
floe
23°C
Low energy homes
made simple

Designed to work perfectly with Floe cylinders

- ErP rated A+++
- MCS approved
- Ultra quiet 42/ 52 d(B)a
- Compact 0.40m3 [8.30kw]
- Maximum output temperature 75°c
- Minimum operating temperature -25°c
- 10-year insurance backed guarantee

Product Range

- R290 6.40kw
- R290 8.30kw
- R290 12.00kw
- R290 16.30kw

R290 refrigerant is the natural choice for Air Source Heat Pumps

* Lowest Global Warming Potential – 99% less than R32
* Superior heat transfer and lower energy consumption
* Future Proof – meets the latest UK and European legislation

MCS Certificate Number: MCSHP0408

Designed to work perfectly with Floe ASHP

- ErP rated A/B
- WRAS Approved
- Highest quality DUPLEX 2205 stainless steel & wave coil for better performance in hot transition and managing pressure drop
- Fully pre-plumbed and factory pressure
- Heat loss and pressure drop optimised

Product Range

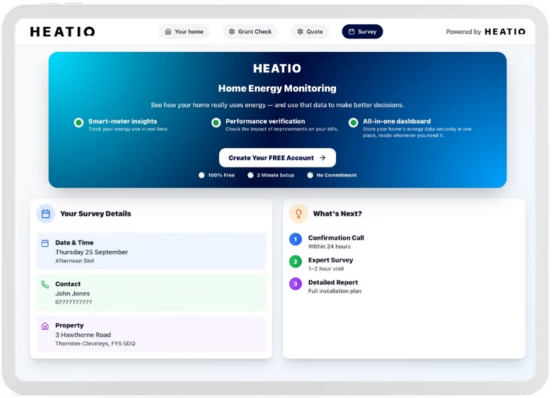
- Floe 236: 180l + 50l Buffer 175 + 55
- Floe 295: 220l + 70l Buffer 220 + 70
- Floe 340: 270l + 70l Buffer 263 + 70

- Floe Radiators operate at 99.995% mechanical efficiency*
- Maximum operating temperature: 110°C
- Maximum working pressure: 10 bars
- Vertical and horizontal mounting options
- Corrosion and impact resistant finish with Nano treatment + water-based primer + RAL 9016 electrostatic powder coating
- Computer controlled production in accordance with EN 442 and TSE standards
- ISO 9001, ISO 14001 and ISO 45001

Product Range

- Full size range of K1 (type 11), K2 (type 22) and K3 (type 33) available

* under factory testing



Floe Heat Pumps are monitored and optimised by Heatio Home Energy Intelligence

Heatio AI Homeowner Portal*

- Live access to real time energy data and heat pump performance
- Optimisation of the heat pump based on Smart Meter Data & Energy Tariff to save as much energy as possible
- Efficiency recommendations for additional measures and improvements with full impact assessment e.g. tariff switch

Heatio AI Installer Portal

- Setup and optimisation in line with customers smart energy tariff
- Triggers & early warning of faults/recommendations for optimisation
- Remote diagnostics and system settings

* Customer registration required

Exclusive heat pump tariff through our partnership with Scottish Power

Making it simple for customers to earn rewards and reduce their energy bill

KEY FEATURES

Up to £117 Savings

- **£60** customer reward when you switch
- **£47 on average** saving with half-price weekends
- **£10 account credit** if on supply for a year
- Up to **£117 savings** per year

Great Customer Service

- **Award-winning** customer service
- Investment in innovation and service improvements

Half-price Weekends

- Get half-price electricity every Saturday & Sunday between 11am–4pm
- Shift electricity use to off-peak times to help balance the grid and make the most of renewable energy

Choice of Smart Solution Products and Tariffs

- One-stop shop for EV charging and smart charging solutions
- Beat electricity price rises with solar panels
- Engineer next working day or £50 cash if heating or hot water fails

BENEFITS

- You could save against the price cap
- Customers can lock in their prices with our Fixed Price Tariff
- With My Rewards customers get £5 when they sign up plus points every 3 months

- Lower call centre wait times
- Over 96% of emails responded to within 2 days
- Fewer complaints received

- Over 450k customers already taking part
- Customers have collectively saved over £5.9m on energy bills

- You can save on overnight charging with EV Saver tariff
- Install solar and reduce your reliance on the grid. You could earn by selling any excess back

floe

Quotation

System Install

Property Name: .....

Floe Air Source Heat Pump System

Product Quotation: £ .....

Including delivery to site

Installation & Commissioning [1]

Floe accredited engineers are trained to set up the system for maximum efficiency and customer comfort. With our optional Customer Hand Over service, a Floe Engineer will attend the home and take the new owners through how their modern heating system works and how to get the best out of it to deliver maximum comfort at minimum cost.

Install & Commission: £ .....

Customer Hand Over: £ .....

House Type	Design Ref	Beds	Plots	Story Height	Number	Total Sq Metres
OMS						

	Powered by Heatio Home Energy Intelligence								
Total Heat Loss	Estimated Annual Running Cost Gas*	Estimated Annual Running Cost ASHP*	Heat Pump	Cylinder	Hallway	Living Room	Cloak/WC	Kitchen	Study
Bed 1	Bed 2	Bed 3	Bed 4	Ensuite 1	Ensuite 2	Bathroom	Landing	Landing 2	

*Based on Heating at 45ºc and Gas Boiler Efficiency of 80%. NB with SAP Data we can deliver 100% accurate estimates

The Floe Advantage

System Design: **FREE** [2]

Savings vs. Gas from Heatio Home Energy Intelligence **FREE** [3]

Monitor & Optimise by Heatio **FREE for 1-year** [4]

Scottish Power Tariff Switch & Referral Reward [5]

Annual Servicing Plan £15 p.c.m.[6]

10-Year Insurance Backed Guarantee **FREE** [7]

1 Assumes all pipework and electrical connections completed per agreed design
1 Assumes radiators connected
2 System design based on provided plans and SAP calculations
3 Saving versus Gas are theoretical savings calculated by HEATIO Home Energy Intelligence
4 Monitor & Optimise service provided by HEATIO Home Energy Intelligence and subject to customer registration
5 Scottish Power's most suitable tariff for Air Source Heat Pumps subject to customer sign-up
6 Annual Servicing Plan maintains warranty and ensures system is in perfect working order, subject to customer registration
7 10-Year IBG FREE when Floe installs and commissions the system

Floe Air Source Heat Pumps with WiFi

Model		Floe 6.40 R290	Floe 8.30 R290	Floe 12.00 R290	Floe 16.30 R290
Heating at A7/W35					
Heating capacity (min~max)	KW	6.40 (2.83~8.00)	8.30 (3.65~10.38)	12.00 (5.28~15.00)	16.30 (8.80~21.20)
Power input (min~max)	KW	1.47(0.65~1.84)	1.93(0.85~2.42)	2.90(1.28~3.63)	3.69(1.99~4.80)
COP	W/W	4.34 (3.03~5.21)	4.30 (3.01~5.16)	4.15 (3.00~5.00)	4.42 (3.10~5.30)
Heating at A2/W35					
Heating capacity (min~max)	KW	5.80 (2.55~7.25)	7.11 (3.13~8.89)	10.30 (4.53~12.88)	14.31 (6.86~18.60)
Power input (min~max)	KW	1.60 (0.71~2.00)	2.06 (0.91~2.58)	2.85 (1.25~3.56)	3.67(1.98~4.84)
COP	W/W	3.60 (2.52~4.32)	3.45 (2.48~4.30)	3.61 (2.53~4.40)	3.90 (2.73~4.68)
Heating at A7/W55					
Heating capacity (min~max)	KW	5.75 (2.53~7.19)	7.70 (3.40~9.63)	11.43(5.03~14.29)	14.71 (7.94~19.13)
Power input (min~max)	KW	2.03 (0.89~2.54)	2.70 (1.19~3.38)	4.07 (1.79~5.09)	5.02 (2.71~6.53)
COP	W/W	2.83 (2.30~3.80)	2.85 (2.00~3.42)	2.81 (2.02~3.41)	2.93(2.05~3.52)
Heating at A2/W55					
Heating capacity(min~max)	KW	5.14 (2.27~6.43)	6.72 (2.96~8.40)	9.70 (4.59~12.63)	13.81 (7.45~17.95)
Power input (min~max)	KW	2.06 (0.91~2.58)	2.71 (1.20~3.39)	3.99 (1.76~4.84)	4.93 (2.66~6.41)
COP	W/W	2.45 (2.00~3.45)	2.48 (2.00~3.60)	2.43 (2.00~3.60)	2.80 (2.20~3.90)
SCOP					
SCOP (TWW for 35°C class)	N/A	4.46	4.48	4.62	4.50
Energy label (TWW at 35°C)	N/A	A+++	A+++	A+++	A+++
SCOP (TWW for 55°C class)	N/A	3.58	3.57	3.60	3.62
Energy label (TWW at 55°C)	N/A	A++	A++	A++	A++
Power supply	V/Ph	220~240/1/50	220~240/1/50	380~415/3N/50	380~415/3N/50
Compressor	N/A	DC Inverter	DC Inverter	DC Inverter	DC Inverter
Fan motor	N/A	DC	DC	DC	DC
Fan motor qty	pc	1	1	2	2
Refrigerant	N/A	R290/700g	R290/1100g	R290/1200g	R290/1600g
CO2 equivalent	T	0.0021	0.0033	0.0036	0.0048
Refrigerant regulation	N/A	Electronic expansion valve			
Heat exchanger	N/A	Brazed plate heat exchanger			
Circulation pump	N/A	Inverter			
Water connection	Inch	1	1	1	1
Nominal water flow	m3/h	1.4	1.8	2.7	3.6
Operating outdoor temp	°C	-25~43	-25~43	-25~43	-25~43
Max heating water temp	°C	75	75	75	75
Min cooling water temp	°C	10	10	10	10
Sound level	dB(A)	54.4	52.2	57.8	61.5
Degree of protection	N/A	IPX4	IPX4	IPX4	IPX4
Net weight	kg	80	85	99	135
Dimension	mm	1100*460*795	1100*460*795	1115*470*1020	1165*470*1280

Test condition:

1. A7/W35: outdoor air temperature 7°C DB/6°C WB, water inlet/outlet temperature 30°C /35°C
2. A2/W35: outdoor air temperature 2°C DB/1°C WB, water inlet/outlet temperature 30°C /35°C
3. A7/W55: outdoor air temperature 7°C DB/6°C WB, water inlet/outlet temperature 47°C /55°C
4. A2/W55: outdoor air temperature 2°C DB/1°C WB, water inlet/outlet temperature 47°C /55°C
5. A35/W7: outdoor air temperature 35°C, water inlet/outlet temperature 12°C /7°C

Floe Pre-Plumbed Combined Heating & Direct Hot Water Cylinders for Air Source Heat Pumps

MODEL		180L DWH+50L Buffer Floe 236	220L DWH+70L Buffer Floe 295	270L DWH+70L Buffer Floe 340
UPPER NOMINAL CAPACITY	L	175	220	263
BOTTOM BUFFER CAPACITY	L	55	70	70
OUTER TANK DIAMETER	mm	Φ560	Φ600	Φ600
INNER TANK DIAMETER	mm	Φ470	Φ500	Φ500
HEIGHT	mm	1715	1870	2100
INNER TANK MATERIAL		DUPLEX 2205	DUPLEX 2205	DUPLEX 2205
INNER TANK THICKNESS	mm	1.0	1.0	1.0
OUTER CASE MATERIAL		Galvanized steel with black painting	Galvanized steel with black painting	Galvanized steel with black painting
OUTER TANK THICKNESS	mm	0.5	0.5	0.5
INSULATION		Polyurethane foam	Polyurethane foam	Polyurethane foam
INSULATION THICKNESS	mm	45	50	50
ELECTRICAL HEATER TYPE		G1-1/2" Screwed type	G1-1/2" Screwed type	G1-1/2" Screwed type
ELECTRICAL HEATER SIZE		3.0kW/230V electric heater with thermostat	3.0kW/230V electric heater with thermostat	3.0kW/230V electric heater with thermostat
HEAT EXCHANGER COIL MATERIAL		SUS316L	SUS316L	SUS316L
HEAT EXCHANGER COIL TYPE		Wave shape	Wave shape	Wave shape
HEAT EXCHANGER COIL SIZE		Φ32mm x 20m (3,0m2)	Φ32mm x 25m (3,76m2)	Φ32mm x 25m (3,76m2)
Hot water draw off port		G3/4"F	G3/4"F	G3/4"F
Height limit stat port		G1/2"F	G1/2"F	G1/2"F
Mg.Anode port		G3/4"	G3/4"	G3/4"
TPR port		G1/2"	G1/2"	G1/2"
Coil inlet/outlet port		G1"	G1"	G1"
Temp. sensor port		G1/2"	G1/2"	G1/2"
Cold water inlet port		G3/4"	G3/4"	G3/4"
Water drain off cock port		G3/4"F	G3/4"F	G3/4"F
Air vent port		G1/2"F	G1/2"F	G1/2"F
Heating flow port		G1"	G1"	G1"
Heating return port		G1"	G1"	G1"
Heat pump return port		G1"	G1"	G1"
WORKING PRESSURE	bar	6	6	6
MAX. TESTING PRESSURE	bar	10	10	10
Standing Heat Loss	kWh/24hrs	HWT 1.23 / Buffer 0.52	HWT 1.25 / Buffer 0.55	HWT 1.47 / Buffer 0.57
Standing Loss	w	HWT 51 / Buffer 23	HWT 52 / Buffer 23	HWT 61 / Buffer 24
ERP Rating (FYI)		HWT B / Buffer A	HWT B / Buffer A	HWT B / Buffer A
WEIGHT (FYI)	kg	65	72	79
PACKING SIZE	mm	735*750*1750	760*775*1915	760*775*2140

Floe Heat Pump Cylinders Pre-Plumb Kit

Heating circulation pump	(HES 25-8-180) G1-1/2 Inch external thread, 65W, 1.0MPa water-lift 1.5–8 m maximum flow 4.2 m^3/h
Pump gate valve	G1-½" x 28mm x 1pc
Brass electric three way motorised valve	1pc
Magnetic filter	28mm x 1pc
Inlet control group	22mm x 1pc with filtering / pressure relief
Air vent	15mm x 2pcs
Height limit stat	G1/2" x 1pc
Drain valve	G3/4" x 2pcs
Safety valve	G1/2" x 1pc 7 Bar
Tundish	22 mm x 15 mm x 1pc
Electrical control box	12 internal terminals x 1pc
Filling loop	15mm x 15mm x 600mm, with check valve, iso valve and pressure gauge
Press fitting equal tee	28mm x 1pc
Press fitting equal tee	15mm x 1pc
Press fitting reducing tee	22mm x 15mm x 22mm x 1pc
Press fitting reducing tee	28mm x 15mm x 28mm x 2pcs
Press fitting Union nut	ϕ28mm x 5pcs
Press fitting Union nut	ϕ22mm x 1pc
90° male elbow	15mm x 1/2" x 1pc
L-shaped copper elbow	28mm; 252 mm length x 1pc
L-shaped copper elbow	28mm; 140 mm length x 2pcs
L-shaped copper elbow	22mm; 300 mm length x 1pc
L-shaped copper elbow	15mm; 60 mm length x 1pc
Pipe fixing clamp	28mm x 2pcs
Pipe fixing clamp	22mm x 1pc
Copper Pipe	28mm x 1.3m–1.6m
Copper Pipe	22mm x 0.3m–0.7m
Copper Pipe	15mm x 0.8m

floe

w: www.floe.energy

We believe every home should be warm and affordable to run