



Efficiency and beauty, the future of electric heating

Market and environmental conditions

The heating market in the UK is changing faster than ever before. Fuel prices, legislation and technological developments are changing the way that homes are heated, and as the world's largest manufacturer of electric heating products, Dimplex has the capabilities and knowledge to remain at the forefront of these developments. The future is electric; we are electric.

Energy costs

The rising cost of energy is forcing homeowners, suppliers and the government to act to find ways of reducing our use of fuel. 36% of the UK's energy is used to heat the space and hot water in our buildings, so it is no surprise that there has been a concerted effort to reduce our exposure to the kind of volatile fossil fuel prices which led to a 9.4% rise in average prices in 2011, driven primarily by the wholesale gas prices on global markets.

a property.

Legislation

The UK is committed to reducing its greenhouse gas emissions by at least 80% by 2050, relative to 1990 levels. This means that we need to secure low carbon energy supplies, and as electricity moves to low carbon sources of generation with significant drops in emissions targets expected by 2030, electricity will become a universal and versatile source of low carbon energy.

"Technologies that use electricity to generate heat are well placed to become major low carbon heating technologies in the coming decades." DECC – Future of Heating, March 2011.

Insulation

Correct insulation is a vital part of a building's heating system and must be maximised if it is to perform to the best of its abilities. Insulation improvements to the attic space, cavity walls, glazing, doors and water cylinder are among the easiest and cheapest ways of improving the efficiency of your system. Due to government subsidies the payback periods are often very short, making them a quick-win when looking to save energy and money.

Many energy suppliers will advise how to correctly insulate a property.

The less heat a home loses, the less must be replaced by the heating system. It is in properties with good insulation levels that the Dimplex Designer Range will perform best, giving reduced heating bills and accurate, even temperatures throughout

The importance of insulation

Thermostatic accuracy

Thermostats range in their accuracy, and a modern electronic thermostat is capable of modulating the temperature of a room to within +/- 0.3°C. Although this is well beyond the temperature discrimination of the human body, this level of accuracy ensures running costs are kept to a minimum and so 'room temperature swing' (where a room constantly over and then under heats) associated with older bimetallic or gas-filled thermostats is a thing of the past. This has two major benefits. You feel a comfortable, stable temperature in the room; and you will save money as you are not overheating the room.

Control usability

The use of electronics also allows for more accurate selection of the time and temperature that you require, and the various control options available for use with the Dimplex Designer Range allow you to match the performance of the heater to your occupancy requirements. This again increases comfort and minimises the amount of time that the heater is operating when heat is not required.





Heating a home



The way we heat our homes in the UK is changing. With the rising costs of energy, three things come into question:

- Which fuel do we use?
- How do we best use this fuel?
- How do we maximise our use of the heat produced?

The future of domestic space heating is electric, a fact which is fast becoming apparent from government publications outlining the future plans of the building and environmental legislation that governs the direction in which domestic heating will develop.

Electricity is the obvious choice for our future heating needs, because:

- It can be produced in the UK, allowing continuity of supply at a steady price
- It is increasingly being produced from renewable sources, neutralising its carbon intensity

And electric heating also has a number of benefits as it:

- Is 100% efficient at the point of use every unit that you pay for becomes heat
- Can be controlled with a degree of accuracy not achievable with other systems



- Is quick and easy to install as there is no pipework to consider, making it ideal for refurbishment and new build
- Can operate as independent heaters or as a complete system subject to requirement and budget, but with the added benefit of being able to add to the system at any time - making it perfect for extensions
- Has low lifetime costs as it requires very little maintenance and on average an electric heating system will last 50% longer than a gas system
- Is not limited by planning issues associated with flue requirements in new build
- Offers very low safety risk as heaters don't burn fossil fuel





Efficiency in electric heating

Efficiency is a widely misunderstood term when it comes to electric heating. The fact is that electric energy is converted to heat with 100% efficiency at the point of use. Therefore the actual efficiency of an electric heater – any electric heater – is 100%. If you pay for 1kWh of electricity, 1kW of heat will be transferred into the room for one hour. This is dictated by one of the principal laws of physics, The Law of Conservation of Energy – "Energy cannot be created or destroyed, but can only change from one form to another."

However while it is true that all electric heaters are 100% efficient, they don't all operate in the same way.

For example an oil (or thermodynamic fluid) filled radiator has different performance characteristics to a panel convector heater.

All electric heating systems are not the same The fluid in the radiator will transfer the heat uniformly around the radiator giving a higher proportion of radiant as opposed to convected heat in comparison to a convector heater. This is useful for certain applications, however the very small thermal storage capacity of a fluid filled radiator also results in slow release heat to the room during start up (see graph 1) and a slightly prolonged release of heat to the room after switching off. By comparison a radiator or panel convector heater with no fluid would release heat to the room more quickly during start up (see graph 2) and stop releasing heat more quickly at "switch off".

Importantly in both cases they release exactly the same amount of energy to the room!

The European Commission Study of Local Room Heating products (DG Ener Lot 20) states: "Since the 'heat generation efficiency' is always 100%, it does not allow comparing the energy performance of electric room heaters."

The government's standard assessment procedure for energy rating of dwellings (SAP 2012 Version 9.92 Dec 2011) draws no distinction between panel, convector or radiant heaters, water or oil filled radiators, fan heaters or portable electric heaters – each has an efficiency of 100% and a responsiveness of 1.

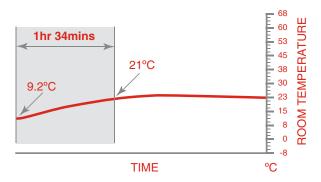
The Dimplex Designer Range of panel convector heaters maximises operational ability by:

- Having low inertia, thus heating up rapidly to match the occupancy patterns of the household
- Having a thermostat accurate to +/- 0.3°C, avoiding room temperature 'drift'
- Having a range of controls which allows the user to time their heating in line with their occupancy

The Dimplex Designer Range achieves this by using convection to heat a space up quickly, meaning that your room is warm for the time that you have set. The room can then be accurately held at the temperature required for the duration of occupancy, creating a comfortable environment. Importantly, it is not then heated for a long period after you leave the room.

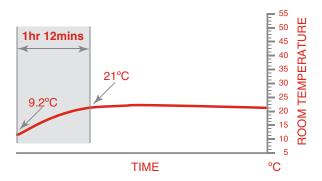
Time taken to raise room temperature from 9.2°C to 21°C.

Graph 1 – 1.5kW Aluminium/steel fluid filled radiator.



^{*}Tested in a climatic chamber with a cooling load of 518W.

Graph 2 - 1.5kW Steel panel convector.





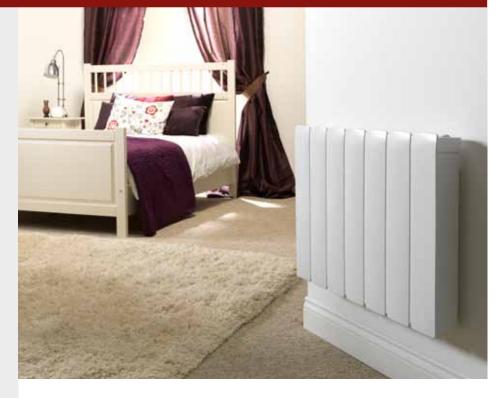
The Monterey range

Energy saving features

- Electronic thermostatic control, providing room temperature stability to +/- 0.3°C
- Range of optional plug-in electronic timer modules, including:
 - 24 hour digital timer
 - Single-zone pilot wire programmer
 - Runback timer
- Compatible with the Dimplex 4-zone control, a wall mounted pilot wire or mains borne signalling multi-heater programmer

Other features

- Traditional design
- Convected heat for rapid warm up
- · Virtually silent operation
- Pre-set background temperature at 5°C below thermostat setting*
- Splashproof (IPX4) rated, for use in bathroom or wet areas



With the same sophisticated control features and energy management options as the Girona and Saletto ranges, the Monterey has a more traditional radiator styling – but with a modern twist. Subtle, vertical contouring gently defines the shape and with its white finish, there's a strong hint of a contemporary edge.

High levels of control are built-in as standard with a sophisticated thermostat accurate to an impressive +/- 0.3°C, but if an even higher level of control is needed, there is a selection of optional control programmers that just plug-in to the top of each heater.

Alternatively, there is a central control option using the Dimplex central programmer through either pilot wire or mains borne signalling to control heaters in four separate 'zones' throughout the home.

Whatever level of control is required, the Dimplex Monterey range provides a sophisticated heating solution that is easy to install with no on-going maintenance.

*When connected to a programming unit supporting setback feature.



General features



Thermostatic control



Digital timer



Central programmer



Rapid warm-up

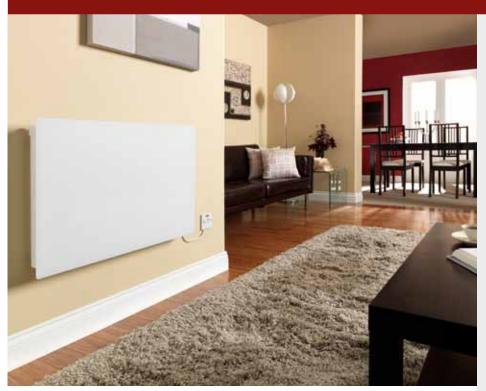


Plug-in



Virtually

The Girona range



The Girona is a glass fronted heater with designer styling. It is available in white or black to match any modern living space, and is compatible with the latest Dimplex controls, giving 24 hour, multi-zone or runback timer operation. The electronic thermostat maintains room temperature with an accuracy of +/- 0.3°C.

The look and technology offered by the Girona is class-leading, perfectly complementing a new property and breathing new life into refurbishment projects.

The product is also light and slim, making it easy to install and attractive when mounted on the wall, and comes with clever features such as the ability to be hinged forward on its bracket while cleaning or redecorating.

Energy saving features

- Electronic thermostatic control, providing room temperature stability to +/- 0.3°C
- Range of optional plug-in electronic timer modules, including:
 - 24 hour digital timer
 - Single-zone pilot wire programmer
 - Runback timer
- Compatible with the Dimplex 4-zone control, a wall mounted pilot wire or mains borne signalling multi-heater programmer

Other features

- · Available in a choice of black or white finish
- Stylish design with clean lines and beautiful glass front
- Low inertia ensures an almost instant response to heat demand
- Virtually silent operation
- Splashproof (IPX4) rated for use in bathrooms and wet areas

General features







Digital timer



programmer









The Saletto range

Energy saving features

- Electronic thermostatic control, providing room temperature stability to +/- 0.3°C
- Range of optional plug-in electronic timer modules, including:
 - 24 hour digital timer
 - Single-zone pilot wire programmer
 - Runback timer
- Compatible with the Dimplex 4-zone control, a wall mounted pilot wire or mains borne signalling multi-heater programmer

Other features

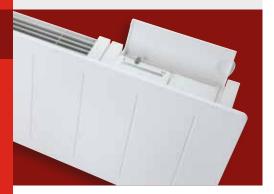
- Compact heater with a low profile, for use in areas with limited wall-space, such as conservatories
- Design features allowing for specification alongside the Girona and Monterey
- · Virtually silent operation
- Low inertia ensures an almost instant response to heat demand
- Splashproof (IPX4) rated for use in bathroom and wet areas



The Saletto low profile panel heater has been designed specifically to provide heat to areas where wall space is limited.

With fantastic convection properties this heater can be placed on low level walls with a sill above and still operate effectively. This makes it great for conservatories, and because of its compact nature it's also a great choice for kitchens, hallways, bedrooms or anywhere else where space is at a premium.

With the same designer styling and electronic control options as the Monterey and Girona ranges, this heater can be easily installed and set up to provide the right type of control for any application.



General features



Thermostatic control



Digital timer



programmer



Rapid warm-up



Plug-in



Virtually

Electronic controls

The Dimplex Designer Range can be controlled by a range of different modules or central programmers. This allows a system to be specifically designed for its environment, while keeping its operation simple.

Systems can be specified accurately for domestic, commercial, educational, and sheltered accommodation properties. This range of controllers provides fully programmable energy saving control for Dimplex electronic panel heaters, providing unmatched levels of versatility and energy efficiency.

With options ranging from 24 hour digital timers for individual heaters, through to single or 4-zone multi-heater programmers, there is a flexible and easy to use control solution available to meet the needs of virtually any application.

Control	Signalling method	Description	Colour/Finish	Best for
RXRBT//RXRBTIB	Single heater	Adjustable run-back timer turns heater on for between 30 minutes to 4 hours (in 30 minute increments).	White Black	Infrequently used rooms with a random occupancy pattern.
RX24TI/RX24TIB	Single heater	Up to four programmable time periods in a 24 hour loop to set your ideal daily heating profile. 'Advance' and 'Manual' functionality and a 12 hour programme memory back-up.	White Black	Rooms used at regular times each day.
RXPW1	Pilot wire	Seven day programmer. Plugs into one heater and can control up to 10 slave heaters via pilot wire connection. Up to four programmable time periods for weekdays/weekends to set your ideal daily heating profile. 'Advance' and 'Manual' functionality and a 12 hour programme memory backup.	White	An area containing multiple heaters used regularly.
RXPW4	Pilot wire	Four zone, wall mounted programmer allowing each zone to be individually configured with a custom seven day programme. Comfort/Setback, Comfort/Off and Comfort/Frost options available. Also includes manual override facility and holiday mode.	White	Multi-zone heating control where pilot wiring is available.
HXMBS4	Mains borne signalling	As above, with the signalling sent to the heaters in each zone via the mains wiring in the house.	White	Multi-zone heating control where no pilot wiring is available.

Technical information

All Dimplex Designer Range Heaters

Thermostat

Electronic type, accurate to +/- 0.3°C.

Element

Compact, finned, mineral-filled sheathed type, providing virtually silent operation.

Thermal cut-out

Auto reset type.

Construction

Durable epoxy-polyester powder coated steel casing, with upward-facing grille. Temperature resistant PBT thermoplastic moulded parts.

Colour/Finish

White front, back, grille and plastic parts. Black front, back, grille and plastic parts on black Girona.

Installation

Supplied with metal wall bracket.

Electrical connections

1.0m, 4 core cable (live, neutral, earth, pilot) supplied fitted to each heater.

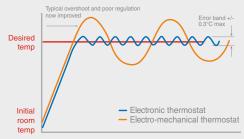
IP rating

Splashproof IPX4.

Electronic thermostat

The Dimplex Designer Range of panel heaters features highly accurate electronic thermostats, providing superior comfort and operating efficiency. Upon start up the heater will give a sustained output but as the room temperature nears the desired set point, power to the

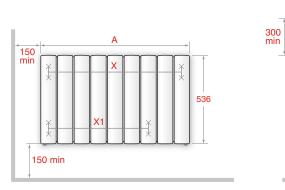
elements is reduced, thereby avoiding the potential of overshooting the target temperature. Once the target is reached, the room temperature is closely monitored to an accuracy of +/- 0.3°C, minimising temperature drift, resulting in better energy efficiency and user comfort.



shelf

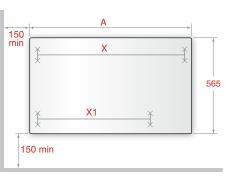
MONTEREY PANEL HEATERS

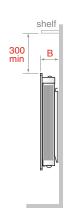




Monterey main and fixing dimension drawing.

Model No.	Colour	Loading	Height	Width (A)	Depth (B)	X	X1	Weight
MFP050W	White	0.5kW	536mm	503mm	104mm	390mm	168.5mm	12.0kg
MFP075W	White	0.75kW	536mm	503mm	104mm	390mm	168.5mm	12.0kg
MFP100W	White	1.0kW	536mm	671mm	104mm	560mm	338.5mm	15.0kg
MFP150W	White	1.5kW	536mm	741mm	104mm	630mm	408.5mm	17.5kg
MFP200W	White	2.0kW	536mm	911mm	104mm	800mm	578.5mm	22.0kg

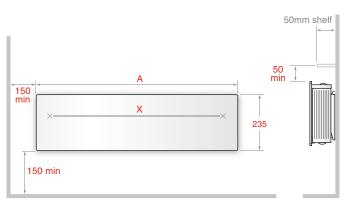


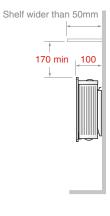


Girona main and fixing dimension drawing.

GIRONA PANEL HEATERS

Model No.	Colour	Loading	Height	Width (A)	Depth (B)	Х	X1	Weight
GFP050W	White	0.5kW	565mm	530mm	107mm	390mm	168.5mm	13.0kg
GFP075W	White	0.75kW	565mm	530mm	107mm	390mm	168.5mm	13.0kg
GFP100W	White	1.0kW	565mm	700mm	107mm	560mm	338.5mm	16.5kg
GFP150W	White	1.5kW	565mm	770mm	107mm	630mm	408.5mm	20.0kg
GFP200W	White	2.0kW	565mm	940mm	107mm	800mm	578.5mm	26.0kg
GFP050B	Black	0.5kW	565mm	530mm	107mm	390mm	168.5mm	13.0kg
GFP075B	Black	0.75kW	565mm	530mm	107mm	390mm	168.5mm	13.0kg
GFP100B	Black	1.0kW	565mm	700mm	107mm	560mm	338.5mm	16.5kg
GFP150B	Black	1.5kW	565mm	770mm	107mm	630mm	408.5mm	20.0kg
GFP200B	Black	2.0kW	565mm	940mm	107mm	800mm	578.5mm	26.0kg







Saletto main and fixing dimension drawing.

Model No.	Colour	Loading	Height	Width (A)	Depth	х	Weight
LPP050	White	0.5kW	235mm	746mm	100mm	671mm	6.7kg
LPP075	White	0.75kW	235mm	746mm	100mm	671mm	6.7kg
LPP100	White	1.0kW	235mm	877mm	100mm	802mm	7.6kg
LPP150	White	1.5kW	235mm	1142mm	100mm	1067mm	9.9kg

Approvals and standards

There is a range of approvals and standards that can be met by electrical heating products. These range from legally required minimum standards through to high-end approvals that demonstrate that products are tested against the highest safety standards.



Many products in the EU are covered by a directive which states that the manufacturer must declare their product meets the minimum safety, health and environmental legislation required of it by European law. This is denoted by the CE mark on the product.



BEAB Approved

A BEAB Approved Mark on a product demonstrates that Intertek (an independent third-party) has verified its safety. Recognised across the UK and Europe, the BEAB Approved Mark demonstrates the safety pedigree of a product. It shows commitment to best practice, commitment to producing quality goods and most importantly commitment to

customer safety. This is the highest safety standard achievable in the UK market. The mark indicates that the product has been manufactured in an inspected factory, using accepted methods and that the products bearing the BEAB Approved Mark are also randomly checked by Intertek on an annual basis. All of the Dimplex Designer Range meets this standard.





The right choice

Wherever you go across the country, you'll find Dimplex heating and hot water solutions. In its field, Dimplex leads the world – making life more comfortable, in more ways, in more places, than any other company.

Electric heating is the fuel of the future – it's very versatile and offers levels of safety, reliability, cleanliness and comfort unmatched by other fuels.

Dimplex is the brand leader in electric space and water heating. With a heritage of over 60 years, Dimplex has an unmatched reputation for quality, reliability, unrivalled experience and innovation.



Why Dimplex?

A critical aspect of our success is built upon a policy of continuous investment in every area of the business – from product development right through to customer service.

No-one else in the industry invests more in developing products that constantly set new standards, with a central design facility, and research and development teams at factories in the UK and Europe.

Our investment in people, training and resources is reflected in the quality of our products and the standard of our pre and post sales service.

As part of our commitment to product quality, we also apply stringent controls to every part of our manufacturing process and are ISO9002 approved.







Tried. Tested. Trusted.



With over 60 years of innovation and experience, Dimplex is established as a world leader in energy efficient heating solutions.

For over 60 years, Dimplex has built its portfolio to the point where it is now the brand leader in electric space and water heating, offering a selection of over 400 products within the electric space heating sector alone – the widest in the world.

Its growth can be attributed to a public who found affordable heating solutions that proved to be efficient, reliable and durable, as well as attractively designed.

- Tried and trusted by installers, specifiers and end users alike
- The world's largest electric heating appliance manufacturer
- A proud reputation for continued investment in quality and innovation
- Backed by an award winning customer services team
- Member of ECA, EDA and BEAMA
- Over 60 years of continued innovation
- Over 45 million heaters sold via the trade in the UK alone
- Part of the multinational Glen Dimplex Group

With Dimplex, trust is built-in.



Support

At Dimplex, our aim is to support all our customers in their purchasing journey from pre-purchase through to after sales if required. As a result we can offer:

Free heating design service

As well as calculating the heat losses of developments, our highly trained team can advise on the best heating solution for a building and provide guidance through the Part L minefield.

Dedicated sales team

Our sales team are divided into project and distribution focused teams so that they understand the needs of customers in different markets.

CPD seminars

If you need more than just product information, our specification team can assist with CPD seminars — please contact us for more details.

After sales service

Should you have a problem with one of our products, our award winning customer services team is on hand to give you advice over the telephone.

Website

As well as the very latest product details, our website is packed full of information to help find the right product solution.

Key features include:

- Help Me Choose Selector

 If you don't know which heater to choose, answer a few simple questions and get a list of our most suitable products
- On-line Calculator
 Ideal if you need to know how much heat you need for a room or even a property
- How-to-use Videos and Operating Instructions
 Designed to help you get the best from your Dimplex heaters
- Stockist Information
 Just type in your postcode and find your nearest contractor or distributor, and a handy reference map will help you locate them quickly and easily

Please visit www.dimplex.co.uk/support

Bathrooms

Any electrical appliances installed in a bathroom should be fitted by a competent electrician in accordance with the current I.E.E. Regulations. Unless otherwise specified in this brochure, heaters that can be permanently fixed have to be mounted so that any controls cannot be reached by a person using a bath or shower.

Specifications

Dimplex policy is one of continuous improvement; the Company therefore reserves the right to alter specifications without notice. Although every care has been taken in the reproduction of product finishes in this brochure, the colour photographs should be taken only as a guide. 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. If you require further advice concerning the installation of our products – especially where the installed dimensions may be critical to your choice and the location of the product – please consult your installer.

Please note that the dimensions contained within this brochure do not in all cases include clearances required around installed products for safe operation.

The Dimplex Range

Dimplex offers the widest range of electric space, water heating and renewable solutions in the UK. In addition to this publication, we have a number of more focused brochures. Choose from:



Renewables capabilities brochure



Solar PV brochure



Solar Thermal



Heat pump



EC-Eau Cylinder



SmartRad brochure



Electric fires brochure



Domestic heating brochure



Commercial brochure



Solid fuel brochure



To discover more about our Designer Range

please visit dimplex.co.uk/designer or call 0844 879 3587

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