



ALFEA EXCELLIA A.I.

HEAT PUMP

R410A 11 14 16 kW



ERP A++



Quiet Noise Level:
47 dB(A)*



425% Rated
Efficiency (COP)**



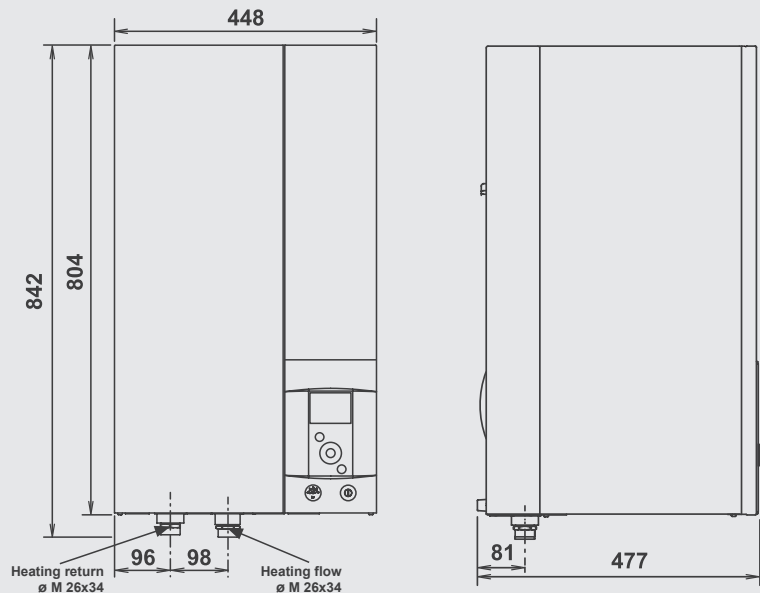
Suitable for new
build, social housing
and retrofit



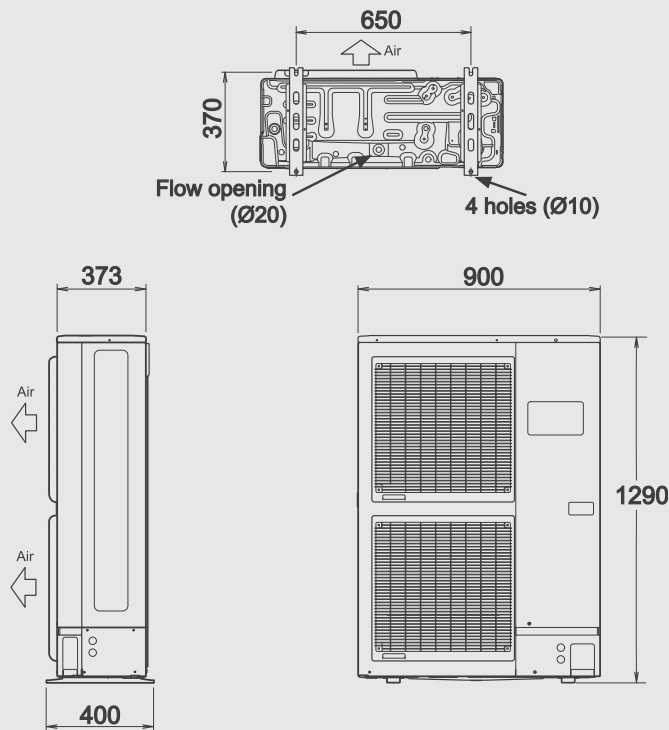
DIMENSIONS

The Ideal Alfea uses smart technology to redefine how we heat our homes, using patented technology to uncompromisingly match performance with reliability.

INDOOR HYDRAULIC MODULE



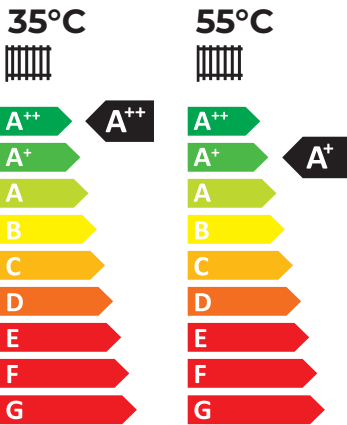
OUTDOOR INVERTER UNIT



*Efficiency Co-efficient of Performance (COP) rated at EN14825 test conditions Water Water 35°C, Air 7°C. **MCS SCoP is a theoretical indication of the anticipated efficiency of a heat pump aggregated over a year using standard climate data across Europe. It indicates the units of total heat energy generated (output) for each unit of energy (electricity) consumed (input). ***47dB(A) is the rated sound Pressure Level of the Alfea 11kW, 14kW & 16kW outdoor unit(s) from a distance of 5m, 1.5m off the ground, open field directionality

KEY FEATURES

- Highly efficient: COP up to 4.25*
- Seasonal efficiency: up to 3.85 SCOP (MCS)**
- Impressively quiet: outdoor unit 47 dB(A)***
- Compatibility: radiator and underfloor heating systems
- Intuitive control: intelligent weather compensating controller
- Incomparable reliability: patented co-axial heat exchange
- Space saving: integrated buffer tank and expansion vessel
- Domestic Hot Water: hot, efficient and fast re-heat times with the Ideal heat pump cylinder.



TECHNICAL SPECIFICATION

		Alfea Excellia A.I R410A 11	Alfea Excellia A.I R410A 14	Alfea Excellia A.I R410A 16
Heat Pump Space Heating [35°C]	MCS ref	KIWA 00027/014 HP	KIWA 00027/015 HP	KIWA 00027/016 HP
	ErP Rating	A++	A++	A++
	η_s	151%	148%	149%
	SCOP	3.85	3.77	3.80
Heat Pump Space Heating [55°C]	ErP Rating	A+	A+	A+
	η_s	112%	113%	117%
	SCOP	2.87	2.90	3.00
Heating (A7/W35)	Capacity (kW)	10.80	13.50	15.17
	Power Input (kW)	2.54	3.23	3.70
	COP	4.25	4.18	4.10
Air Temperature Range (°C)	Min/Max	-20/+35	-20/+35	-20/+35
Sound Data Outdoor Unit / Indoor Unit	Pressure Level 5m Outdoor / 1m Indoor dB(A)*	47/39	47/39	47/39
	Power Level dB(A)**	69/46	69/46	69/46
	MCS 020 (Q2) 6m to assessment point	Barrier (no view) 42dB(A) Pass	Barrier (no view) 42dB(A) Pass	Barrier (no view) 42dB(A) Pass
Primary Flow Rate	Min / Max (l/min)	19.5/39.0	24.3/48.7	27.5/54.8
Pipework Connection Sizes	Heating F/R (mm)	28	28	28
	Gas Pipe - refrigeration (in)	5/8	5/8	5/8
	Liquid Pipe - refrigeration (in)	3/8	3/8	3/8
Dimensions Outdoor Unit (mm)	Width	977	977	900
	Depth	400	400	400
	Height	1290	1290	1290
Dimensions Indoor Unit (mm)	Width	450	450	450
	Depth	480	480	480
	Height	842	842	842
Weight (kg)	Outdoor Unit / Indoor Unit	92/42	92/42	99/42
Electrical Data	Electrical Supply (50 Hz)	230 V	230 V	400 V
	Phase	Single	Single	Triple
	Maximum Running Current [Nominal] (A)	22.0 [11.4]	25.0 [14.2]	10.5 [5.5]
	Back-up Heater (kW)	3	3	9
	Fuse Rating - MCB Sizes Type D (A)*****	32	32	20
Refrigerant Charge (kg)****	R410A	2.5	2.5	2.5

ErP in accordance with EN 14825, EN 12102-1, EN 14511, EN 16147. The energy efficiency provided may not correspond to the actual energy once installed in a building, as the efficiency is influenced by other factors such as heat loss in the distribution system and the capacity of the products in relation to building size and characteristics. *Hydraulic unit: Sound pressure level at 5m from the appliance, 1.5m off the ground, open field directionality 2 / Outdoor unit : Sound pressure level at 5m from the device, halfway between the ground and top of the outdoor unit, open field directionality 2. **The EN 12102-1, sound power level is a laboratory measurement of the emitted sound power. It does not correspond to a measurement of the perceived sound power. **** Calculation in accordance to MIS:MCS 020 Issue 1.3. Thermal and acoustic performances are measured with 7.5m length refrigerant lines. ***** Fuse rating for Outdoor Heat Pump Unit

IDEAL HEAT PUMP CYLINDER

The Ideal stainless steel unvented heat pump cylinder is specifically designed for installation with the Ideal heat pump. Capacities are available up to 300 litres, which includes slimline models to ensure the Ideal Heat Pump range provides a flexible system solution.

The corrugated stainless-steel coil has been specifically designed for use with heat pump applications and to maximise the available heat input.

IDEAL HEAT PUMP DHW

		180	210	250	300
Heat loss (per hour)	watts	55	62	74	86
Capacity	litres	178	208	248	287
Height	mm	1306	1494	1744	1990
Diameter	mm	550	550	550	550
Weight (empty)	kg	34	38	43	47
Weight (full)	kg	212	246	291	334
Surface area of HP coil	m ²	2.5	3	3	3
Immersion heater rating	kW	3	3	3	3
Secondary return connection		No	Yes	Yes	Yes

IDEAL HEAT PUMP DHW SLIMLINE

		180	210
Heat loss (per hour)	watts	67	74
Capacity	litres	183	202
Height	mm	1791	1963
Diameter	mm	475	475
Weight (empty)	kg	38	40
Weight (full)	kg	219	237
Surface area of HP coil	m ²	3	3
Immersion heater rating	kW	3	3
Secondary return connection		No	Yes

25

25 year warranty



Lightest cylinder on the market



Highly efficient multi-coil heat exchanger

KEY FEATURES



Engineered to work seamlessly with the Ideal Alfea heat pump.



Our industry leading multi pass coil, enables fast and efficient reheat times.



Our most powerful heat exchange delivers hot water on demand.



High density insulation ensures remarkably low heat losses.



Wide range of capacities available:

- Standard model (550mm wide) - 180, 210, 250 and 300 litres
- Slimline model (475mm wide) - 180 and 210 litres

