Airtherm

Air Source Heat Pump

Designed specifically to operate in the UK climate on new or existing situations, air source heat pumps utilise the free latent energy within the air, to create heat for underfloor heating or low temperature radiators.

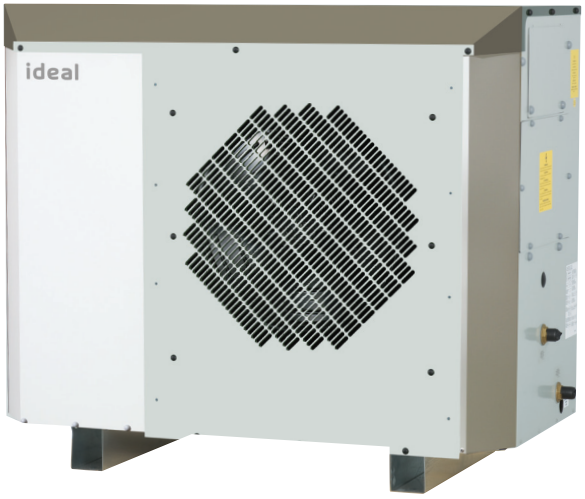
This clean and sustainable heating solution, provides an ideal solution for properties without a gas supply, or looking to reduce their CO_2 emissions.

The Ideal Airtherm has been designed to provide a simple and dependable solution; delivering up to 100% of the annual heating and domestic hot water for a wide variety of properties.

Ideal's Airtherm design provides hot water supply up to 65ºC ensuring there is no need for electrical heating backup and delivering complete homeowner comfort and peace of mind.

Designed for external use, Ideal's Airtherm range offers an unobtrusive, simple and cost effective renewable energy solution for new build and retrofit installations alike.

The Ideal Airtherm range is approved under the Microgeneration Certification Scheme.



Airtherm Features and Benefits

- Available in three outputs of 4.5, 9 and 12 kWs
- Dual temperature operation for maximum efficiency
- DHW heating temperature control of 65°C (needs no additional immersion heater or boiler back up)
- Space heating temperatures variable from 35-55°C for underfloor heating or radiators
- Twin coil compressors in larger models optimise efficiency
- Reverse cycle defrost: max 4 mins per hour No defrost above 4°C
- Operational to -15°C
- No flues, gas supply or ventilation required
- Low starting currents
- Simple installation: only requiring water and electrical connections
- Very low sound levels
- Maintenance free

Accredited to the following:

APPROVED PRODUCT
MCS
BRE GLOBAL LISTED

Certificate no. MCS HP0009
Air to Water Heat Pump

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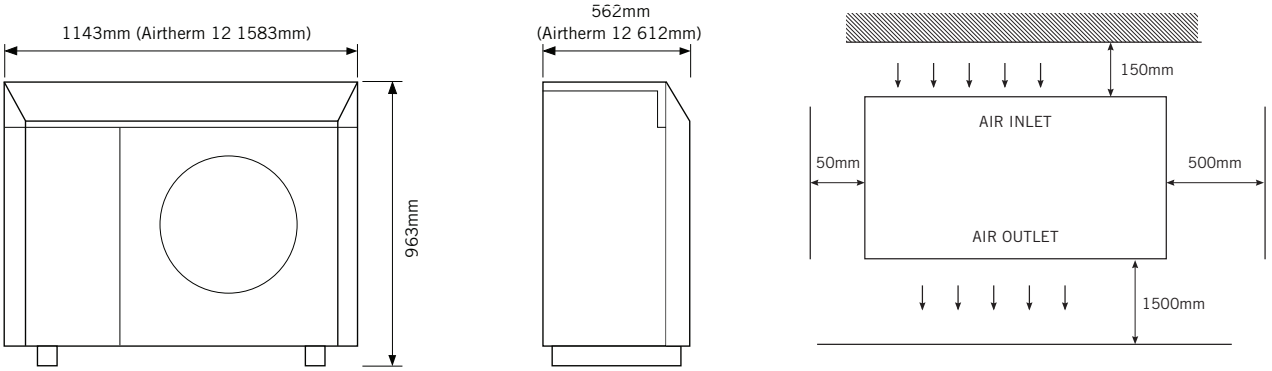
Technical Specification



Model	Unit	Airtherm 4.5	Airtherm 9	Airtherm 12
@ Air On 0°C, 90%RH*				
Output to Water @35˚C #	kW	3.39	6.56	9.11
Electrical Input	kW	1.11	2.17	2.93
Output to Water @55˚C #	kW	2.97	5.63	7.86
Electrical Input	kW	1.54	2.93	3.98
COP		1.92	1.92	1.97
@ Air On 7°C, 87%RH*				
Output to Water @35˚C #	kW	4.4	8.4	11.7
Electrical Input	kW	1.18	2.27	3.13
Output to Water @55˚C #	kW	4.06	7.65	11.13
Electrical Input	kW	1.62	3.07	4.46
COP @ 55˚C		2.5	2.49	2.49
@ Air On 20°C, 60%RH*				
Output to Water @35˚C #	kW	6.3	11.81	16.5
Electrical Input	kW	1.37	2.58	3.51
Output to Water @55˚C #	kW	6.1	11.44	15.92
Electrical Input	kW	1.78	3.35	4.54
COP		3.42	3.41	3.50
Electrical data				
Electrical Supply 1 Phase	V/ph/Hz	230/240V ~1N/50Hz	230/240V ~1N/50Hz	230/240V ~1N/50Hz
Minimum Supply Capacity	amps	13	25	32
Maximum Supply fuse 1 ph A/Type C MCB	amps	20	32	40
Soft Start Amps 1 ph N	amps	19	35	31
Air data				
Air Flow (Anem'@air on grille, Wet evap')	m³/hr	3266	3000	4330
Fan External Resistance STD	mm Wg	0	0	0
Fan External Resistance 'F'	mm Wg	6	6	6
Water data				
Water Flow +20%	litres/min	7.5	15	20
Pressure Drop (Water)	metres hd	1.1	0.7	0.4
Condenser Volume	litres	2	3.5	6.5
Water Connections	inches	3/4" BSPM	3/4" BSPM	1" BSPM
Condensate Water Connections	inches	3/4" domestic waste	3/4" domestic waste	3/4" domestic waste
Typical buffer tank sizes	litres	50	100	150
General data				
Compressor type		ROTARY	ROTARY	ROTARY
Compressor Oil		Polyolester oil	Polyolester oil	Polyolester oil
Operating Temperatures (Air)	ºC	-6 TO +35	-6 TO +35	-6 TO +35
Operating Temperatures (Water)	ºC	+20 TO +65	+20 TO +65	+20 TO +65
Water proof level		IP24	IP24	IP24
Refrigerant type		R134a	R134a	R134a
Refrigerant quantity	kg	3.5	5.5	7.5
Sound levels				
Sound pressure @ 1 metre	dB(A)	57	58	60
Sound pressure @ 10 metres	dB(A)	37	38	40

Notes: Weight and dimensions are nett. # Indoor heat exchanger outlet temperature. * Outdoor heat exchanger inlet temperature. Allow 500mm clearance to service panels.