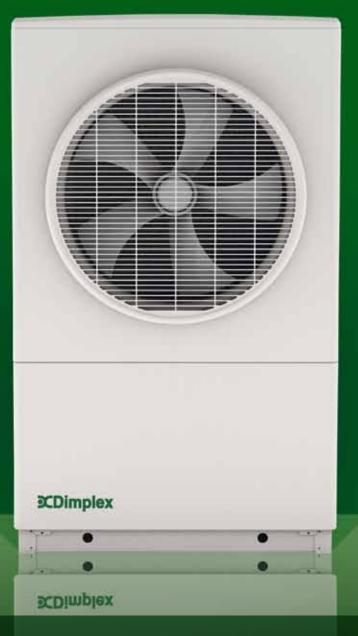
CDimplex A Class

A Class of its own



Complex renewablesA world of expertise

CDimplex A Class

An endless list of unique product features



Outstanding performance and efficiency

Dimplex A Class is designed specifically to maximise year-round heating system efficiency, no matter the weather conditions. It outperforms the UK's leading heat pumps and the efficiency assumptions in the industry best-practice Heat Emitter Guide. As a result, Dimplex A Class will achieve a higher Seasonal Performance Factor (SPF) than other heat pumps at similar water flow temperatures. And better efficiency means lower running costs and a faster payback for the homeowner.



High output, high temperature

Dimplex A Class delivers full heat output, even at air temperatures as low as -7°C and at high water flow temperatures. It also meets the requirements of the MIS3005 '100% sizing rule', even for properties requiring design temperature heat loads of up to 15kW, sparing homeowners the expense of upsizing. Plus, while many heat pumps can only heat water to 55°C, Dimplex A Class has a maximum flow temperature of 65°C. So it can meet all the domestic hot water requirements without reliance on costly electrical backup. And it can still do this even when the outside temperature is unusually low, so customers never have to worry about unexpectedly high running costs or running out of hot water.

Respectable efficiency and no loss of heating capacity at higher water temperatures also mean that where it is not cost-effective or feasible to upgrade existing radiators, A Class can still provide a viable solution. In many instances, A Class can be paired with existing radiators without the need for resizing and still provide an attractive annual saving when compared with oil or LPG.







Sophisticated heating made simple

The A Class Controller runs the complete home heating system: the A Class heat pump, room and water temperatures, as well as timings, in up to four heating zones. So it's ideal for large and even mixed installations. There's no need for a separate heating thermostat, keeping costs to a minimum. It automatically uses the lowest possible amount of energy to deliver target temperatures, further lowering running costs. Plus, it comes pre-configured with all default settings, so minimal system set-up is required, helping to make installation fast and efficient.



Innovative technology

Dimplex A Class uses market-leading Copeland Scroll™ compressor technology, optimised for heating performance and efficiency in a European climate. Its variable speed inverter drive optimises system efficiency, reducing running costs and environmental impact. Enhanced Vapour Injection (EVI) technology extends the operating envelope of the refrigeration cycle, for a higher performance while using less energy.

The result: improved seasonal efficiency, reduced running costs, higher output and higher temperatures.







Complete System Packages

Dimplex A Class comes in a range of prepackaged options, carefully specified for both new build and existing homes, with everything needed for a quick and hassle-free installation.

Packages combine A Class with the new EC-Eau Smart hot water cylinders and for a fully integrated, high-efficiency, low-carbon heating system, just add SmartRad. For the ultimate Dimplex renewable system integrate an A Class system with solar thermal panels that use solar energy to heat the hot water cylinder to reduce running costs even further and/or add a Dimplex solar PV system which produces electricity from daylight to offset some of the heat pump's electrical power.



Designed for the UK, made in the UK

Dimplex A Class is our first heat pump specifically engineered to deliver optimal performance at typical UK winter temperatures (-2°C to 10°C). It's fully operational at temperatures as low as -15°C, ensuring full compliance with MIS 3005 design requirements. Plus it's manufactured in the UK too. So, as well as maximising savings and minimising environmental impact, it's supporting UK industry and employment.



Dimplexrenewables®

A wor**l**d of expertise

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Integrate with solar thermal

Solar water heating can be used with a heat pump to produce domestic hot water thus further reducing running costs and savings against other fuels. Water heating is the least efficient operation that the heat pump has to do, so producing some of the hot water from free solar energy will reduce heat pump electricity consumption and improve overall system efficiency. Plus solar thermal is also eligible for the RHPP and Renewable Heat Incentive schemes, so there is extra funding for the additional upfront costs as well as the potential for a higher RHI payment for the additional renewable heat produced.



Solar packages

Dimplex supply a range of solar packages suitable for various house sizes. We also provide a special cylinder that combines the requirements of the heat pump and solar water heating system, providing a fully integrated system solution.

HEAT PUMP	CYLINDER	SOLAR PANELS	SOLAR ANCILIARIES
A16	EC-Eau Smart HP/Solar 250I (with 40I buffer)	2 x flat plate	Solar hydraulic pack & roof mounting kit
A16	EC-Eau Smart HP/Solar 250l (with 40l buffer)	3 x flat plate	Solar hydraulic pack & roof mounting kit
A12	EC-Eau Smart HP/Solar 250l (with 40l buffer)	2 x flat plate	Solar hydraulic pack & roof mounting kit
A12	EC-Eau Smart HP/Solar 250l (with 40l buffer)	3 x flat plate	Solar hydraulic pack & roof mounting kit



Complete system packages

Dimplex A Class comes in a range of pre-configured, system package options.

Carefully specified for both new build and existing homes, these include all ancillary parts needed for a quick and hassle-free installation.





EC-Eau Smart cylinders

Innovative EC-Eau Smart cylinders are a key feature of the new A Class range. By incorporating an onboard, pre-wired "water module" controller and integrated heating system hydraulic components, EC-Eau Smart makes the entire system as fast and cost-effective to install as possible.

KEY FEATURES

- 3 model options 150, 210 and 250 Litre with integrated 40l buffer
- 1 solar thermal model, 250L with integrated 40l buffer Optimised for inverter heat pumps
- Onboard water module Pre-wired thermostats, immersions, sensors, pumps and valves
 - Easy to install



CDimplex A Class



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Dimplex A Class

MODEL			A12M	A16M	
DESIGN					
Degree of protection according to EN 60 529 for a compact unit or heating element			IP 24	IP 24	
Installation location			Outd	oors	
PERFORMANCE DATA					
Operating temperature limits:			Min./	Max.	
Heating water flow and return temperature	C	°C	25 / 65	25 / 65	
Outside air temperature	·	°C	-20 / 35	-20 / 35	
Seasonal Performance Factor (SPF) for Under floor a	3.9	3.9			
Seasonal Performance Factor (SPF) for Radiators at	3.6	3.6			
Heating water temperature difference at standard rating condition	A7 W35†	K	5	5	
Heat output/CoP	at A7 W35† I	kW/	12.0 / 4.7	12.0 / 4.7 [*]	
	at A-2 W35† I	kW/	12.0 / 3.5	15.5 / 3.2	
	at A-7 W35† I	kW/	12.0 / 3	14.3 / 3	
	at A7 W55† I	kW/	12.0 / 3	12.0 / 3 [*]	
	at A-2 W55† I	kW/	12.0 / 2.5	15.6 / 2.4	
	at A-7 W55† I	kW/	12.0 / 2.2	15.3 / 2.2	
	at A7 W65† I	kW/	12.0 / 2.5	12.0 / 2.5 [*]	
	at A-2 W65† I	kW/	12.0 / 2.0	15.0 / 1.99	
	at A-7 W65† I	kW/	12.0 / 1.8	15.0 / 1.8	
Sound power level [‡]	(dB(A)	64	64	
Heating water flow rate @ A7 W35 (nominal)	ı	m³/h	2.1	2.1	
Refrigerant; total filling weight	-	Type/kg	R410A / 2.0	R410A / 2.0	
Water capacity of stainless steel heat exchanger	I	litre	1	1	
DIMENSIONS, CONNECTIONS AND WEIGHT					
Device dimensions without connections	1	HxWxL mm	1571 x 932 x 401	1571 x 932 x 401	
Physical volume		m³	0.59		
Device connections to heating system		inch	1" ext.	1" ext. thread	
Weight of the transportable unit(s) excluding packaging	ng l	kg	130	130	
ELECTRICAL CONNECTION (HEAT PUMP)					
Nominal voltage; fuse protection		V/A	230 / C 40	230 / C 40	
Nominal power consumption A7 W35		kW	2.6	2.6	
Maximum current		A	30	35	
Nominal current A7 W35/cos		A/	11 / 0.98	11 / 0.98	
Power input of integral fan @ A7 W35		W	60	60	
OTHER DESIGN CHARACTERISTICS					
Defrosting			Automatic		
Type of defrosting			Reverse Cycle		
.,po o. doodg					
Heating water in device protected against freezing			Ye	s	

⁺ Calculated to EN15316 excluding hot water.

 ${\bf NOTE: Provisional\ data\ only,\ subject\ to\ confirmation\ at\ MCS\ certification.}$

[†] These data characterise the size and performance of the system according to EN 14511 with clean heat exchangers. Abbreviations have the following meaning, e.g. A2 / W35: outside temperature 2°C and heating water supply temperature 35°C.

According to EN 12102

^{*} Performance at this point is optimised to match the building heat load and maximise the Seasonal Performance Factor.