAULIC MODULE					
Noise level(2)	dB(A)	36	36	36	36
Net weight/filled weight	kg	37.5 / 41.5	37.5 / 41.5	37.5 / 41.5	37.5 / 41.5
Min./Max. outdoor temperature for heating	°C	-20 / +35	-20 / +35	-20 / +35	-20 / +35
Power supply		230 V 50 Hz	230 V 50 Hz	230 V 50 Hz	230 V 50 Hz
OUTDOOR UNIT					
Noise level(3)	dB(A)	42	42	47	47
Operating weight	kg	41	41	42	60
REFRIGERANT CHARACTERISTICS					
Min./max. length	m	5 / 30	5 / 30	5 / 30	5 / 30
Max. difference in height	m	20	20	20	20
R410A factory load	g	1100	1100	1400	1800
Quantity of refrigerant in tons of CO_2 equivalent	t	2	2	3	4

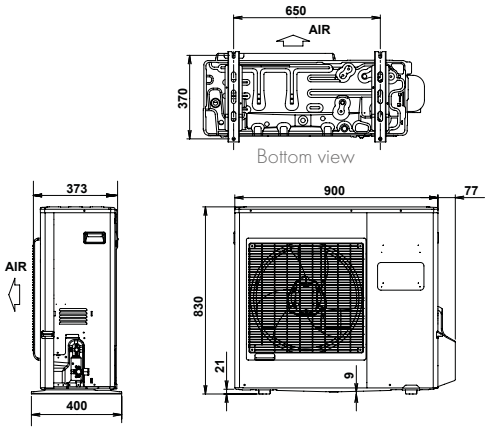
(1) Sound power level is a laboratory measurement of the sound power emitted by the product, but it does not correspond to the sound perceived. Used by acoustics specialists, it allows to measure the sound pressure level of the product in its working environment.
(2) Acoustic pressure at 1m from HP, 1.5 m height, open field, directivity 2.
(3) Acoustic pressure at 5m from HP, 1.5 m height, open field, directivity 2.

DIMENSIONS (MM)

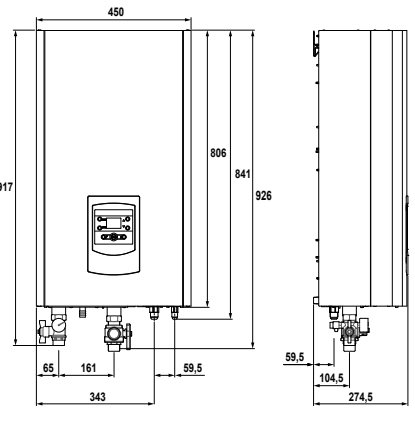
Loria 4,6 and 8kW Ourdoor Inverter unit



Loria Duo 10kW Ourdoor Inverter unit



Indoor hydraulic module

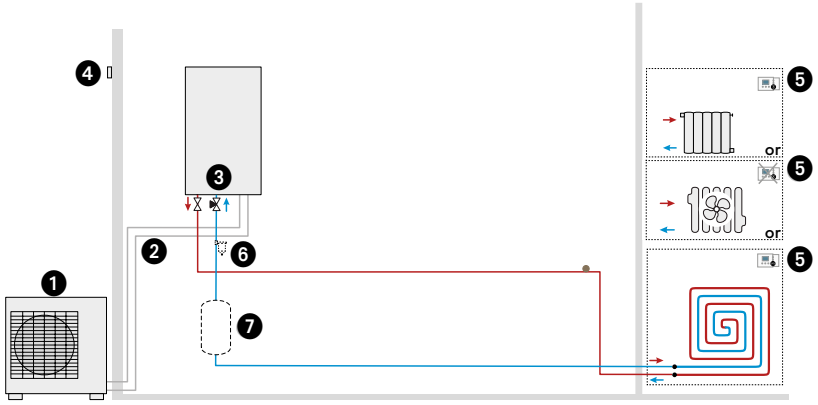


LORIA

Installation schematics

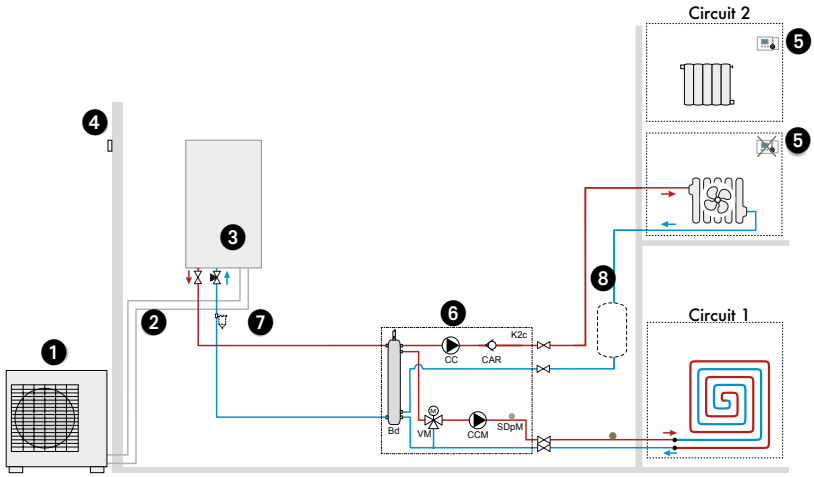
LORIA 6000: 1 HEATING ZONE

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



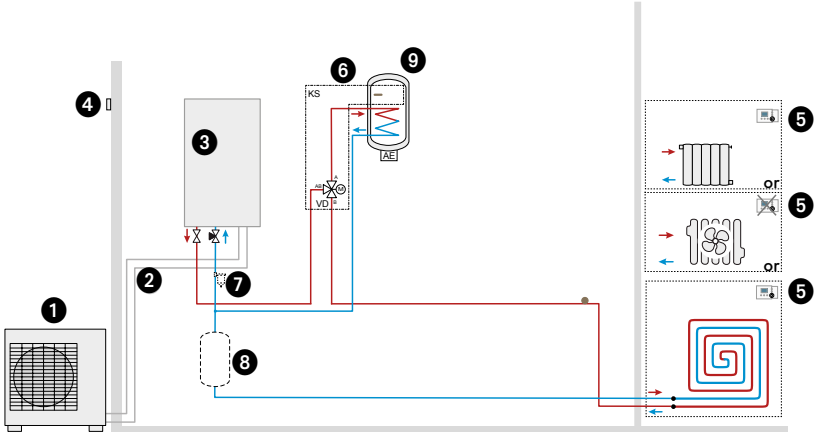
LORIA 6000: 2 HEATING ZONES

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



LORIA 6000: 1 HEATING ZONE + DHW PRODUCTION

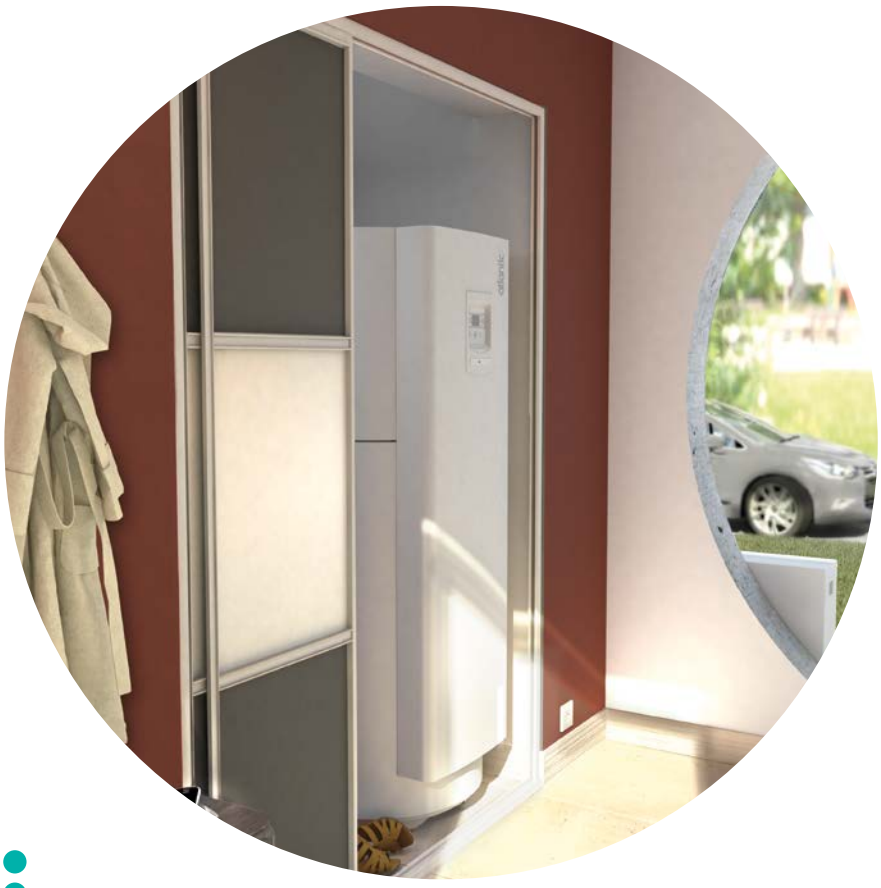
1. Outdoor unit and ground support*
2. Refrigerant connections*
3. Hydraulic module
4. Outdoor sensor
5. Room sensor*
6. DHW kit*
7. Magnetic mud filter*
8. Buffer tank**
9. DHW tank*



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

LORIA DUO

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



Indoor hydraulic module

Outdoor Inverter unit

Product

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

DESCRIPTION

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

AVAILABLE OPTIONS

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

SUPPLIES

Indoor hydraulic module

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

Outdoor Inverter unit

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

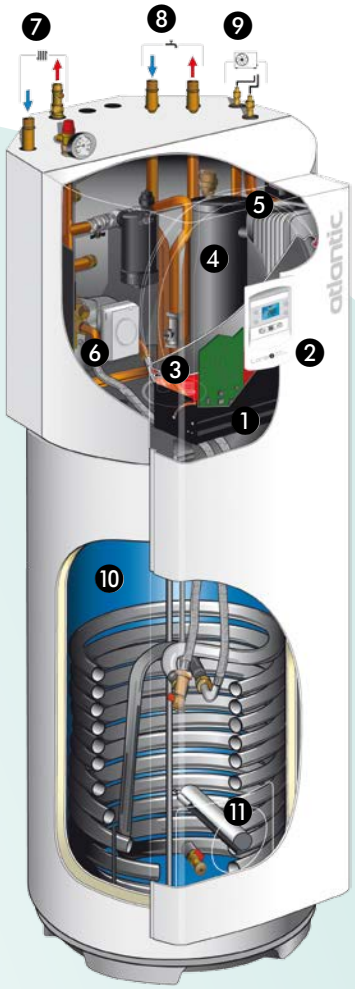
ErP best

Energy class

35 °C A+++ | 55 °C A++ | A+

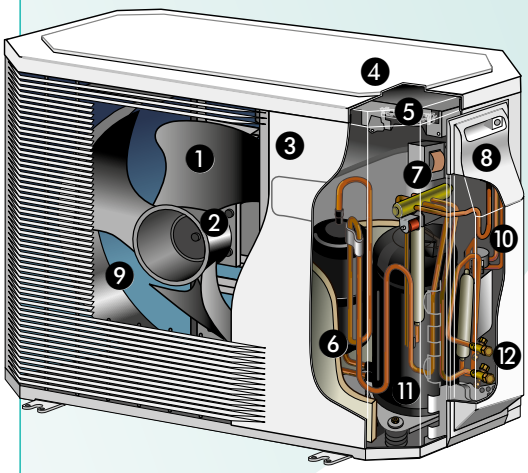
INDOOR HYDRAULIC MODULE

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



OUTDOOR INVERTER UNIT

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



*Depending on models

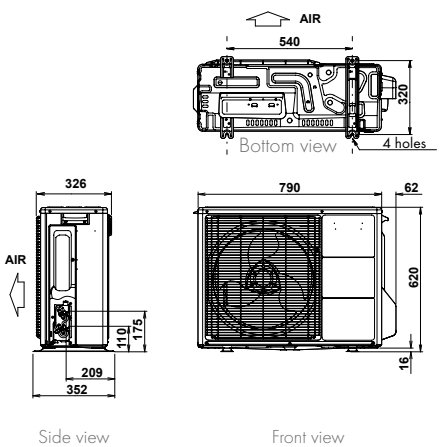
TECHNICAL CHARACTERISTICS AND PERFORMANCES

	UNIT	LORIA DUO 6004	LORIA DUO 6006	LORIA DUO 6008	LORIA DUO 6010
REFRIGERANT		R410A	R410A	R410A	R410A
MAIN CHARACTERISTICS					
Heating capacity +7°C/+35°C – Underfloor Heating	kW	4.07	6.02	7.47	10.42
COP +7°C/+35°C - Underfloor Heating		4.96	4.70	4.22	4.40
Heating capacity -7°C/+35°C – Underfloor Heating	kW	4.42	5.20	5.96	7.94
Power consumption -7°C/+35°C - Underfloor Heating	kW	1.42	1.77	2.33	3.11
COP -7°C/+35°C - Underfloor Heating		3.11	2.94	2.56	2.55
Heating capacity +7°C/+45°C – Low T°radiators	kW	4.09	4.98	6.40	8.51
COP +7°C/+45°C – Low T°radiators		3.62	3.51	3.37	3.54
Heating capacity -7°C/+45°C – Low T°radiators	kW	4.24	4.62	5.74	7.38
COP -7°C/+45°C – Low T°radiator		2.48	2.38	2.21	2.11
Heating capacity +7°C/+55°C – Low T°radiators	kW	3.68	4.27	5.53	6.98
COP +7°C/+55°C – Low T°radiators		2.65	2.67	2.68	2.65
Heating capacity -7°C/+55°C – Low T°radiators	kW	3.72	3.88	5.03	6.47
COP -7°C/+55°C – Low T°radiators		1.90	1.92	1.70	1.78
Electric back-up heater	kW	3	3	3	3
ErP ENERGY EFFICIENCY CHARACTERISTICS					
Energy class - Heating (35°C/55°C)		A+++ / A++	A+++ / A++	A++ / A++	A++ / A++
Rated heat output (35°C/55°C)	kW	4 / 4	6 / 5	7 / 6	9/7
Seasonal energy efficiency - Heating (35°C/55°C) with outdoor sensor	%	183 / 129	188 / 130	168 / 126	156 / 118
Seasonal energy efficiency - Heating (35°C/55°C)	%	181 / 127	186 / 128	166 / 124	154 / 116
Annual energy consumption - Heating (35°C/55°C)	kWh	1884 / 2708	2588 / 2933	3226 / 4197	4481 / 5256
Sound power level (indoor/outdoor)(1)	dB(A)	44 / 62	44 / 62	44 / 69	44 / 68
Declared load profile - DHW		L	L	L	L
Energy class - DHW		A+	A+	A+	A+
Annual water heating energy consumption	kWh	966	966	966	966
Seasonal water heating energy efficiency (%)	%	130	130	130	130
INDOOR HYDRAULIC MODULE					
Noise level(2)	dB(A)	36	36	36	36
Net weight/filled weight	kg	138/ 332	138 / 332	138 /332	138 /332
Power supply		230 V 50 Hz	230 V 50 Hz	230 V 50 Hz	230 V 50 Hz
OUTDOOR UNIT					
Noise level(3)	dB(A)	40	40	47	47
Operating weight	kg	41	41	42	60
REFRIGERANT CHARACTERISTICS					
Min./max. length	m	5 /30	5 /30	5 /30	5 /30
Max. difference in height	m	20	20	20	20
HFC R410A factory load	g	1100	1100	1400	1800
Quantity of refrigerant in tons of CO_2 equivalent	t	2	2	3	4

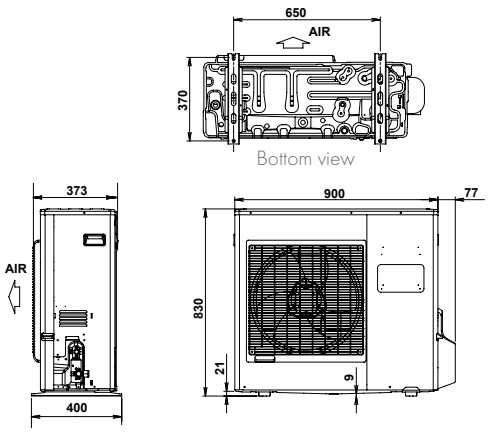
(1) Sound power level is a laboratory measurement of the sound power emitted by the product, but it does not correspond to the sound perceived. Used by acoustics specialists, it allows to measure the sound pressure level of the product in its working environment.
(2) Acoustic pressure at 1m from HP, 1.5 m height, open field, directivity 2.
(3) Acoustic pressure at 5m from HP, 1.5 m height, open field, directivity 2.

DIMENSIONS (MM)

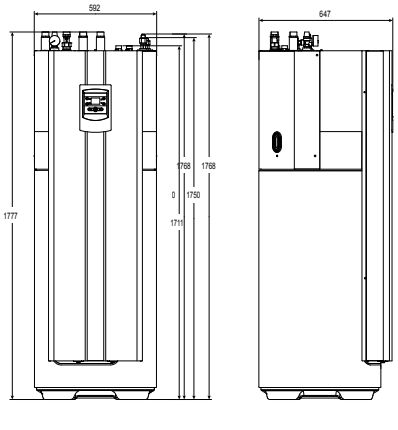
Loria Duo 4, 6 and 8kW Ourdoor Inverter unit



Loria Duo 10kW Ourdoor Inverter unit



Indoor hydraulic module

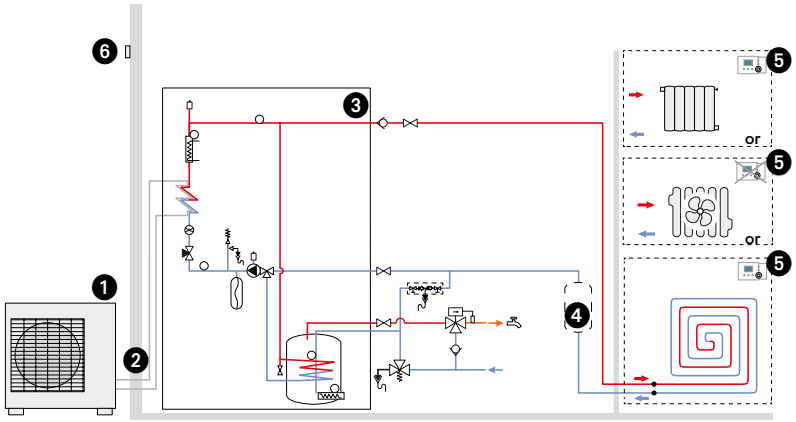


LORIA DUO

Installation schematics

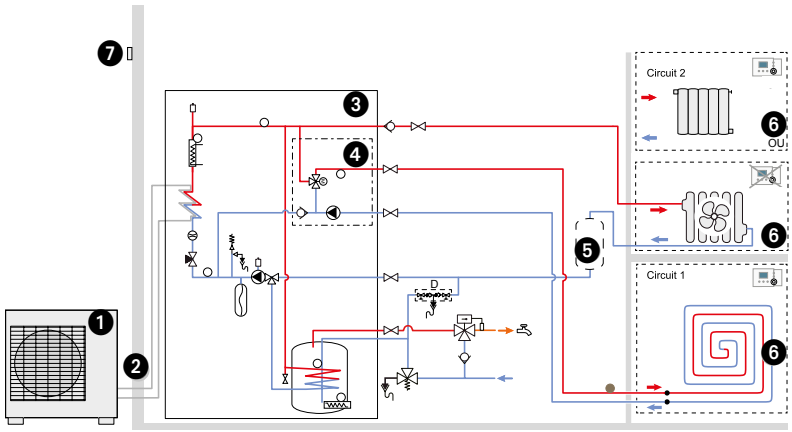
LORIA DUO 6000: 1 HEATING ZONE

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



LORIA DUO 6000: 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 sensor (optional, except for fan coil)
7. Outdoor sensor



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

LORIA RANGE ACCESSORIES

ROOM SENSOR UA55

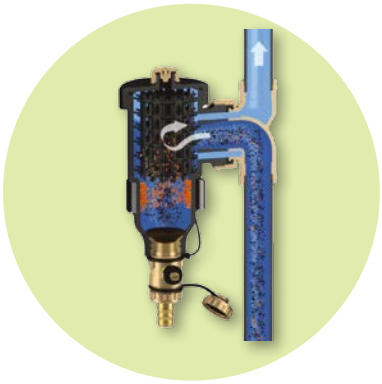
Product

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

DESCRIPTION

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

MAGNETIC MUD FILTER (FOR LORIA)



Product

- Capture impurities of the heating circuit

DESCRIPTION

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

DOMESTIC HOT WATER TANK MILEO / MILEO+

Product

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

DESCRIPTION

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

MODEM HARNESS KIT

Product

- Remote piloting of your heat pump operating modes

DESCRIPTION

- Modem harness allowing to switch heat pump operating mode remotely

2 ZONES KIT

2 zones kit for single service heat pump

Product

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

DESCRIPTION

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

COOLING KIT

Product

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

DESCRIPTION

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

RETRACTOR STRUCTURE KIT

Product

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

*Installer has to make sure that the wall bracket installation will not transmit vibration (ground position is being preferred)
**For a better protection of insulation against UV, Atlantic recommends the installation of protection pipes together with refrigerant pipes

WALL-IN

Integration system of the outdoor unit

Product

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

DESCRIPTION

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

SUPPLIES

Grid

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

Internal frame

- Integrated seals
- Reinforced supports

Internal box

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

PACKING

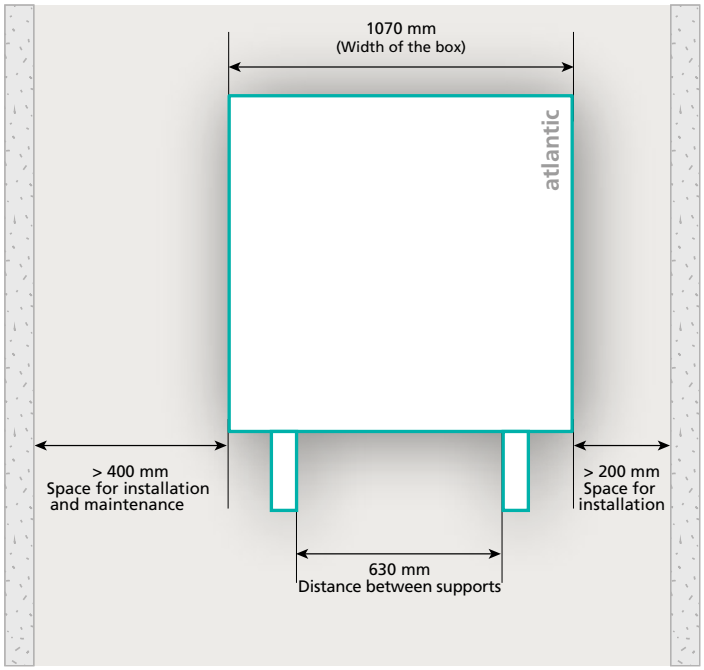
- 3 packing units : grid, frame and box

Assembly steps

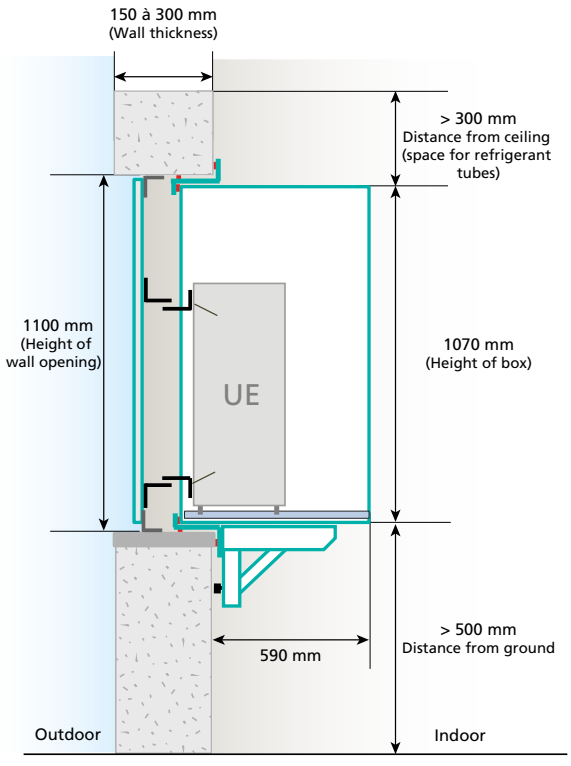
- Grid : to avoid air / water to enter the room
- Frame : support to be fixed to the wall
- Box : complete cover of the outdoor unit (supplied assembled)

DIMENSIONS (MM)

Surface on the wall to plan : 1100 x 1100 mm



Front view (indoor)



Side view