

ALFEA EXCELLIA

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



Outdoor Inverter unit



Indoor hydraulic module

Product

- COP : up to 4.3 (+7°C / +35°C)
- Compatible with all kinds of low temperature transmitters (underfloor heating/cooling, fan coil)
- Intuitive control and simplified use
- **NAVISTEM 200S** regulator
- Perfect solution for high heating demand
- 16L buffer tank integrated
- Patented coaxial heat exchanger
- Inverter regulation
- Class A low energy consumption circulation pump
- Possibility to manage an electric radiator heating zone from the heat pump control panel (optional)

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, up to -20°C outside temperature

AVAILABLE OPTIONS

- 2nd circuit kit (plug-and-play kit)
- Cooling kit
- Separated hot water tank
- Electric back-up heater
- Boiler connection kit
- Control unit

SUPPLIES

Outdoor Inverter unit

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

Indoor hydraulic module

- Coaxial exchanger immersed in buffer tank
- Class A low consumption circulation pump
- Expansion vessel, valve, etc.
- Electric panel and terminal blocks



Energy class



35 °C

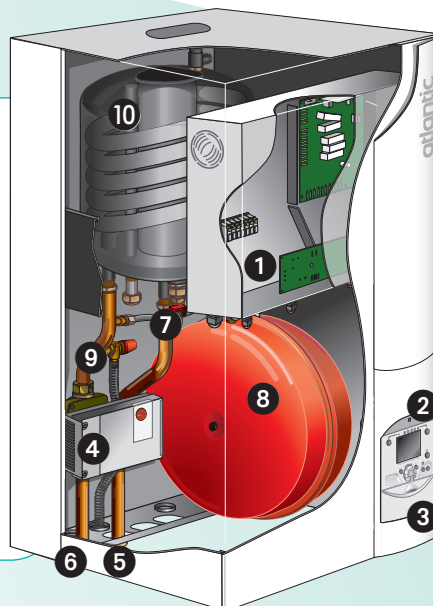
A++

55 °C

A+

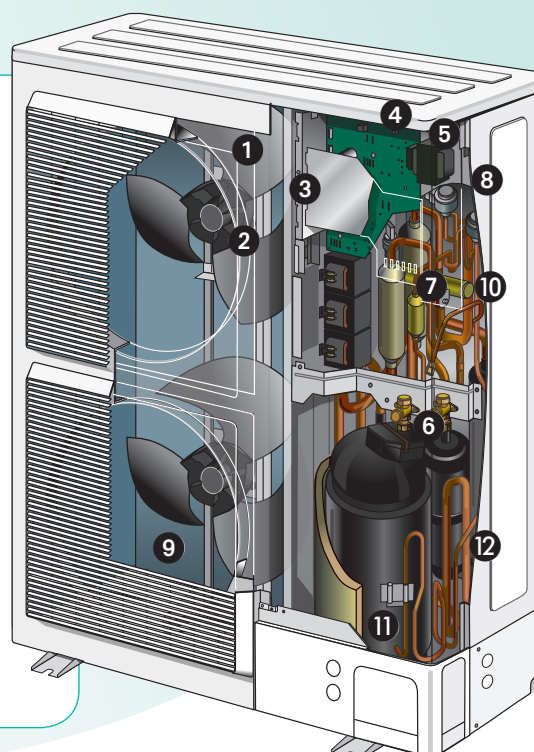
INDOOR HYDRAULIC MODULE

- ❶ Electric board
- ❷ User interface/regulator
- ❸ Manometer
- ❹ Class A low consumption circulation pump
- ❺ Heating flow
- ❻ Heating return
- ❼ Refrigerant connections
- ❽ Expansion vessel
- ❾ Safety valve
- ❿ Condenser



OUTDOOR INVERTER UNIT

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



TECHNICAL CHARACTERISTICS AND PERFORMANCES

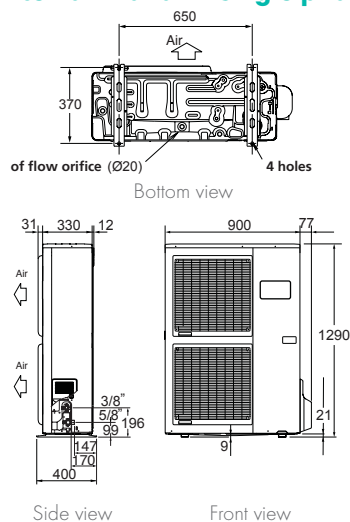
	Unité	ALFEA EXCELLIA 11	ALFEA EXCELLIA 14	ALFEA EXCELLIA TRI 11	ALFEA EXCELLIA TRI 14	ALFEA EXCELLIA TRI 16
REFRIGERANT		R410A	R410A	R410A	R410A	R410A
MAIN CHARACTERISTICS						
Heating capacity +7°C/+35°C – Floor Heating	kW	10.80	13.50	10.80	13.00	15.17
COP +7°C/+35°C - Floor Heating		4.25	4.18	4.30	4.18	4.10
Heating capacity -7°C/+35°C – Floor Heating	kW	10.38	11.54	10.38	12.20	12.98
COP -7°C/+35°C - Floor 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	12.71
COP +7°C/+55°C – Radiators		2.47	2.40	2.64	2.41	2.52
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
Heating capacity +7°C / +60°C - Radiators	kW	7.05	8.81	9.25	11.50	12.49
Heating capacity -7°C / +60°C - Radiators	kW	6.71	8.42	8.48	10.10	10.90
Additional adjustable electric back-up in option	kW	adjustable 3 ou 6	adjustable 3 ou 6	9	9	9
ENERGY EFFICIENCY & ACOUSTIC CHARACTERISTICS WITH OUTDOOR SENSOR						
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)	%	153 / 111	150 / 115	156 / 114	152 / 119	151 / 119
Annual energy consumption - Heating (35°C/55°C)	kWh	6062 / 6842	6824 / 8041	5930 / 6669	6738 / 7803	7408 / 9062
Sound power level (indoor/outdoor)	dB(A)	46 / 69	46 / 70	46 / 68	46 / 69	46 / 70
INDOOR HYDRAULIC MODULE						
Noise level*	dB(A)	39	39	39	39	39
Dimensions h x w x d	mm	800x450x480	800x450x480	800x450x480	800x450x480	800x450x480
Net weight/filled weight	kg	42 / 58	42 / 58	42 / 58	42 / 58	42 / 58
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**	dB (A)	47	48	46	47	48
Dimensions h x w x d	mm	1290x970x400	1290x970x400	1290x900x400	1290x900x400	1290x900x400
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. diff. in height	m	15	15	15	15	15

*Acoustic pressure at 1m from HP, 1,5 m hight, open field, directivity 2. - **Acoustic pressure at 5m from HP, 1,5 m hight, open field, directivity 2.

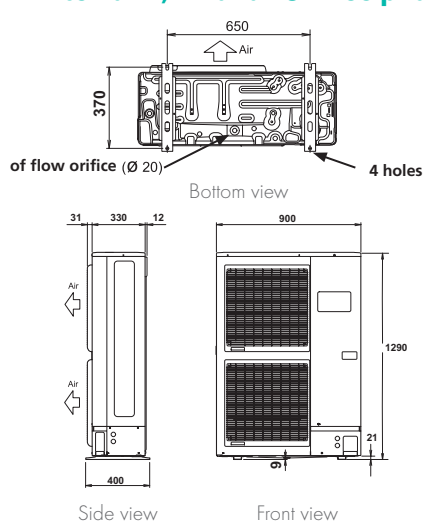
The cable sections and circuit breaker protection ratings are given for information only and does not relieve the installer from verifying that these sections correspond to the needs and meet the standards.

DIMENSIONS (MM)

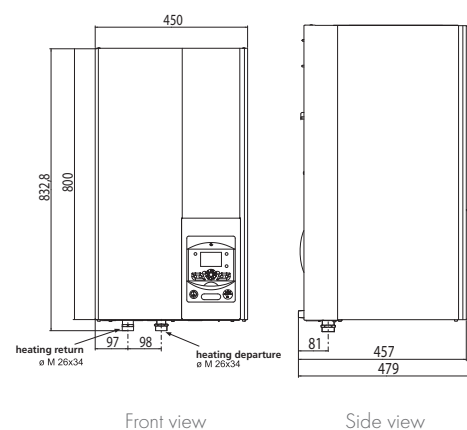
**Outdoor Inverter unit Alfea
Excellia 11 and 14 single-phase**



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



**Indoor hydraulic
module**

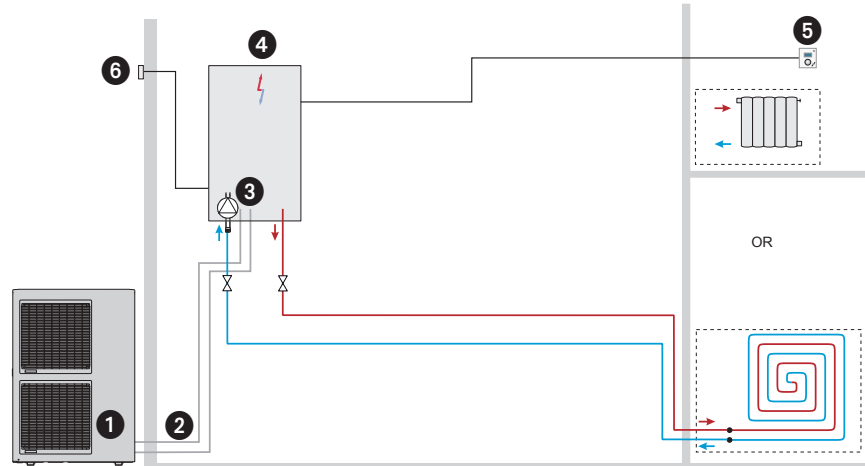


ALFEA EXCELLIA

Installation schematics

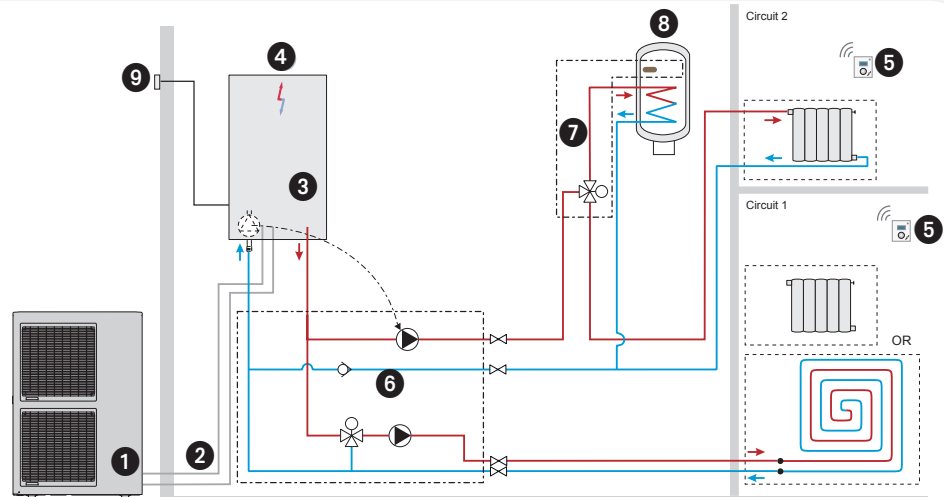
ALFEA EXCELLIA: 1 HEATING ZONE

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



ALFEA EXCELLIA: 2 HEATING ZONES AND DHW PRODUCTION

- ❶ Outdoor unit and ground support*
- ❷ Refrigerant connections*
- ❸ Hydraulic module
- ❹ Back-up heater*
- ❺ Room radio control unit*
- ❻ 2nd zone kit*
- ❼ DHW kit*
- ❽ DHW tank*
- ❾ Outdoor sensor



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

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

