

Alfea Hybrid Duo Gas / Gas R

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



+ BENEFITS

- High performance with patented coaxial heat exchanger and condensing gas unit
- Equipped with 120 L enamelled steel DHW storage tank with ACI anti-corrosive protection
- Ergonomic outdoor sensor control and programmable indoor temperature
- Innovation with Gas R models: Cooling mode & new control option with energy cost input for more energy savings

DESCRIPTION

- Replacement of existing gas boiler
- 7 models: 6 to 16 kW
- Single-phase and three-phase models
- Heating and DHW integrated
- Patented coaxial heat exchanger
- Inverter regulation
- Navistem 200S control system

AVAILABLE OPTIONS

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

Practical trainings

that will help you save time and be more efficient.

Tailor-Made Training Programs

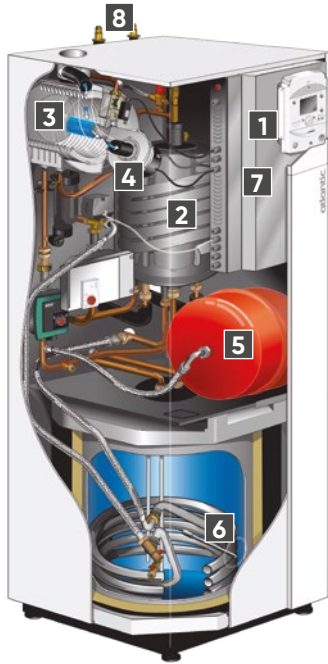
*Available for Alfea Hybrid Duo Gas R models



55°C

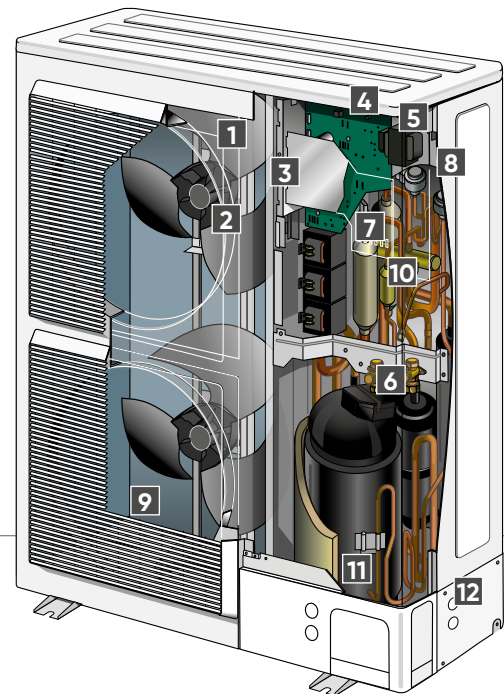


INDOOR HYDRAULIC MODULE



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

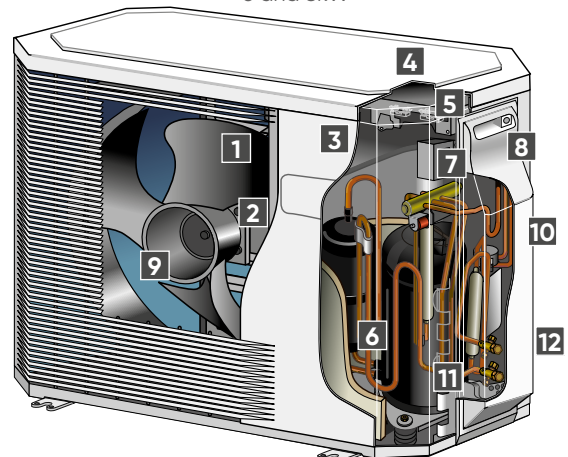
Outdoor Inverter unit
11, 14 and 16kW



OUTDOOR INVERTER UNIT

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

Outdoor Inverter unit
6 and 8kW



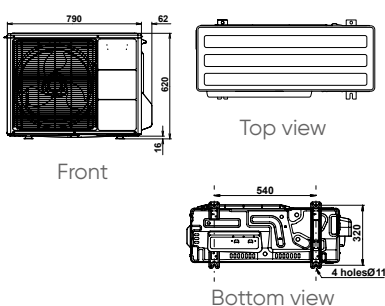
TECHNICAL CHARACTERISTICS AND PERFORMANCES

	UNIT	ALFEA HYBRID DUO GAS R 6	ALFEA HYBRID DUO GAS R 8	ALFEA HYBRID DUO GAS 11	ALFEA HYBRID DUO GAS 14	ALFEA HYBRID DUO GAS TRI 11	ALFEA HYBRID DUO GAS TRI 14	ALFEA HYBRID DUO GAS TRI 16
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
Annual energy consumption - Heating (55°C)	kWh	3180	3836	6841	8041	6669	7803	9062
Seasonal energy efficiency - Heating (55°C)	%	115	118	112	113	112	117	117
Seasonal energy efficiency - Heating (55°C) with outdoor sensor	%	117	120	114	115	114	119	119
Sound power level (indoor/outdoor) ⁽¹⁾	dB (A)	46 / 63	46 / 69	46 / 69	46 / 70	46 / 66	46 / 68	46 / 69
DHW ENERGY EFFICIENCY								
Declared load profile	-	XXL	XXL	XXL	XXL	XXL	XXL	XXL
Energy class - DHW	-	B	B	B	B	B	B	B
Seasonal energy efficiency (%) - DHW	kWh	6446	6446	6446	6446	6446	6446	6446
Seasonal energy efficiency (%) - DHW	%	74	74	74	74	74	74	74
DHW flow according to regulation EN 13203	L/mn	20	20	20	20	20	20	20
DHW tank capacity	L	120	120	120	120	120	120	120
THERMODYNAMIC PERFORMANCE								
SCOP 35 °C / 55 °C	-	4.30 / 2.95	3.97 / 3.02	3.85 / 2.87	3.77 / 2.90	3.92 / 2.87	3.82 / 3.00	3.80 / 3.00
Heating capacity +7°C/+35°C – Underfloor Heating	kW	5.90	7.50	10.89	13.24	10.80	13.00	15.17
COP +7°C/35°C – Underfloor Heating	-	4.37	4.08	4.29	4.05	4.12	4.18	4.10
Heating capacity -7°C/+35°C – Underfloor Heating	kW	4.13	5.42	11.13	11.86	10.80	12.20	12.98
COP -7°C/+35°C – Underfloor Heating	-	2.60	2.47	2.71	2.48	2.52	2.38	2.28
Heating capacity +7°C/+45°C – Low T°radiators	kW	5.39	6.20	9.37	11.84	9.70	12.10	12.75
COP +7°C/45°C – Low T°radiators	-	3.33	3.32	3.30	3.24	3.15	3.20	3.21
Heating capacity -7°C/+45°C – Low T°radiators	kW	3.84	5.05	9.36	10.89	8.89	10.7	12.5
COP -7°C/+45°C – Low T°radiator	-	2.04	2.04	2.19	2.21	2.05	2.08	2.03
CONDENSING GAS BACK-UP BURNER 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
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 / 50	230 / 50	230 / 50	230 / 50	400 / 50	400 / 50	400 / 50
REFRIGERANT CHARACTERISTICS								
Min./max. length	m	5 / 30	5 / 30	5 / 20	5 / 20	5 / 20	5 / 20	5 / 20
Max. difference in height	m	20	20	15	15	15	15	15
Refrigerant	-	R410A	R410A	R410A	R410A	R410A	R410A	R410A
R410A factory load	g	1100	1400	2500	2500	2500	2500	2500
Quantity of refrigerant in tons of CO ² equivalent	-	2	3	5	5	5	5	5

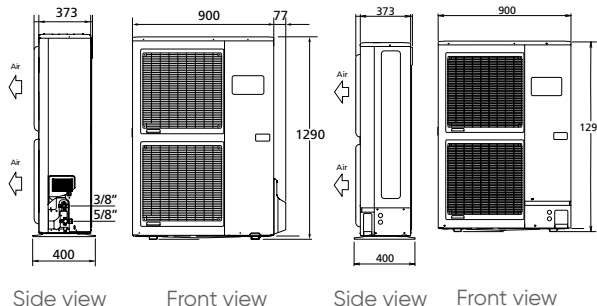
(1) Sound power level is a laboratory measurement of the sound power emitted by the product, but it does not correspond to the sound perceived. Used by acoustics specialists, it allows to measure the sound pressure level of the product in its working environment. - (2) Acoustic pressure at 1m from HP,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

INSTALLATION DIMENSIONS (mm)

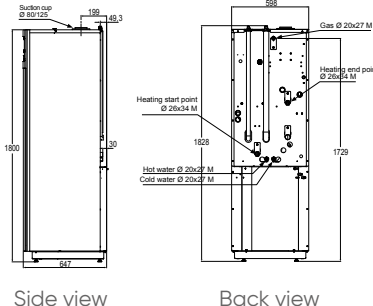
Outdoor Inverter unit Alfea Hybrid Duo Gas R6, R8



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



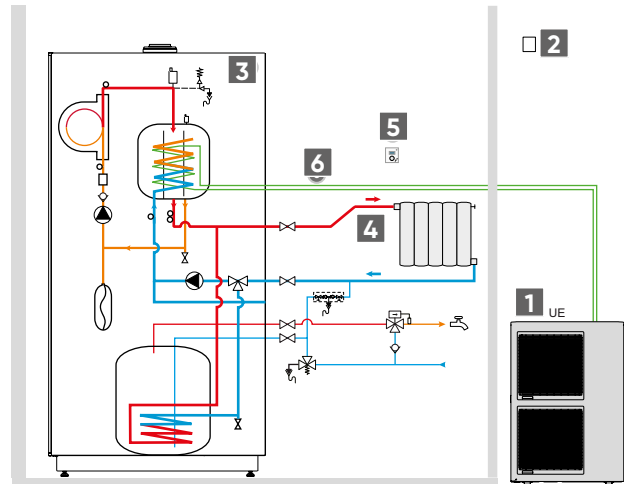
Indoor hydraulic module



INSTALLATION SCHEMATICS

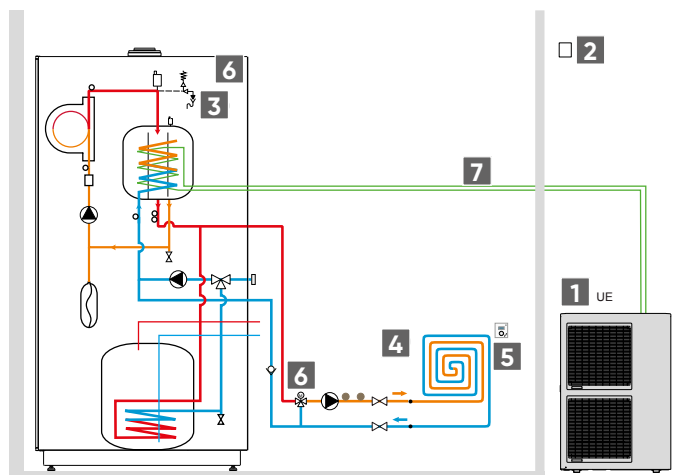
ALFEA HYBRID DUO GAS: 1 HEATING ZONE

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



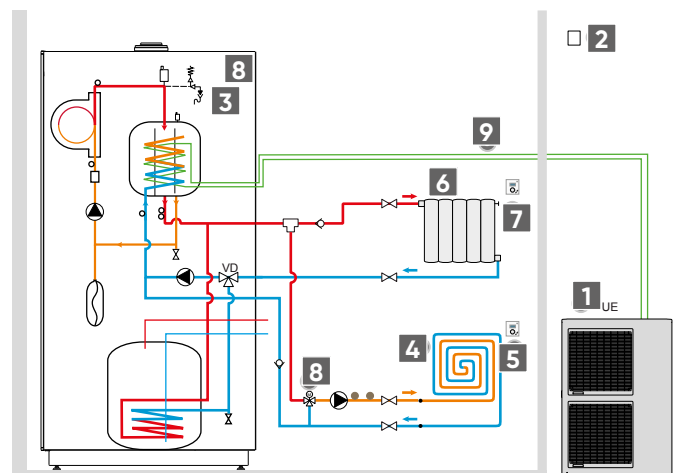
ALFEA HYBRID DUO GAS: 1 HEATING ZONE + UNDERFLOOR HEATING

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



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

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



*Optional