

FUSION Packaged Electric Systems

FUSION-E/Eplus, FUSION-TW/TWplus Hot Water Systems

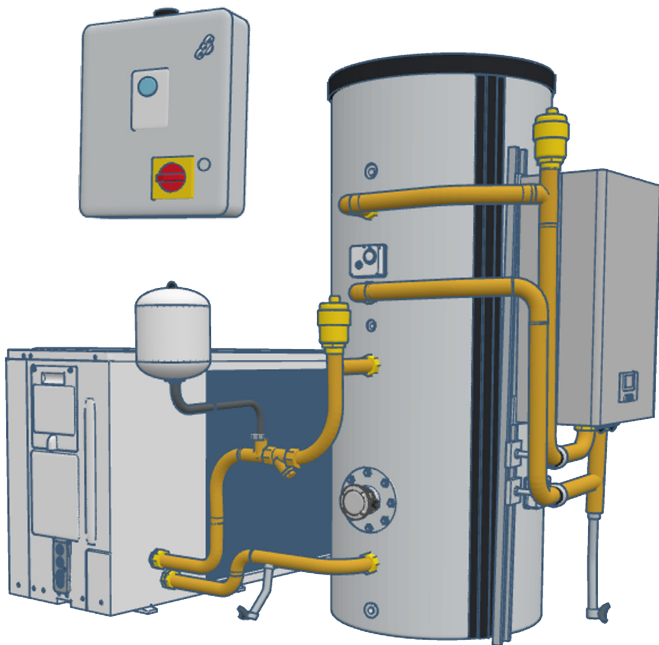
The Adveco FUSION range is a low carbon, all electric packaged hot water system available in a number of presized variants to address a host of commercial hot water applications.

Adveco FUSION systems feature a corrosion-resistant stainless steel calorifier paired with a mountable Ardent Premium electric boiler, with options for air source heat pump preheating, supplied as a complete package including all controls, bracketry, and boiler pipework.

With tank sizes from 300 to 750 litres and a range of heat input options, the electric-only systems eliminate on-site carbon emissions and maximise efficiency through bespoke controls designed to seamlessly integrate all components. Systems are designed to be simple to install and maintain, with minimal installation footprint and reduced maintenance demands.

FUSION-E systems use a high powered tank-mounted electric boiler to provide a reliable electric hot water system. FUSION-TW systems increase sustainability using a twin-coil tank and the integration of an air source heat pump as a preheat, where the heat pump can run in its most efficient configuration, with the electric boiler providing only high grade top-up heat.

For projects requiring additional resilience, both systems are available in 'Plus' formats, featuring an additional backup immersion heater and automated changeover and alert controls, ensuring continuity of hot water supply even in the event of a primary appliance fault.

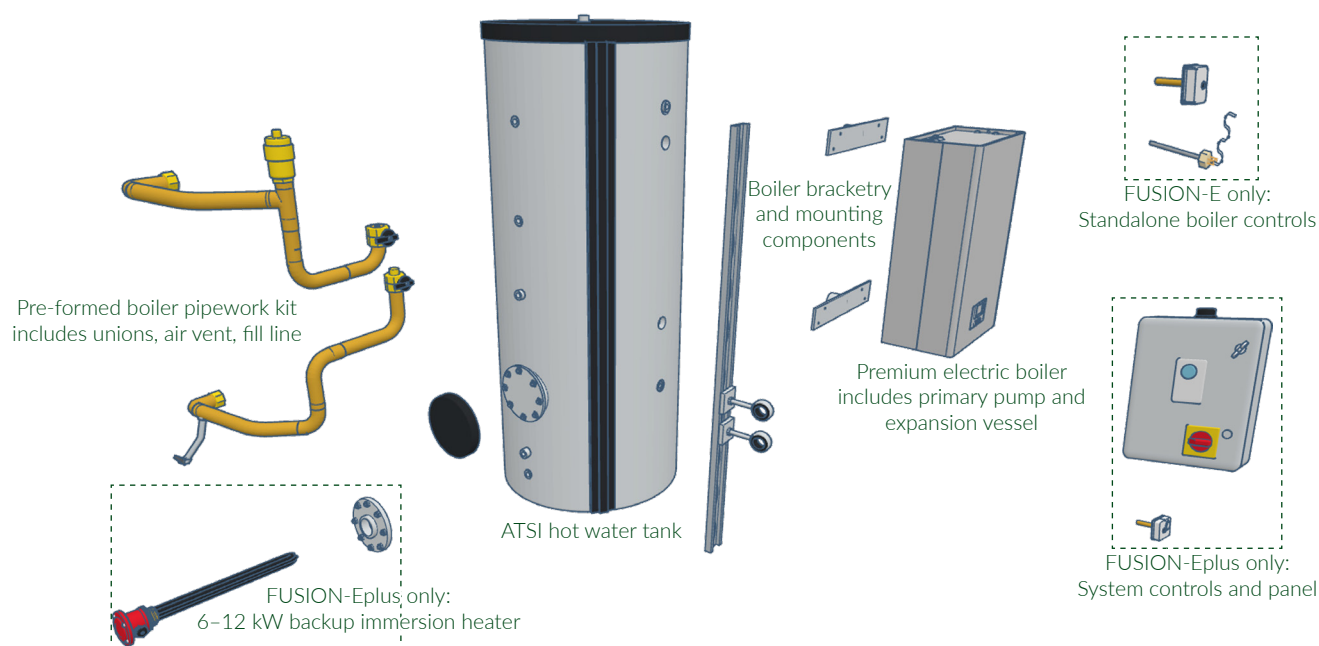


FEATURES

- Wide range of pre-sized variants to suit almost any application.
- Available with 300–750 litre tank capacities, using corrosion resistant stainless steel rated to 10 bar working pressure as standard and suitable for almost all water conditions.
- 10–30 kW ASHP preheat options
- 9–24 kW electric boiler options
- 6–12 kW backup immersion options with automated fault activation
- Dedicated control systems for straightforward and efficient integration of all components
- R32 ASHP refrigerent ensures a low global warming potential
- Compact space saving form factor with pre-built pipework kits and boiler mounts on either side of the tank to suit the location.

Adveco FUSION-E and Eplus

Single coil hot water tank with electric boiler and all required ancillaries in a convenient single package. 'Plus' variant adds a control panel and backup heat source capabilities.

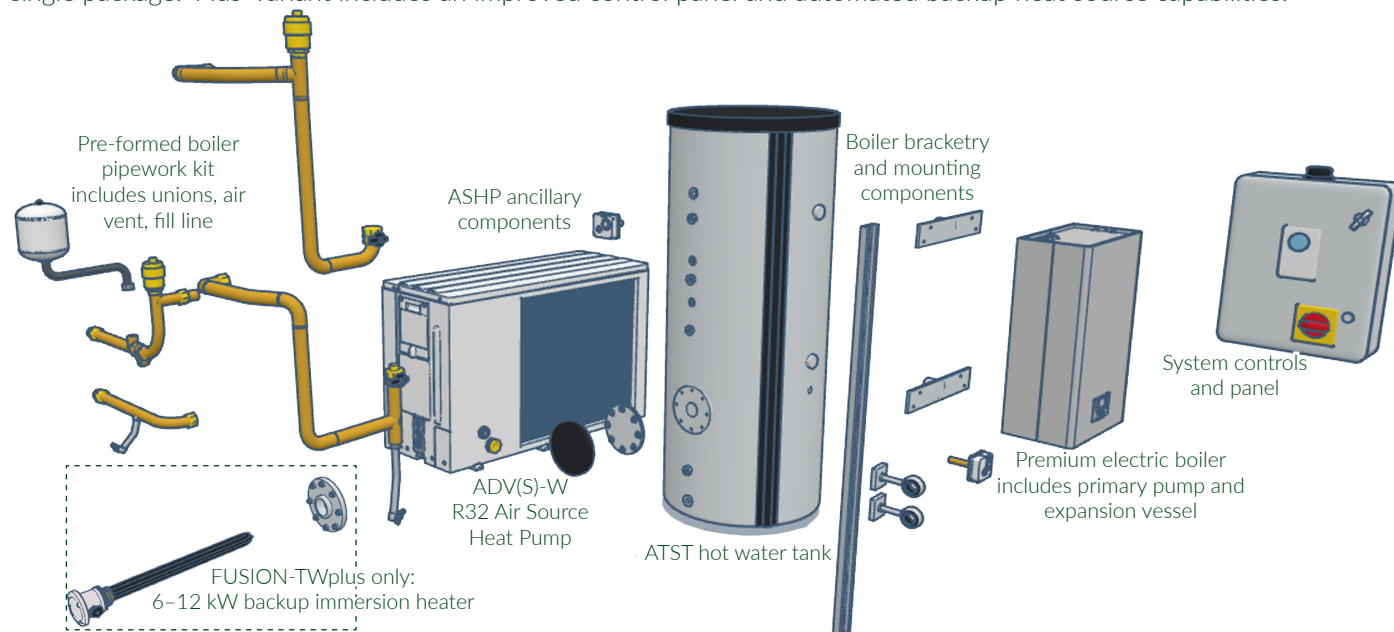


FUSION E/Eplus System Options ⁽¹⁾	Tank Model	Storage Volume	Electric Boiler		Full Load Amps (A)	Continuous DHW Flow Rate (l/h)	Instantaneous Draw Off Capacity (l)
			Model	Power Output (kW)			
FE / FEplus 300-9	ATSI 300	289	P9	9.00	39.1	154.3	289
FE / FEplus 300-12	ATSI 300	289	P12	12.00	17.4	205.7	289
FE / FEplus 300-24	ATSI 300	289	P24	24.30	35.2	416.6	289
FE / FEplus 400-9	ATSI 400	411	P9	9.00	39.1	154.3	411
FE / FEplus 400-12	ATSI 400	411	P12	12.00	17.4	205.7	411
FE / FEplus 400-24	ATSI 400	411	P24	24.30	35.2	416.6	411
FE / FEplus 500-9	ATSI 500	490	P9	9.00	39.1	154.3	490
FE / FEplus 500-12	ATSI 500	490	P12	12.00	17.4	205.7	490
FE / FEplus 500-24	ATSI 500	490	P24	24.30	35.2	416.6	490
FE / FEplus 580-9	ATSI 580	575	P9	9.00	39.1	154.3	575
FE / FEplus 580-12	ATSI 580	575	P12	12.00	17.4	205.7	575
FE / FEplus 580-24	ATSI 580	575	P24	24.30	35.2	416.6	575
FE / FEplus 750-9	ATSI 750	756	P9	9.00	39.1	154.3	756
FE / FEplus 750-12	ATSI 750	756	P12	12.00	17.4	205.7	756
FE / FEplus 750-24	ATSI 750	756	P24	24.3	35.2	416.6	756

(1): Additional system configurations available from Adveco on request

Adveco FUSION-TW and TWplus

Twin coil hot water tank with air source heat pump, electric boiler, control panel and required ancillaries in a convenient single package. 'Plus' variant includes an improved control panel and automated backup heat source capabilities.



FUSION TW/TWplus System Options ⁽¹⁾	Hot Water Tank		ASHP			Electric Boiler		Cont. DHW Flow Rate (l/h)	Instantaneous Draw Off Capacity (l)	Peak Draw Off Capacity (l)
	Model	Storage Volume	Model	Output kW ⁽²⁾	% Heat Contribution	Model	Output kW			
FTW/FTWplus 300-19	ATST 300	289	ADVS10W	9.85	52.25%	P9	9.00	323.14	130	289L in 25mins
FTW/FTWplus 300-22	ATST 300	289	ADVS12W	12.82	58.75%	P9	9.00	374.04	130	289L in 25mins
FTW/FTWplus 400-22	ATST 400	411	ADVS10W	9.85	45.08%	P12	12.00	374.57	182	411 in 32mins
FTW/FTWplus 400-25	ATST 400	411	ADVS12W	12.82	51.65%	P12	12.00	425.47	182	411 in 32mins
FTW/FTWplus 400-26	ATST 400	411	ADV16W	14.47	54.66%	P12	12.00	453.70	182	411 in 32mins
FTW/FTWplus 400-35	ATST 400	411	ADV22W	22.81	65.53%	P12	12.00	596.74	182	411 in 32mins
FTW/FTWplus 500-22	ATST 500	490	ADVS12W	12.82	58.75%	P9	9.00	374.04	217	490L in 43mins
FTW/FTWplus 580-22	ATST 580	575	ADVS10W	9.85	45.08%	P12	12.00	374.57	225	575L in 49mins
FTW/FTWplus 580-26	ATST 580	575	ADV16W	14.47	54.66%	P12	12.00	453.70	225	575L in 49mins
FTW/FTWplus 580-35	ATST 580	575	ADV22W	22.81	65.53%	P12	12.00	596.74	225	575L in 49mins
FTW/FTWplus 580-40	ATST 580	575	ADV30W	28.09	70.07%	P12	12.00	687.26	225	575L in 49mins
FTW/FTWplus 750-23	ATST 750	756	ADVS16W	14.47	61.65%	P9	9.00	402.27	315	756L in 69mins
FTW/FTWplus 750-25	ATST 750	756	ADVS12W	12.82	51.65%	P12	12.00	425.47	315	756L in 52mins
FTW/FTWplus 750-35	ATST 750	756	ADV22W	22.81	65.53%	P12	12.00	596.74	315	756L in 52mins
FTW/FTWplus 750-39	ATST 750	756	ADV16W	14.47	37.32%	P24	24.30	664.56	315	756L in 40mins
FTW/FTWplus 750-40	ATST 750	756	ADV30W	28.09	70.07%	P12	12.00	687.26	315	756L in 52mins
FTW/FTWplus 750-47	ATST 750	756	ADV22W	22.81	48.42%	P24	24.30	807.60	315	756L in 40mins
FTW/FTWplus 750-52	ATST 750	756	ADV30W	28.09	54.50%	P24	23.45	883.59	315	756L in 40mins

⁽¹⁾: Additional system configurations available from Adveco on request.

⁽²⁾: ASHP performance based on 2°C external air and 55°C flow temperature.

Power Supply

As an electric-only hot water system, it is essential to ensure a suitable power supply is available to the installation. Components require the following supplies:

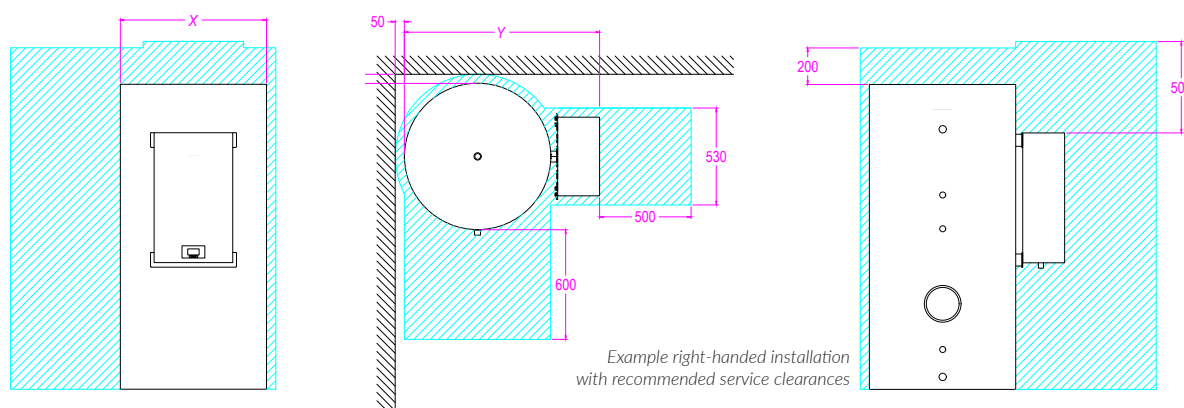
System Control Panel Full Load Power Supply			
System Config.	Boiler Model	Immersion Model	Supply Requirements
With ADVS10W supplied via system control panel	P9 (1ph)	None	230V 1ph: 60A / 253V 1ph: 63A
		810118K-810119K (3-6 kW 1ph)	230V 1ph: 65A / 253V 1ph: 72A
	P12	Any	400V 3ph: 37A / 440V 3ph: 39A
	P24	Up to 810121K (9 kW 3ph)	400V 3ph: 55A / 440V 3ph: 57A
810122K (12 kW 3ph)		400V 3ph: 57A / 440V 3ph: 59A	
With independent supply to ASHP	P9 (1ph)	None	230V 1ph: 42A / 253V 1ph: 45A
		810119K (6 kW 1ph)	230V 1ph: 64A / 253V 1ph: 72A
	P12	None	400V 3ph: 20A / 440V 3ph: 22A
		810119K (6 kW 3ph)	400V 3ph: 27A / 440V 3ph: 30A
		810120K (9 kW 3ph)	400V 3ph: 31A / 440V 3ph: 35A
	P24	810122K (12 kW 3ph)	400V 3ph: 35A / 440V 3ph: 39A
		None	400V 3ph: 38A / 440V 3ph: 41A
		810119K (6 kW 3ph)	400V 3ph: 45A / 440V 3ph: 50A
		810120K (9 kW 3ph)	400V 3ph: 49A / 440V 3ph: 54A
		810122K (12 kW 3ph)	400V 3ph: 53A / 440V 3ph: 59A

ASHP Full Load Power Supply		
ASHP Model	Supply	Amps per phase
ADVS10W	220-240V 1ph	supply via panel
ADVS12W	220-240V 1ph	30A
ADVS16W	220-240V 1ph	30A
ADV16W	380-415V 3ph	14A
ADV22W	380-415V 3ph	28A
ADV30W	380-415V 3ph	28A

System Footprint

The Adveco FUSION is designed around a compact installation area to ensure maximum compatibility. A range of tank sizes and a choice of left or right-handed boiler mount configurations are available.

Note that additional outdoor space will be required for systems featuring ASHP. Additional wall or frame space will be required for systems featuring control panels.



Tank Model	Height (mm)	Tank Diameter (mm)			Dry Combined Mass (kg)
		Uninsulated diameter for installation access	Insulated diameter (X)	Max diameter (Y) including mounted boiler and pipework	
ATSI 300	1740	500	700	1030	97
ATST 300					105
ATSI 400	1735	600	800	1130	109
ATST 400					123
ATSI 500	1990	600	800	1130	123
ATST 500					143
ATSI 580	1990	650	850	1180	128
ATST 580					138
ATSI 750	2080	750	950	1280	175
ATST 750					191