

ErP A++

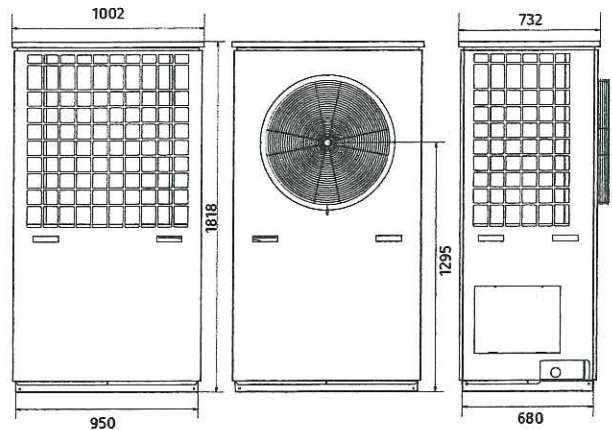
DATASHEET CAERNARFON

Air Source Heat Pump

Product Name		Caernarfon
Model Number		CAER410AMOD1
ERP Rating		A++
(Air 7°C/Water 35°C)*	Rated Output (kW)	8.58
	Power Consumption (kW)	1.80
	Rated COP	4.76
(Air 2°C/Water 35°C)**	Rated Output (kW)	10.92
	Power Consumption (kW)	3.36
	Rated COP	3.25
(Air -7°C/Water 35°C)**	Rated Output (kW)	12.13
	Power Consumption (kW)	4.53
	Rated COP	2.68
Domestic Hot Water Temperature (°C)		65
Weight (kg)		230
Heat Pump Voltage / Frequency		230V AC 50Hz
Max Running Current (A) Compressor / Booster		34/27
Max Electrical Power (kW) Compressor / Booster		8.2/6.0
Sound Pressure Level @ 1m (dBA)***		54
Minimum/Maximum Operating Temperature (°C)		-20/30
Maximum Starting Current (A)		14.3

* Test results as per BS EN14511 ** Data supplied by BRE

*** Sound power level is 61.5 dBA as tested to BS EN12102

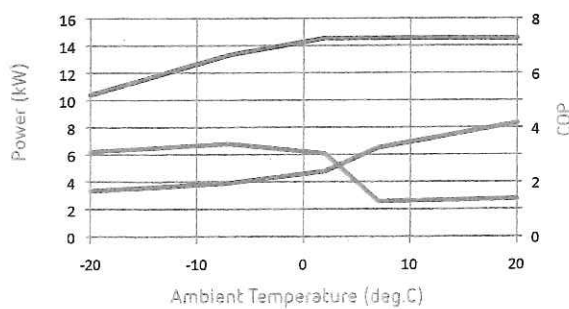


Model	H	W	D
Caernarfon	1818	1002	732

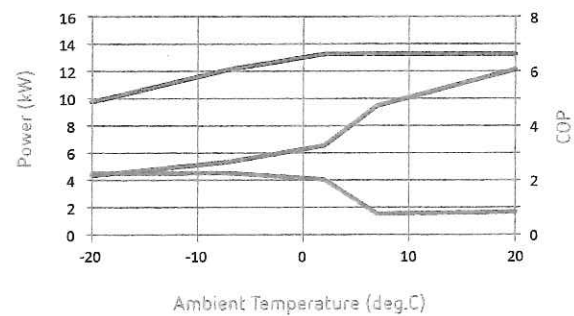
All sizes in mm

Note - units will have Private Green Colour Finish

Caernarfon Performance at 55°C Outlet Temperature



Caernarfon Performance at 35°C Outlet Temperature



Power Output (kW) Power Input (kW) COP



Global Energy
Systems

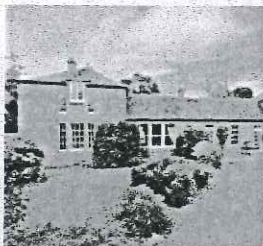
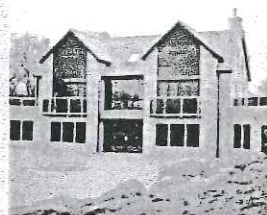
GREAT BRITISH ENERGY. NATURALLY

THE CAERNARFON IS IDEAL FOR...

DOMESTIC NEW BUILDS

The variable output of the Caernarfon 8-18kW air source heat pump offers complete heating and domestic hot water solutions for even the largest new build properties. With run costs savings of up to 70% and the Renewable Heat Incentive available to self-builders, the Caernarfon is an ideal solution for new builds.

Integrating a Caernarfon air source heat pump in a new build project could not be easier. Our specifiers and engineers will recommend suitable heat emitters for each room. The Caernarfon is designed to work equally effectively with under floor or radiator based systems with an A++ ERP rating. Requiring only an electric power supply, the use of a Caernarfon simplifies utility connections and future energy bills.



DOMESTIC RETRO FITS

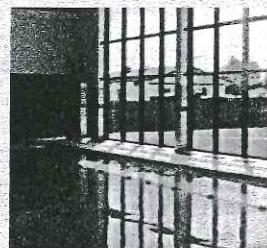
Offering our highest heat output from a single electricity supply, and inverter control to vary the heat pump output, the Caernarfon 8-18kW air source heat pump has been engineered with British houses in mind. Working equally well with under floor heating or radiators the Caernarfon offers the flexibility to work with existing systems.

Able to offer full heating and domestic hot water supply to large, retro fit properties, the Caernarfon is an ideal choice for renovation projects. Through bespoke software, written by Global Energy Systems, the Caernarfon can either work bivalently with an existing boiler or replace it completely in line with RHI guidelines.

POOLS

Swimming pools, with their potential need for year round, low grade heat are an ideal match for air source heat pumps. The Caernarfon 8-18kW air source heat pump, with its inverter technology and 55 °C output is a perfect match for pool water, space heating and domestic hot water combinations.

Able to work as a standalone unit, bivalently with boilers or in parallel with other units, the Caernarfon can be used for any scale of installation. Eligible for the Renewable Heat Incentive for Non-Domestic pools, the Caernarfon can offer excellent savings. The heat for domestic pools, when part of a wider heating system, can benefit from the savings of the Caernarfon but is not counted for the RHI.



SMALL COMMERCIAL

The Caernarfon 8-18kW air source heat pump offers the flexibility to deliver heat through existing radiators, under floor or fan convactor based heating systems. It has been specifically designed for the UK climate with a broad range of uses.

Able to deliver space heating to single, large spaces such as workshops or halls, heat to hotel or residential rooms and domestic hot water to legionella standards, the Caernarfon is an ideal choice. Able to work as a standalone unit, bivalently with boilers or in parallel with other units, the Caernarfon can be used for any scale of installation.

MULTIPLE UNITS

As heat loads increase, multiple Caernarfon air source heat pumps can be used together to offer solutions to very large heat loads. Suitable for large warehouses, workshops, hotels, pools or offices the Caernarfon is an ideal choice.

Software developed by Global Energy Systems to work with our own air source heat pumps will ensure that the load is managed across the season and across the multiple heat pumps, offering an optimal solution.



For more information visit www.globalenergysystems.co.uk or call +44 (0) 3333 444 414



9. DECLARATION OF CONFORMITY

Global Energy Systems Ltd
1501
Dock Road, Lytham
Lancashire, FY8 5AQ

Document Number: DoC Caernarfon

Tel: +44(0) 3333 444414
www.globalenergysystems.co.uk
info@globalenergysystems.co.uk



EC Declaration of Conformity

We, Global Energy Systems Ltd at above address declare under our sole responsibility that the product detailed below complies with essential requirements of the following EU directives,

- Machinery Directive 2006/42/EC
- Electromagnetic Compatibility 2004/108/EC
- Restriction on the use of certain Hazardous Substances (RoHS) directive 2011/65/EU
- Radio Equipment and Telecommunications Terminal Equipment 1995/5/EC (where applicable)

Equipment description
Model Name
Model Number

Air/water heat pump system
Caernarfon
CAER410MOD1

Compliance with the directives has been assessed by with reference to the following harmonised standards.

- EN 378-2:2008+A2:2012 - Refrigerating systems and heat pumps. Safety and environmental requirements. Design, construction, testing, marking and documentation
- EN ISO 12100: 2010 - Safety of machinery - General principles for design - Risk assessment and risk reduction
- EN 60204-1:2006+A1:2009 - Safety of machinery. Electrical equipment of machines. General requirements
- EN 14511-2:2013 - Air conditioners, liquid chilling packages and heat pumps with electrically driven compressors for space heating and cooling. Test conditions
- EN 55014-1:2006 + A2:2011 Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1: Emission
- EN 55014-2:1997 + A2:2008 Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 2: Immunity - Product family standard
- EN 61000-3-11 Electromagnetic Compatibility (EMC) Part 3-11: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems Equipment with rated current <75 A and subject to conditional connection
- EN 61000-3-12 Electromagnetic Compatibility (EMC) Part 3-12: Limits - Limits for harmonic currents produced by equipment connected to public low-voltage systems with input current > 16 A and <75 A per phase

A technical file for this equipment has been assembled and is maintained by Ben Morris at the above address.

Ben Morris
Managing Director
Lytham, UK, February 2016

Power Output (kW) Power Input (kW) COP

