

Advenco FPH-S Hybrid

Air Source Heat Pump Hot Water System



The Advenco FUSION range is a low carbon, all-electric packaged hybrid hot water system available in a range of presized variants to serve a host of commercial DHW applications.

FUSION harnesses Advenco's FPi32 Air Source Heat Pumps to preheat a high quality ATSH stainless steel calorifier, with a low intensity electric immersion afterheater and packaged controls to provide a complete, low-carbon hot water system for a wide range of commercial applications.

The Advenco FUSION provides excellent year-round performance and is specially designed for the UK climate. With sleek looks and quiet operation, the compact monobloc ASHP design is capable of providing preheat at up to 55°C into the FUSION system, offsetting much of the direct electric demand to reduce carbon emissions.



STANDARD FEATURES

- Available with 200–500 litre capacities
- 6–10 kW ASHP preheat with 9–12 kW direct electric immersion heater.
- High quality stainless steel vessel rated for 10 bar working pressure as standard
- Dedicated control system for simple operation and maintenance checks
- 16 pre-sized FPH-S stainless steel variants to meet a wide range of applications
- Lower global warming potential with R32 refrigerant
- Compact space saving form factor

Fusion FPH-S Variant	Heat Pump Model	Calorifier Model	Immersion Power (kW)	Immersion Amperage (A)	Continuous Draw Off Capacity (l/h)	30min. Draw Off Capacity (l)	60min. Draw Off Capacity (l)	120min. Draw Off Capacity (l)
FPH-S 1	FPI32-6	ATSH 200	9	13/phase	235	235	363	620
FPH-S 2	FPI32-12	ATSH 200	9	13/phase	326	269	432	757
FPH-S 3	FPI32-6	ATSH 200	12	17/phase	309	260	415	723
FPH-S 4	FPI32-12	ATSH 200	12	17/phase	377	295	483	860
FPH-S 5	FPI32-6	ATSH 300	9	13/phase	257	273	402	659
FPH-S 6	FPI32-12	ATSH 300	9	13/phase	326	307	470	796
FPH-S 7	FPI32-6	ATSH 300	12	17/phase	309	299	453	762
FPH-S 8	FPI32-12	ATSH 300	12	17/phase	377	333	522	899
FPH-S 9	FPI32-6	ATSH 400	9	13/phase	257	334	463	720
FPH-S 10	FPI32-12	ATSH 400	9	13/phase	326	368	531	857
FPH-S 11	FPI32-6	ATSH 400	12	17/phase	309	360	514	823
FPH-S 12	FPI32-12	ATSH 400	12	17/phase	377	394	583	960
FPH-S 13	FPI32-6	ATSH 500	9	13/phase	257	374	502	759
FPH-S 14	FPI32-12	ATSH 500	9	13/phase	326	408	571	896
FPH-S 15	FPI32-6	ATSH 500	12	17/phase	309	399	554	862
FPH-S 16	FPI32-12	ATSH 500	12	17/phase	377	434	622	999

Continuous draw off conditions: Water in/out temperature 10°C/60°C. ASHP ambient temperature DB/WB 7°C/6°C

ASHP Technical Specifications		FPI32-6	FPI32-12
Maximum heating capacity (1) (kW)	Minimum	3.50	5.50
	Maximum	7.45	11.67
Maximum heating capacity (2) (kW)	Minimum	3.15	4.90
	Maximum	6.80	11.25
Heating power input (1) (W)	Minimum	758	1107
	Maximum	1410	2683
Heating power input (2) (W)	Minimum	943	1401
	Maximum	1732	3263
Coefficient of Performance (COP) (1)		4.51	4.35
Coefficient of Performance (COP) (2)		3.44	3.45
Seasonal Coefficient of Performance (SCOP)		4.74	4.71
Seasonal Energy Efficiency Rating (SEER)		4.10	3.93
Power	Supply (V/Hz/Phase)		230 / 50 / 1ph
	Starting current (A)		Soft start
	Run current (A)	8	15
Noise level (dB(A))		52	52
Minimum water flow rate (L/s)		0.35	0.55
Dimensions H×W×D (mm)		734×1008×399	882×1165×399
Dry mass (kg)		65	85

(1) Heating conditions: Water in/out temperature 30°C/35°C. Ambient temperature DB/WB 7°C/6°C

(2) Heating conditions: Water in/out temperature 40°C/45°C. Ambient temperature DB/WB 7°C/6°C

Calorifier Technical Specifications		ATSH 200	ATSH 300	ATSH 400	ATSH 500
Water volume (l)		212	289	411	490
Standing losses	W / kWh/24h	58 / 1.39	66 / 1.58	85 / 2.04	98 / 2.35
	Energy efficiency class	B	B	C	C
Dry mass (kg)		79	96	128	139
Coil surface area (m ²)		1.8	2.6	3.8	4.0
Output capacity (80/60:10/60) (kW)		38.3	55.3	80.8	85.1

For complete FPI32 ASHP and ATSH Calorifier specifications, consult respective product literature.

Advenco Ltd. Unit 7&8 Armstrong Mall, Southwood Business Park, Farnborough, Hampshire GU14 0NR
Company Reg : 09493966 T : 01252 551 540 E : enquiries@advenco.co I : www.advenco.co