Alfea Excellia

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



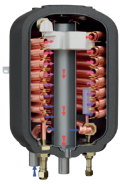


BENEFITS

- **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**

INNOVATION

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



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

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 - **½ day**

A++ 35°C

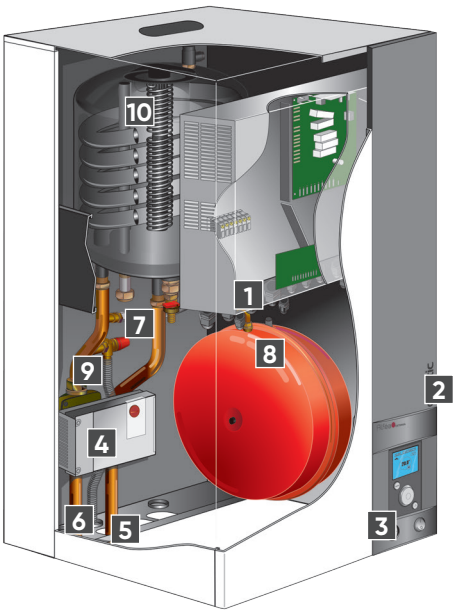
A+ 55°C

Cozytouch

homecontrol®

PATENTED EXCHANGER

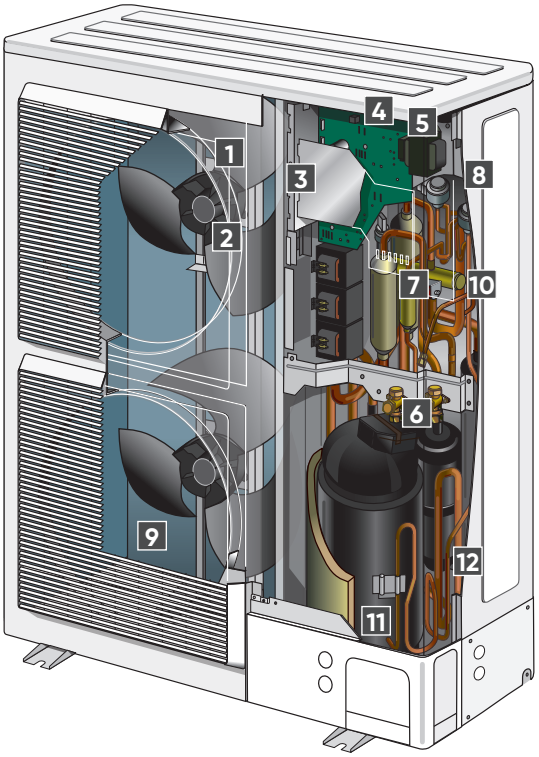
INDOOR HYDRAULIC MODULE



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

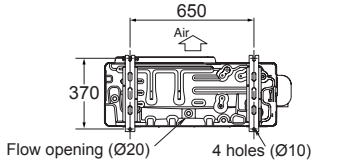
ErP

	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 CHARACTERISTICS									
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
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)[1]	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[2]	dB(A)	39	39	39	39	39	37	37	37
Net weight/filled weight[3]	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[4]	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_2 equivalent	t	5	5	5	5	5	8	8	8

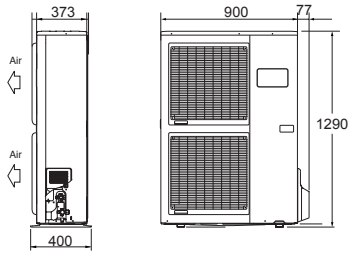
(1) Sound power level is a laboratory measurement of the sound power emitted by the product, but it does not correspond to the sound perceived. Used by acoustics specialists, it allows to measure the sound pressure level of the product in its working environment. (2) Acoustic pressure at 1m from HP,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

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

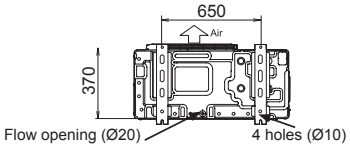


Bottom view

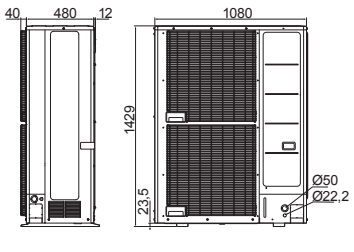


Side view Front view

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

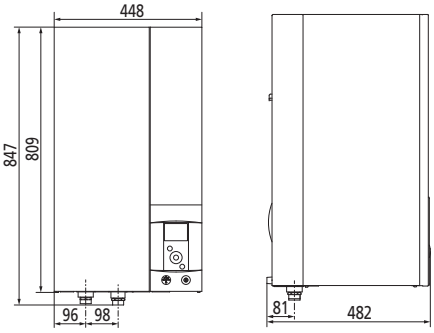


Bottom view



Side view Front view

Indoor hydraulic module

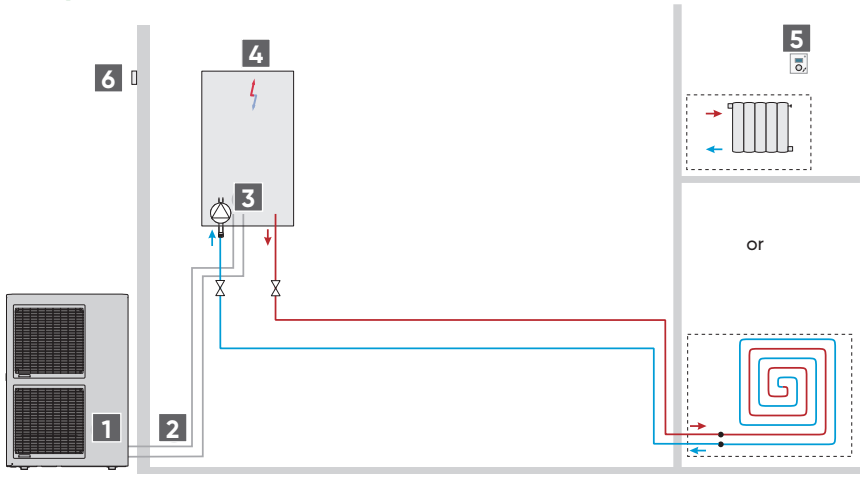


Front view Side view

INSTALLATION SCHEMATICS

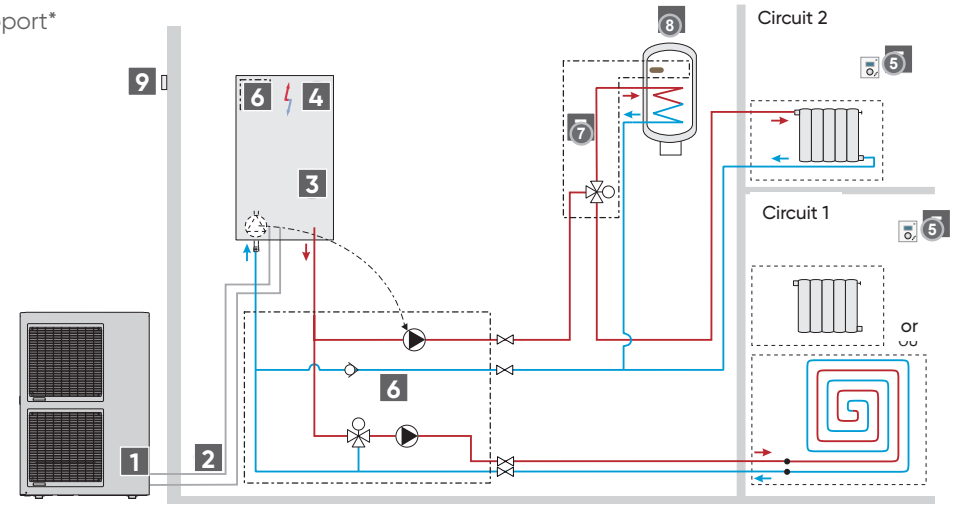
ALFEA EXCELLIA A.I. (+ HP MODELS): 1 HEATING ZONE

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



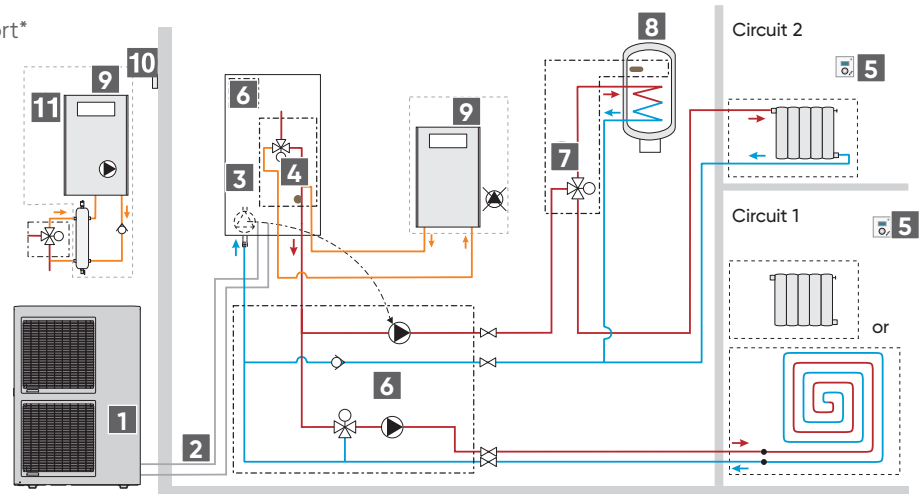
ALFEA EXCELLIA A.I. (+ HP MODELS): 2 HEATING ZONES + DHW PRODUCTION

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



*Optional