

A world of new product innovation

2011 new product launches

Welcome to our world

Dimplex is proud to announce a set of new product ranges that significantly enhance our portfolio of renewable energy technologies.

They are welcome additions to our already extensive renewable offering which comes with all the expertise, technical and sales support you expect from Dimplex.



For more information on our wide range of renewables technologies, please visit www.dimplexrenewables.co.uk
email: marketing@dimplex.co.uk
or call **0845 601 5111**



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LA MAS

Air Source Heat Pumps

Key features

Single phase air source heat pumps for domestic heating and hot water systems

- Model range: 11 and 16kW, single phase
- Variable heating water flow temperatures from 35°C to 55°C, weather compensated
- Suitable for use with under floor heating, Dimplex SmartRad fan convectors, conventional radiators and to produce domestic hot water
- Can be used as the sole heating source or in “bivalent” mode in combination with an existing heating system
- Operational temperatures from -20°C to +35°C
- Supplied complete with wall mounted WPM heat pump manager
- Very low noise emissions through the use of innovative “owl’s wing” fan blades
- Corrosion resistant stainless steel inner frame and powder coated outer housings
- Energy efficient, auto adaptive defrost cycle
- Electronic soft start to reduce starting current loads
- UK manufactured

New range of air source heat pumps designed specifically for the UK climate.

The new Dimplex LA MAS air source heat pumps provide an ideal solution for medium to large properties wishing to adopt a cost effective, highly efficient form of renewable heating.

Capable of providing both space and water heating at outdoor temperatures as low as -20°C, the LA MAS range can be used either in place of, or alongside, conventional fossil fuelled heating systems to reduce energy bills and CO₂ emissions.

Employing innovative “owl’s wing” fan blades to minimise noise emissions, the LA MAS is based on the highly successful LA MS range, but with a reduced footprint, making it ideal for domestic installations.



MCS approval pending.

Specifications

MODEL	LA 11 MAS	LA 16 MAS
OPERATING LIMITS		
Heating water flow (°C)	Up to 55 +/-2	
Air temperature (°C)	-20 to +35	
PERFORMANCE		
Heat output (kW)/CoP at A-7/W35	5.7/2.8	9.8/2.6
Heat output (kW)/CoP at A2/W35	7.9/3.4	11.9/3.1
Heat output (kW)/CoP at A7/W35	9.5/3.9	14.5/3.7
Heat output (kW)/CoP at A7/W55	8.2/2.9	13.5/2.4
Heat output (kW)/CoP at A10/W35	10.4/4.2	15.5/3.9
Heating water flow with internal pressure differential at A7/W35	1.7m ³ /hr @ 7600Pa	2.6m ³ /hr @ 14800Pa
Sound pressure level at 10m [dB(A)]	33	34
Air flow (m ³ /hr)	3000	4500
MECHANICAL/ELECTRICAL		
Dimensions HxWxD (mm)	1340 x 852 x 1050	1550 x 852 x 1074
Weight (kg)	189	229
Refrigerant: type/total charge weight (kg)	R404A/3.8	R404A/3.8
Nominal voltage/fuse rating (V/A)	230/20	230/32
Starting current with soft start (A)	29	45
Defrosting	Automatic, reverse cycle	
Enclosure protection	IP24	

LA MAS Heat Pump Packages

Designed to ease specification, selection and ordering, the LA MAS is also available in a range of packs containing correctly sized heat pumps and complementary accessories for most common applications. Ideal for installation in new build properties or as a retro fit to an existing installation, full details of the LA MAS packs can be found on page 10.





LA PMS

Medium Temperature Air Source Heat Pumps

Key features

Single phase, medium temperature air source heat pumps for domestic heating and hot water systems

- Model range: 8 and 14kW, single phase
- Variable heating water flow temperatures from 35°C to 65°C, weather compensated
- Suitable for use with under floor heating, Dimplex SmartRad fan convectors, conventional radiators and to produce domestic hot water
- Can be used as the sole heating source or in “bivalent” mode in combination with an existing heating system
- Operational temperatures from -25°C to +35°C
- Supplied complete with wall mounted WPM heat pump manager
- Environmentally friendly R290 refrigerant (GWP of 3)
- Corrosion resistant stainless steel inner frame and powder coated outer housings
- Energy efficient, auto adaptive defrost cycle
- Electronic soft start to reduce starting current loads

Medium temperature air source heat pumps designed to provide a complete heating and hot water solution.

Available in outputs of 8 and 14kW, the new LA PMS range is available for outdoor installation and provides variable water flow temperatures of up to 65°C.

This makes the LA PMS an ideal choice for providing a complete heating and hot water solution, either where higher heating temperatures are required or for the efficient production of stored hot water.

The LA PMS range uses the R290 refrigerant, an efficient and naturally occurring substance with close to zero global warming potential.

Like the LA MAS range, these models can be installed instead of, or alongside, existing heating systems/boilers.



MCS approval pending.

Specifications

MODEL	LA 8 PMS	LA 14 PMS
OPERATING LIMITS		
Heating water flow (°C)	Up to 65 +/-2	
Air temperature (°C)	-25 to +35	
PERFORMANCE		1 x Compressor
Heat output (kW)/CoP at A-7/W35	4.5/2.5	2 x Compressors
Heat output (kW)/CoP at A2/W35	6.0/3.1	8.0/2.5
Heat output (kW)/CoP at A7/W35	8.0/3.8	5.8/2.9
Heat output (kW)/CoP at A7/W55	7.3/2.9	10.2/3.1
Heat output (kW)/CoP at A10/W35	8.9/4.2	7.4/3.7
Heat output (kW)/CoP at A7/W35		13.3/3.9
Heating water flow with internal pressure differential at A7/W35	1.5m ³ /hr @ 7800Pa	2.4m ³ /hr @ 10100Pa
Sound pressure level at 10m [dB(A)]	32	35
Air flow (m ³ /hr)	3500	4500
MECHANICAL/ELECTRICAL		
Dimensions HxWxD (mm)	1361 x 1362 x 852	1571 x 1552 x 852
Weight (kg)	232	256
Refrigerant: type/total charge weight (kg)	R290/1.0	R290/1.8
Nominal voltage/fuse rating (V/A)	230/20	230/32
Starting current with soft start (A)	30	28
Defrosting	Hot gas	
Enclosure protection	IP24	

LA PMS Heat Pump Packages

Designed to ease specification, selection and ordering, the LA PMS is also available in a range of packs containing correctly sized heat pumps and complementary accessories for most common applications. Ideal for installation in new build properties or as a retro fit to an existing installation, full details of the LA PMS packs can be found on page 10.





LA MI

Inverter driven Air Source Heat Pumps

Key features

Inverter driven air source heat pumps for domestic heating and hot water systems for outdoor installation

- Model range: 6, 9, 12 and 16kW, single phase
- Inverter driven compressor, providing variable output levels and low starting current
- Variable heating water flow temperatures from 25°C to 55°C, weather compensated
- Suitable for use with under floor heating, Dimplex SmartRad fan convectors, conventional radiators and to produce domestic hot water
- Operational temperatures from -20°C to +35°C
- Supplied complete with wall mounted inverter heat pump manager
- Fully integrated system components:
 - Circulation pump
 - Expansion vessel
- Very low noise levels
- Corrosion resistant stainless steel inner frame and powder coated outer housings

High efficiency air source heat pumps designed to match output to varying heating demand.

The new Dimplex LA MI air source heat pumps employ an inverter driven compressor to maximise heat pump efficiency. The inverter modulates the heat pump output to match the heating demand, so at warmer air temperatures when heating demand falls the heat pump output is reduced, which helps to improve efficiency (CoP).

Available in 6, 9, 12 and 16kW variants the LA MI is supplied as a fully integrated unit, including circulation pump and expansion vessel making installations easier to carry out and less time consuming. The LA MI models also come with the added advantages of low starting current (phased compressor start up) and low noise levels.



MCS approval pending.

Specifications

MODEL	LA 6 MI	LA 9 MI	LA 12 MI	LA 16 MI
OPERATING LIMITS				
Heating water flow (°C)	25 to 55			
Air temperature (°C)	-20 to 35			
PERFORMANCE				
Heat output (kW)/CoP at A-15/W35	5.9/2.2	7.6/2.0	8.9/2.43	10.3/2.33
Heat output (kW)/CoP at A-7/W55	5.8/1.8	5.0/1.5	8.2/1.9	9.0/1.8
Heat output (kW)/CoP at A-7/W35	5.9/2.8	9.0/2.4	10.0/2.7	11.4/2.55
Heat output (kW)/CoP at A2/W35	6.0/3.7	9.0/3.4	11.4/3.4	13.0/3.25
Heat output (kW)/CoP at A7/W35	6.0/4.4	9.0/4.1	12.0/4.67	16.0/4.23
Recommended heating water flow with internal pressure differential	TBC	TBC	2.1m ³ /hr @ 17000Pa	2.8m ³ /hr @ 27000Pa
Sound pressure level at 1m [dB(A)]	TBC	TBC	50	53
Air flow (m ³ /min)	TBC	TBC	80	90
MECHANICAL/ELECTRICAL				
Dimensions HxWxD (mm)	865 x 1283 x 320	865 x 1283 x 320	1410 x 1284 x 400	1410 x 1284 x 400
Weight (kg)	TBC	TBC	165	165
Refrigerant: type/total charge weight (kg)	R410A/TBC	R410A/TBC	R410A/2.3	R410A/2.95
Expansion vessel size (l)	10			
Nominal voltage/fuse rating (V/A)	TBC	TBC	16A Type C	20A Type C
Starting current with soft start (A)	TBC	TBC	11.7	17.1
Defrosting	Reverse cycle defrost			
Enclosure protection	IP24			

12 & 16KW models available August 2011. 6 & 9KW available November 2011.



Air Source Heat Pump Packages

To optimise the benefits of our LA PMS and LA MAS air source heat pumps, Dimplex has introduced a set of complete air source packages designed to suit a number of domestic heating and hot water applications.

The packages incorporate either an LA PMS or LA MAS heat pump to provide the domestic hot water and heating via under floor emitters, SmartRad fan convectors or traditional radiators. A buffer vessel is provided to ensure efficient defrosting and compressor optimisation.

DHW packages are supplied with a choice of Dimplex EC-Eau stainless steel unvented cylinders. Providing mains pressure domestic hot water for fast filling baths and powerful showers, EC-Eau heat pump cylinders have high levels of insulation for added energy efficiency.

The packages are suitable for both new and existing homes. In new build properties the Dimplex air source heat pump can supply both the heating and domestic hot water. If installed as part of a property refurbishment, the existing boiler can be retained as an additional heating resource.

LA MAS packages available from March 2011. LA PMS packages available from April 2011.

Package 1 – 1 Heating Zone and DHW with combined buffer DHW cylinder



A choice of air source heat pump combined with a PWS332UK offers installers a flexible heating and hot water system for properties with limited space. The PWS332UK stores 300 litres of hot water, more than sufficient for most homes and with combined buffer tank minimises space requirements. Incorporating circulation pumps and the weather compensating WPM heat pump manager, this package provides the ideal heating and hot water solution for both new build and retro fit installations.

Package 2 – 1 Heating Zone and DHW with separate buffer and DHW cylinder



A choice of air source heat pump and heat pump cylinder capacities provides installers with a flexible heating and hot water system for properties with varying hot water requirements. With cylinder options from 125 to 300 litre capacities and heat pump output from 8 to 16kW, a range of domestic heating and hot water demands can be fulfilled. Incorporating circulation pumps and the weather compensating WPM heat pump manager, this package provides the ideal heating and hot water solution for both new build and retro fit installations.

Package 3 – 1 Heating Zone with buffer tank



For situations where only heating is required, this package, with a choice of heat pump outputs from 8 to 16kW, offers installers a flexible solution to the heating demands of a wide range of domestic properties. Incorporating circulation pump and buffer tank to optimise heat pump operation and weather compensating WPM heat pump manager, this package is ideal for retro fit installations.

Additional heating circuits and bivalent systems

For systems with more than one heating circuit or for bivalent systems, optional bolt on packs are available, which can be used in combination with any of the packages above.

Complete systems

A new range of heat pump packages for ease of design and installation.

For heating and hot water with compact installation

Package includes:

- Heat pump
- Circulation pumps
- Combined buffer and DHW cylinder
- WPM heat pump manager
- Controller and connection cable

Air Source Heat Pump	LA 8 PMS	LA 11 MAS	LA 14 PMS
Circulation pumps	2 x UP 25-60	2 x UP 25-60	1 x UP 25-60 1 x UP 32-60
20m Control cable	EVL997-1		
300l DHW/100 l buffer	PWS332UK		
Buffer immersion	CTHK631		

For heating and hot water

Package includes:

- Heat pump
- Circulation pumps
- Buffer cylinder
- DHW cylinder
- WPM heat pump manager
- Controller and connection cable

Air Source Heat Pump	LA 8 PMS	LA 11 MAS	LA 14 PMS	LA 16 MAS
Circulation pumps	2 x UP 25-60	2 x UP 25-60	1 x UP 25-60 1 x UP 32-60	2 x UP 25-60
20m Control cable	EVL997-1			
Buffer cylinder	PSW100	PSW100	PSW200	PSW200
Buffer immersion	CTHK631			
Choose one of:				
125l heat pump cylinder	ECS125HP-580			
150l heat pump cylinder		ECS150HP-580		
210l heat pump cylinder		ECS210HP-580		
250l heat pump cylinder		ECS250HP-580		
300l heat pump cylinder		ECS300HP-580		

For properties that require only space heating

Package includes:

- Heat pump
- Circulation pump
- Buffer cylinder
- WPM heat pump manager
- Controller and connection cable

Air Source Heat Pump	LA 8 PMS	LA 11 MAS	LA 14 PMS	LA 16 MAS
Circulation pump	UP 25-60	UP 25-60	UP 32-60	UP 32-60
Buffer cylinder	PSW100	PSW100	PSW200	PSW200
20m Control cable	EVL997-1			
Buffer immersion	CTHK631			

Additional heating circuit pack	
Mixed heating manifold	MMH 25
Circulation pump	UP 25-60

Bivalent system pack	
4 way valve	MMB 25



SIH 4 ME

High Temperature Ground Source Heat Pump

Key features

Single phase, high temperature ground source heat pump for domestic heating and hot water systems

- 4kW, single phase
- Variable heating water flow temperatures from 35°C to 70°C, weather compensated
- Suitable for use with under floor heating, Dimplex SmartRad fan convectors, conventional radiators and to produce domestic hot water
- Provides domestic hot water to 60° with no need for supplementary heating
- Can be used as the sole heating source or in “bivalent” mode in combination with an existing heating system
- WPM 2007 heat pump manager with removable control panel
- Electronic soft start to reduce starting current loads

A new addition to the range, ideal for smaller domestic properties

Extending the already comprehensive range of SIH ME high temperature ground source heat pumps, the new SIH 4 ME is ideal for single domestic dwellings.

With an output of 4kW, the SIH 4 ME is designed to provide both heating and hot water without the need for supplementary electric heating and offering excellent CoP for heating radiators at 50°C, it is ideally suited to replace boilers in existing properties.

With a small footprint and reduced ground collector size over larger output models, the SIH 4 ME is the perfect solution for social housing providers and new build housing developers looking to reduce tenant energy costs and comply with energy rating standards.



Range Specifications

MODEL	SIH 4 ME*	SIH 6 ME	SIH 9 ME	SIH 11 ME
PERFORMANCE				
Heating capacity B0/W35 (kW)	4.0	6.2	9.1	10.8
CoP (B0/W35)	4.1	4.3	4.2	4.6
Heating capacity B0/W50 (kW)	3.8*	5.8	8.9	10.3
CoP (B0/W50)	2.8*	3.0	3.1	3.3
OPERATING LIMITS				
Heating water supply/return (°C)	Max 70/min 18 +/-2			
Brine (°C)	-5 to +25			
Anti-freeze agent	Monoethylene glycol			
Minimum anti-freeze concentration	25%			
MECHANICAL/ELECTRICAL				
Dimensions HxWxD (mm)	805 x 650 x 462			
Weight (including packaging) (kg)	115	118	130	133
Sound pressure level at 10m dB(A)	56	56	56	57
Refrigerant type/total charge weight (kg)	R134A/1.0	R134A/1.2	R134A/2.2	R134A/2.4
Nominal voltage/fuse rating (V/A)	230/20	230/20	230/25	230/32

*Available July 2011 – Specification STC

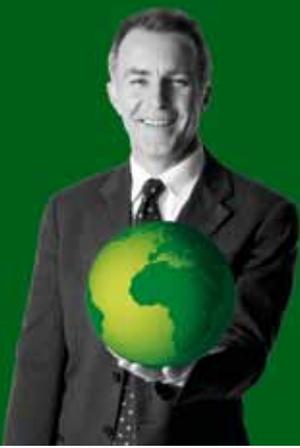
Control and regulation

SIH ME ground source heat pumps utilise the WPM 2007 heat pump manager, which monitors, regulates and controls the entire heating system.

The heat pump, heating and hot water circulation pumps for up to 3 individually programmable circuits, mixer motors and any additional heating circuits (bivalent mode) are all automatically activated by the heat pump manager, allowing the heat pump to provide maximum control and flexibility.

Specification

- Large, easy to understand illuminated display
- Dynamic menu based programming, customised to the configuration of the heat pump – settings that are not required are hidden
- Interface for remote control unit with identical menu options
- Individual time/temperature controlled operation over the 3 separate heating circuits, including production of domestic hot water
- Weather compensated water flow temperature control
- Automatic actuation of supplementary heat sources (electric immersion heater or oil/gas boiler)
- Automatic actuation of mixer valves for supplementary heat generators (oil/gas boiler or solar thermal system)
- Diagnostics system for monitoring important heat pump functions



Energy efficient room temperature control

Key features

- Stylish design, with choice of metal or glass fronts
- Low energy EC fan motor to further reduce energy consumption (EC models)
- Space saving – heating and cooling provided by the same unit (CM models) – no need for unsightly air conditioning units
- Energy efficient alternative to conventional radiators (heating) or air conditioning units (cooling)
- Cost effective practical alternative to under floor heating
- Designed for low water temperature operation:
 - Optimises heat pump CoP
 - Reduces heat pump running costs
 - Reduces heat pump system carbon emissions
- Individual temperature control:
 - Close tolerance electronic thermostat providing automatic control over fan speed output
 - Delivers high levels of comfort through improved room temperature stability

Dimplex SmartRad wall mounted fan convectors provide controllable, responsive and energy efficient heating and cooling with heat pump systems.

Designed specifically to operate at the lower water temperatures produced by heat pumps, Dimplex has extended the SmartRad range to include models that offer responsive cooling as well as heating and a reduced energy range.

Although SmartRad is already more energy efficient than convention radiators and standard electric heaters, Dimplex has taken the concept one step further with the introduction of a lower energy range SmartRad EC. SmartRad EC provides the same controllable, responsive heating at a reduced fan power input, helping to reduce running costs and carbon emissions even further.

SmartRad CM models offer the added advantage of active cooling when used in conjunction with a reversible heat pump, providing a combination of winter time heating and summer time cooling.

With a compact footprint and flexible installation options, all SmartRad models are ideal for retrofit installations, in place of conventional radiators or in new buildings instead of, or in conjunction with, under floor heating.



Specifications

Low energy models

OPERATING LIMITS	SRX080EC	SRX120EC	SRX140EC	SRX180EC
Heating water system/return (°C)	Max 85/min 15 at 150 l/h			
PERFORMANCE				
Heating capacity – water flow temp 40°C (kW)	0.6	0.9	1.1	1.5
Heating capacity – water flow temp 45°C (kW)	0.8	1.1	1.4	1.8
Heating capacity – water flow temp 50°C (kW)	1.0	1.4	1.7	2.2
Heating capacity – water flow temp 55°C (kW)	1.1	1.6	2.0	2.6
Heating capacity – water flow temp 60°C (kW)	1.3	1.8	2.3	2.9
SOUND PRESSURE LEVEL AT 1M DB(A)				
Low	26			
Medium	29			
Boost	36			
DIMENSIONS HxWxD (MM)	530 x 503 x 145	530 x 670 x 145	530 x 740 x 145	530 x 911 x 145
Weight (kg)	13	16	18	23
POWER INPUT (W)				
Low	2.9	3.3	3.7	4.2
Medium	4.6	5.5	6.4	7.2
High	8.4	10.5	12.5	14.5
Standby power	1			

Heating and cooling models

OPERATING LIMITS	SRX070CM	SRX120CM	SRX160CM
Heating water system/return (°C)	Max 85/min 7 at 150 l/h		
PERFORMANCE			
Heating capacity – water flow temp 45°C (kW)	0.56	1.09	1.4
Heating capacity – water flow temp 55°C (kW)	0.79	1.56	2.0
Heating capacity – water flow temp 65°C (kW)	1.03	2.04	2.64
Cooling capacity – water flow temp 7°C (kW)	0.5	0.92	1.1
Cooling capacity – water flow temp 10°C (kW)	0.39	0.74	0.89
SOUND PRESSURE LEVEL AT 1M DB(A)			
Low	26		
Medium	29		
Boost	36		
DIMENSIONS HxWxD (MM)	530 x 503 x 145	530 x 740 x 145	530 x 911 x 145
Weight (kg)	13	18	23
POWER INPUT (W)			
Low	17	26	24
Medium	20	40	35
High	27	60	53
Standby power	1		



SOLCDF22 / SOLCDF32

Direct flow evacuated tube solar collectors

Key features

High quality direct flow evacuated tube solar collectors for domestic hot water

- Suitable for domestic and commercial applications
- Designed specifically for the Northern European climate
- Full vacuum tube
- Direct flow configuration
- Plug in tube connection for:
 - Quick installation
 - Easy replacements
 - Standard tube spacing – even with multiple collectors/manifolds
- Horizontal, vertical, façade or flat roof mounting
- Tubes can be rotated for optimal direction
- 20 and 30 tube options
- 10 year guarantee
- Solar Keymark approved

High efficiency low carbon solution for hot water production.

Specifically designed to operate in Northern European climates, Dimplex evacuated tube solar collectors deliver excellent transfer of solar energy to heat.

Available as either 20 or 30 tube options, Dimplex evacuated tube collectors insulate against heat loss from cold, wet and windy weather by using a vacuum inside the tube resulting in high performance year round.

The nature of evacuated tube systems means that they are quick and easy to install and can be mounted horizontally, vertically or on flat roofs or façades.

When combined with Dimplex solar hydraulic packs, containing pump station and controller, they provide a highly efficient and cost effective renewable energy solution.

With the introduction of the Renewable Heat Incentive, the SOLCDF collector based solar thermal systems from Dimplex provide an excellent opportunity to generate an attractive income from the generation of hot water from a renewable source.



Specifications

MODEL	SOLCDF22	SOLCDF32
PHYSICAL		
Overall dimensions (WxHxD) (mm)	1500 x 2200 x 120	2250 x 2200 x 120
Gross area (m ²)	3.3	4.9
Aperture area (m ²)	2.03	3.05
Fluid volume (l)	2.64	3.96
Weight – empty (kg)	45	67.5
Number of tubes	20	30
Coating – double sided	TiNOX	TiNOX
PERFORMANCE (BASED ON APERTURE)		
Peak power (Wp)	2208	3312
Efficiency η_p (%)	77.6	77.6
OPERATING DATA		
Max operating pressure (bar)	10	10
Stagnation temperature °C	179.1	179.1

Dimplex solar hot water is supplied in packages which combine all the necessary components into easy to purchase kits. This makes specification and purchase easy, giving confidence that every component has been carefully selected for its quality and suitability for the UK climate. With a range of cylinder sizes suitable for each property and a selection of roof mounting options, the Dimplex solution has an answer for every solar water heating requirement.

Roof Kit packages

- Choice of 20 or 30 tube manifold and evacuated tube collector kits
- On roof mounting for plain tile, corrugated tile or slate roofs
- Façade or flat roof mounting kits

Accessories

A complete range of accessories available to make installation and maintenance quick and easy including pre-insulated flexible hoses, vent tiles, flow meters and heat transfer fluid testing kits.

Hydraulic packages

Suitable for the majority of domestic applications, including:

- Pump station
- Control unit
- Heat transfer fluid
- Expansion vessel and fixing kit

Range of cylinders

Available with single coil and dual immersions for direct electric system, or dual coils for use with a secondary heat source (such as a boiler). Features an external expansion vessel to maximize the amount of water stored. Sizes available – 175, 210, 250 and 300 litres.



SOLC201

Flat plate solar collector

Key features

Standard efficiency flat plate solar collectors for domestic hot water

- Suitable for horizontal or vertical mounting with connection of up to 4 panels in series
- Easy to install with Dimplex roof fixing kits:
 - slate
 - tile
 - coach bolts
 - flat roof
- Lightweight – only 29kg per panel when empty
- 3.2mm structured solar safety glass with 85% transmission allowing the collector to absorb a large range of light frequencies
- The structured safety glass covering has passed optional impact resistance tests as detailed in EN12975-2
- Aluminium, anthracite powder coated frame provides lightweight protection for the absorber that blends with the roof
- Spring suspended aluminium absorber sheet providing high efficiency over product life span
- Laser welded meander absorber for low pressure drop of overall collector field
- Compression fittings for ease of installation
- 10 year warranty
- Solar Keymark approved

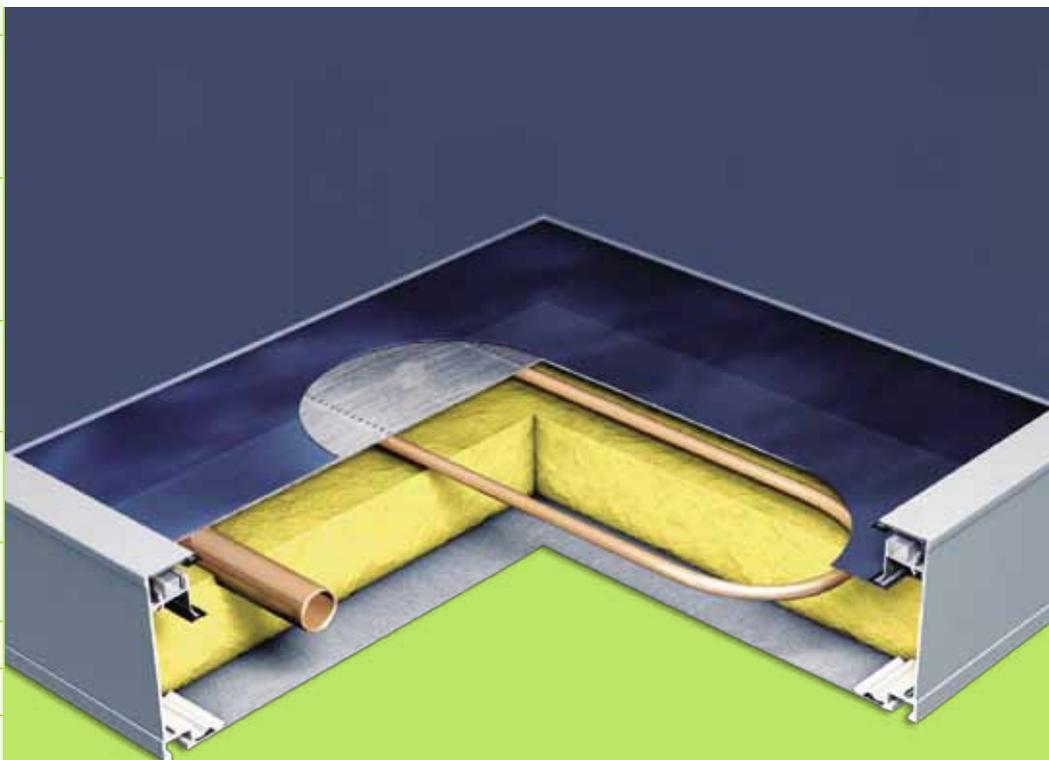
Extending our range of solar thermal products, Dimplex SOLC201 flat plate collectors are ideal for domestic solar hot water applications.

The SOLC201 consists of a laser welded meander pipe with a high selective absorber coating and 30mm rear and side insulation. The whole assembly is encased in an anthracite anodised aluminium frame for a neat construction. The collectors can be connected in series in either horizontal or vertical orientation to suit the available roof space.

An extensive range of accessories are available for on-roof or free standing systems and the collector also has the benefit of a 10 year warranty.

The SOLC201 collectors can be combined with a choice of either the premium SOLPU1 pump station or the new cost effective SOLPU0 module, providing an ultra cost effective solar thermal solution.

With the introduction of the Renewable Heat Incentive, the SOLC201 collector based solar thermal systems from Dimplex provide an excellent opportunity to generate an attractive income from the generation of hot water from a renewable source.



Specifications

Gross collector area (m ²)	2.01
Absorber area (m ²)	1.85
Length (mm)	1908
Width (mm)	1058
Height (mm)	75
Weight – empty (kg)	29
Liquid content (l)	1.4
Glass	3.2mm low iron solar safety glass
Efficiency	η_0 : 0.748 a1 : 3.93 W/m ² K a2 : 0.0148 W/m ² /K ²
Stagnation temperature (°C)	199
Absorber material	Aluminium
Absorption	>90%
Emission	5%
Connections	Compression
Transmission of glass	85%
Max operating pressure (bar)	10

Dimplex solar hot water is supplied in packages which combine all the necessary components into easy to purchase kits. This makes specification and purchase easy, giving confidence that every component has been carefully selected for its quality and suitability for the UK climate. With a range of cylinder sizes suitable for each property and a selection of roof mounting options, the Dimplex solution has an answer for every solar water heating requirement.

Roof Kit packages

- Choice of 2m², 4m² and 6m² collector kits
- On roof mounting for plain tile, corrugated tile or slate roofs
- Free standing panels for flat roofs or ground level mounting

Hydraulic packages

Suitable for the majority of domestic applications, including:

- Pump station
- Control unit
- Heat transfer fluid
- Expansion vessel and fixing kit

Range of cylinders

Available with single coil and dual immersions for direct electric system, or dual coils for use with a secondary heat source (such as a boiler). Features an external expansion vessel to maximize the amount of water stored. Sizes available – 175, 210, 250 and 300 litres.

Accessories

A complete range of accessories available to make installation and maintenance quick and easy including pre-insulated flexible hoses, vent tiles, flow meters and heat transfer fluid testing kits.



Stainless steel unvented cylinders for heat pumps and solar thermal

Key features

Unvented stainless steel cylinders for heat pumps and solar thermal

- Heat pump range with models from 125 to 300 litres
- Solar range with models from 175 to 300 litres
- Optimally sized, high surface area heat exchangers for heat pump/solar operation
- Mains pressure hot water for fast filling baths and powerful showers
- Simultaneous supply of water to all bathrooms
- Long life low maintenance hot water supply
- Tough, easy to clean outer casing – made from recycled materials
- Immersion for sterilisation and back up heating
- 60mm of CFC-free foam injected insulation for excellent heat retention – minimising heat loss and energy consumption
- Stainless steel inner cylinder with 25 year guarantee
- Supplied with an expansion vessel and all the necessary safety equipment required by governing legislation

Mains pressure hot water with full eco-credentials.

EC-Eau, the new range of unvented stainless steel cylinders from Dimplex, is designed specifically to deliver mains pressure hot water from renewable energy sources.

EC-Eau heat pump cylinders are specified with large, high surface area heat exchangers, specifically sized to match the requirements of Dimplex heat pumps, while solar models are available in a choice of single or dual coil options.

Environmental sensitivity and efficient performance are key attributes of the EC-Eau range, which boasts 60mm of low GWP insulation foam and innovative measures throughout to reduce heat loss, together with the use of 100% recyclable stainless steel inner components and a sleek black, hard wearing outer shell manufactured from completely recycled materials.



Heat pump cylinders



Sustainable Materials

- Inner vessel manufactured from premium grade Duplex stainless steel:
 - Lightweight yet ultra high strength and stress/corrosion resistant, ensuring long cylinder life
 - 100% recyclable
 - No need for sacrificial anode
 - 25 year warranty
- HIPS/ABS outer cladding
 - Produced from 100% recycled material
 - Hard wearing, flexible and damage resistant
- CFC/HCFC free injected foam insulation
- 60% of all materials (excluding insulation) by volume recycled

Superior Operational Performance

- High flow rates for efficient hot water delivery
 - Powerful showers and fast filling baths
- Corrugated coil construction maximises surface area while maintaining high usable volume
- Light and easy to handle for easy installation
- Surface mounted thermostats and sensors for easy installation and maintenance/replacement
- Supplied complete with inlet safety group and external expansion vessel
- All connections accessible from the front



Environmentally Sound Performance

- Designed for use with renewable sources of heat production – heat pumps and solar thermal systems
- Side hot water draw off connection, minimises heat losses through the top of the cylinder
- 60mm of injected polyurethane foam insulation
 - Exceeds “CHESS” best practice standards for low heat loss and heat recovery
 - Completely void free, including insulation around immersions and thermostats
- Recessed immersion heater and thermostat housings reduces heat loss
- Large surface area coil for use with heat pumps
- Up to 125l dedicated solar volume (ECS ST models) to maximise use of renewable energy

Heat pump cylinders

MODEL	ECS125HP-580	ECS150HP-580	ECS210HP-580	ECS250HP-580	ECS300HP-580
Nominal volume (l)	125	150	210	250	300
Diameter (mm)	580	580	580	580	580
Height (mm)	960	1130	1504	1780	2080
Expansion vessel (l) (external)	12	12	19	24	24
Coil surface area (m ²)	2.2	2.8	3.0	3.0	3.2
Secondary return	–	–	Yes	Yes	Yes

Solar cylinders

INDIRECT MODEL	ECSi175ST-580	ECSi210ST-580	ECSi250ST-580	ECSi300ST-580
DIRECT MODEL	ECSd175ST-580	ECSd210ST-580	ECSd250ST-580	ECSd300ST-580
Nominal volume (l)	175	210	250	300
Diameter (mm)	580	580	580	580
Height (mm)	1280	1504	1750	2080
Expansion vessel (l) (external)	19	19	24	24
Solar coil surface area (m ²)	1.1	1.1	1.1	1.1
Auxiliary coil surface area (m ²)*	0.8	0.8	0.8	0.8

* (Indirect Models only)



Indirect and direct stainless steel unvented cylinders

Key features

Indirect and direct unvented stainless steel cylinders

- Mains pressure hot water for fast filling baths and powerful showers
- Simultaneous supply of water to all bathrooms
- No cold water storage tank required freeing up valuable living space
- Long life low maintenance hot water supply
- Attractive, hard wearing, easy to clean outer coating
- 60mm of CFC-free foam injected insulation for excellent heat retention – minimising heat loss and energy consumption
- Stainless steel inner cylinder with 25 year guarantee
- Supplied with an expansion vessel and all the necessary safety equipment required by governing legislation

Mains pressure hot water with full eco-credentials.

The EC-Eau range of indirect and direct cylinders can supply all the hot water required for the modern home, providing rapid fill baths and invigorating showers to en-suite bathrooms and other domestic appliances simultaneously.

Efficiency and performance are key attributes of the EC-Eau range, with 60mm of low GWP foam insulation to minimise heat loss and innovative measures such as recessed immersions thermostats reducing energy wastage further still.

Available either for direct electric heating or with a coil for indirect heating, EC-Eau cylinders range from 100 to 300 litres with an external diameter of 580mm.



Indirect cylinders



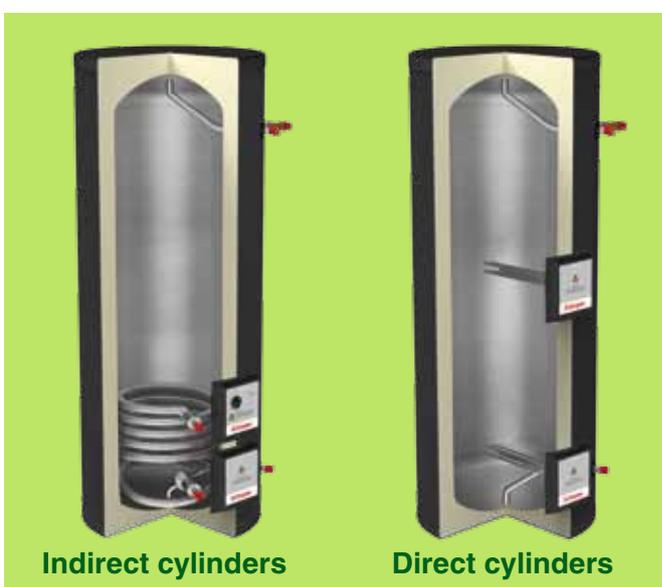
Direct cylinders



Specifications

MATERIALS	
– inner cylinder	Duplex stainless steel
– outer casing	Black HIPS/ABS (from recycled materials)
– inlet/outlet	Stainless steel
– coils	Corrugated stainless steel
– insulation	60mm PU foam (GWP=1, ODP=0)
MAX OPERATING CONDITIONS	
– potable water temperature	70°C
– heating water temperature	95°C
– operating pressure	3 bar
COLD WATER SUPPLY	
– minimum dynamic pressure	1.5 bar
– maximum pressure	16 bar
– minimum flow rate	15 l/min
CONNECTIONS	
– cold water inlet	22mm stainless steel
– hot water outlet	22mm stainless steel
– coil flow/return	22mm stainless steel
– sensor	Surface mounted
– T+P valve	1/2" F BSP
– immersion heater	1¾" F BSP
IMMERSION HEATERS	
– indirect	1
– direct	2

SAFETY COMPONENTS	
– pressure reducing valve and strainer	3 bar
– expansion relief valve	6 bar
– T+P valve	7 bar / 90°C
– factory pressure tests	12 bar
– expansion	External
THERMOSTATIC CONTROL	
– indirect	1 x integrated surface mounted thermostat
	1 x integrated immersion heater thermostat and thermal cut out
– direct	2 x integrated immersion heater thermostats and thermal cut out



INDIRECT							
Model	ECSi100-580	ECSi125-580	ECSi150-580	ECSi175-580	ECSi210-580	ECSi250-580	ECSi300-580
Nominal volume (l)	100	125	150	175	210	250	300
Diameter (mm)	580	580	580	580	580	580	580
Height (mm)	810	960	1130	1280	1504	1750	2080
Weight – empty (kg)	TBC						
Expansion vessel (l)	12	12	12	19	19	24	24
Number of immersions	1	1	1	1	1	1	1
Coil surface area (m ²)	0.5	0.5	0.5	0.8	0.8	0.8	0.8
DIRECT							
Model	ECSd100-580	ECSd125-580	ECSd150-580	ECSd175-580	ECSd210-580	ECSd250-580	ECSd300-580
Nominal volume (l)	100	125	150	175	210	250	300
Diameter (mm)	580	580	580	580	580	580	580
Height (mm)	810	960	1130	1280	1504	1750	2080
Weight – empty (kg)	TBC						
Expansion vessel (l)	12	12	12	19	19	24	24
Number of immersions	2	2	2	2	2	2	2

Specifications

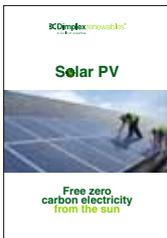
Dimplex policy is one of continuous improvement; the Company therefore reserves the right to alter specifications without notice. The information contained in this brochure is correct at the time of printing. You are advised to consult your Dealer before purchasing.

Installation Guidance

This brochure is designed to assist you with your choice of Dimplex products and it is not intended as an installation guide. For safety, products should only be installed by a competent person, in accordance with current regulations and the manufacturer's instructions.

The Dimplex Range

Dimplex offers the widest range of electric space and water heating products in the world – over 400 – to meet almost any heating need. In addition to this publication, we have a wide range of brochures for both domestic and commercial applications. Please visit our website www.dimplexrenewables.co.uk for more information.



Solar PV brochure



Heat pumps brochure



Solar brochure



SmartRad brochure



Commercial brochure



Domestic heating brochure



Electric fires brochure



Solid fuel brochure

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