Earth Save Products

PRODUCT CATALOG

DELIVERING ECO VALUE

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APPROVED INSTALLER

MCS NICEIC

NIC 1265

APPROVED PRODUCT

MCS nqa.

ISO9001 RoHS

- EMC certified
- Production accredited

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ABOUT

Earth Save Products ("ESP") is a private limited company specializing in the provision of products, equipment and integrated systems that radically reduce the energy required to heat, ventilate and cool buildings or provide hot water. We provide equipment, products and systems for both the domestic and commercial sectors.

ESP is part of a company group that has been established for 30 years and it is the embodiment of the company group's ongoing commitment to improve the environment in which we all live, for the present and the future generations. All of our products, equipment and systems have been designed carefully over a number of years to deliver much improved efficiency, reduced running costs and to be discrete and attractive. We have used tried and tested components that deliver maximum reliability at the same time as being at leading edge of heating and hot water technology.

Our systems integrate all of the elements that are key to reducing the cost of heating, ventilation, domestic hot water (DHW) production and heating/cooling. Our systems comprise under floor heating, air source heat pump(s), our unique Ecocent (delivering DHW), whole house mechanical ventilation and heat recovery and solar thermal land photo voltaic panels delivering power. Our systems can be reduced in scope if customers do not want all of the elements available so we can produce systems that suit all pockets and design preferences. By taking a "system led" approach, ESP is delivering the most efficient "renewables" based capability available on the market but this does not mean that prices are high: quite the opposite. ESP, and its sister companies, manufacture the system elements and have adopted a low margin policy that means customers get the lowest prices possible. Consequently, ESP equipment, products and systems are of the highest quality, but offered at sensible prices.

With these criteria in mind, we are in the process of building a new factory that will be operating using the latest technology aimed at cutting the cost of manufacturing our products and equipment. The capacity of the new facilities will produce savings through economies of scale and the cost savings will be passed on to our customers.

Blue print of new factory

www.esavep.com

Our aim is to provide equipment and products that are at a price that makes them competitive with alternative, more traditional equipment performing the same task. This underpins our commitment to improving the environment in which we all live by reducing household and commercial premises carbon footprints more carbon dioxide originates from our houses/commercial buildings overall than is emitted from vehicles on the roads in the UK. The affordability and oustanding performance or our systems, along with the design services and support/assistance that we provide to our customers, makes ESP the partner of choice for self builders, householders, developers, Local Authorities, housing associations and businesses. Our service quality is second to none and is available before, during and after installation. Our focus is firmly upon making the design and delivery of our products, equipment and systems as straight forward as possible for all customers our system delivery approach means that customers need only deal with one company, ESP: no other company offers full systems from under the same roof.

We have our own approved installers that are available to you, or we can work with your chosen installer should you prefer that approach wherever possible, we try to work with local plumbing and heating engineers so that funds go in to the local economy. We are a Microgeneration Certification Scheme (MCS) Accredited Installer (our air source heat pump units are MCS Accredited) and we took the step of becoming an Accredited Installer to ensure that installation costs are managed and controlled to a sensible and reasonable level. Our installer and product MCS Accreditations mean that funding may be available through the Renewable Heat Incentive Schemes, feed in tariffs, etc.

Through our flexible approach to selling our equipment, products, systems and services we will deliver to you whatever you want and give you peace of mind that you will have reliable, quiet and robust technology in your home/building that will substantially reduce your heating/hot water bills at the same time as you making a significant contribution to reducing carbon footprints of our customers, thereby improving the environment in which we live.

With changes in the global climate becoming more evident as each day passes and its causes clearer, now is the time for us all to do whatever we can, within our means, to stop further change and reverse it before it is too late. Making sustainable and leading heating, hot water and ventilation products, equipment and systems available at sensible and viable prices is just one way in which we can assist ESP is constantly seeking ways that it can do more. Listening to what our customers want and working hard with our customers to find sustainable ways to deliver what is required is what makes ESP unique and its products, equipment and services market leading in capability, performance and value.

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This unit is suitable for effective and efficient operation between -15 deg C and 38 deg C. These units have small buffer tanks incorporated (that can be supplemented with external buffer tanks as well, where system design requires this). The units use R410 refrigerant for the best balance of cold and high ambient temperature operation. All the units in the ESP Classic range are MCS Accredited.

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MCS nqa.

Features:

- **ESP Classic range of units are available in a powder coat paint or stainless steel finish.**
- **The design is compact and robust.**
- **ESP's high efficiency compressors are used.**
- **Soft starts are installed to ensure that power draw is managed to the optimum at start up.**
- **System water flow protection included.**
- **Wide ranging operating condition protections are fitted e.g. High pressure, low pressure, compressor overheating, defrosting, etc.**
- **Small integral stainless steel buffer tank.**
- **Micro-processor used to maintain optimum operating duty (remote control available as option).**
- **Danfoss or SWEP stainless steel heat exchanger used.**
- **The evaporator is hydrophically coated to prevent debris sticking to it.**
- **Automatic defrost function with trace heating support.**
- **Thermostatic or electric expansion valve is used.**
- **Wilo water pump fitted as standard.**
- **Every unit is tested before it leaves our factory.**

Compact Design

R410a

MODEL	ESP (A) 040	020B	030B	040B
Heating Capacity	kW	5.5	8.0	11
	BTU/h	18,777	27,312	37,554
COP	W/W	4.10	4.12	4.10
Cooling Capacity	kW	5.1	7.1	9.6
	BTU/h	17,411	24,239	32,774
ERR	W/W	2.85	2.83	2.82
Noise (tested at 1 metre)	dB	52	53	53
Power Supply	V/Ph/Hz	230/1/50	230/1/50	230/1/50
Compressor	-	Rotary	Rotary	Scroll
Fan Quantity	-	1	1	2
Tank Size	Litres	16	23	32
Net Dimensions (L/W/H)	mm	1130/470/650	1160/470/860	1390/490/1180
Shipping Dimensions (L/W/H)	mm	1200/490/680	1200/480/880	1250/500/1300

Heating: Ambient temp.(DB/WB): 7℃/6℃, Water temp.(In/Out): 30℃/35℃;
Cooling: Ambient temp.(DB/WB): 35℃/24℃, Water temp.(In/Out): 12℃/7℃.
The above data is for reference only; specific data is subject to the product nameplate.

Our Classic higher output capacity units are specifically designed to optimise low/high temperature ambient operating conditions, efficiency and effectiveness. These units use ESP's multiple compressor technology to allow for single phase operating and effective start up power management. The multiple compressors start up sequentially and never together. All units in the ESP Classic range are MCS Accredited.

Features:

- **ESP Classic range of units are available in a powder coat paint or stainless steel finish.**
- **The design is compact and robust.**
- **ESP's high efficiency compressors are used with R410a refrigerant.**
- **Galvanomagnetic reverse valve is installed as standard.**

- **Micro-processor used to maintain optimum operating duty (remote control available as option).**
- **The heat exchanger is a high efficiency tube in shell design.**
- **The evaporator is hydrophically coated to prevent debris sticking to it.**
- **Automatic defrost function with trace heating support.**

- **Thermostatic or electric expansion valve is used.**
- **Every unit is tested before it leaves our factory.**
- **System water flow protection included.**
- **Soft starts are installed to ensure that power draw is managed to the optimum at atart up.**

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Specification

MODEL	ESP (A) 040	050B	060B	060SB	070B
Heating Capacity	kW	13.5	15.0	17	25
	BTU/h	46,089	51,210	58,038	85,350
COP	W/W	4.20	4.15	4.15	4.15
Cooling Capacity	kW	10.0	11.5	13.5	19.5
	BTU/h	34,140	39,261	46,089	66,573
ERR	W/W	2.85	2.8	2.86	2.8
Noise (≈)	dB	53	53	53	56
Power Supply	V/Ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50
Compressor	-	Rotary x 2	Rotary x 2	Rotary x 2	Rotary x 3
Fan Quantity	-	2	2	2	2
Net Dimensions (L/W/H)	mm	1100/440/1350	1100/440/1350	1100/440/1350	1350/515/1450
Shipping Dimensions (L/W/H)	mm	1180/510/1480	1180/510/1480	1180/510/1480	1430/580/1580

Heating: Ambient temp.(DB/WB): 7℃/6℃, Water temp.(In/Out): 30℃/35℃;
Cooling: Ambient temp.(DB/WB): 35℃/24℃, Water temp.(In/Out): 12℃/7℃.
The above data is for reference only; specific data is subject to the product nameplate.

The ESP Ecocent is unique and exceptional in every way. It will generate domestic hot water (DHW) from heat within the home that would otherwise be totally wasted e.g. heat generated in the bathroom when showering or bathing. The Ecocent also dehumidifies air that it processes to recover waste heat. The by-product of the Ecocent is cold air that can be recycled in to the house to provide cooling for a larder, bedrooms in summer, conservatories in summer, and so on. The Ecocent can be installed as a mains pressure unit or gravity fed. Units in our ecocent range are MCS Accredited.

Features:

- Attractive and compact design - available in 100ltr, 200ltr and 300ltr capacity.
- Stainless steel tank with magnesium anode protection.
- Can be installed as gravity fed or mains pressure.
- ESP's high efficiency compressor designs with R134a refrigerant for exceptional performance.
- Digital touch screen control panel.
- Wide target temperature range - Default is 55 deg C.
- Immersion heater back up - 1.5kW - used for weekly pasteurisation cycle.
- Legionella protection through weekly pasteurisation cycle.
- Can be full integrated with the ESP-Rega MVHR whole house systems.
- Air feed via 150mm ducting that can be up to 8m on both the inlet and outlet side.
- Secondary coil for additional heat sources to be incorporated. Optional twin water coil top and bottom of Ecocent available.

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High Efficiency 3.8

Stylish Design

R134a

Sanitary Water 60°C

Specification

MODEL	ECOCENT	100Ltr	200Ltr	300Ltr
Heating Capacity	kW	1.0	2.5	2.5
	BTU/h	3414	8535	8535
Power Supply	V/Ph/Hz	230/1/50	230/1/50	230/1/50
COP	W/W	3.7	3.8	3.8
Power Input	W	270	640	640
Power Output	kW	1.0	2.5	2.5
Water Tank Volume	L	100	200	300
Net Dimensions (DxH)	mm	520x1210	560x1700	640x1800
Shipping Dimensions (L/W/H)	mm	710/640/1530	630/630/1840	720/720/1960

Heating: Ambient temp.: 15/13℃, Water temp from 15℃ to 45℃.
Energy efficiency test is based on Standard DINEN255-3-1997.
The above data is for reference only; specific data is subject to the product nameplate.

The ESP High temperature (HT) ASHP unit has been designed to deliver excellent efficiency in colder areas. The HT unit will deliver heating in on colder days with a water flow temperature up to 65 degrees C. It will also provide cooling for the hottest times of the year when installed with a suitable cooling distribution system. Domestic hot water is available all year round.

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High Efficiency

EVI System

Low Air Temp. -25℃

Hot Water 65℃

Features:

- ESP's EVI compressor is designed specifically for high water flow temperatures.
- The HT unit is available in a powder coat paint or stainless steel finish.
- The heat exchanger is a high efficiency tube in shell design.
- R407 refrigerant is used for outstanding high temperature operation.
- System water flow protection included.
- Control panel is fully water resistant.
- Controls are simple and clear.
- The evaporator is hydrophically coated to prevent debris sticking to it.
- The evaporator is equipped with low power trace heating to assist with defrosting.
- Thermostatic or electric expansion valve is used.
- Immersion heater back up is available for the coldest operating conditions.
- Full defrosting capability.
- Grundfos water pump is fitted.

Optional Extras:

- Touch screen LCD control
- Carel controller (can be remote controlled).
- Weather compensation.

Specification

MODEL	ESP (HT)	9kW	12kW	15kW
*Heating Capacity	kW	9.2	12.0	14.5
	BTU/h	31,409	40,968	49,503
*COP	W/W	3.58	3.60	3.60
**Heating Capacity	kW	9.5	12.9	15.0
	BTU/h	32,300	43,800	51,000
**COP	W/W	2.4	2.6	2.6
Cooling Capacity	kW	6.2	7.9	9.5
ERR	BTU/h	21,167	26,971	32,433
Power Supply	V/Ph/Hz	230/1/50	230/1/50	230/1/50
No. Compressors	-	1	1	1
Compressor Type	-	High Temp EVI Scroll	High Temp EVI Scroll	High Temp EVI Scroll
No. Fans	-	1	2	2
Net Dimensions (L/W/H)	mm	1160/430/850	1390/490/1180	1390/490/1180
Shipping Dimensions (L/W/H)	mm	1210/490/1000	1400/510/1330	1400/510/1330

***Outlet water 45°c, inlet water (return) 40°c**
****Outlet water 60°c, inlet water (return) 55°c**

The ESP Inverter Heat Pump is one of the most "intelligent" air source heat pump units on the market. The unit has full weather compensation capability driven by a number of parameters to ensure minimum power usage whilst maintaining your home or office at the temperature of your choice. Our inverter units have an output capacity from 4kW to 19kW and run on 30Hz to 80Hz.

DC inverter

Intelligent Operation

Soft Starting

Features:

- The frame and cabinet are made from galvanised steel that is powder coat painted for durability.
- The units are compact, attractive and unobtrusive.
- The heat exchanger is a tube in shell design for maximum efficiency.
- Wilso water pumps are fitted.
- Use R410a refrigerant for wide operating temperature capability.
- System water flow protection included.
- Control panel is fully water resistant.
- Micro-processor used to maintain optimum operating duty (Carel controllor available as option and includes remote operating instructions capability).
- The evaporator is hydrophically coated to help prevent debris sticking to it.
- Automatic defrost function with trace heating support.
- Thermostatic or electric expansion valve is used.
- Every unit is tested before it leaves our factory.

Specification

MODEL	ESP (INV)	4-12 IHP	6-19 IHP
Heating Capacity	kW	4.2~12.3	6.3~19.5
	BTU/h	14,339~41992	21,508~66,573
COP	W/W	3.97~4.39	4.03~4.49
Cooling Capacity	kW	2.85~7.5	4.66~13.5
	BTU/h	9,730~25,605	15,909~46089
ERR	W/W	2.15~2.70	2.13~2.75
Power Supply	V/Ph/Hz	230/1/50	230/1/50
Compressor	-	Rotary	Rotary
Fan Quantity	-	1	2
Net Dimensions (L/W/H)	mm	1190/445/750	1385/450/1180
Shipping Dimensions (L/W/H)	mm	1200/490/800	1390/500/1300

Heating: Ambient temp.(DB/WB): 7℃/6℃, Water temp.(In/Out): 30℃/35℃;
Cooling: Ambient temp.(DB/WB): 35℃/24℃, Water temp.(In/Out): 12℃/7℃.
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Our high level fan coil unit is for use with water based heating and ventilation systems. This can be new build (heating and cooling) or retrofit systems (heating and cooling). Our high wall fan coils are designed with higher than normal air flow volumes which makes them suitable for water flow temperatures of up to 70 deg C.

Features:

- **Attractive LED display.**
- **Flexible stainless steel water connection for ease of installation.**
- **Mirroprocessor controlled.**
- **Heat exchanger has a hydrophilic coating to assist keeping it clean.**
- **Every unit is tested before it leaves our factory.**
- **Comes with Remote control.**

Specification

MODEL	ESP (FCHL)	4GV-HL	6GV-HL	8GV-HL
Cooling Capacity	kW	1.8	2.7	3.7
	BTU/h	6,145	9,218	12,632
Heating Capacity	kW	2.5~3.4	3.4~4.5	5.0~6.6
	BTU/h	8,535~11,608	11,608~15,363	17,070~22,532
Air Volume	m/h	380	500	730
Net Dimensions (L/W/H)	mm	790/270/190	1025/315/205	1025/315/205
Shipping Dimensions (L/W/H)	mm	865/340/285	1100/380/270	1100/380/270

Cooling: Inlet water temp.: 7℃(Difference in temp. have 5 ℃), Ambient temp.(DB/WB): 27 ℃/ 19℃

Heating: Inlet water temp.: 50 ℃(Difference in temp. have 5 ℃), 70 ℃(Difference in temp. have 10 ℃), Ambient temp.(DB/WB): 20 ℃

The above data is for reference only; specific data is subject to the product nameplate.

Our vertical floor standing fan coils are designed for rooms where heating and cooling may be required. These units can be used with our heat pumps and are relatively compact. The units are designed with attractive neutral colour finishes and have te capability to heat or cool a room very quickly. The speed of reaction means that they are ideal for use in bedrooms with one of our heat pump systems where UFH upstairs is not possible or practical.

Ultra Thin 130mm *Compact and attractive with only 130mm depth.*

Super Quiet 25 dB(A) *Cross flow fan technology with air directing settings means that the units are exceptionally quiet.*

Stylish Design *The units are white and this means that they will be suitable with most decoration schemes.*

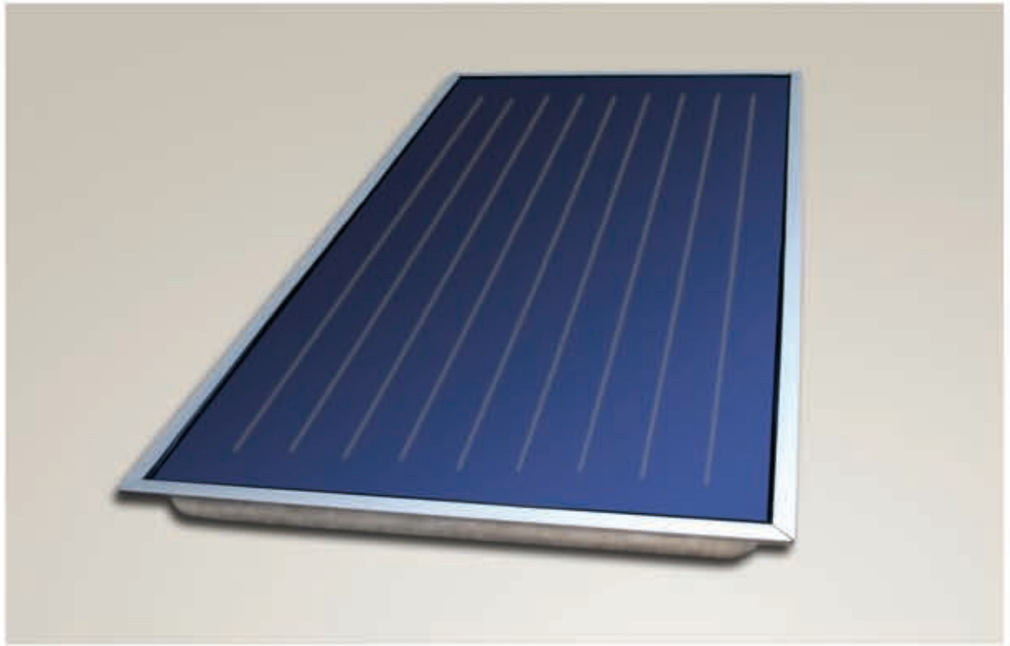
Thermostatic controls.

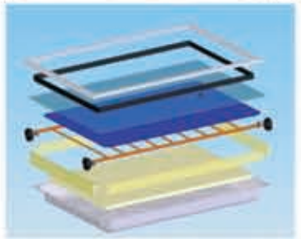
Specification

MODEL	ESP (VFC)	ESPVFC 2.25kW	ESPVFC 3.95kW	ESPVFC 5.75kW	ESPVFC 7.2kW	ESPVFC 9.4kW
Heating Capacity	kW	2.55	3.95	5.75	7.20	9.40
	BTU/h	8,706	13,485	19,631	24,581	32,092
Cooling Capacity	kW	1	1.9	2.5	3.5	4.83
	BTU/h	3,414	6,487	8,535	11,949	16,490
Air Volume	m/h	160	320	460	580	650
Net Dimensions (L/W/H)	mm	700/130/670	900/130/670	1100/130/670	1300/130/670	1500/130/670
Shipping Dimensions (L/W/H)	mm	740/185/730	940/185/730	1140/185/730	1340/185/730	1540/185/730

Cooling: Inlet water temp.: 7℃(Difference in temp. have 5 ℃), Ambient temp.(DB/WB): 27 ℃/ 19℃.
Heating: Inlet water temp.: 50 ℃(Difference in temp. have 5 ℃), 70 ℃(Difference in temp. have 10 ℃), Ambient temp.(DB/WB): 20 ℃.
The above data is for reference only; specific data is subject to the product nameplate.

Our solar thermal panels are built using highly efficient Blutec ETA Plus technology out of Germany. The panels carry the Solar Keymark as an independant confirmation of quality and performance. Panels can be linked in to large arrays or installed as single units.





Features:

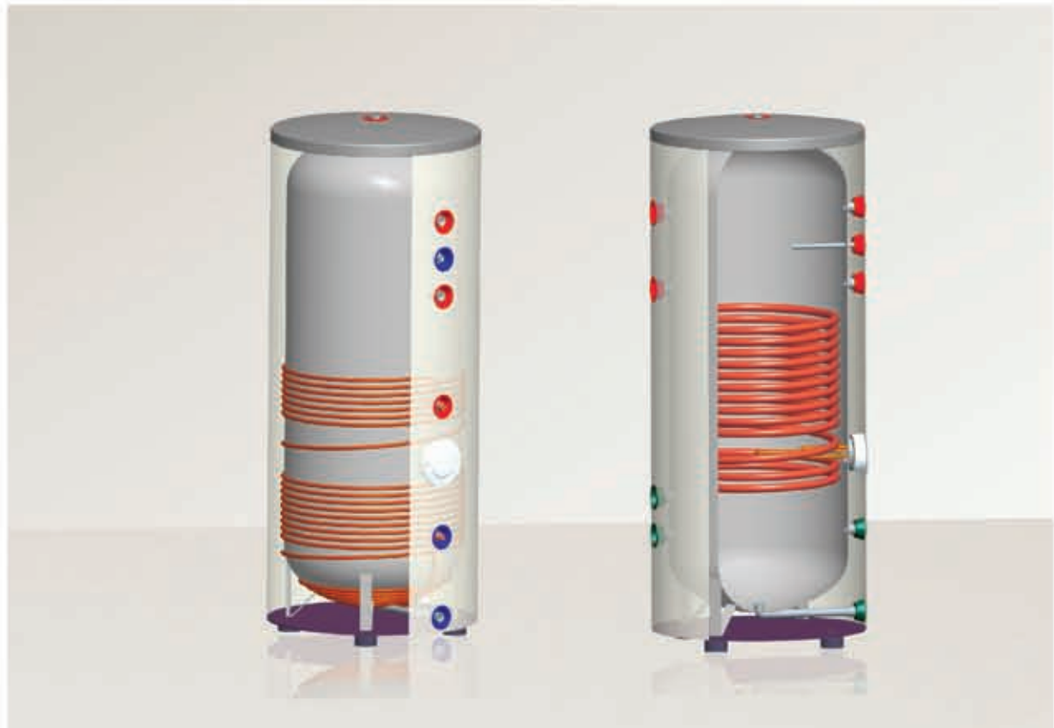
- **Manufactured with Bluetec ETA Plus selective absorber and ultrasonic whole plate welding.**
- **Absorbtion of 95% with low thermal emittance of only 5%.**
- **Can be "on roof", "in roof", "facard mounted" or stand alone.**
- **Waterproof and weather resistance aluminium collector housing.**
- **Aluminium frame is coated for greater weather resistance and long life.**
- **Absorber is copper sheet, vacuum coated to 0.2mm.**
- **3.2mm low iron solar glass for maximum light absorbtion.**
- **50mm thermal insulation to the rear and sides - using high pressure polyeurethane foamed resin (non CFC).**

NOTE: ESP also supplies system peripherals such as solar pump station, Duo core pre insulated pipe, etc.

SPECIFICATION

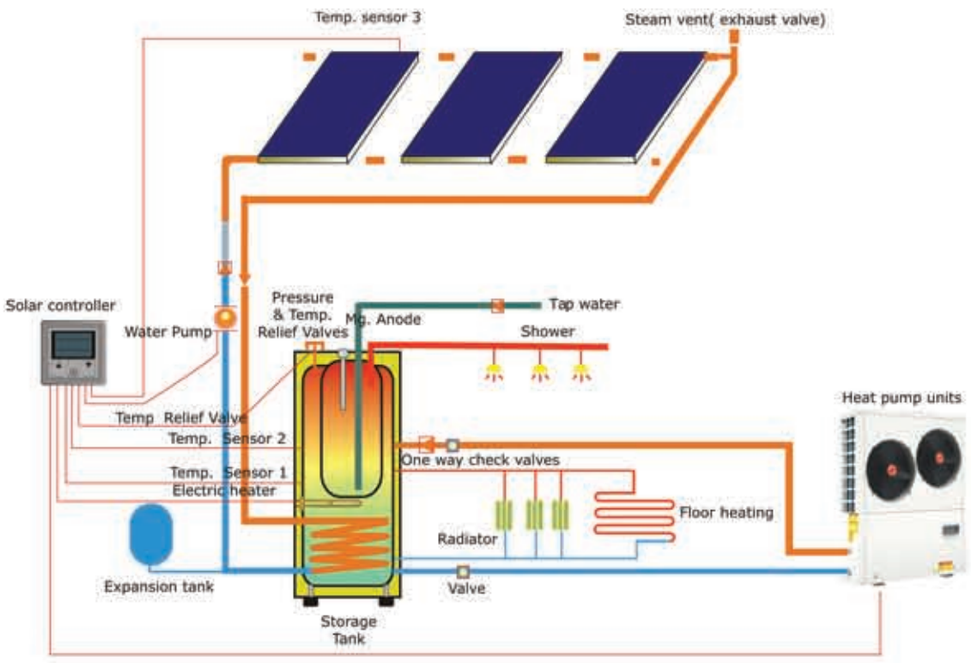
		PSHC-1C	PSHC-2C	PSHC-2C B
Dimensions(L/W/D)	mm	1115/1015/105	2015/1015/105	2015/1015/105
Weight	kg	20.5	38	38
Shipping Dimension (L/W/D)	mm	1168/1068/135	2070/1075/140	2070/1075/140
Gross Weight	kg	24	44	44
Gross Area	m^2	1.13	2.05	2.05
Absorber Area	m^2	1.00	2.00	2.00
Absorption	%	95±2	95±2	95±2
Emission	%	5±2	5±2	5±2
Thermal Capacity	kJ(m^2K)	3.06	6.12	6.12
Max. Operating Pressure	bar	6	6	6
Content	litres	0.7	1.2	1.2
Flow/return Distance	mm	900	1800	850
Connections	G	3/4 "	3/4 "	3/4 "
Angle of Inclination	°	0-90	0-90	0-90
Absorber			eta plus-Cu	
Absorber Coating			Highly selective vacuum coating	
Stagnation Temperature			180℃ plus ambient temperature	
Heat Transfer Medium			Polypropylene glycol/water mixture	

ESP manufactures a large range of hot water cylinders, in many sizes. We offer cylinders with coils (one or two), no coils (buffer tanks) and "tank in tank" configurations. The units meet WRAS requirements and are robust and will perform better than most other cylinders where internal coils are available. Standing heat loss from our cylinders is exceptionally low and can form the heart of any renewables based system.



Features:

- **Our cylinders are versatile and can be used for many storage duties/buffer tank functions.**
- **The cylinders have high quality stainless steel lining.**
- **If ordered in quantity (50 +) we are able to alter cylinder configuration to produce exactly what you want.**
- **The cylinders are well protected from corrosion.**
- **Our Cylinders can be used in traditional heating system or one that is renewables based (e.g. Air source Heat Pump) heat pump.**
- **Our cylinders meet the requirements of the Pressure Equipment Directive.**



NOTE: Tank layouts vary by specification

Specification

MODEL	ESP (A) 040	050B	060B	060SB	070B
Net Dimensions (L/W/H)	mm	470x1035	560x1315	600x1540	700x1820
Shipping Dimensions (L/W/H)	mm	540/540/1080	630/630/1445	670/670/1660	780/780/1930
Net Weight	kg	30	60	75	95
Gross Weight	kg	34	65	80	103
Capacity	L	100	200	300	500
Size of Exchanger	m^2	TBA	TBA	TBA	TBA
Operating Pressure	bar	6	6	6	6
Max. Testing Pressure	bar	12	12	12	12
Max. Running Temperature	°C	90	90	90	90
Connections	mm	TBA	TBA	TBA	TBA
Electric Heater	kW	1.5	1.5	1.5	1.5
Thermostat range	°C	30~70	30~70	30~70	30~70
Mg Anode	mm	22x300	22x300	22x300	22x300
Heat Losses/Day	kW	0.25	0.5	0.75	1.2

Nominal capacity: 100L-600L optional.