Global Energy
Systems

British Designed and Built

Air Source Heat Pumps

Castletown 6.6KW ECO

Air Source Heat Pump

- 6.6kW power output at 7°C
- Designed for UK climate down to -20°C
- British Designed
- Ideal for existing heating systems and new build properties
- Eligible for government grants
- Compatible with both radiators and underfloor heating
- Data link for real time monitoring
- Remote internet control function

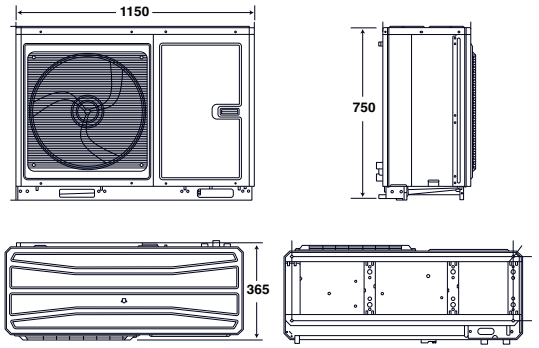
Global Energy Systems

For more information please visit:
www.globalenergysystems.co.uk
or call 03333 444 414

Air Source Heat Pump

Product Name / Product Number		Castletown GRS-CQ6.0Pd/NhG3-E
Heat Pump Space Heater - 55°C	ErP Rating	A++
	SSHEE*2 (η_s)	137%
	SCOP	3.17
Heat Pump Space Heater - 35°C	ErP Rating	A+++
	SSHEE*2 (η_s)	199%
	SCOP	4.53
Heat pump Combination Heater - Extra large Profile	ErP Rating	A+
	SSHEE*2 (η_s)	128%
Heating (Air -3°C / Water 35°C)	Rated Output (kW)	4.8
	Power Consumption (kW)	1.4
	COP	3.3
Maximum Outlet Temperature (°C)		65
Weight (kg)		95
Heat Pump Voltage / Frequency		230V AC 50Hz
Max Running Current (A) Compressor / Booster		11 / 13
Max Electrical Power (kW) Compressor / Booster		2.5 / 3.0
Sound Pressure Level @ 1m (dba) *1,3		53
Operating Ambient Temperature (°C)		-20 / +30
Maximum Starting Current (A)		16

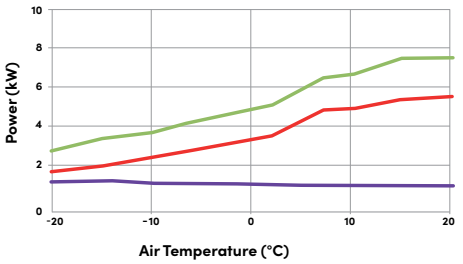
*1 - Tested at Outdoor temp 7°C DB/ 6°C WB, Inlet / Outlet water temp 30/35°C as per BS EN 14511.
*2 - Seasonal Space Heating Energy Efficiency
*3 - Sound power level is 57.9dBA as tested to BS EN 12102



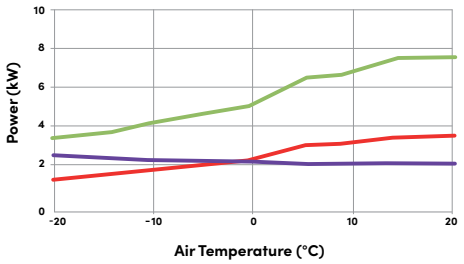
Model	H	W	D
Castletown	750	1150	365

All sizes in mm

Castletown Performance at 35°C Outlet Temperature



Castletown Performance at 55°C Outlet Temperature



Power Output (kW) Power Input (kW) COP

Rothesay 9.9KW ECO

Air Source Heat Pump

- 9.9 kW power output at 7°C
- Designed for UK climate down to -20°C
- British designed
- Ideal for existing heating systems and new build properties
- Eligible for government grants
- Compatible with both radiators and underfloor heating
- Data link for real time monitoring
- Remote internet control function

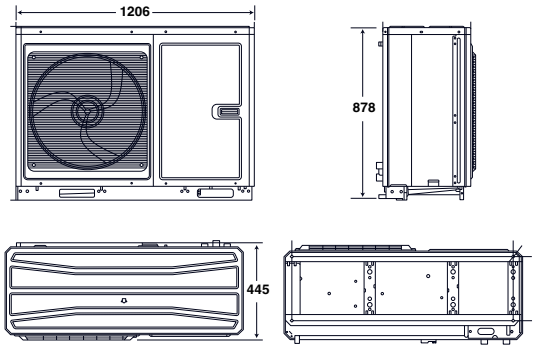
Global Energy Systems

For more information please visit:
www.globalenergysystems.co.uk
or call 03333 444 414

Air Source Heat Pump

Product Name / Product Number		Rothesay GRS-CQ8.0Pd/NhG3-E
Heat Pump Space Heater - 55°C	ErP Rating	A++
	SSHEE*2 (η_s)	145%
	SCOP	3.51
Heat Pump Space Heater - 35°C	ErP Rating	A+++
	SSHEE*2 (η_s)	177%
	SCOP	4.22
Heat pump Combination Heater - Extra large Profile	ErP Rating	A
	SSHEE*2 (η_s)	123%
Heating (Air -3°C / Water 35°C)	Rated Output (kW)	8.6
	Power Consumption (kW)	2.8
	COP	3.1
Maximum Outlet Temperature (°C)		65
Weight (kg)		127
Heat Pump Voltage / Frequency		230V AC 50Hz
Max Running Current (A) Compressor / Booster		23 / 26
Max Electrical Power (kW) Compressor / Booster		5.3 / 6.0
Sound Pressure Level @ 1m (dba) *1,3		56
Operating Ambient Temperature (°C)		-20 / +30
Maximum Starting Current (A)		40

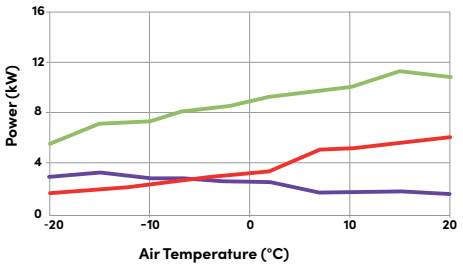
*1 - Tested at Outdoor temp 7°C DB/ 6°C WB, Inlet / Outlet water temp 30/35°C as per BS EN 14511.
*2 - Seasonal Space Heating Energy Efficiency
*3 - Sound power level is 68dBA as tested to BS EN 12102



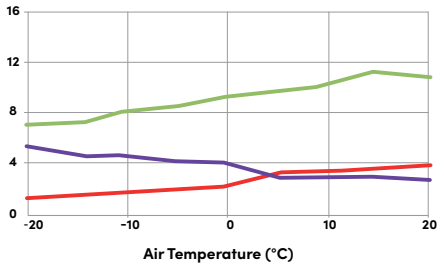
Model	H	W	D
Rothesay	878	1206	445

All sizes in mm

Rothesay Performance at 35°C Outlet Temperature



Rothesay Performance at 55°C Outlet Temperature



Power Output (kW) Power Input (kW) COP

Cartmel 11.2KW ECO

Air Source Heat Pump

- 11.2kW power output at 7°C
- Designed for UK climate down to -20°C
- British designed
- Ideal for existing heating systems and new build properties
- Eligible for government grants
- Compatible with both radiators and underfloor heating
- Data link for real time monitoring
- Remote internet control function

Global Energy Systems

For more information please visit:
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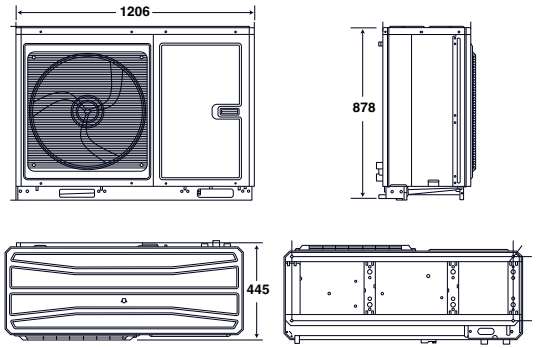
or call 03333 444 414

Cartmel Datasheet

Air Source Heat Pump

Product Name / Product Number		Cartmel GRS-CQ10Pd/NhG3-E
Heat Pump Space Heater - 55°C	ErP Rating	A++
	SSHEE*2 (η_s)	135%
	SCOP	3.3
Heat Pump Space Heater - 35°C	ErP Rating	A+++
	SSHEE*2 (η_s)	176%
	SCOP	4.30
Heat pump Combination Heater - Extra large Profile	ErP Rating	A
	SSHEE*2 (η_s)	123%
Heating (Air -3°C / Water 35°C)	Rated Output (kW)	9.1
	Power Consumption (kW)	3.1
	COP	3.1
Maximum Outlet Temperature (°C)		65
Weight (kg)		127
Heat Pump Voltage / Frequency		230V AC 50Hz
Max Running Current (A) Compressor / Booster		25 / 26
Max Electrical Power (kW) Compressor / Booster		5.8 / 6.0
Sound Pressure Level @ 1m (dba) *1,3		56
Operating Ambient Temperature (°C)		-20 / +30
Maximum Starting Current (A)		40

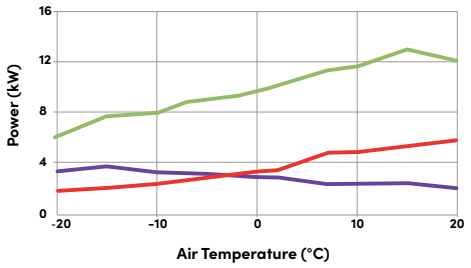
*1 - Tested at Outdoor temp 7°C DB/ 6°C WB, Inlet / Outlet water temp 30/35°C as per BS EN 14511.
*2 - Seasonal Space Heating Energy Efficiency
*3 - Sound power level is 68dBA as tested to BS EN 12102



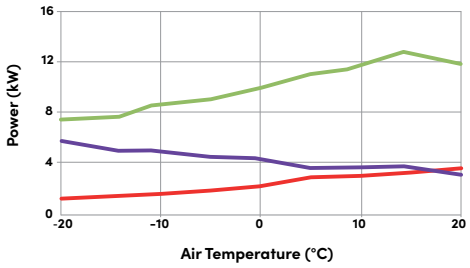
Model	H	W	D
Cartmel	878	1206	445

All sizes in mm

Cartmel Performance at 35°C Outlet Temperature



Cartmel Performance at 55°C Outlet Temperature



Power Output (kW) Power Input (kW) COP

Caernarfon 18KW ECO

Air Source Heat Pump

- 18kW power output at 7°C
- Designed for UK climate down to -20°C
- High mounted evaporator to prevent cold air recirculation
- Data link for real time monitoring
- Remote internet control function
- British designed and built
- Ideal for new and existing heating systems
- Eligible for government grants
- Compatible with both radiators and underfloor heating

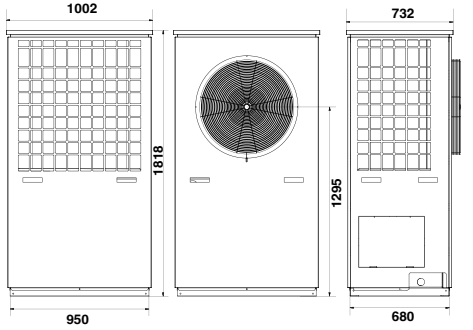
Global Energy Systems

For more information please visit:
www.globalenergysystems.co.uk
or call 03333 444 414

Air Source Heat Pump

Product Name / Product Number		Caernarfon CAER410MOD1
Heat Pump Space Heater - 55 °C	ErP Rating	A++
	SSHEE*2 (η_s)	126%
	SCOP	3.26
Heat Pump Space Heater - 35 °C	ErP Rating	A++
	SSHEE*2 (η_s)	160%
	SCOP	4.11
Heating (Air -3°C / Water 35 °C)	Rated Output (kW)	13.7
	Power Consumption (kW)	4.6
	COP	3.0
Maximum Outlet 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) *1,3		54
Operating Ambient Temperature (°C)		-20 / +30
Maximum Starting Current (A)		14.3

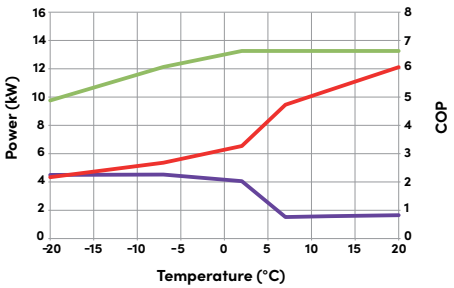
*1 - Tested at Outdoor temp 7deg.C DB/ 6deg.C WB, Inlet / Outlet water temp 30/35deg.C as per BS EN 14511.
*2 - Seasonal Space Heating Energy Efficiency
*3 - Sound power level is 61.5dBA as tested to BS EN 12102



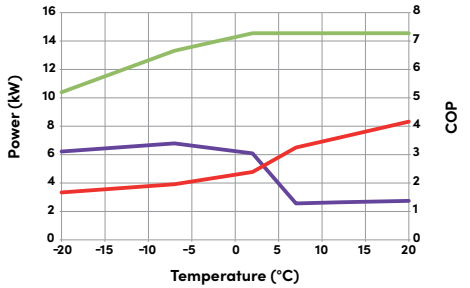
Model	H	W	D
Caernarfon	1818	1002	732

All sizes in mm

Caernarfon Performance at 35°C Outlet Temperature



Caernarfon Performance at 55°C Outlet Temperature



Power Output (kW) Power Input (kW) COP

Winchester 18 KW

Air Source Heat Pump (3-phase)

- 18kW power output at 7°C
- Designed for UK climate down to -20C°
- High mounted evaporator to prevent cold air recirculation
- Data link for real time monitoring
- Remote internet control function
- British designed and built
- Ideal for new and existing heating systems
- Eligible for government grants
- Compatible with both radiators and underfloor heating
- Designed to use three phase electricity

Global Energy Systems

For more information please visit:
www.globalenergysystems.co.uk
or call 03333 444 414

Winchester Datasheet

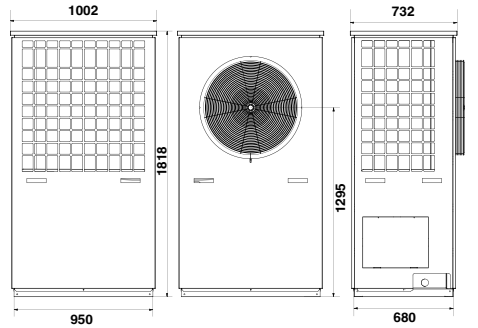
Air Source Heat Pump

Product Name / Product Number		Winchester WINR410MOD1
Heat Pump Space Heater - 55 °C	ErP Rating	A++
	SSHEE* [2] (η_s)	127%
	SCOP	3.26
Heat Pump Space Heater - 35 °C	ErP Rating	A++
	SSHEE* [2] (η_s)	162%
	SCOP	4.11
Heating (Air -3°C / Water 35°C)	Rated Output (kW)	13.7
	Power Consumption (kW)	4.6
	COP	3.0
Maximum Outlet Temperature (°C)		65
Weight (kg)		230
Heat Pump Voltage / Frequency		3/PE 400V AC 50Hz
Max Running Current (A) Compressor / Booster		34 / 27
Max Electrical Power (kW) Compressor / Booster		8.2 / 6.1
Sound Pressure Level @ 1m (dba) *[1,3]		54
Operating Ambient Temperature (°C)		-20 / +30
Maximum Starting Current (A)		14.3

*1 - Tested at Outdoor temp 7deg.C DB/ 6deg.C WB, Inlet / Outlet water temp 30/35deg.C as per BS EN 14511.

*2 - Seasonal Space Heating Energy Efficiency

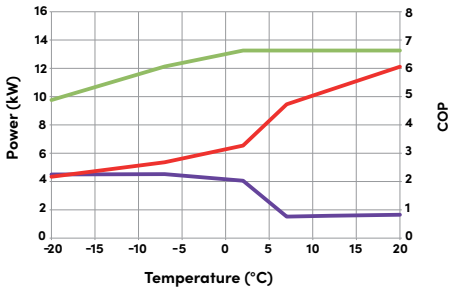
*3 - Sound power level is 61.5dBA as tested to BS EN 12102



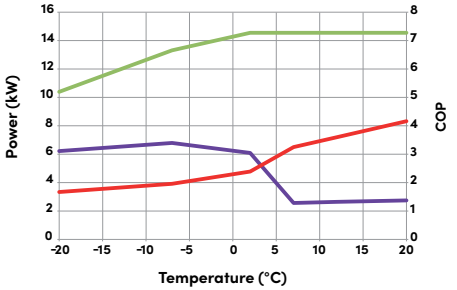
Model	H	W	D
Winchester	1818	1002	732

All sizes in mm

Winchester Performance at 35°C Outlet Temperature



Winchester Performance at 55°C Outlet Temperature



Power Output (kW) Power Input (kW) COP

Lincoln 70KW

Air Source Heat Pump

- 70kW power output at 7°C
- Air Source heat pump for large scale commercial use
- Specifically designed for UK climate
- Suitable for wet systems, pools or pre-heat
- Non-domestic

Global Energy Systems

For more information please visit:
www.globalenergysystems.co.uk
or call 03333 444 414

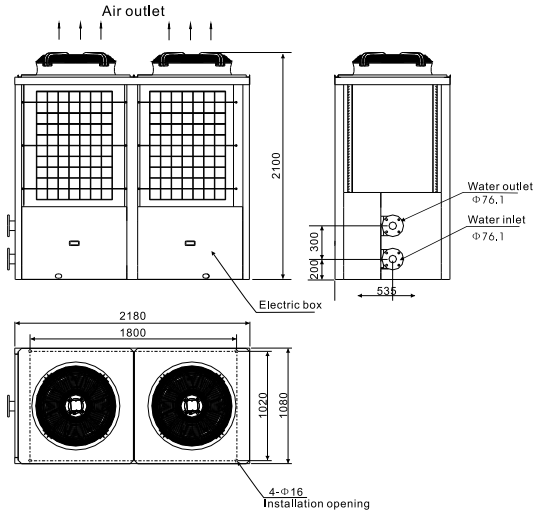
Air Source Heat Pump

Product Name		Lincoln
Product Number		LCNR410MOD1
Heat Pump Space Heater - 55°C	ErP Rating	A+
	SSHEE* [1] (η_s)	114%
	SCOP	2.92
Heat Pump Space Heater - 35°C	ErP Rating	A+
	SSHEE* [1] (η_s)	138%
	SCOP	3.51
Maximum Outlet Temperature (°C)		60
Weight (kg)		900
Heat Pump Voltage / Frequency		415V AC 3N / 50Hz
Max Running Current (A) Compressor / Booster		74
Max Electrical Power (kW) Compressor / Booster		41.5
Sound Pressure Level @ 1m (dba)		73
Operating Ambient Temperature (°C)		-20 / +35

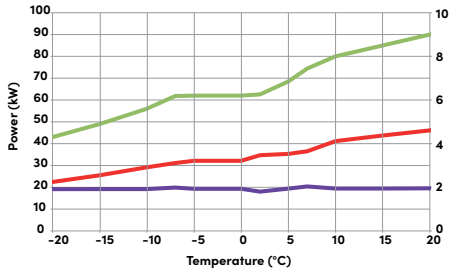
*1 - Seasonal Space Heating Energy Efficiency

Model	H	W	D
Lincoln	2100	2180	1080

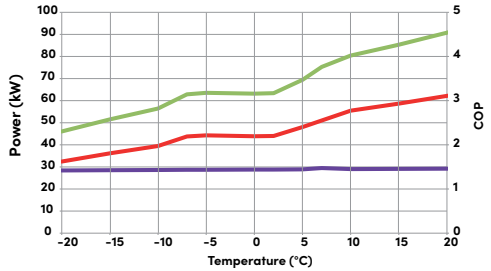
All sizes in mm



Lincoln Performance at 35°C Outlet Temperature



Lincoln Performance at 55°C Outlet Temperature



Power Output (kW) — Power Input (kW) — COP

Product list

Flexi Feet (pair)

PA999/1

Filternator (System Filter 28mm)

PA351

Touch Screen Controller and Cable

CST002

R32 Ecolink Cable

R32W01

Tank Temp Sensor

CST004

Inside Temp Sensor and Cable

CST003

R32 Ecolink and Power Supply Hub

ECOLINK3

Wiring Centre

L2030-1

DHW Expansion Vessel

INSTL-113

Auto Air Vent

L10000

Robo Kit

PA252

Tank Thermostat

PA255

Tundish 15/22mm

PA257

Immersion Heater 3kw

PA259

Pressure Reducing Valve

PA260

2 Port Zone Valve

PA271

28mm 3 Port Belimo Valve

L20013

Belimo Motor Head (Incorporated)

L20012

Flexible Hoses 500mm

PA617

EcoSpark Advanced Maintenance Software

PA157

Avon

Avon Hot Water Heat Pump Cylinder

Avon heat pump cylinders comprise of a stainless steel hot water cylinder with a hot water heat pump mounted on top. The heat pump produces hot water very efficiently by extracting heat from external air supplied via ductwork. The unit can achieve a maximum of 75°C hot water with the immersion and heat pump.

- **Consumes less electricity than standard electric water heaters**
- **Options of 200L or 300L storage**
- **Stainless steel tank**
- **Quiet operation**
- **Variable speed fan mode**
- **High performance compressor**
- **Ideal for apartments and small businesses**

Global Energy Systems

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or call 03333 444 414

Avon Datasheet

Hot Water Heat Pump

Model Code	AVON 08-200-T	AVON 08-300-T
Nominal Volume (Litres)	200	300
Air Operating Range (°C)	-5 to +43	-5 to +43
Acheivable Hot Water Temperature Via Heat Pump (°C)	60	60
Max Electrical Power Input Heat Pump and Immersion (kW)	2.05	2.05
Max Thermal Power Output from Heat Pump only at 45°C (kW)	2.173	2.173
Max Power Output from Heat Pump and Immersion at 45°C (kW)	3.673	3.673
Air Flow (m^3/hr)	300 to 450	300 to 450
Sound Pressure Level - dB(A)	33.6	32.5
Sound Power Level - dB(A)	51.6	51.0
Refrigerant Type	R134A	R134A
Refrigerant Weight (kg)	1.25	1.25
Standing Heat Loss (kWh/24hr)	0.38	0.50
Air Ducting Method	Separate Inlet and Outlet to Exterior	
Water Heating Time from 10°C to 55°C (hours)	5.8	8.7
Coefficient of Performance	3.2	3.4
Energy Efficiency Class	A++	A++
Dimensions (mm)	566 x 570 x 1731	640 x 655 x 1804
Weight with Packaging (kg)	122	138
Weight without Packaging (kg)	104	129
Air Duct Diameter (mm)	150	150
Minimum Air Flow (m^3/hr)	300	300
Water Connection (inch)	Male 3/4	Male 3/4
Condesate Tube ID (mm)	20	20
Electrical Supply	230VAC/50Hz 8.9A	230VAC/50Hz 8.9A
MCB Type	Type B 16A	Type B 16A
Material	Stainless Steel	Stainless Steel
Insulation	50mm PU Foam	50mm PU Foam
Maximum Water Inlet Supply Pressure (bar)	7	7
Integrated Electric Immersion (kW)	1.5	1.5
Max Temperature with Immersion (°C)	75	75
Water Regulations	G3 KIWA Approval 2203704	
T&P Valve	Factory Fitted	
Accessories Included*	Inlet Group, Tundish, Expansion Valve *Ducting not included	

Hot Water DHW and Buffer Cylinders

Multiple cylinders available:

- **170L DHW**
- **200L DHW**
- **250L DHW**
- **300L DHW**
- **Buffer 50L**
- **Buffer 100L**
- **Buffer 100L Square**
- **Buffer 300L**
- **Dual 170/50**
- **Dual 200/50**
- **Dual 250/50**
- **Dual 300/50**

Global Energy Systems

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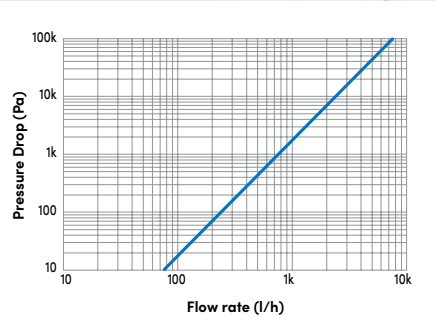
Filternator

Central Heating Filter

The patent pending, high performance, efficient stainless steel Filternator is engineered to deliver durable, long life, effective filtration of your heating system and is designed not to restrict the flow, even at high flow rates. The Filternator is designed to be cleaned easily by removing the lid and filter gauze, or you can just clean the magnetic filter by removing the magnets independently of the lid and flush any metal dirt free from the filter via the drain valve, meaning you do not need to shut your heating system down.

The Filternator has a stainless mesh filter and a magnetic rod for removing any metal particulates. It has been designed to work with air source heat pumps. It's very important to keep a high flow rate through a heat pump circuit to maintain efficiency and longevity of the heat pump by keeping any debris free from the heat pump heat exchanger.



Application

The Filternator is designed with easy installation in mind and can be installed inline or horizontally onto horizontal or vertical pipe work. The Filternator has been uniquely designed to be used with air source heat pumps, ground source heat pumps, gas, oil and LPG heating systems.

Benefits

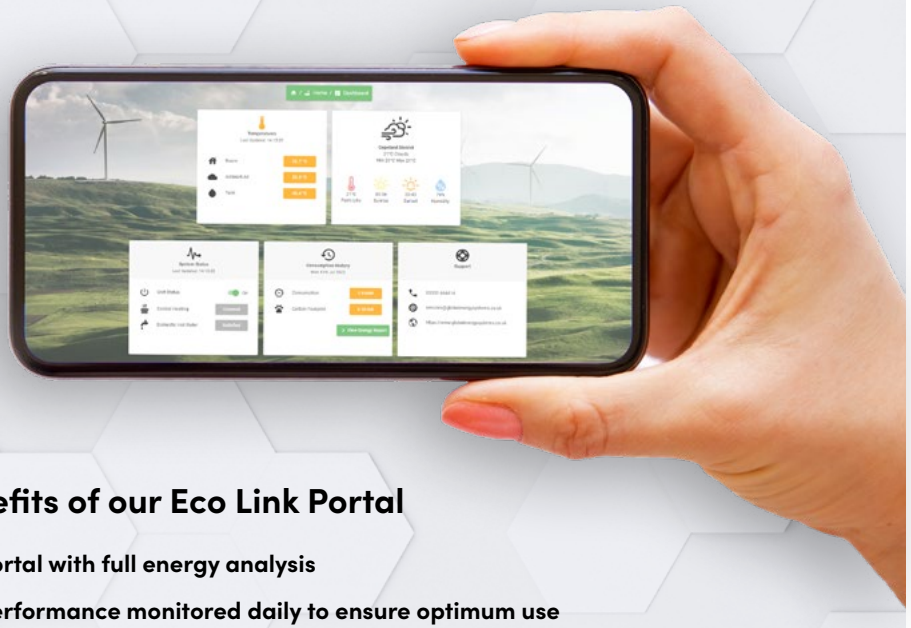
- **Effective central heating filter**
- **Boost efficiency of your heating system**
- **Can be fitted to both new and existing systems**
- **Filters both magnetic and non-magnetic particulates**
- **British designed**

Specifications

Filternator body	Stainless steel 304
Drain valve	Brass nickel plated
Seals	Nitrile rubber
Valves	Brass nickel plated
Magnets	Neodymium
Suitable fluids	Water
Maximum percentage	Glycol 50%
Max working pressure	6 bar
Max working temp	90°C
Max flow rate	50L/min

Eco Link Portal

By selecting a Global Energy Systems Air Source Heat Pump, you have automatically become part of our Eco link Monitoring Service. Over the duration of your Eco Link Subscription, we will be there working in the background and on hand with any issues or questions you may have.



Benefits of our Eco Link Portal

- Portal with full energy analysis
- Performance monitored daily to ensure optimum use
- Get live stats of your energy bill online
- Remote diagnostics and maintenance
- Free 3 year subscription
- Remote control from PC or phone

Remote monitoring available on selected products

Why Choose Global Energy Systems

- Family run business building heat pumps for the last 20 years in Blackpool
- Parts stocked in the factory
- BUS Grant, we apply for it on your behalf
- Each unit commissioned by Global Energy Systems
- Free installer training days
- Industry leading 24/7 remote monitoring with our unique Eco-link
- Accredited installer program - G.A.I.N
- 3 year no quibble parts and labour guarantee
- Lifetime manufacturer support

Here to help

With our support, Global Energy Systems can enable you to offer your customers a fully MCS accredited installation without the hassle of maintaining the accreditation and compiling all of the paperwork yourself.

We carry out all of the MCS design work, we specify and supply the heat pump equipment that you need, and one of our In-house engineers will inspect and commission the installation once you've completed it.

What we provide

Global Energy Systems includes the following services to ensure MCS compliance:

- Heat loss calculations in accordance with MIS-3005 (the MCS standard for heat pumps)
- Performance estimation in the mandatory format
- Correct Radiator/emitter sizing for you to work to
- Standard installation Schematics
- Unlimited telephone technical support for the product life, for you and for the end user
- Free heat pump installation training
- Preliminary on-site inspection pre-installation by a Global Energy engineer
- Post-installation, Inspection and commissioning by a Global Energy engineer
- MCS Compliance Certificate
- MCS Certificate
- Workmanship Warranties
- Full End-User Handover Pack
- Full service and maintenance support for your customers post installation utilising our Eco Link remote monitoring support package (Ask the Global Energy representative for more information on this and how it can help your business)

Your customers will receive a comprehensive handover pack, including MCS certificate, and Global Energy Systems will also apply for the Boiler Upgrade Scheme grant on their behalf.

Why MCS?

The Microgeneration Certification Scheme ("MCS") is the UK heat pump industry quality standard, and provides the pathway to access Government funding such as the renewable heat incentive, as well as a pathway to Building Control approval. For sole traders, or businesses for whom heat pump installations represents a small proportion of their usual business, obtaining MCS certification represents a significant investment in time and responsibility.

Taking advantage of the Global Energy Systems product will save you time and money but above all the highest level of support on all aspects of your project.

For more information please visit:

www.globalenergysystems.co.uk or call 03333 444 414

Global Energy Systems

MCS CERTIFIED

APPROVED INSTALLER

Certificate No. NIC 5608
Heat Pump Technology