Dimplex
Comfort. By design

February 2009
CI/SFB (56)
www.dimplex.co.uk

Dimplex heat pumps

working with nature's energy
for environmentally friendly heating

A name you can trust

For nearly 60 years, Dimplex has been making life more comfortable, in more ways, in more places than any other company. Dimplex has long been the number one name in electric heating technology, having established an unmatched reputation for quality, reliability and innovation.

The Dimplex brand is well known in both the public and private sectors, particularly with local authorities, housing associations and major home builders where the brand has become synonymous with a commitment to excellence and customer satisfaction.

Our experience

For Dimplex, there's nothing new about renewables. As part of the worldwide Glen Dimplex Group, Dimplex has been producing innovative heat pumps for over 30 years with thousands of installations throughout Europe. We are committed to developing heating solutions which utilise sustainable and renewable energy with the aim of reducing CO_2 emissions and its impact on the environment.

From its manufacturing plant in Kulmbach, Germany, Dimplex produces the widest range of heat pumps available on the UK market and leads the way in the development of energy efficient heat pump technologies.

Quality assured

Over the years, Dimplex has established strong relationships with its customers in all aspects of the construction and heating industries. Today Dimplex electric heating and heat pump systems are operating efficiently across the UK in schools, offices, social housing and libraries in both private and public sectors.

In order to ensure the highest levels of quality and to provide peace of mind, Dimplex has an established network of Approved Heat Pump Installer Partners, all accredited under the Microgeneration Certification scheme and fully trained and experienced in the installation, commissioning and after sales support of Dimplex heat pump products.

No other company can provide the depth of range, expertise and service back-up for economical, sustainable heating solutions.

Contents

Why choose a heat pump?

In the context of ever rising energy costs and climate change, every household is in need of a heating technology that is future-proof, cost-effective and independent of fossil fuels.

Using nature's energy

Heat pumps make a significant contribution towards solving the problems associated with increasingly scarce and evermore expensive energy resources – supplying more energy than they consume by tapping into the freely available, inexhaustible solar energy stored in the earth, the ambient air or water and converting this for use in a heating system.

In fact up to 75% of the energy needed by the heating system is extracted from the environment, so the only energy required is electricity needed to drive the heat pump compressor.

Put another way, for every 1kWh of electricity used to run the heat pump, up to 4kW of useful heat is provided, giving the heat pump an efficiency of up to 400%.

A low carbon heating solution

Whenever fossil fuels such as gas or oil are burnt, carbon dioxide is released. CO_2 is the principle contributor to the greenhouse effect which is leading to long term climate change.

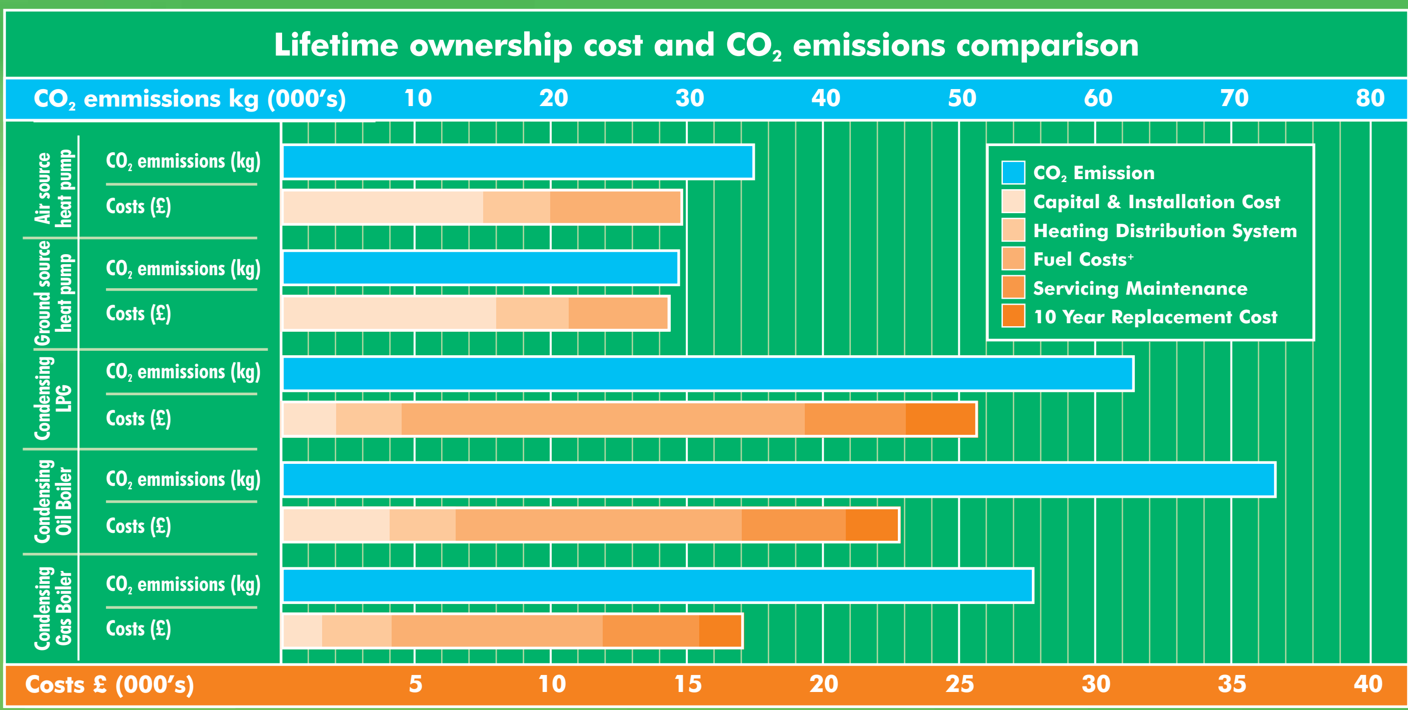
However as heat pumps extract as much as 75% of their heating energy from the environment, building carbon emissions for heating can be reduced by as much as 50% compared with gas fuelled heating systems.

This is an obvious benefit when considering building regulations Part L compliance, planning obligations requiring minimum contributions from renewable energy and EcoHome / Code for Sustainable Homes ratings.

Low running costs
Low ownership costs

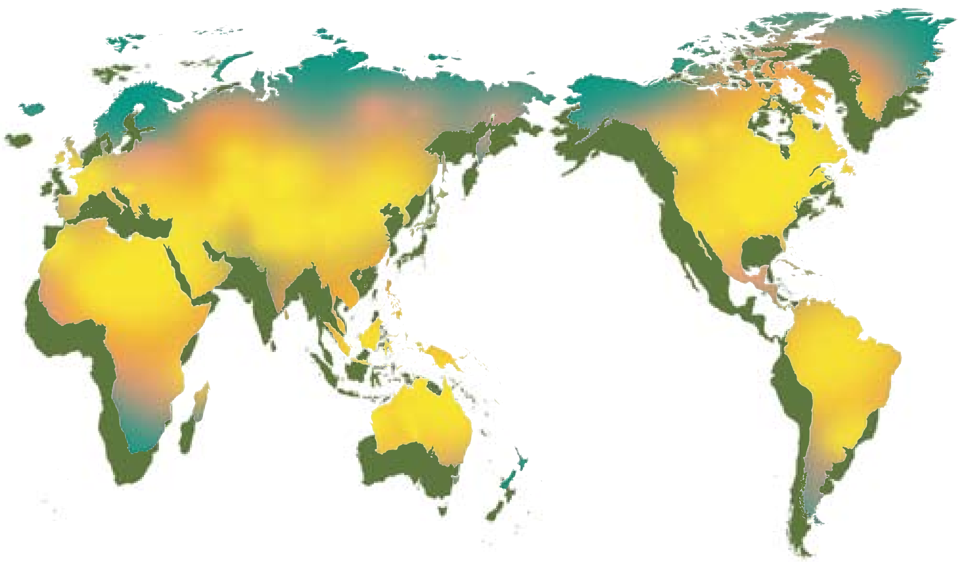
The considerable contribution from renewable energy sources also helps to provide running cost savings over fossil fuelled heating systems and arguably more importantly, future proofs the system against future energy price increases.

But fuel costs are only part of the story. Unlike gas and oil based systems, heat pumps require no costly regular maintenance or annual safety inspections. And because a heat pump has a reasonable life expectancy of 20 – 25 years, typically twice that of a boiler, the investment costs can be recovered over a longer period meaning the ownership costs over the working life of the system are demonstrably lower.



Figures compared over a 20 year period for space and water heating for a typical 3 bed semi detached home (new build)
+ Fuel costs based on 2007 gas and electricity prices

The global challenge



Climate change is the greatest threat facing the planet, with rising temperatures causing more droughts, floods and storms causing sea levels to rise.

In the last 20 years, use of the Thames Barrier (designed to protect London from flooding) has risen from once every two years to six times a year.

According to the latest figures from Intergovernmental Panel on Climate Change (IPCC), 11 of the last 12 years rank in the 12 warmest years since 1850 and 2003 was the third hottest year on record. The impacts of weather related disasters are also increasing two to three times more rapidly than impacts due to earthquakes.

Most scientists agree that climate change is largely due to human activity, mainly the increased use of fossil fuels. The main human influence on the global climate is likely to be emissions of greenhouse gases such as carbon dioxide (CO_2) and methane.

What difference can we make?

Emerging nations such as China and India are today consuming more and more energy to fuel their enormous economic growth, so what difference can a tiny island like the UK make?

Indeed if the UK became 100% zero carbon tomorrow, it would take China less than 3 months to replace the UK's carbon emissions.

However, carbon emissions per capita in the UK are one of the highest in the world – in fact if every nation had such high emissions per head of population, global emissions would increase 3-fold.

So the UK has a responsibility to demonstrate to the developing nations of the world that it is possible to achieve economic growth while reducing its carbon emissions and environmental impact.

Planning for the future

Currently we all have the freedom to choose whether or not to voluntarily install greener technologies to reduce our homes or businesses carbon footprint. Some experts predict that greener technologies will be compulsory through legislation in the near future as has the recycling of our rubbish. The sooner you switch the sooner you can start to save money and the planet.

Harnessing nature's energy

Our environment is full of energy, even at sub-zero temperatures there is plenty of energy available.

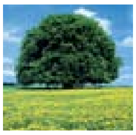
Heat pumps use conventional refrigeration technology to extract the sun's energy stored in the environment and raise it to a temperature suitable for heating purposes.

This method even works in the middle of winter at temperatures as low as -25°C.

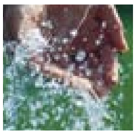
One system for all types of heat sources

Dimplex heat pumps offer you three different future-proof heat sources, outside air, the ground or water.

Air Source heat pumps utilise the outside air as their energy source. Heat pumps can even extract heating energy from the outside air at temperatures as low as -25°C.



Ground source heat pumps extract heat from the earth all year-round via ground heat collectors buried beneath the ground.

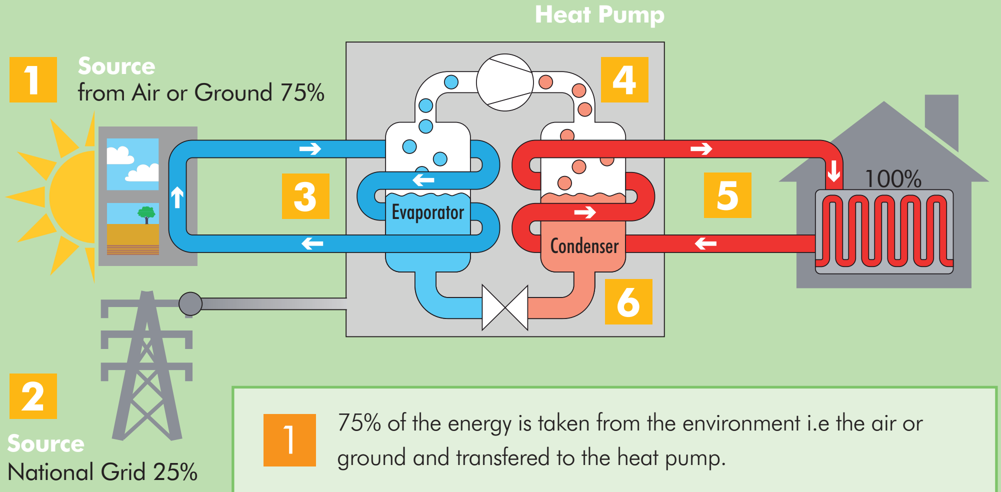


Water-to-water heat pumps extract thermal energy from the ground water. If the supply is readily available and the quality is sufficient, ground water is the most efficient source of heat.

Trusted technology

A heat pump heating system consists of 3 components: the heat source, the heat pump itself and a heat distribution and storage system.

Heat pumps are able to produce more energy than they consume by using the conventional refrigeration cycle to absorb heat from the environment and raise it to a suitable level for heating.



1. 75% of the energy is taken from the environment i.e the air or ground and transfered to the heat pump.
2. 25% of the energy is sourced from the national grid in the normal way of supplying your electricity. This is used to operate the heat pump but with very low consumption
3. The energy from the air or ground is transfered to the refrigerant inside the heat pumps evaporator. This causes the temperature of the refrigerant to rise and change state from liquid to gas.
4. The refrigerant gas is then compressed, using an electrically driven compressor, reducing its volume but causing its temperature to rise significantly.
5. A heat exchanger (condenser) then extracts the heat energy from the hot refrigerant to heat water for central heating, underfloor heating or domestic hot water.
6. After giving up its heat energy the refrigerant turns back into a liquid and is able to absorb energy from the environment, allowing the cycle to begin again.

Using nature's energy efficiently

Heat pumps are among the most efficient heating and hot water systems available today. Approximately 75% of the energy needed for heating comes from the environment. This means that for every 1kWh of electricity used to power the heat pump compressor, between 3 and 4 kWh of heating energy are produced, giving the heat pump an efficiency of 300-400% or higher.

The heat pump's "efficiency" is known as it's "Coefficient of Performance" (CoP). This is simply a ratio between the proportion of the total energy supplied that can be extracted from the environment and the amount supplied by electricity to run the heat pump compressor. The higher the CoP, the more "free" environmental energy the heat pump is using!

Built to last

1. **Powerful, quiet, safe and reliable.** The "heart" of the heat pump is the Copeland scroll compressor, providing high levels of efficiency, reliability and low noise operation.
2. **Always in control.** The WPM heat pump manager monitors, regulates and controls the entire system to ensure optimum performance and efficiency for heating, domestic hot water and where applicable, cooling.
3. **Evaporator.** Large surface area plate heat exchangers allow for efficient heat transfer of energy from the environment. They are compact, efficient and reliable.
4. **Insulated casing.** Sound insulation around the insides of the heat pump casing reduce operating noise to a minimum.

The natural solution..

Social Housing

Housing Developments

Flats and Apartments

Self Builders

...with so many applications

Increasingly stringent legislation and escalating fuel costs make heat pumps the ideal choice for so many applications, both domestic and non domestic

Whether for new build or retro-fit, for self builders, commercial housing developments or schools; for heating, cooling or for use with underfloor heating systems or radiators, heat pumps provide the ideal low carbon energy solution whatever the application.

Social Housing

- Ideal for stock refurbishment projects as a means to meeting Decent Homes standards and tackling fuel poverty, particularly in off gas-grid areas.
- Significant CO_2 emission savings over other fuels, helping compliance with higher levels of the Code for Sustainable Homes.
- Negligible maintenance requirements.
- Significant grant funding opportunities available, either through Low Carbon Buildings Programme Phase 2 or CERT.

Housing Developments

- Up to 50% CO_2 savings over fossils fuelled systems helps towards Building Regulations Part L / Code for Sustainable Homes compliance
- Heat pumps formally accepted as a “Renewable” technology so meet local planning authority requirements to incorporate renwable energy in new buildings (Planning Policy Statement 22 / “Merton Rule”)
- Will make a significant contribution towards high EPC scores
- Highly marketable “Eco” credentials and low end-user running costs for heating / hot water

Flats and Apartments

- Multiple high output ground or air source units commonly linked together to provide central plant space/water heating for multi-occupancy dwellings
- Up to 50% CO_2 savings over fossil fuelled systems helps towards Building Regulations Part L / Code for Sustainable Homes compliance
- Significant cost reduction over installing individual heat pumps in each apartment
- Efficiency benefits of communal systems recognised by SAP

Self Builders

- 50% lower CO_2 emissions than gas boilers, so help make a significant contribution towards Building Regulations Part L compliance, particularly with contemporary styled homes with large glazed areas
- High renewable energy contribution so helps ease planning consent
- Requires electrical infrastructure only, so ideal for off gas-grid areas
- Makes a significant contribution to lower home energy bills
- Can be used for energy-efficient swimming pool heating in the summer months

Education


Retail and Commerce


Leisure and Residential


Public and Community

Education

- Ongoing schools building programmes, such as Building Schools for the Future can benefit from heat pump systems that improve the environmental footprint and reduce running and operational costs
- Able to meet governmental targets for 60% renewable energy in new schools projects
- Can be utilised to provide a valuable learning tool for students
- **50% grant funding for Dimplex ground source heat pumps through Low Carbon Buildings Programme Phase 2**

Retail and Commerce

- Heat pumps meet the increasing local authority requirements to incorporate renewable energy within the energy profile of new buildings (Planning Policy Statement 22 / "Merton Rule")
- Significant CO_2 savings over fossil fuelled systems help towards building regulations compliance
- Many developers investing in "green" buildings with low energy costs in the knowledge that they can attract premium rent/lease values
- Ability to provide energy efficient heating and cooling from a single system optimises capital investment

Leisure and Residential

- Growing take up in the leisure / hotels sector to reduce consumption and CO_2 emissions, particularly where mains gas is not available
- Typical uses include swimming pool heating, hot water production, space heating and cooling
- Reversible units with heat recovery ideal for utilising waste heat for swimming pool or water heating
- Multiple air source units commonly linked together to provide central plant space/water heating for multi-occupancy dwellings such as care homes

Public and Community

- Dimplex heat pumps are already installed in a wide range of public and community buildings, both new build and refurbished, allowing them to benefit from lower fuel bills and reduced CO_2 emissions
- Typical installations include:
  - Visitor centres
  - Village halls
  - Community centres
  - Emergency service buildings (fire stations, mountain rescue centres, lifeboat stations)
  - Libraries
  - Places of worship
- **Local government and not for profit organisations are able to benefit from 50% funding through Low Carbon Buildings Programme Phase 2**
- **Match funding available through the Community Sustainable Energy Programme (CSEP)**

Renewable energy grants

A number of grant schemes and financial incentives are available to help subsidise the cost of renewable energy installations across the UK and Ireland.

UK Wide

Low Carbon Building Programme (Phase 1)
Open to households across the UK (except the Channel Islands and the Isle of Man), Phase 1 of the Low Carbon Buildings Programme demonstrates how energy efficiency and microgeneration can work hand in hand to create low carbon buildings.

Grants of £1200 are available to householders for the installation of ground source heat pumps or £900 for the installation of air source heat pumps.

For more information visit: www.lowcarbonbuildings.org.uk

Low Carbon Buildings Programme (Phase 2)
Phase 2 of the DTI Low Carbon Buildings Programme is managed by the Building Research Establishment and provides £50 million of capital grant funding for the installation of various microgeneration technologies – including ground source heat pumps – by organisations in the UK public and not-for-profit sectors, including local authorities, housing associations, schools, colleges, community buildings, hospitals and registered charities.

The scheme is operating in England, Wales, Scotland and Northern Ireland and aims to commit the bulk of its funding by June 2009.

Dimplex has been appointed as one of only 3 "Framework Suppliers" of ground source heat pumps under the scheme, meaning Dimplex systems are subject to grants of 50% of their total installation cost.

For more information visit:
www.lowcarbonbuildingsphase2.org.uk
or email lcbp@dimplex.co.uk

Scotland

Scottish Community &
Householder Renewables Initiative
The Scottish Community Householder Renewables Initiative (SCHRI) provides grants for properties in Scotland. This is funded by the Scottish Executive and managed by the Energy Saving Trust.

Grants are available for a variety of renewable energy technologies including ground source and air source heat pumps. Funding for householders is set at 30% of the installed cost up to £4,000.

For more information visit: www.energysavingtrust.org.uk/schri

Republic of Ireland

Greener Homes Scheme
The Greener Homes Scheme provides assistance to homeowners who intend to purchase a new renewable energy heating system for existing homes over 1 year old. The scheme is administered by Sustainable Energy Ireland and aims to increase the use of sustainable energy technologies within Irish homes.

The scheme provides grants of €2,500 for ground source heat pumps (with horizontal collectors) or water source heat pumps, €3,500 for ground source heat pumps with vertical borehole collectors or €2,000 for air source heat pumps.

Renewable Heat Deployment Programme (ReHeat)

ReHeat provides assistance for one installation of renewable heating systems including ground, air, water source heat pumps in industrial, commercial, public and community premises in Ireland.

Support of up to 30% of eligible costs is available for capital investment projects and 40% of eligible costs is available for feasibility study projects.

The programme is administered by Sustainable Energy Ireland.

For more information on either of these schemes visit: www.sei.ie/grants or contacts Dimplex (details on back cover).

Dimplex Renewable Energy Finance

Dimplex Renewable Energy Finance has been specifically designed to help not-for-profit organisations including local authorities, schools and housing associations overcome the need for initial capital investment when installing heat pump systems.

The scheme is designed to provide a solution for organisations looking to implement renewable energy technologies but for whom the initial capital outlay, even where grants are available, could make going ahead with the project an impossibility, by allowing investment costs to be repaid over a period of years funded through the savings in energy costs the heat pump will provide.

Benefits of the scheme include:

- Finances match funding for LCBP2 (or other grant schemes)
- Can be used in place of grants to cover entire project costs
- Project costs covered in full with no up-front capital outlay
- Investment costs recovered from energy cost savings on an ongoing basis
- Allows project schedules to be accelerated by removing budgetary constraints
- Flexible payment schedules and accounting structure based on client needs

Installers

Approved Installer Partners

Heat pumps are one of the most efficient and economical heating systems available provided the individual components of the system – the heat source, the heat pump itself and the connected heating system – are properly matched.

In order to ensure the highest levels of quality and to provide peace of mind, Dimplex has an established network of Approved Heat Pump Installer Partners, all accredited under the ClearSkies scheme and fully trained and experienced in the installation, commissioning and after sales support of Dimplex heat pump products.

Dimplex APPROVED Heat Pump Installer Partner

Installer Training

Dimplex believe that the key to success in the heat pump market is through thorough and robust installer training to ensure installations are provided to a high standard and maximise the energy efficiency of our customers investment.

In addition to an approved installer partner network we also provide dedicated training courses for new installers, covering installation of our range of ground and air source heat pumps. As the public interest in the environment and renewable energy products in particular increases, training ensures our installers are better equipped to satisfy our customers' requirements.

Dimplex ACCREDITED Air Source Heat Pump Installer

Dimplex ACCREDITED Ground Source Heat Pump Installer

Microgeneration Certification Scheme

The Microgeneration Certification Scheme (MCS) is intended to provide a robust third party certification scheme for microgeneration products and installers and is designed to underpin the governments grant scheme, the Low Carbon Buildings Programme. Grants will only be available to applicants using both products and installers certified under the Microgeneration Certification Scheme.

The scheme evaluates products and installers against robust criteria for each of the microgeneration technologies, providing greater protection for consumers and ensuring that the Government's grant money is spent in an effective manner.

Dimplex recognises the importance of such schemes in helping to build a UK heat pump industry based on quality and good practice, which will make a substantial contribution to cutting the UK's dependency on fossil fuels and its carbon dioxide emissions.

Dimplex actively supports the scheme and we encourage all Dimplex heat pump installers to also become certified, giving our customers assurance as to the quality of our products and their installation and providing a means of accessing government grants.

For more information visit: www.microgenerationcertification.org

Range overview

Dimplex is setting new standards with its latest generation of heat pumps. With the widest range of heat pumps in the UK, no matter what your choice of energy source (ground, air or water), there will be a solution in the Dimplex range ideally suited to your needs.

Flexible

Our "integrated" heat pumps – containing key hydraulic system components – provide space saving and simple installation, while our stand alone models can be combined with a wide range of fully coordinated system accessories, including buffer tanks and domestic hot water cylinders, to provide complete flexibility in terms of system design.

Performance

The Dimplex ethos is always to aim for the highest level of system efficiency, with our heat pumps designed to minimise energy use – no matter what the temperature or operating conditions.

Quality and Reliability

German engineering from one of the UK's most respected heating brands! The international quality label for heat pump systems guarantees the highest, environmental, safety and quality standards.

Attractive

Innovative technology in a new look. The entire Dimplex range, including buffer tanks and hot water cylinders, is designed to fully coordinate in a new standardised design.

Control

The comprehensive Dimplex heat pump manager provides complete system control over multiple heating and hot water circuits and, where needed, cooling functions. Self explanatory display text provides simple operation.

Outdoor air source heat pumps

LA MS/LA AS* ranges

- Outdoor installation
- Flow temperature up to 55°C
- Heating capacities: 11 – 40kW
- Connection voltages: 230V single phase
  400V three phase

Options available:
- Heating / hot water
- Heating / hot water and active dynamic cooling
- Two level output capacity
- Flow temperature up to 55°C, 65°C (LA PS range) or 75°C (LA HS range)

LAK M/LA MR/LA TR ranges

- Outdoor installation
- Integrated system components
- Flow temperature up to 60°C
- Heating capacities: 6 – 16kW
- Connection voltages:
  230V single phase
  400V three phase

Options available:
- Heating / hot water only
- Heating / hot water and dynamic cooling
- Swimming pool (LAS range)

Indoor air source heat pumps

LI MEK range

- Indoor installation in corners or on walls
- Integrated system components and buffer
- Flow temperature up to 58°C
- Heating capacity: 8kW
- Connection voltage: 230V single phase

Options available:
- Heating / hot water only
- Heating / hot water and active dynamic cooling

LI ME/LI TE ranges

- Indoor installation in corners or on walls
- Flow temperature up to 58°C
- Heating capacities: 11 – 28kW
- Connection voltages: 230V single phase
  400V three phase

Options available:
- Heating / hot water only
- Heating / hot water and active dynamic cooling
- Two level output capacity
- Flow temperature up to 58°C or 75°C (LI TEH range)

Ground source heat pumps

SI MEK range

- Indoor installation
- Integrated system components
- Flow temperature up to 58°C
- Heating capacities: 11 – 16kW
- Connection voltage: 230V single phase

Options available:
- Heating / hot water only
- Passive cooling via PKS14/25

SI ME/SI TE ranges

- Indoor installation
- Flow temperatures up to 58°C
- Heating capacities: 5 – 21kW
- Connection voltages:
  230V single phase
  400V three phase

Options available:
- Heating / hot water only
- Passive cooling
- Heating / hot water and active dynamic cooling

SI TE range

- Indoor installation
- Flow temperatures up to 60°C
- Two level output capacity
- Heating capacities: 24 – 130kW
- Connection voltage: 400V three phase

Options available:
- Heating / hot water only
- Heating / hot water and active dynamic cooling with heat recovery
- Passive cooling

SI MEH/SI TEH range

- Indoor installation
- Flow temperatures up to 70°C
- Heating capacities: 6 – 40kW
- Connection voltage:
  230V single phase
  400V three phase

Options available:
- Heating / hot water only
- Passive cooling
- Two level output capacity

Water to water heat pumps

WI ME/WI TE/WI CS ranges

- Indoor installation
- Flow temperature up to 58°C
- Heating / hot water capacities: 9 – 90kW
- Connection voltage:
  230V single phase
  400V three phase

Options available:
- Heating / hot water only

Heat Pump accessories

- Domestic hot water cylinders
- Buffer cylinders
- Hydraulic system accessories
- Ground collector circuit manifolds and accessories
- Cooling accessories

*Image not applicable to LA 40 AS. Please see page 19 for image.

Air source heat pumps

Even cold air is full of energy and Dimplex air source heat pumps use the freely available heat in the ambient air to provide efficient heating and hot water at air temperatures as low as -25°C. Because the source of heat – the air – is abundantly available all around us, air source heat pumps have the advantage of low installation costs and minimal space requirements, while relatively mild winter temperatures in the UK mean excellent levels of efficiency and performance are achieved throughout the year.

Benefits of the outside air as a heat source:

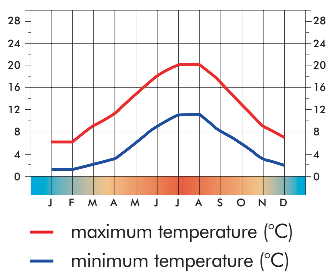
- Can be utilised all year round between +35°C and -25°C.
- Always available and inexhaustible source of heat.
- No requirement for the cost and land area of ground collectors.
- Ideal for new build or retro fit applications, especially where space is limited.
- Can be used for heating, cooling, domestic hot water and swimming pools.

Air source heat pumps – benefits of the UK climate

Compared with central Europe (where air source heat pumps are already very popular), the UK has a relatively moderate winter climate.

With average winter temperatures of around 5°C, seasonal co-efficients of performance comparable with ground source heat pumps are achievable, without the additional cost of expensive ground loop systems having to be installed.

Average UK temperatures over 12 month period

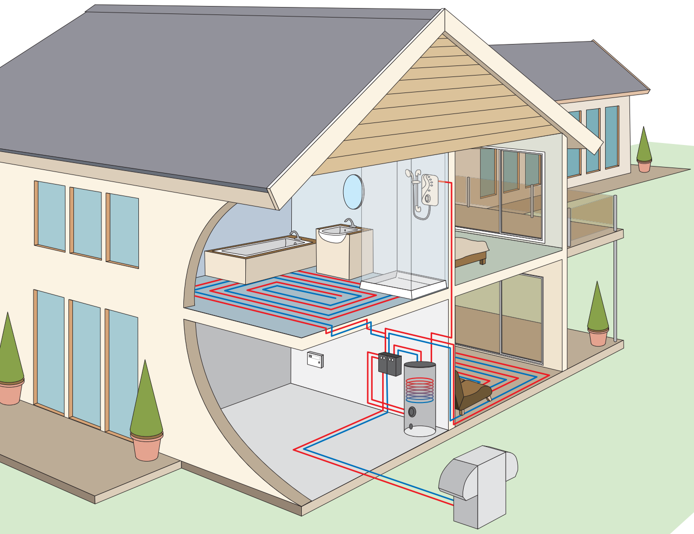


Optional outdoor or indoor installation

Air source heat pumps are suitable for either outdoor or indoor installation.

Dimplex outdoor air source heat pumps are constructed from robust, powder-coated metal casings to provide year round protection against the elements. The heat pump is connected to the indoor heating system simply by laying two heat insulated pipes and the electric connection cables under the ground.

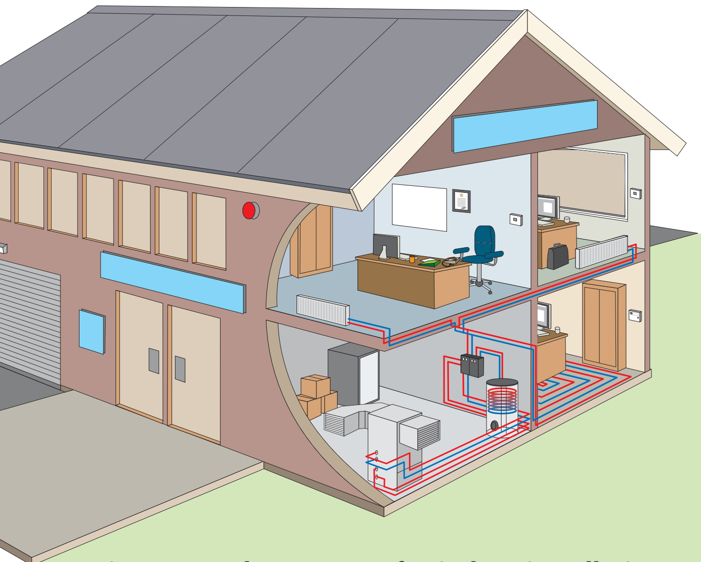
In some instances it may not be desirable for the heat pump to be installed in the garden. Indoor air source heat pumps offer a practical alternative and can be installed for example in a garage, basement or utility room. The heat pump is connected to the outside air via air ducts.



Note: Combined DHW / buffer tank shown

Air to water heat pumps for outdoor installation

- The heat source is easy to tap.
- The weatherproof heat pump is installed on a sturdy concrete foundation.
- The water pipes and electric cables are securely laid under ground.



Air to water heat pumps for indoor installation

- The heat source is tapped via air ducts.
- Heat pump is installed against an external wall.
- The insulated opening is protected by a rain guard.

CASE STUDIES

Heat pumps in action

Dimplex heat pumps have been installed in a wide variety of applications – two are featured here, but more are available on our website.

Dimplex heat pumps score for McCarthy & Stone

McCarthy & Stone, the UK's largest builder of retirement homes, took the lead in energy savings by installing Dimplex heating pumps at a development of 41 apartments in Clevedon, Somerset and achieved level 3 of the Code for Sustainable Homes. Three 28kW Dimplex air source heat pumps provide a communal system, servicing the entire block, with each flat having its own metering and separate hot water cylinder.

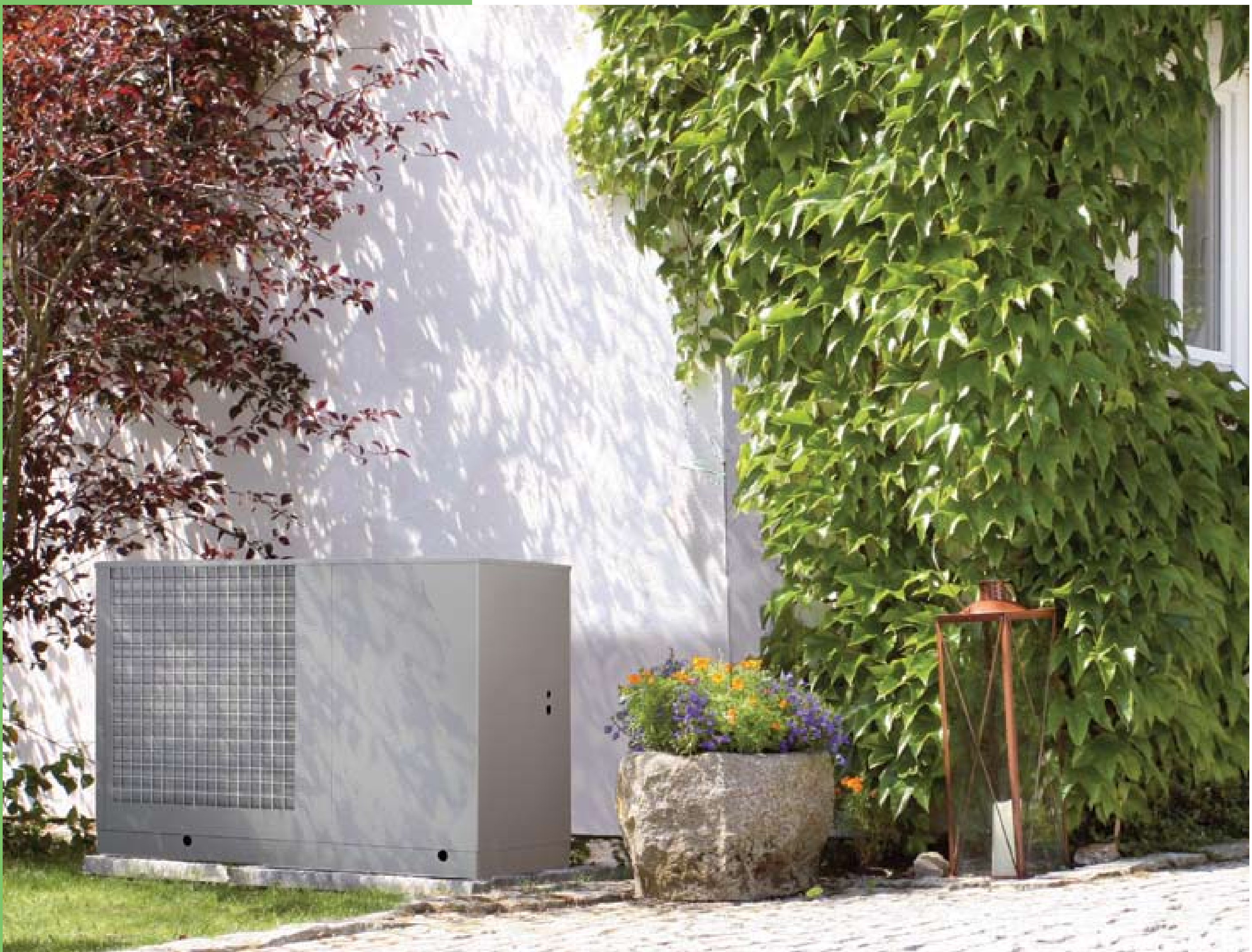
National Trust customers keep comfy with Dimplex

A restaurant at Feock, the National Trust tiered garden estate near Truro in Cornwall is using a Dimplex 11kW air source heat pump to utilise warm air from the kitchen fridges to keep customers warm. The condensers from the back of the fridges have been remotely sited alongside the Dimplex air source heat pump in an insulated outbuilding which means the air to water heat pump is given a kick start by the warm air expelled from the kitchen fridges."

The heat generated by the system is used for under floor heating in the new Crofters restaurant and there is the additional benefit that the kitchen is cooler with the refrigerators' heat extracted outside the building.

Air source heat pumps

Outdoor installation



Our robust outdoor air source heat pumps are constructed to withstand the best and worst of the British climate, with powder-coated metal casings and a stainless steel base frame. They're ideal where internal space is limited and can be installed up to 30cm from the building.

Single phase devices are available in outputs of 6-16kW providing a range of solutions for both domestic and light commercial applications.

An air source heat pump system is normally designed to deliver 100% of the heating and hot water demand, with the heat pump itself typically sized to provide at least 95% of the heating requirement. To minimise investment costs, it is normal to provide the remaining energy demand from a supplementary heat source, most commonly an electric immersion heater, however in retro-fit applications it is also possible to combine the heat pump with an existing boiler.

Integrated air source heat pumps

LAK M

The Dimplex LAK10 M air source heat pump provides extra low installation costs with the help of fully integrated system components, including the heating system circulation pump, 8 litre expansion vessel, hydraulic safety devices and a three capacity supplementary heating element (2, 4 or 6kW).

LAK 10 M is designed to provide both heating and domestic hot water.

Range features

- Nominal heating capacity 10kW.
- Variable heating water flow temperature from 35°C to 58°C.
- Integrated system components, including immersion heater and circulating pump.
- Suitable for use with under floor heating or radiator systems and to provide domestic hot water.
- Electronic soft start reduced starting current loads.

LAK 10 M

Model	LAK 10 M
Connection Voltage (V)	230
Maximum flow temp (°C)	58
Heat output (kW) A7/W35	10.2
CoP A7/W35	4.1

Please see page 44 for full technical specifications.

Free standing air source heat pumps

LA MS

Dimplex LA MS air source heat pumps provide excellent levels of heating and hot water performance at temperatures as low as 20°C.

The range incorporates air deflector hoods to minimise sound transmissions and an auto-adaptive defrost cycle to minimise energy consumption.

Range features

- 2 models with nominal heating capacities from 11 – 16kW single phase.
- Corrosion resistant stainless steel inner frame and powder coated outer housing.
- Variable heating water flow temperature from 35°C – 55°C with weather compensation.
- Suitable for use with underfloor heating or radiator systems and to provide domestic hot water.
- Extensive sound insulation minimises noise emissions.
- Energy optimised auto adaptive defrost cycle.
- Electronic soft start reduces starting current loads.

LA 16 MS

Model	LA 11 MS	LA 16 MS
Connection Voltage (V)	230	230
Maximum flow temp (°C)	55	55
Heat output (kW) A7/W35		
1 Compressor	10.9	15.4
2 Compressors	-	-
CoP A7/W35		
1 Compressor	4.1	3.7

Please see page 44 for full technical specifications.

Air source heat pumps

High output air source heat pumps for outdoor installation

Dimplex high output air source heat pumps expand the scope of the applications for high efficiency heating solutions with a range of increased output models ranging from 20-40kW.

Optimised twin compressor operation allows buildings with high heat consumption to be catered for, such as offices, schools, hotels or retail outlets. High output heat pumps are also ideal for multiple occupancy buildings such as flats and apartments where centralised heat pump systems are able to provide a building-wide heating solution.

Parallel operation for higher total capacity

Multiple Dimplex heat pumps can be connected together in parallel to provide a highly cost effective solution where very high capabilities are required.

The WPM heat pump manager controls and optimises performance of the system.

High output air source heat pumps

LA AS

The Dimplex LA AS range of high output 3 phase air source heat pumps provide a flexible range of solutions for higher capacity heating systems.

All models utilise a wall mounted WPM 2007 heat pump manager, allowing independent control over multiple heating circuits at differing flow temperatures.

Twin compressor operation enables these models to flexibly and efficiently adapt to fluctuating heat demand by automatically switching between single and dual compressor modes depending on the outside temperature and heat demand of the building.

Range features

- Range of 4 models with nominal heating capacities from 20-40kW.
- Variable heating water flow temperatures from 35°C-55°C with weather compensation.
- Intelligent switching between single and dual compressor modes, maximising efficiency and compressor duty cycle.
- WPM 2007 heat pump manager.
- Suitable for use with under floor heating, radiator or fan coil systems and to provide hot water.
- Three phase electrical connection, with electronic soft start to reduce start current loads.
- Optional flexible expansion for bivalent or bivalent-renewable operating mode and for distributed systems with unmixed and mixed heating circuits.
- LA 40 AS modes incorporates horizontal air flow circuit, minimising installation space requirements.

LA 20-28 AS

LA 40 AS

Model	LA 20 AS	LA 24 AS	LA 28 AS	LA 40 AS
Connection Voltage (V)	400	400	400	400
Maximum flow Temperature (°C)	55	55	55	55
Heat Output A7/W35 (kW)				
1 compressor	9.8	13.1	14.2	20.2
2 compressors	16.6	24.8	25.8	36.3
CoP A7/W35				
1 compressor	3.2	3.4	3.1	4.7
2 compressors	3.1	3.6	3.4	4.5

Please see page 44 for full technical specifications.

Air source heat pumps

Indoor installation

Indoor air source heat pumps can be installed in a utility room, garage or basement and are designed with low noise emissions in mind.

Single phase models are available in outputs of 8-11kW, with outputs up to 28kW available for 3 phase connection, providing solutions for both domestic and light commercial applications alike.

The 8kW LI 8 MEK 'integrated' heat pump is designed to fit neatly into the corner of room with no need for additional ducting. Many of the hydraulic system components are built in providing simple and convenient installation.

Alternatively, the LI ME and LI TE ranges provide flexible system design, allowing buffer tanks, domestic hot water cylinders and hydraulic components to be specified and installed as and when required.

Integrated air source heat pump

LI MEK

The LI 8 MEK saves valuable space and is easy to install, with the WPM2007 heat pump manager and key system components fully integrated into one compact unit.

Range features

- Nominal heating capacity 8kW.
- Variable heating water flow temperatures from 35°C – 58°C with weather compensation.
- Integrated system components, including 50L buffer tank, 2kW immersion heater, circulating pump and expansion vessel.
- WPM2007 heat pump manager with removable control panel.
- Designed for 'through wall' installation in the corner of a room against two outside walls – no additional ducts needed.
- Suitable for use with underfloor heating or radiator systems and to provide domestic hot water.
- Energy optimised auto adaptive defrost cycle.
- Electronic soft start reduces starting current loads.

LI 8 MEK

Universal design air source heat pumps

LI ME & LI TE

LI indoor air source heat pumps are available in outputs from 11-28kW and incorporate low noise fans to minimise sound transmission.

Models with twin compressors (20kW and over) incorporate intelligent load switching to maximise compressor life.

Range features

- 5 models with nominal heating capacities of 11kW single phase and 16 – 28kW three phase.
- 20kW and above models fitted with twin compressors for higher capacity output and two performance capacities.
- Variable heating water flow temperatures from 35°C – 58°C with weather compensation.
- WPM2007 heat pump manager with removable control panel for installation in a preferred location.
- Suitable for use with underfloor heating or radiator systems and to provide domestic hot water.
- Energy optimised, auto adaptive defrost cycle.
- Complementary built-under buffer tank for space saving.
- Air ducting kits provided as accessories.
- Electronic soft start reduces starting current loads.

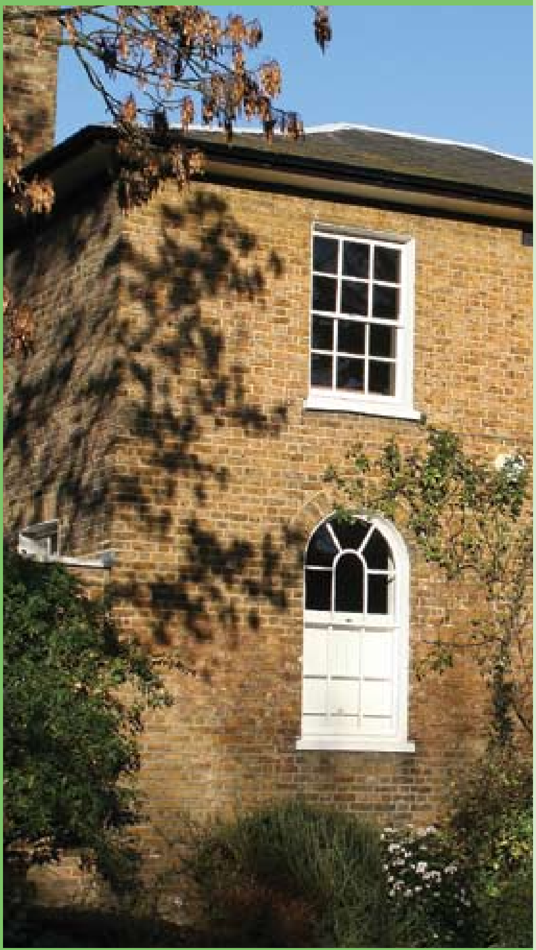
LI 11 ME

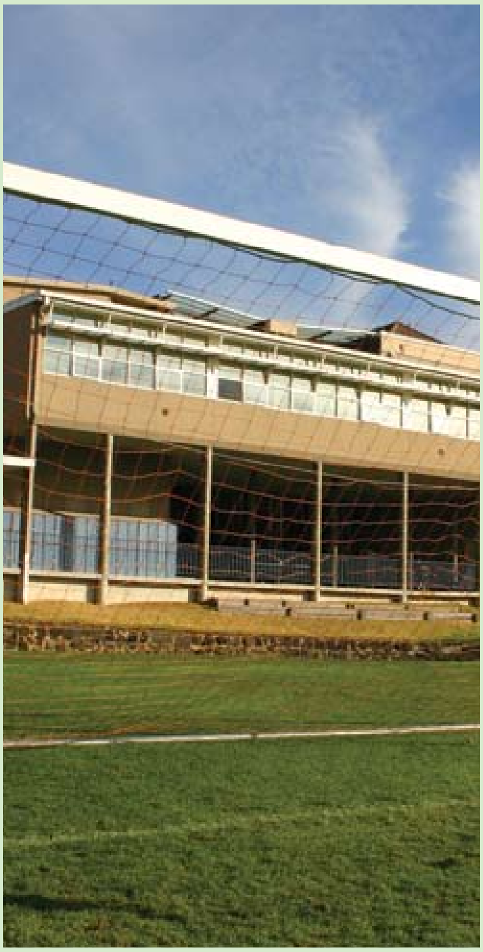
Model	LI 8 MEK	LI 11 ME	LI 16 TE	LI 20 TE	LI 24 TE	LI 28 TE
Connection Voltage (V)	230	230	400	400	400	400
Maximum flow temp (°C)	58	58	58	58	58	58
Heat output (kW) A7/W35						
1 Compressor	9.2	10.9	15.1	10.4	12.6	13.9
2 Compressors	-	-	-	17.0	24.2	25.1
CoP A7/W35						
1 Compressor	3.8	3.9	3.6	3.5	3.3	3.1
2 Compressors	-	-	-	3.4	3.4	3.3

Please see page 46 for full technical specifications.

Air source heat pumps

Medium and high temperature air source heat pumps





Improving a buildings thermal insulation can often be enough to allow the heating system to be operated at low temperatures. However higher water flow temperatures are sometimes needed where high volumes of hot water are required at temperatures of 60°C or higher, or where the heat pump is intended for use in older buildings with existing radiator systems.

The Dimplex ranges of medium and high temperature air source heat pumps provide just this facility, providing water output temperatures of 65°C and 75°C respectively.

LA PS medium temperature models utilise the environmentally sensitive R290 refrigerant and are available for outdoor installation only, while high temperature models are available for installation either indoors or outdoors.

Medium temperature air source heat pumps

LA PS

The LA PS medium temperature heat pumps are available for outdoor installation and provide variable water flow temperatures of up to 65°C.

Range features

- 5 models with nominal heating capacities from 9 – 26kW.
- Variable heating water flow temperatures from 35°C – 65°C with weather compensation.
- Higher output models (17kW and above) fitted with twin compressors for high capacity output and two performance capacities.
- Intelligent switching between single and dual compressor modes, maximising efficiency and compressor duty cycle.
- For outdoor installation only.
- Utilises environmentally sensitive R290 refrigerant.
- WPM2006 heat pump manager.
- Electronic soft start reduces starting current loads.

LA 9 PS

LA 17 PS

Model	LA 9 PS	LA 11 PS	LA 17 PS	LA 22 PS	LA 26 PS
Connection Voltage (V)	400	400	400	400	400
Maximum flow temp (°C)	65	65	65	65	65
Heat output A7/W35(kW)					
1 Compressor	8.5	11.5	9.6	12.0	13.3
2 Compressors	-	-	16.6	21.1	22.9
CoP A7/W35					
1 Compressor	3.6	3.8	3.4	3.6	3.5
2 Compressors	-	-	3.4	3.5	3.5

Please see page 46 for full technical specifications.

High temperature air source heat pumps

LA HS & LI TEH

Dimplex high temperature heat pumps are available for either outdoor or indoor installation and provide variable water flow temperatures of up to 75°C.

Range features

- Nominal heating capacities of 22kW and 26kW in both outdoor and indoor installation options.
  Variable heating water flow temperatures from 35°C – 75°C with weather compensation.
- Twin compressors for high temperature output.
- Intelligent switching between single and dual compressor modes, maximising efficiency and compressor duty cycle.
- LI HS models fitted with integrated WPM2007 heat pump manager with removable control panel.
- LA HS models supplied with WPM2006 heat pump manager.
- Electronic soft start reduces starting current loads.

LI 26 TEH

LA 22 HS

Model	LI 22 TEH	LI 26 TEH	LA 22 HS	LA 26 HS
Connection Voltage (V)	400	400	400	400
Maximum flow temp (°C)	75	75	75	75
Heat output A7/W35(kW)	15.2	19.5	15.2	19.5
CoP A7/W35	3.2	3.6	3.2	3.6

Please see pages 46 for full technical specifications.

Ground source heat pumps

Drawing as much as 75% of the energy needed by the heating system from freely available, inexhaustible solar energy stored in the ground, Dimplex ground source heat pumps are available in an extensive range of models types and capacities suitable for either domestic or commercial applications.

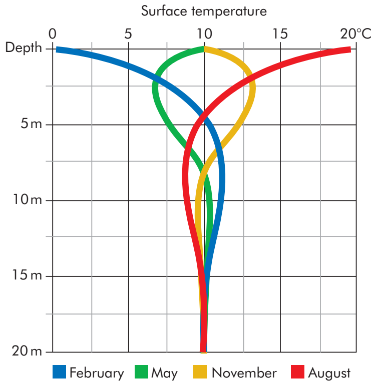
Due to highly stable temperatures below the earth's surface, ground source heat pumps provide high levels of efficiency for space and water heating all year round.

Benefits of the ground as a heat source

- Consistent temperatures below ground throughout the year provides a high Co-efficient of Performance.
- Can be used for heating, domestic hot water and swimming pools.
- Borehole systems can be used for either passive or active cooling (see page 36).

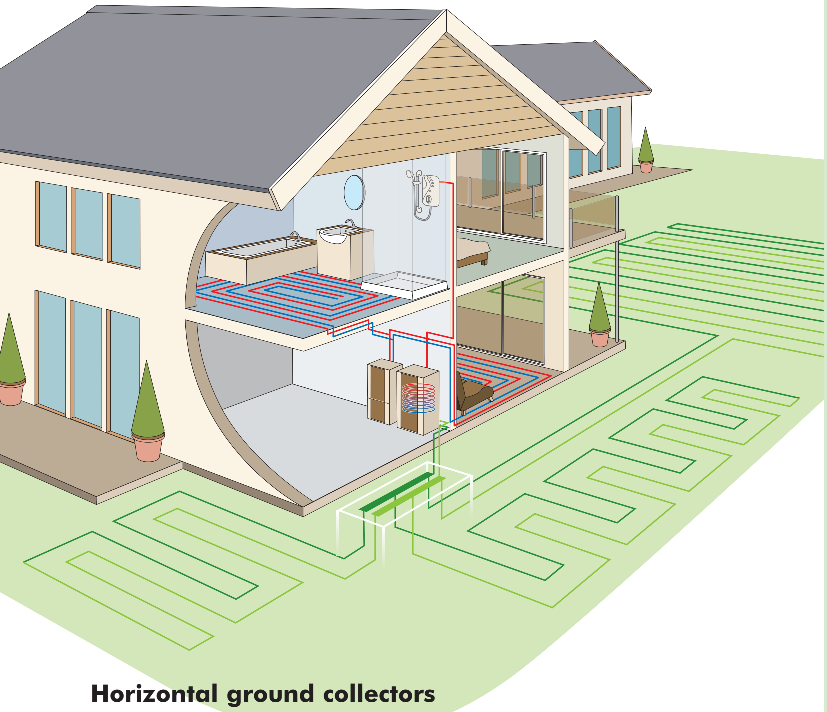
At just 1m below the surface, the earth provides a stable source of heat throughout the year.

At depths of 15m or more, the earth provides a constant 10°C temperature.



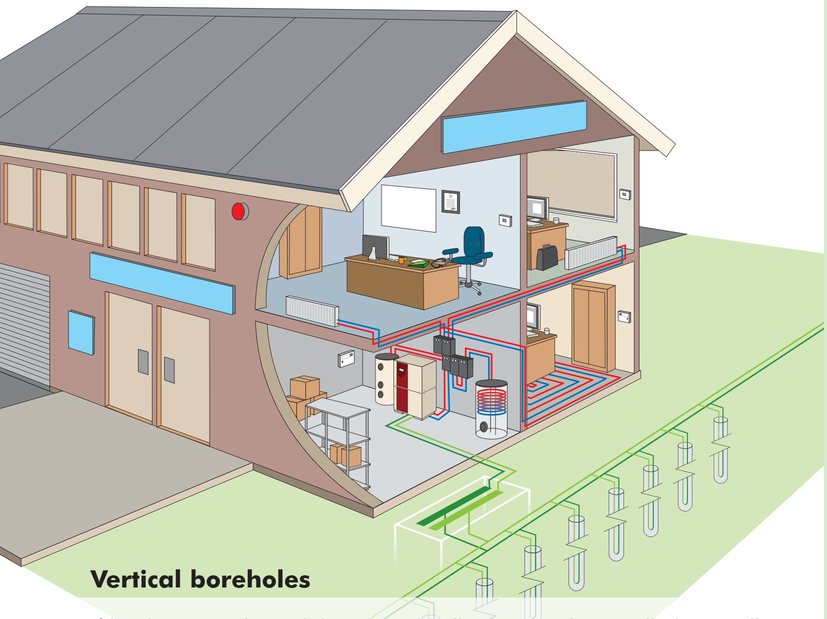
Heat from the ground

The earth stores an enormous amount of solar energy from both solar radiation and rainfall. To extract this energy, ground collectors consisting of flexible poly ethylene pipes are buried in the earth, either horizontally or vertically. A mixture of water and anti-freeze is then circulated through the pipe loops, attracting the heat energy and transferring it to the heat pump.



Horizontal ground collectors

If a large enough land area is available, horizontal ground collectors provide an effective method of extracting heat from the ground.
The pipework is buried at a depth of approximately 1.2m and spaced 0.75m apart. The land area required is dependent on both the capacity of the heat pump and heat conductance of the soil type in which the pipes are buried.
As a space saving alternative to horizontal collectors, slinkies - consisting of coiled pipes buried in a trench – can be used.



Vertical boreholes

If land space is limited the ground collectors can be installed vertically in a borehole, drilled up to 100m deep in the ground.
Multiple boreholes are commonly used in large installations where very high levels of heat extraction are required.

CASE STUDIES

Heat pumps in action

Dimplex heat pumps have been installed in a wide variety of applications – two are featured here, but more are available on our website.

Housing Association bungalows convert to Dimplex

Stafford & Rural housing association has fitted Dimplex ground source heat pumps into a refurbishment project of nine warden-linked bungalows at Synnerton, Staffordshire, with five of the properties taking part in a year-long survey by the EST to monitor heat pumps in real-life installations.

One of the key considerations when replacing the system was fuel poverty as economic heating was very important to its tenants. The housing association was also looking for something that was future-proof, cost effective with no costly bills or annual inspections. Three suppliers were considered by an assessment panel which included 3 tenants with Dimplex selected because of the overall package they could supply.

Top Marks for Dimplex in London school

Ealing council has installed Dimplex ground source heat pumps at three schools and is already planning a fourth!

A Dimplex SI 40 TEH high temperature ground source heat pump was initially installed at Grange Primary School, a larger than average school with 500 pupils, with 15 boreholes required in a restricted area which subsequently became part of the playground.

Following the success at Grange Primary, a Dimplex SI 37 TE heat pump has been installed at Mandeville School, Northolt, a co-educational day school for pupils aged 2-12 and a SI 24 TE has been installed at Ellen Wilkinson School for Girls in Acton, with 1400 students aged 11-18.

Ground source heat pumps

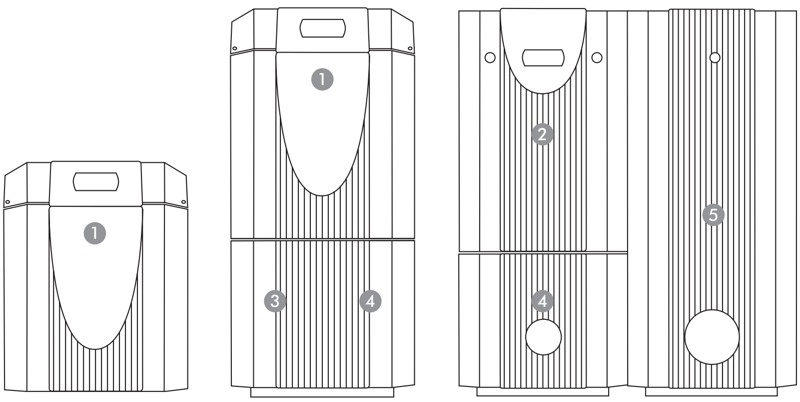
Available in a wide range of sizes and configurations, Dimplex ground source heat pumps provide a sustainable heating solution for virtually any scenario.

As well as being perfectly suitable for use with either radiators or underfloor heating systems, Dimplex ground source heat pumps are able to provide domestic hot water.

Single phase models are available in outputs from 5-16kW making them ideal for both domestic and light non domestic applications alike, while the option of either stand alone or fully integrated formats provides maximum flexibility to meet the needs of virtually any scenario.

Flexible system options

The Dimplex ground source range, including buffer tanks and hot water cylinders are designed to fully co-ordinate and provide a range of flexible system options:



1. SI ME ground source heat pump
2. SI MEK integrated ground source heat pump
3. WWSP229EUK 200L domestic hot water cylinder
4. PSP100E 100L buffer cylinder
5. WWSP442EUK 400L domestic hot water cylinder

Ground source heat pumps

SI ME

The popular range of SI ME ground source heat pumps provide flexible system design making them ideal for domestic or light commercial applications.

Where space saving is required the SI ME range can be combined with a 200L domestic hot water cylinder, which fits neatly below the heat pump unit.

Range features

- 5 models with nominal heating capacities from 5 – 14kW, single phase.
- Variable heating water flow temperatures from 35°C – 58°C with weather compensation.
- WPM2007 heat pump manager with removable control panel.
- Electronic soft start reduces starting current loads.
- Suitable for use with underfloor heating or radiator systems and to provide domestic hot water.
- Complementary built under 200L domestic hot water cylinder for space saving.

SI 5 ME

Model	SI 5 ME	SI 7 ME	SI 9 ME	SI 11 ME	SI 14 ME
Connection Voltage (V)	230	230	230	230	230
Maximum flow temp (°C)	58	58	58	58	58
Heat output B0/W35 (kW)	4.9	6.3	8.9	10.8	14.8
CoP B0/W35	3.8	3.7	3.8	3.9	3.9

Please see page 48 for full technical specifications.

Integrated ground source heat pumps

SI MEK

The SI MEK range of fully integrated ground source heat pumps provide easy installation and minimises space requirements, with the heat pump manager and key system components all fully integrated into one compact unit.

A complementary 100L buffer tank and 400L domestic hot water cylinder are also available to complete the system.

Range features

- Available with nominal heating capacities of 11 and 16kW, single phase.
- Integrated system components, including circulating pumps, expansion vessels and safety assemblies for both the heating and ground collector circuits.
- WPM2007 heat pump manager with removable control panel.
- Variable heating water flow temperatures from 35°C – 55°C with weather compensation.
- Suitable for use with underfloor heating or radiator systems and to provide domestic hot water.
- Matching built-under buffer tank for space saving and 400L domestic hot water cylinder.

SI 16 MEK

Model	SI 11 MEK	SI 16 MEK
Connection Voltage (V)	230	230
Maximum flow temp (°C)	55	55
Heat output B0/W35 (kW)	11.8	15.8
CoP B0/W35	4.4	4.2

Please see page 50 for full technical specifications.

Ground source heat pumps

High temperature ground source heat pumps

Dimplex high temperature ground source heat pumps have the ability to provide high water flow temperatures up to 70°C.

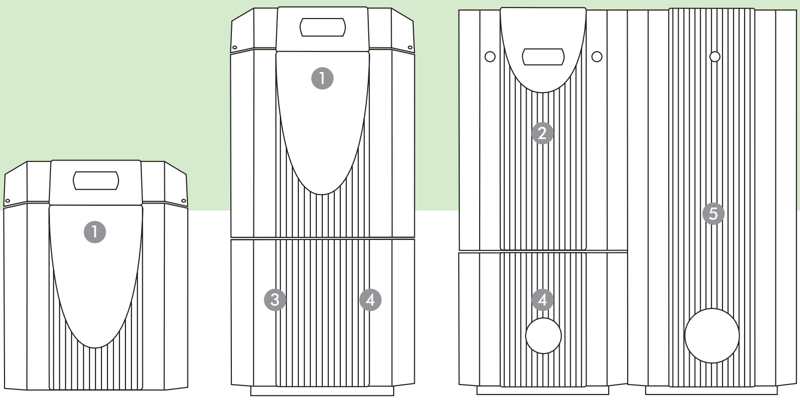
This provides the ability to provide the dwellings full domestic hot water requirements with no need for supplementary electric heating.

The Co-efficient of Performance for heating radiators at 50°C has also improved over standard models, making them ideally suited to existing as well as new properties.

Single phase models are available in outputs from 6-11kW, with the option of either stand-alone or fully integrated formats to provide maximum flexibility to meet the needs of a wide range of applications.

Flexible system options

The Dimplex ground source range, including buffer tanks and hot water cylinders are designed to fully co-ordinate and provide a range of flexible system options:



1. SI MEH ground source heat pump
2. SI MEKH integrated ground source heat pump
3. WWSP229EUK 200L domestic hot water cylinder
4. PSP100E 100L buffer cylinder
5. WWSP442EUK 400L domestic hot water cylinder

High temperature ground source heat pumps

SI MEH

The SI MEH range provides flow temperatures up to 70°C enabling 100% of a homes heating and hot water to be provided without the need for supplementary heating.

Range features

- 3 models with nominal heating capabilities from 6-11kW.
- Variable heating water flow temperatures from 35°C-70°C with weather compensation.
- WPM 2007 heat pump manager with removable control panel.
- Electronic soft start control reduces starting current loads.
- Suitable for use with under floor heating or radiator systems.
- Provides domestic hot water to 60°C with no need for supplementary heating.

SI MEH

Model	SI 6 MEH	SI 9 MEH	SI 11 MEH
Connection Voltage (V)	230	230	230
Maximum flow temp (°C)	70	70	70
Heat output B0/W35 (kW)	6	8.9	10.7
CoP B0/W35	4.1	4.0	4.5

Please see page 48 for full technical specifications.

High temperature, integrated ground source heat pumps

SI MEKH

The SI MEKH range of fully integrated ground source heat pumps provides easy installation and minimises space requirements, with the heat pump manager and key system components all fully integrated into one compact unit

A complimentary 100L buffer tank and 400L domestic hot water cylinder are also available to complete the system.

Range features

- Available with nominal heating capacity of 9kW.
- Integrated system components, including circulating pumps, expansion vessels and safety assemblies for both the heating and ground circuits.
- WPM 2007 heat pump manager with removable control panel.
- Variable heating water flow temperatures from 35°C-70°C with weather compensation.
- Suitable for use with under floor heating or radiator systems.
- Provides domestic hot water to 60°C with no need for supplementary heating.
- Matching built-under buffet tank for space saving and tool domestic hot water cylinder.

SI MEKH

Model	SI 9 MEKH
Connection Voltage (V)	230
Maximum flow temp (°C)	70
Heat output B0/W35 (kW)	9.4
CoP B0/W35	4.4

Please see pages 50 for full technical specifications.

Ground source heat pumps

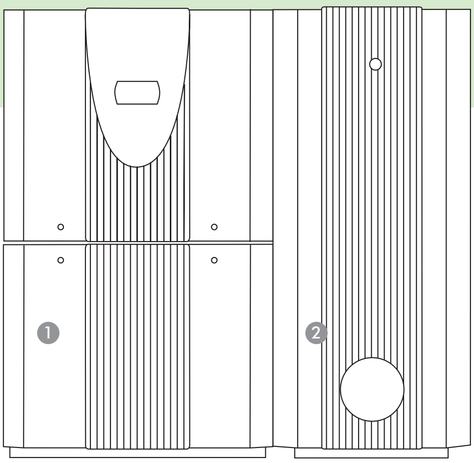
High output ground source heat pumps

Dimplex high output ground source heat pumps expand the scope of applications for high efficiency heating solutions with a range of increased output models ranging from 17 – 130kW.

Optimised twin compressor operation allows buildings with high heat consumption to be catered for, in the shape of either non-domestic applications such as offices or schools. High output heat pumps are also ideal for multiple occupancy buildings such as flats and apartments where centralised heat pump systems are able to provide a building wide heating solution.

Flexible system options

SI 24 TE – SI 37 TE heat pumps are designed to co-ordinate with the WWSP442EUK hot water cylinder.



1 SI 24-37 TE ground source heat pump
2 WWSP442EUK 400L hot water cylinder

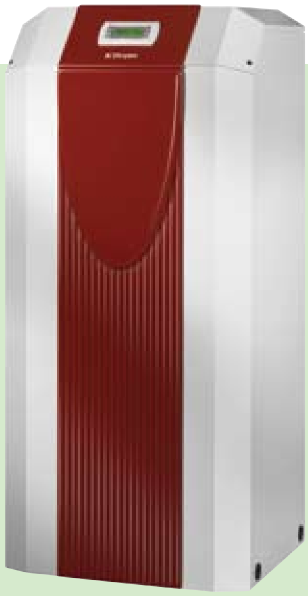
High output ground source heat pumps

SI TE

The Dimplex SI TE range of high output 3 phase ground source heat pumps provide a flexible range of solutions for higher capacity heating systems.

All models utilise the WPM2007 heat pump manager, allowing independent control over multiple heating circuits at differing flow temperatures.

Models with outputs of 24kW and above incorporate twin compressors, enabling them to flexibly and efficiently adapt to fluctuating heat demand by automatically switching between single and dual compressor modes depending on the outside temperature and heat demand of the building.



SI 21 TE

SI 17 TE

Range features

- Range of 9 models with nominal heating capacities from 17 – 130kW.
- Variable heating water flow temperatures from 35°C – 60°C with weather compensation.
- Twin compressors on outputs of 24kW and over for higher capacity output.
- Intelligent switching between single and dual compressor modes, maximising efficiency and compressor duty cycle.
- WPM2007 heat pump manager with removable control panel.
- Suitable for use with underfloor heating or radiator systems and to provide domestic hot water.
- Three phase electrical connection, with electronic soft start to reduce start current loads.
- Able to use ground water as a heat source with the addition of an intermediate heat exchanger.
- Matching 400 litre domestic hot water cylinder.

SI 50 – 130 TE

SI 24 – 37 TE

Model	SI 17 TE	SI 21 TE	SI 24 TE	SI 30 TE	SI 37 TE	SI 50 TE	SI 75 TE	SI 100 TE	SI 130 TE
Connection Voltage (V)	400	400	400	400	400	400	400	400	400
Maximum flow temp (°C)	58	58	60	60	60	60	60	60	60
Heat output B0/W35(kW)	-	-	-	-	-	-	-	-	-
1 Compressor	16.9	20.8	12.7	14.4	18.3	23.0	37.6	48.4	63.3
2 Compressors	-	-	23.7	31.2	35.4	46.7	75.2	96.3	125.8
CoP B0/W35									
1 Compressor	4.4	4.1	4.3	4.2	4.5	4.4	4.3	4.6	4.2
2 Compressors	-	-	4.1	4.6	4.3	4.5	4.4	4.6	4.3

Please see pages 50-54 for full technical specifications.

Ground source heat pumps

High output, high temperature ground source heat pumps

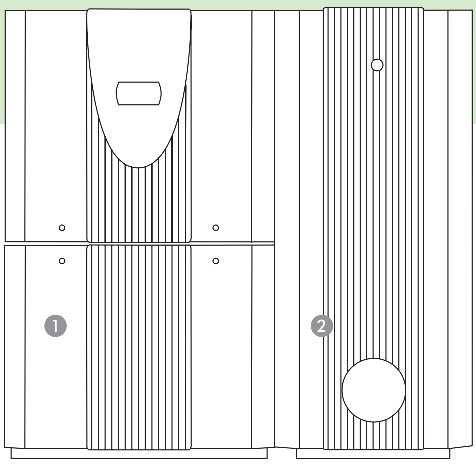
Dimplex high temperature ground source heat pumps have the ability to provide high water flow temperatures of up to 70°C.

This makes them ideal for applications where high volumes of stored hot water are required at temperatures of 60°C or higher, or where the heat pump is required to be connected to a high temperature heating system using radiators.

Optimised twin compressor operation allows the SI TEH range to be used in buildings with high heat consumption, for example commercial applications, schools or for centralised heat production in multiple occupancy residential buildings such as flats.

Flexible system options

SI 20 TEH is designed to co-ordinate with the WWSP442EUK hot water cylinder.



1 SI 20 TEH ground source heat pump
2 WWSP442EUK 400L hot water cylinder

High temperature ground source heat pumps

SI TEH

The Dimplex SI TEH range of high temperature ground source heat pumps provide variable water flow temperatures up to 70°C, providing a solution for buildings with high temperature heating systems (radiators) or where high temperature hot water storage is required.

Available in 20kW and 40kW options, both models utilise the WPM2007 heat pump manager, allowing independent control over multiple heating circuits at differing flow temperatures.

Both models incorporate twin compressors, enabling them to flexibly and efficiently adapt to fluctuating heat demand by automatically switching between single and dual compressor modes depending on the outside temperature and heat demand of the building.

Range features

- Nominal heating capacities of 20kW and 40kW.
- Variable heating water flow temperatures from 35°C – 70°C with weather compensation.
- Twin compressors for higher capacity output.
- Intelligent switching between single and dual compressor modes, maximising efficiency and compressor duty cycle.
- WPM2007 heat pump manager with removable control panel.
- Suitable for use with underfloor heating or radiator systems and to provide domestic hot water at stored water temperatures of up to to 60°C.
- Three phase electrical connection, with electronic soft start to reduce start current loads.
- Able to use ground water as a heat source with the addition of an intermediate heat exchanger.
- Matching 400 litre domestic hot water cylinder.

SI 20 TEH

SI 40 TEH

Model	SI 20 TEH	SI 40 TEH
Connection Voltage (V)	400	400
Maximum flow temp (°C)	70	70
Heat output B0/W35(kW)		
1 Compressor	11.5	17.4
2 Compressors	21.4	34.2
CoP B0/W35		
1 Compressor	4.6	4.1
2 Compressors	4.4	4.1

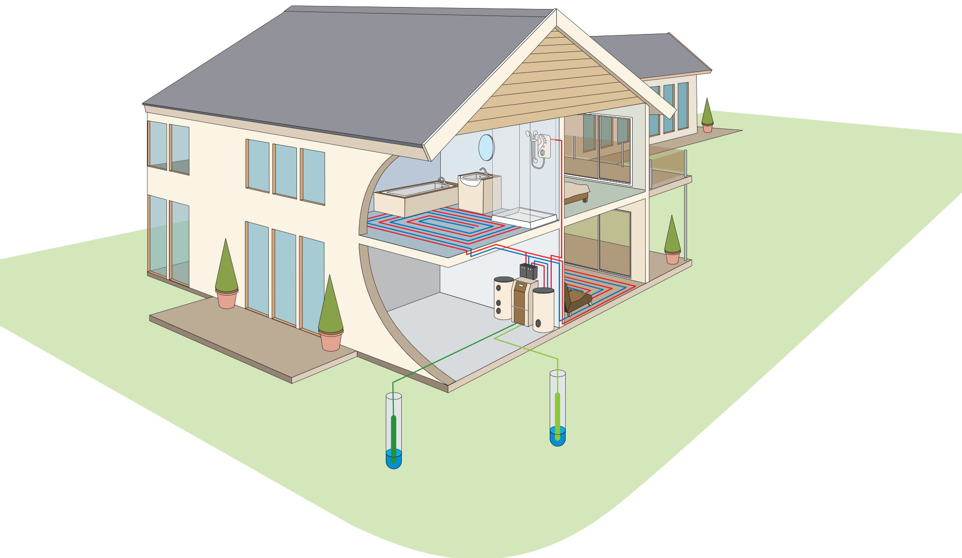
Please see page 52 for full technical specifications.

Water to water heat pumps

Water to water heat pumps work in a similar way to ground source systems, with the exception that they use "open loop" collectors, where underground water is circulated through the pipes.

The Dimplex range is available in an extensive range of model types and capacities suitable for either domestic or commercial applications.

High year round water temperatures allow water to water heat pumps to provide very high levels of efficiency with CoP's of 5 or over achievable.



Underground water stores an enormous amount of solar energy which can be extracted at very high levels of energy efficiency by circulating it directly through the heat pump evaporator.

Ground water as a heat source

- Year round availability at temperatures of 7-12°C.
- Can be used for heating, domestic hot water and swimming pools.
- Requires environment agency consent to extract and discharge water from/to the water course.

Water to water heat pumps

WI ME & WI TE

Dimplex WI ME and WI TE water to water heat pumps provide flexible system design in heating outputs from 9 – 27kW, making them ideal for domestic or light commercial applications.

Stainless steel coil heat exchangers provide high levels of corrosion resistance, preventing the need for water analysis prior to installation.

Range features

- 5 models with nominal heating capacities from 9 – 27kW.
- Variable heating water flow temperatures from 35°C – 58°C with weather compensation.
- Stainless steel coil heat exchanger providing the opportunity for use with virtually all water qualities without the need for water analysis.
- WPM2007 heat pump manager with removable control panel.
- Suitable for use with underfloor heating or radiator systems and to provide domestic hot water.
- Electronic soft start control to reduce start current loads.

WI 14 ME

The new stainless steel spiral heat exchanger is a innovative solution to prevent corrosion and icing up. WI ME and WI TE models can therefore be used with untreated ground water sources with a temperature of up to 13°C.

Model	WI 9 ME	WI 14 ME	WI 18 TE	WI 22 TE	WI 27 TE
Connection Voltage (V)	230	230	400	400	400
Maximum flow temp (°C)	55	55	58	58	58
Heat output W10/W35(kW)	8.2	13.5	16.9	21.3	26.1
CoP W10/W35	4.8	4.7	5.2	5.3	4.9

Please see page 52 for full technical specifications.

High capacity water to water heat pumps

WI CG

Dimplex WI CG high performance water to water heat pumps provide the solution where higher capacity heating is required.

Available in outputs of 40kW and 90kW, both models utilise the WPM 2006 heat pump manager and incorporate twin compressors, enabling them to flexibly and efficiently adapt to fluctuating heat demand by automatically switching between single and dual compressor modes.

Range features

- Available with nominal heating capacities of 40 and 90kW.
- Variable heating water flow temperatures from 35°C – 55°C with weather compensation.
- Twin compressors for high capacity output and two performance capacities.
- WPM2006 heat pump manager.
- Requires ground water analysis prior to installation.

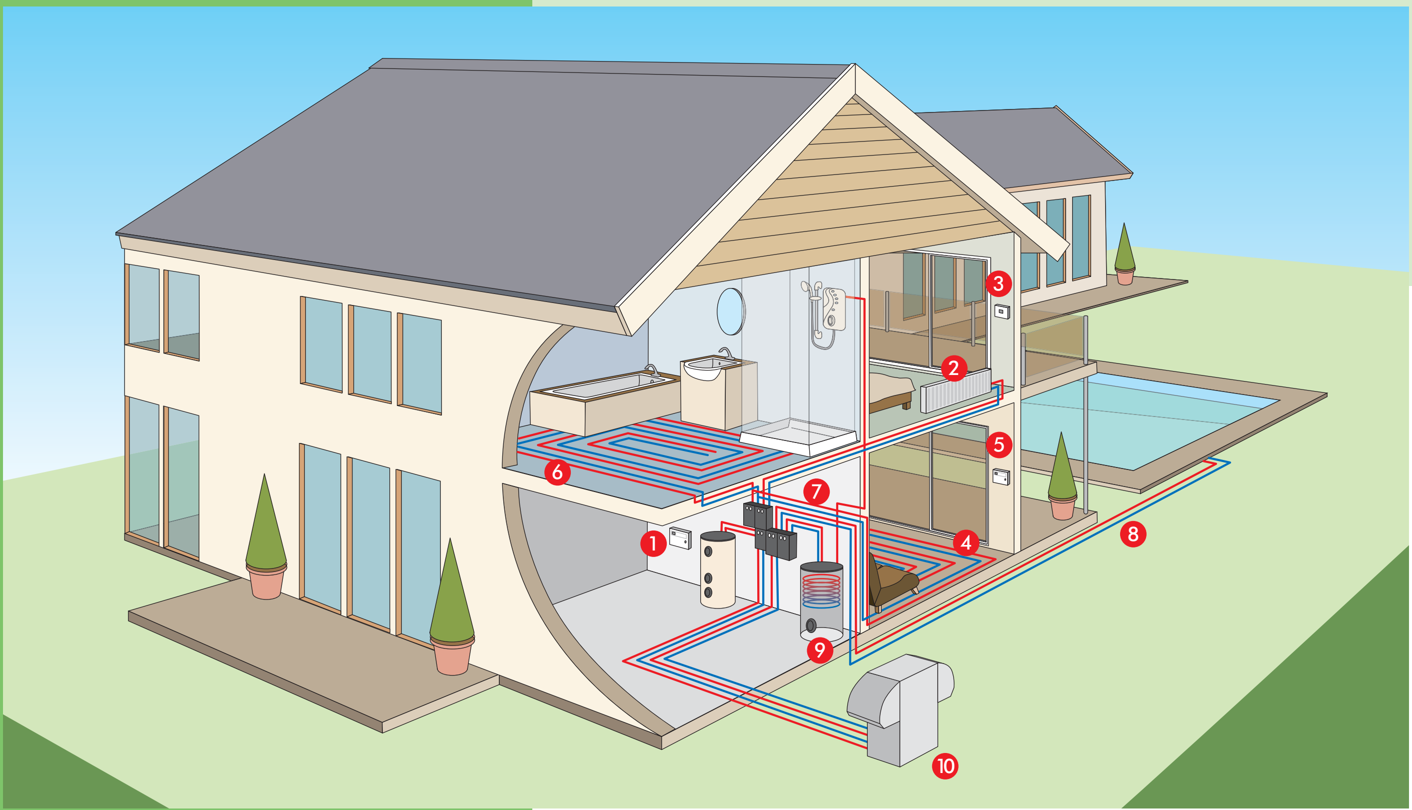
WI 40 CG

Model	WI 40 CG	WI 90 CG
Connection Voltage (V)	400	400
Maximum flow temp (°C)	55	55
Heat output W10/W35(kW)		
1 Compressor	23.4	49.8
2 Compressors	44.4	91.2
CoP W10/W35		
1 Compressor	5.9	5.9
2 Compressors	5.7	5.4

Please see page 52 for full technical specifications.

Reversible heat pumps

Innovative heating and cooling



Apart from an efficient heat pump heating system, summer time cooling of well-insulated new buildings is becoming increasingly important to achieve a comfortable environment. Solar gain, higher levels of insulation and increasingly warm summer temperatures all lead to a rising demand for cooling systems. Dimplex offers an innovative, energy efficient concept for all types of heat sources to also utilise water-bearing heating systems for cooling purposes.

1. Heat pump manager for heating and cooling
2. Dynamic cooling via fan convectors with condensate drainage; suitable for domestic buildings with high heat loads and commercial buildings
3. Room thermostats switch from heating to cooling via an external signal from the cooling controller
4. Silent cooling utilising existing heating surfaces (underfloor, ceiling or wall cooling)
5. Room climate control station for regulating the flow temperature with silent cooling via a reference room
6. Underfloor heating for comfortable heat in the winter
7. Dew point monitor for connection to the cooling controller to interrupt the cooling operation of the system if condensate forms at vulnerable points in the cooling distribution system
8. The waste heat produced in cooling operation can be utilised for swimming pool water heating
9. Efficient domestic hot water preparation utilising waste heat recovery in cooling operation
10. Reversible air source heat pumps for outdoor installation

Reversible air source heat pumps

Indoor Installation
LI TER+

Outdoor Installation

LA MSR / ASR

LA MR

Indoor installation

Models available:

- 8kW single phase, integrated (LI 8 MEKR)
- 11kW single phase (LI 11 MER)
- 11kW three phase with heat recovery (LI 11 TER+)
- 16kW three phase with heat recovery (LI 16 TER+)

Outdoor installation

Models available:

- 11kW single phase (LA 11 MSR)
- 16kW three phase (LA 16 ASR)
- 6-10kW single phase (LA 6-10 MR)
- 12-16kW three phase (LA 12-16 MR)

Reversible heat pumps for active cooling

In winter the heat pump functions as an energy efficient heating device and extracts the required energy from the environment. By reversing this process the heat pump can be operated to provide cooling, extracting heat from the building and transferring this to the environment via the heat pump refrigerant and compressor.

Waste heat recovery makes it possible to also produce domestic hot water extremely efficiently during the cooling process, while returning waste heat to the ground (using a ground source heat pump) effectively stores the energy for use later in the year when needed for heating. The entire system is controlled by the heat pump manager.

Passive cooling with borehole heat exchangers or ground water.

Deeper ground layers have constant temperature levels of around 10°C all year round. This allows ground source heat pumps installed with vertical borehole collectors to be used to provide 'passive' cooling, by transferring excess heat from the building to the ground via the collector in the summer months.

This is achieved with the addition of a retro-fittable passive cooling unit, controlled by an additional cooling controller, which communicates with the heat pump manager to enable a combination of heating and 'comfort' cooling in a single system.

Domestic hot water can still be provided in parallel to the cooling operation as the heat pump compressor is not active in the passive cooling mode.

Depending on the type of heating system installed in the building, cooling can be provided in one of two ways:

Silent (active) cooling via surface heating systems

In summer, the heating surfaces in floors, walls and ceilings are activated for cooling by passing cooled water through them. Large cooled surfaces cool the rooms to a comfortable temperature without draughts or air movement.

Dynamic cooling via fan convectors

Integrated ventilators guide the indoor air to a heat exchanger, which heats or cools the air according to need. Multi-level controllable air recirculation guarantees short response times and high transmission capacities.

Reversible ground source heat pumps

SI 75 TER+

SI 30 TER+

SI 5-11 MER

Models available:

5-11kW single phase (SI 5-11 TER)

30kW three phase with heat recovery (SI 30 TER+)

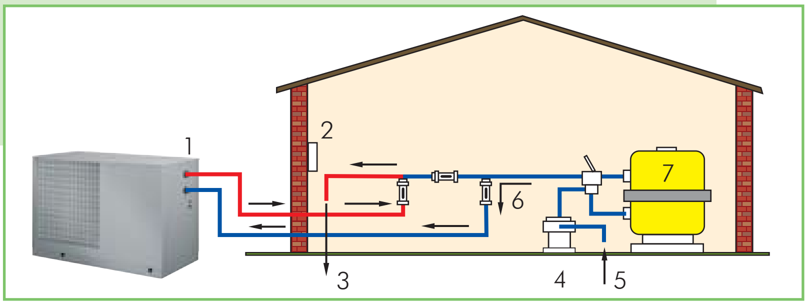
75kW three phase with heat recovery (SI 75 TER+)

Please see technical specification pages for typical system configuration and accessories.

Swimming pool heat pumps

Heat pumps are the ideal solution for swimming pool heating, providing an economic and energy efficient means of delivering a constant pool water temperature throughout the year.

Air source heat pumps are particularly suitable due to their low installation cost and high efficiency at high ambient temperatures during the summer – the most frequent time of swimming pool use!



1. Swimming pool heat pump
2. Remote control
3. Pure water to the pool
4. Circulating pump
5. Bypass and regulator valves
6. Pipe water from the pool
7. Filter

The heat pump is connected directly to the pool system. No additional control.

Swimming pool heat pumps – air source

LAS MT & LAS TT

Dimplex LAS MT and LAS TT air source heat pumps provide an energy efficient and cost effective way of providing swimming pool heating throughout the year, irrespective of the weather conditions.

Purpose designed for swimming pool use and incorporating a titanium heat exchanger which allows the heat pump to be used with varying levels of water quality, the range is available in outputs from 10-22kW. The heat pump is installed outdoors and integrated into the swimming pool filter circuit.

A single heat pump setting ensures the required swimming pool water temperature is constantly maintained.

LAS 10 MT

Range features

- Outdoor installation.
- Nominal heating capacities of 10kW, 15kW and 22kW.
- Variable heating water flow temperatures up to 40°C.
- Titanium heat exchanger ensuring safe operation with variable water qualities, including salt water.
- Integrated automatic defrost cycle, allowing operation at temperatures as low as – 10°C.

Model	LAS 10 MT	LAS 15 MT	LAS 22 TT
Connection Voltage (V)	230	230	400
Maximum flow temp (°C)	40	40	40
Heat output A20/W24(kW)	12.1	16.6	22.3
CoP A20/W24	4.2	4.7	5.1

Please see page 52 for full technical specifications.

Heat pump accessories

Perfectly matched

Dimplex heat pumps offer a variety of services – providing the home with comfortable warmth is only one of them. It can also provide all the hot water needed for the kitchen and bathroom.

Dimplex provides all the components needed for these applications, including buffer tanks, unvented hot water cylinders and hydraulic accessories, ensuring the components are optimally matched to ensure maximum system efficiency.

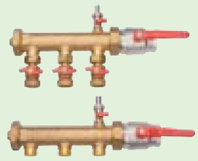
A range of ancillary products designed to simplify heating system and ground collector connections are also available, ensuring installation is as compact and simple as possible.

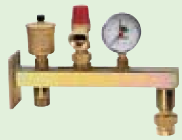
1. **Buffer Tank**
2. **Heating System Connection**
3. **Unvented Hot Water Cylinder**
4. **WPM Heat Pump Manager**

Tapping into the heat source

When using the outside air as a heat source, special components for the air circuit are required for heat pumps that are installed indoors.
These include insulated air ducts and specifically designed rain guards.

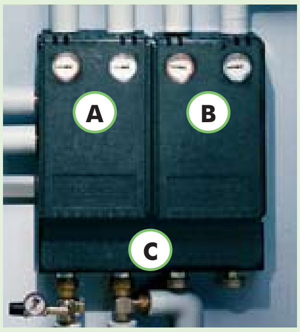
For ground source heat pumps, brine packages and brine circuit manifolds are available.
These are specifically matched to the requirements of each type of heat pump.





Distribution system

Modules matching the specific requirements of the heat pumps simplify connection to the heating system and offer the option of flexible expansion for domestic hot water or additional heating circuits.



The most common components are;

A Compact manifold (KPV25) allows connection between heat pump, buffer tank and a single heating circuit, simplifying the installation process and reducing space.

B Hot water module (WMM25) allows connection between the heat pump and the hot water cylinder.

C Manifold bar (VTB25) allows simultaneous connection of the compact manifold and hot water module.

Buffer tanks

Connection of a buffer tank ensures minimum compressor run times and minimum water flow rates through the heat pump to maintain optimum efficiency. A buffer is essential for air source heat pumps as it provides the energy for defrosting. Where the heat pump provides the sole source of heating, an electric immersion element can also be integrated to provide supplementary heating if required.

Model	Capacity (litres)	Dimensions (mm)	For use with
PSW100	100	Ø512x850	Up to 12kW
PSP100E	100	740x740x240	All SI ME & SI MEK models
PSW200	200	Ø600x1300	Up to 30kW
PSW500	500	Ø700x1950	All heat pumps
PSP140E	140	750x600x850	Indoor ASHP 11-20kW capacity

Note: a suitably sized immersion element must be ordered separately.

Hot water cylinders

For the central hot water supply Dimplex offers a range of unvented hot water cylinders, sized correctly for the maximum heating capacity of the heat pump.
It is important to remember that due to the lower flow temperatures, correctly sized heat exchangers are required to maximise performance.
An integrated temperature sensor is connected to the heat pump manager, allowing the heat pump to automatically manage the production of hot water as well when required.

Model	Capacity (litres)	Dimensions (mm)
WWSP332UK	300	Ø700x1300
WWSP880UK	400	Ø700x1600
WWSP900UK	500	Ø700x1950
PWS332UK	300+100 buffer	Ø700x1800

All Dimplex heat pump cylinders are fully UK approved for G3 Building regulations.

kiwa approved product

Heat pump manager

Everything is under control

The majority of Dimplex heat pumps utilise the WPM heat pump manager, which is designed to regulate, control and monitor the entire heating system.

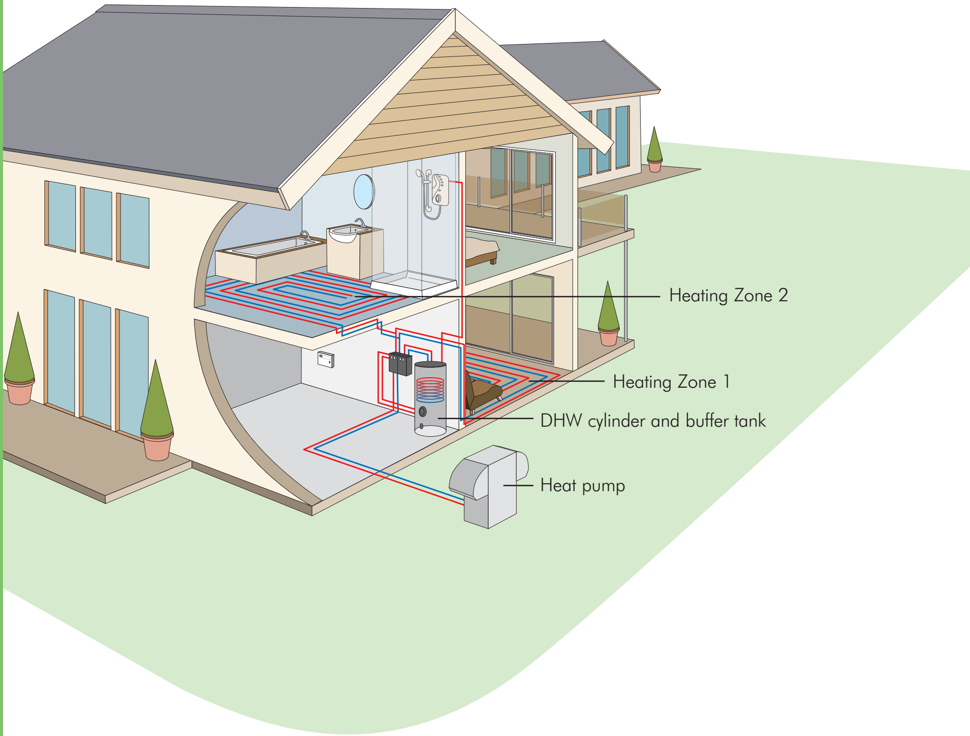
Water temperatures for up to 3 heating / hot water circuits are individually programmable, allowing the heat pump to provide maximum flexibility, control and efficiency.

Key features:

- Simple 6 key operation
- Large, well laid out 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
- Ground source and indoor air source units have removable control panel for convenient positioning
- Weather compensated temperature control
- Control over 3 separate heating / hot water circuits
- Automatic actuation of supplementary heat source (electric immersion heater or gas / oil boiler).
- Automatic actuation of mixer valves for supplementary heat generators (gas / oil boiler or solar energy storage system)

Two heat generators and three heat consumers: the heat pump has everything under control

The heat pump manager monitors the operation of the heat pump and provides all the functions of a modern heating regulation system, including remote diagnostics and time programmes for heating and hot water preparation.
The heat pump, heating and hot water pumps, mixer motor and any supplementary heating sources are all automatically activated by the WPM manager. For reversible heat pumps both heating and cooling modes are managed by the same controller.



System integration with existing systems

The WPM controller also allows Dimplex heat pumps to be efficiently integrated in 'bi-valent' mode with existing systems. When combined in parallel with an existing boiler, the heat pump manager regulates the boiler in accordance to need and ensures that no excessive temperatures can enter the heating system.
This way, for example, a filled oil tank can be used up before converting to heat pump only operation later on, or provide the ability for the heat pump to manage the base heating load with supplementary support from an existing gas boiler. Such strategies provide an excellent opportunity for the installation of heat pumps in existing homes and buildings.

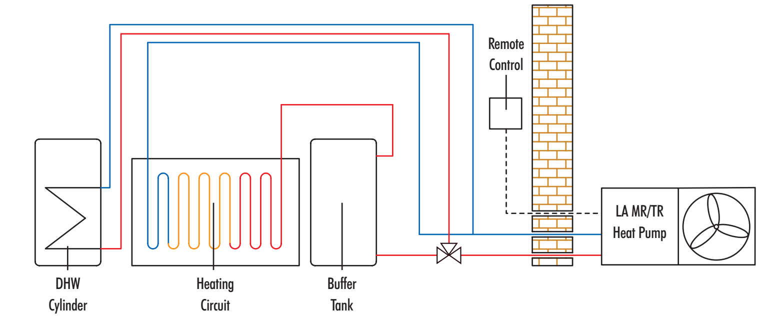
Integration with the renewables

For optimal integration of renewable heat sources, the heat pump manager offers an operating mode developed especially for purpose. Thermal solar energy systems or biomass boilers feed into a renewable cylinder fitted with an additional heat exchanger which, at a sufficient temperature level, gives priority to this energy for heating or hot water, over riding the operation of the heat pump.

technical specifications
TYPICAL SYSTEM CONFIGURATION AND ACCESSORIES

Outdoor Air Source Heat Pumps: LAK M / LA MR / LA TR ranges

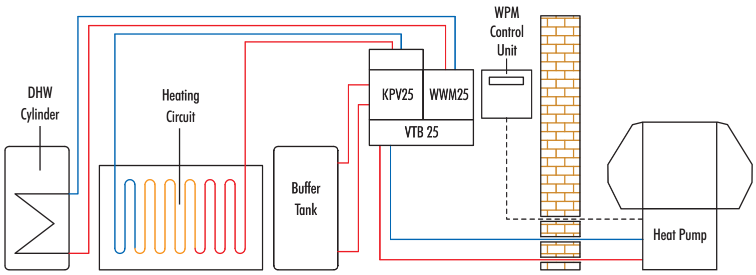
The diagram below shows a typical LAK M / LA MR / LA TR heat pump configuration for heating and domestic hot water including typical accessories required for a single heating circuit.
(Note this is for illustrative purposes only and is not intended as a full hydraulic schematic)



Heat Pump		Qty
LAK 10 M	Air source heat pump (heating)	1
LA 6/8/10 MR / LA 12/16 TR	Air source heat pump (heating / cooling)	1
Heating and Hot Water Accessories		
PSW100/200	100L/200L Buffer tank	1
WWSP332UK/880UK	300/400L Hot water cylinder	1
Controller Accessories		
WPR 2007	Heat pump controller	1

Outdoor Air Source: LA MS range
Reversible Outdoor Air Source Heat Pumps: LA MSR range

The diagram below shows typical LA MS / LA MSR heat pump configuration for heating and domestic hot water including typical accessories required for a single heating circuit.
(Note this is for illustrative purposes only and is not intended as a full hydraulic schematic)

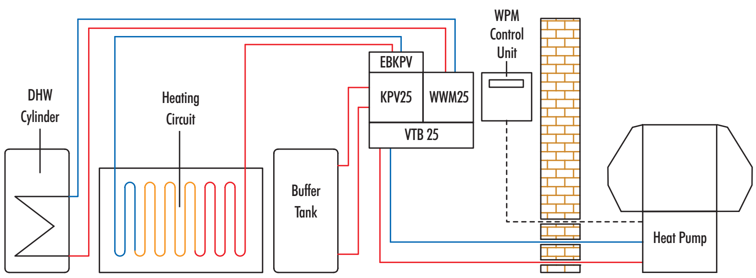


Heat Pump		Qty
LA 11/16 MS	Air source heat pump (heating)	1
LA 11 MSR	Air source heat pump (heating/cooling)	1
Heating and Hot Water Accessories		
WWSP332UK/WWSP880UK	300L/400L domestic hot water cylinder	1
PSW100/PSW200	100L/200L buffer tank	1
UP60/UP80	Heating/DHW circulation pumps	1
CTHK631/2/3/4/5	Buffer immersions	1
KPV25*	Compact manifold	1
EBKPV*	Extension module for KPV	1
WWM25*	Heating circuit/hot water module	1
VTB25*	Manifold bar	1
Controller Accessories		
EVL 995/6/7/8-1	Controller connecting cable (heating)	1
EVL 10/20/30R	Controller connecting cable (heating/cooling)	1

* Dependent on required heat pump flow rate – see page 54 for details

Outdoor Air Source Heat Pumps: LA AS range
Reversible Outdoor Air Source Heat Pumps: LA ASR range

The diagram below shows typical LA AS / LA ASR heat pump configuration for heating and domestic hot water including typical accessories required for a single heating circuit.
(Note this is for illustrative purposes only and is not intended as a full hydraulic schematic)



Heat Pump		Qty
LA 20/24/28/40 AS	Air source heat pump (heating)	1
LA 16 ASR	Air source heat pump (heating/cooling)	1
Heating and Hot Water Accessories		
WWSP332UK/WWSP880UK	300L/400L domestic hot water cylinder	1
PSW500	500L buffer tank	1
UP60/UP80	Heating/DHW circulation pumps	1
UP32-70	Heating/DHW circulation pumps	1
CTHK631/2/3/4/5	Buffer immersions	1
FLH60	Three phase 6.0kW flange heater	1
FLHU70	Three phase 2.0/2.7/4.0kW variable output flange heater	1
DDV32*	Dual differ. pressure less module	1
KPV25*	Compact manifold	1
EBKPV*	Extension module for KPV	1
WWM25*	Heating circuit/hot water module	1
VTB25*	Manifold bar	1
Controller Accessories		
EVL 995/6/7/8-1	Controller connecting cable (heating)	1
EVL 10/20/30R	Controller connecting cable (heating/cooling)	1

* Dependent on required heat pump flow rate – see page 54 for details

	LAK 10 M	LA 6 MR	LA8 MR	LA10 MR	LA12TR	LA16TR
Operating Limits						
Heating water system/return °C	max 58 / min 18	max 60 / min 18				
Air °C	-20 to +35	-20 to +35				
Cooling flow °C	-	+7 to +20				
Air °C	-	+15 to +40				
Performance						
Heating capacity A7 /W35 (kW)[1]	10.2	6.1	7.4	8.5	11.9	15.3
Coefficient of performance A7 /W35	4.1	3.3	3.3	3.4	3.3	3.3
Cooling Capacity A35/W18 (kW)[1]	-	7.9	9.3	11.1	15.8	18.5
Coefficient of performance A35 /W18	-	3.2	3.3	3.3	3.3	3.3
Minimum heating flow @ internal pressure differential (m³/h/Pa)	0.8 / 1100	1.1	1.3	1.5	1.7	1.9
Sound Pressure level at 10m dB (A)	46	45	46	46	47	47
Refrigerant: type/total charge weight (kg)	R404A / 2.3	R407C / 1.5	R407C / 2.3	R407C / 2.7	R407C / 3.4	R407C / 3.5
Dimensions HxWxL (mm)	880x1285x695	860x1270x670	860x1270x670	860x1270x670	860x1270x670	860x1270x670
Weight (including packaging) (kg)	185	159	165	170	185	196
Electric heating element (max) (kW)	2/4/6	2/4/6	2/4/6	2/4/6	2/4/6	2/4/6
Normal Voltage / fuse rating (V/A)	230 / 25	230 / 20	230 / 20	230 / 25	400 / 20	400 / 25
Starting current with soft starter (A)	32	26	32	38	26	27

[1] Performance standards measured to EN255

	LA 11 MS	LA 11 MSR	LA 16 MS
Operating limits			
Heating water supply/return °C	Max55 / min18		
Air °C	-20 to +35		
Cooling flow °C	-	+7 to +20	-
Air °C	-	+15 to +40	-
Performance			
Heating capacity A7/W35 (kW)[1]	10.9	11.1	15.4
Coefficient of performance A7/W35[1]	4.1	4.2	3.7
Cooling capacity A27/W18 (kW)[1]	-	10.9	-
Coefficient of performance A27/W18[1]	-	3.3	-
Minimum heating flow @ internal pressure differential (m³/h/Pa)	1.0 / 3000	1.0 / 3000	1.4 / 4500
Sound Pressures Level at 10m dB (A)	33	33	34
Refrigerant: type/total charge weight (kg)	R404A / 2.5	R404A / 3.6	R404A / 3.1
Dimensions HxWxL (mm)	1360x1360x850	1360x1360x850	1570x1550x850
Weight (including packaging) (kg)	219	224	264
Normal voltage / fuse rating (V/A)	230 / 25	230 / 25	230 / 32
Starting current with soft starter (A)	38	38	45

[1] Performance standards measured to EN255

	LA 16 ASR	LA 20 AS	LA 24 AS	LA 28 AS	LA 40 AS
Operating limits					
Heating water supply/return °C	Max55 / min18				
Air °C	-20 to +35				
Cooling flow °C	+7 to +20	-	-	-	-
Air °C	+15 to +40	-	-	-	-
Performance					
Heating capacity A7/W35 (kW)[1]					
1 compressor	15.1	9.8	13.1	14.2	20.2
2 compressors	-	16.6	24.8	25.8	36.3
Coefficient of performance A7/W35[1]					
1 compressor	3.8	3.2	3.4	3.1	4.7
2 compressors	-	3.1	3.6	3.4	4.5
Cooling capacity A27/W18 (kW)[1]	16.4	-	-	-	-
Coefficient of performance A27/W18[1]	2.8	-	-	-	-
Minimum heating flow @ internal pressure differential (m³/h/Pa)	1.4 / 4500	1.8 / 3700	2.3 / 5900	2.3 / 3100	4.0 / 1700
Sound Pressures Level at 10m dB (A)	34	37	41	41	43
Refrigerant: type/total charge weight (kg)	R404A / 5.7	R404A / 3.7	R404A / 4.2	R404A / 4.2	R404A / 11.8
Dimensions HxWxL (mm)	1570x1550x850	1570x1550x850	1710x1680x1000	1710x1680x1000	2100x1735x890
Weight (including packaging) (kg)	289	284	351	355	585
Normal voltage / fuse rating (V/A)	400 / 20	400 / 20	400 / 25	400 / 25	400 / 25
Starting current with soft starter (A)	25	23	24	25	30

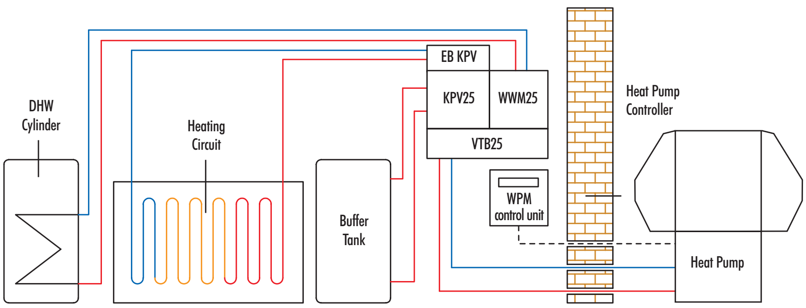
[1] Performance standards measured to EN255

For additional hydraulic modules please refer to page 54.

Outdoor Air Source Heat Pumps: LA PS / LA HS ranges

The diagram below shows typical LA PS / LA HS heat pump configuration for heating and domestic hot water including typical accessories required for a single heating circuit.

(Note this is for illustrative purposes only and is not intended as a full hydraulic schematic)



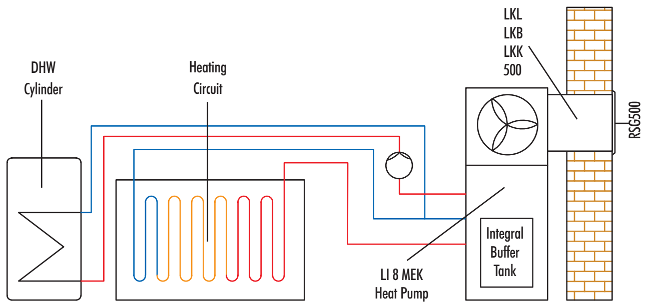
Heat Pump		Qty
LA 9/11/17/22/26 PS	Air source heat pump (medium temp)	1
LA 22/26 HS	Air source heat pump (high temp)	1
Heating and Hot Water Accessories		
WWSP332UK/880UK/900UK	300L/400L/500L domestic hot water cylinder	1
PSW100/PSW200	100L/200L buffer tank	1
UP60/UP80	Heating/DHW circulation pumps	1
CTHK631/2/3/4/5	Buffer immersions	1
DDV32*	Dual differ. pressure less module	1
KPV25*	Compact manifold	1
EBKPV*	Extension module for KPV	1
WWM25*	Heating circuit/hot water module	1
VTB25*	Manifold bar	1
Controller Accessories		
EVL 995/6/7/8-1	Controller connecting cable (heating)	1

* Dependent on required heat pump flow rate – see page 54 for details

Indoor Air Source Heat Pumps: LI 8 MEK / LI 8 MEKR ranges

The diagram below shows typical LI 8 MEK and LI 8 MEKR heat pump configuration for heating and domestic hot water including typical accessories required for a single heating circuit.

(Note this is for illustrative purposes only and is not intended as a full hydraulic schematic)

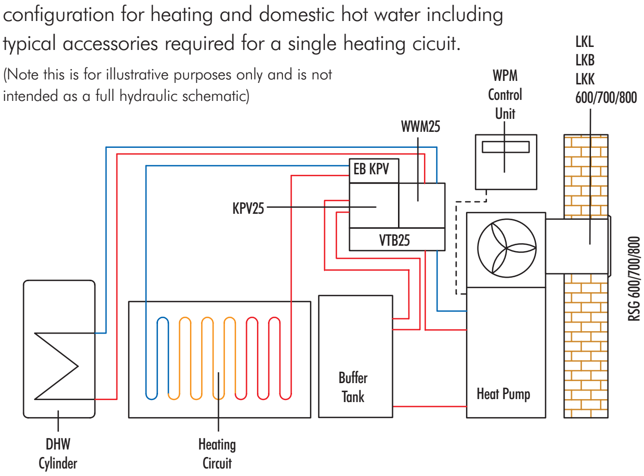


Heat Pump		Qty
LI 8 MEK	Air source heat pump (heating)	1
LI 8 MEKR	Air source heat pump (heating and cooling)	1
Heating and Hot Water Accessories		
WWSP332UK	300L domestic hot water cylinder	1
UP60	Heating/DHW circulation pumps	1
Ducting Accessories		
LKL / LKK / LKB 500	Long, short or 90° elbow ducts (depending on requirement)	1 or 2
DMK500	Sealing collar	1
RSG500	Rain guard	2

Indoor Air Source Heat Pumps: LI ME / LI TE ranges High Temperature Indoor Air Source Heat Pumps: LI TEH range

The diagram below shows a typical LI ME/LI TE/LI TEH heat pump configuration for heating and domestic hot water including typical accessories required for a single heating cicuit.

(Note this is for illustrative purposes only and is not intended as a full hydraulic schematic)



Heat Pump		Qty
LI 11 ME / LI 16/20/24/28 TE	Air source heat pump	1
LI 22 / 26 TEH	Air source heat pump (High temp)	1
Heating and Hot Water Accessories		
WWSP332UK/880UK/900UK	300L/400L/500L domestic hot water cylinder	1
PSP140E	140L built under buffer tank (LI 11/16/20)	1
CTHK 631/2/3/4/5/6	Buffer immersion	1
SAS110	Connection hoses	1
UP60/UP80	Heating/DHW circulation pumps	1
FLH60	Three phase 6.0kW flange heater	1
FLHU70	Three phase 2.0/2.7/4.0kW variable output flange heater	1
DDV32*	Dual differ. pressure less module	1
KPV25*	Compact manifold	1
EBKPV*	Extension module for KPV	1
WWM25*	Heating circuit/hot water module	1
VTB25*	Manifold bar	1
Ducting Accessories		
LKL600 / 700 / 800	Long duct (as required)	1 or 2
LKK600 / 700 / 800	Short duct (as required)	1 or 2
LKB600 / 700 / 800	90° elbow duct (as required)	1 or 2
DMK600 / 700 / 800	Sealing collar	1
RSG600 / 700 / 800	Rain guard	2

* Dependent on required heat pump flow rate – see page 54 for details

	LA 9 PS	LA11 PS	LA17 PS	LA 22 PS	LA 26 PS	LA 22 HS	LA 26 HS
Operating limits							
Heating water supply/return °C	Max 65 / min 18					Max 75 /min 18	
Air °C	-20 to + 35						
Performance							
Heating capacity A7 / W35 (kW)[1]							
1 compressor	8.5	11.2	9.6	12.0	13.3	15.4	19.8
2 compressors	-	-	16.6	21.1	22.9	-	-
Coefficient of Performance A7/ W35[1]							
1 compressor	3.6	3.5	3.4	3.6	3.5	3.4	3.8
2 compressors	-	-	3.4	3.5	3.5	-	-
Minimum heating flow @ internal pressure differential (m^3/h/Pa)	1.2 / 9000	1.1 / 2600	1.6 / 2900	2.0 / 4500	2.2 / 3100	1.8 / 3000	1.8 / 3000
Sound Pressures Level at 10m dB (A)	34	34	37	41	41		
Refrigerant: type/total charge weight (kg)	R290 / 1.0	R290 / 1.5	R290 / 1.8	R290 / 2.2	R290 / 2.5	R404A / 3.3 R134A / 2.7	R404A / 3.7 R134A / 3.1
Dimensions H x W x L (mm)	1320x770x660	1570x1550x850	1570x1550x850	1710x1680x1000	1710x1680x1000	1710x1680x1000	1710x1680x1000
Weight (including packaging) (kg)	168	258	330	360	371	411	418
Nominal Voltage / fuse rating (V/A)	400 / 16	400 / 16	400 / 20	400 / 20	400 / 25	400 / 25	400 / 25
Starting current with soft starter (A)	28	30	23	25	30	25	30

[1] Performance standards measured to EN14511

	LI 8 MEK	LI 8 MEKR
Operating limits		
Heating water supply/return °C	Max 55 / min 18	
Air °C	-25 to +35	
Cooling water supply °C		+7 to +20
Air °C		+15 to +40
Performance		
Heating capacity A7 / W35 (kW)[1]	9.2	9.2
Coefficient of Performance A7 / W35[1]	3.8	3.8
Cooling capacity A27 / W18 (kW)[1]	-	9.6
Coefficient of Performance A27 / W18[1]	-	3.2
Minimum heating flow @internal pressure differential (m^3/h/Pa)	0.8 / 2700	0.8 / 2700
Sound Pressure level at 1m dB (A) (indoors)	48	
Refrigerant: type/total charge weight (kg)	R404A / 2.0	R404A / 3.3
Dimensions H x W x L (mm)	1900x750x680	1900x750x680
Weight (including packaging) (kg)		245 250
Buffer tank capacity (L)	50	50
Electric heating element (kW)	2	2
Nominal Voltage / fuse rating (V/A)	230 / 20	230 / 20
Starting current with soft starter (A)	30	30

[1] Performance standards measured to EN14511

	LI 11 ME	LI 16 TE	LI 20 TE	LI 24 TE	LI 28 TE	LI 22 TEH	LI 26 TEH
Operating limits							
Heating water supply/return °C	Max 58 / min 18					Max 75 / min18	
Air °C	-25 to +35						
Performance							
Heating capacity A7/W35 (kW)[1]							
1 compressor	10.9	15.1	10.4	12.6	13.9	15.2	19.5
2 compressors	-	-	17	24.2	25.1	-	-
Coefficient of performance A7/W35[1]							
1 compressor	3.9	3.6	3.5	3.3	3.1	3.2	3.6
2 compressors	-	-	3.4	3.4	3.3	-	-
Minimum heating flow @ internal pressure differential (m^3/h/Pa)	1.0 / 3000	1.4 / 4500	1.8 / 3700	2.3 / 5900	2.3 / 3100	1.8 / 3700	1.8 / 3700
Sound Pressure level at 1m dB (A) (Indoors)	50	52	54	58	58	58	58
Refrigerant: type/total charge weight (kg)	R404A / 2.5	R404A / 3.1	R404A / 3.7	R404A / 4.2	R404A / 4.3	R404A / 3.3 R134A / 2.7	R404A / 3.7 R134A / 3.1
Dimensions H x W x L (mm)	1360x750x880	1570x750x880	1570x1550x880	l710x750x1030	1710x7500x1030	1710x7500x1030	1710x7500x1030
Weight (including packaging) (kg)	200	235	255	310	314	370	377
Electric heating element (kW)	-	-	6	-	-	-	-
Nominal Voltage / fuse rating (V/A)	230 / 25	400 / 32	400 / 20	400 / 25	400 / 25	400 / 25	400 / 25
Starting current with soft starter (A)	38	25	23	24	25	25	30

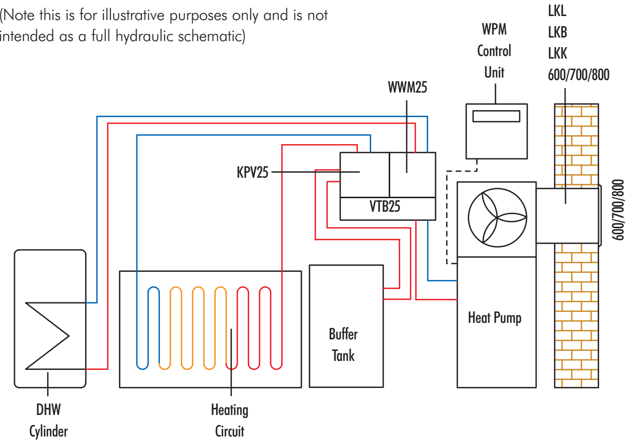
[1] Performance standards measured to EN14511

For additional hydraulic modules please refer to page 54.

Reversible Indoor Air Source Heat Pumps: LI MER / LI TER+ ranges

The diagram below shows a typical LI MER / LI TER+ heat pump configuration for heating and domestic hot water including typical accessories for a single heating circuit.

(Note this is for illustrative purposes only and is not intended as a full hydraulic schematic)



Heat Pump		Qty
LI 11 MER/LI 11 TER + LI 16 TER/16 TER+	Air source heat pump	1
Heating and Hot Water Accessories		
WWSP332UK	300L domestic hot water cylinder	1
PSP140E	140L built under buffer tank	1
CTHK 631/2/3/4/5/6	Buffer immersion	1
SAS110	Connection hoses	1
KPV25*	Compact manifold	1
EBKPV*	Extension module for KPV	1
WWM25*	Heating circuit/hot water module	1
VTB25*	Manifold bar	1
Controller Accessories		
EVL10/20/30R	Controller connecting cable (heating/cooling)	1
Ducting Accessories		
LKL600 / 700 / 800	Long duct (as required)	1 or 2
LKK600 / 700 / 800	Short duct (as required)	1 or 2
LKB600 / 700 / 800	90° elbow duct (as required	1 or 2
DMK600 / 700 / 800	Sealing collar	1
RSG600 / 700 / 800	Rain guard	2

* Dependent on required heat pump flow rate – see page 54 for details

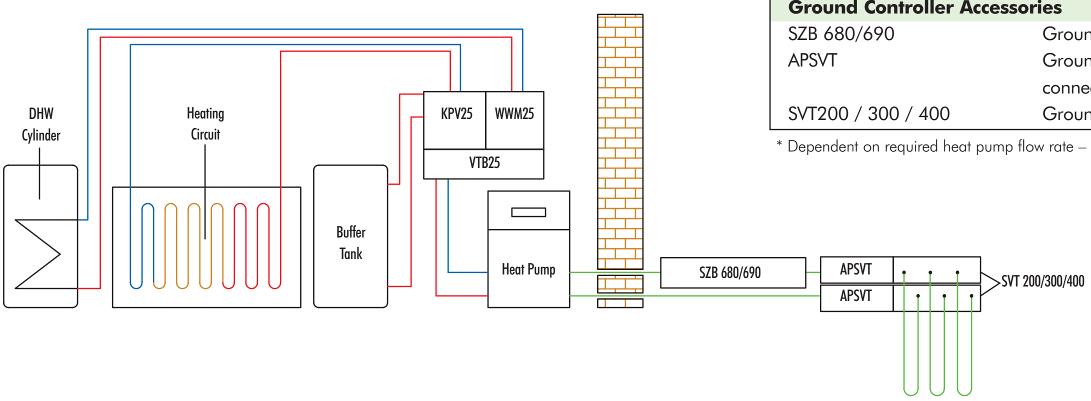
Ground Source Heat Pumps: SI ME range
High Temperature Ground Source Heat Pumps: SI MEH range
Reversible Ground Source Heat Pumps: SI MER range

The diagram below shows a typical SI ME / SI MEH / SI MER heat pump configuration for heating and domestic hot water including typical accessories required for a single heating cicuit.

(Note this is for illustrative purposes only and is not intended as a full hydraulic schematic)

Heat Pump		Qty
SI 5/7/9/11/14 ME	Ground source heat pump (heating)	1
SI 6/9/11 MEH	Ground source heat pump (high temp)	1
SI 5/7/9/11 MER	Ground source heat pump (heating and cooling)	1
Heating and Hot Water Accessories		
WWSP332UK/WWSP880UK	300L/400L domestic hot water cylinder	1
PSW100/PSW200	100L/200L buffer tank	1
PSP100E	100L under buffer cylinder	1
UP60/UP80	Heating/DHW circulation pumps	1
VSHBS	Connection hoses	1
PWS332UK	100L buffer cylinder/300L DHW combination cylinder	1
KPV25*	Compact manifold	1
EBKPV*	Extension module for KPV	1
WWM25*	Heating circuit/hot water module	1
VTB25*	Manifold bar	1
Ground Controller Accessories		
SZB 680/690	Ground loop circuit package	1
APSVT	Ground loop circuit manifold connection kit	1
SVT200 / 300 / 400	Ground circuit manifold (2/3/4 circuits)	1

* Dependent on required heat pump flow rate – see page 54 for details



	LI 11 MER	LI 11 TER+	LI 16 TER+
Operating Limits			
Heating water supply/return °C	Max 58 / min 18		
Air °C	-25 to +35		
Cooling water supply °C	+7 to +20		
Air °C	+15 to +40		
Performance			
Heating capacity A7 / W35 (kW)[1]	11.1	11.3	14.9
Coefficient of Performance A7 / W35[1]	4.2	3.6	3.6
Cooling capacity A27 / W18 (kW)[1]	10.9	10.8	16.4
Coefficient of Performance A27 / W18[1]	3.3	5.2	2.8
Minimum heating flow @ internal pressure differential (m^3/h/Pa)	1.0 / 3000	1.0 / 3000	1.4 / 4500
Heat recovery for DHW	-	•	•
Sound Pressure level at 1m dB (A) (Indoors)	50	50	52
Refrigerant: type/total charge weight (kg)	R404A / 3.6	R404A / 5.1	R404A / 5.7
Dimensions HxWxL (mm)	1360x750x880	1360x750x880	l570x750x880
Weight (including packaging) (kg)	250	222	260
Normal Voltage / fuse rating (V/A)	230/25	400/16	400/20
Starting current with soft starter (A)	38	23	25

	SI 5 ME	SI 7 ME	SI 9 ME	SI 11 ME	SI 14 ME
Operating Limits					
Heating water supply/return °C	Max 58 / min 18				
Brine (heating) °C	-5 to +25				
Anti-freeze agent	Monoethylene glycol				
Minimum anti-freeze concentration	25%	25%	25%	25%	25%
Performance					
Heating capacity B0 / W35[1]	4.9	6.3	8.9	10.8	14.8
Coefficient of Performance B0 / W35[1]	3.8	3.7	3.8	3.9	3.9
Minimum heating flow @internal pressure differential (m^3/h/Pa)	0.45 / 1900	0.6 / 3300	0.75 / 2300	1.0 / 4100	1.3 / 4800
Sound power level dB (A)	54	55	56	56	56
Refrigerant: type/total charge weight (kg)	R407C / 1.2	R407C / 1.4	R407C / 1.7	R407C / 1.9	R407C / 2.2
Dimensions H x W x L (mm)	805x650x462	805x650x462	805x650x462	805x650x462	805x650x462
Weight (including packaging) (kg)	109	111	118	122	130
Nominal Voltage / fuse rating (V/A)	230 / 16	230 / 16	230 / 20	230 / 25	230 / 32
Starting current with soft starter (A)	24	26	38	38	50

	SI 6 MEH	SI 9 MEH	SI 11 MEH
Operating Limits			
Heating water supply/return °C	Max 70 / min 18		
Brine (heating) °C	-5 to +25		
Anti-freeze agent	Monoethylene glycol		
Minimum anti-freeze concentration	25%	25%	25%
Performance			
Heating capacity B0 / W35	6	8.9	10.7
Coefficient of Performance B0 / W35	4.1	4.0	4.5
Minimum heating flow @internal pressure differential (m^3/h/Pa)	0.5 / 1200	0.76 / 1700	1.0 / 1600
Sound power level dB (A)	56	56	57
Refrigerant: type/total charge weight (kg)	R134A / 1.2	R134A / 2.2	R134A / 2.4
Dimensions H x W x L (mm)	805x650x462	805x650x462	805x650x462
Weight (including packaging) (kg)	118	130	133
Nominal Voltage / fuse rating (V/A)	230 / 20	230 / 25	230 / 32
Starting current with soft starter (A)	38	43	45

	SI 5 MER*	SI 7 MER*	SI 9 MER*	SI 11 MER*
Operating Limits (cooling)				
Cooling water supply °C	+7 to +20			
Brine (cooling) °C	-5 to +25			
Performance				
Heating capacity B0 / W35 (kW)[1]	4.9	6.4	9.3	11.6
Coefficient of Performance B0 / W35[1]	3.9	3.8	4.0	4.1
Cooling capacity B10 / W35 (kW)	6.8	8.8	12.4	14.1
Coefficient of Performance B10 / W18	6.7	6.6	6.7	6.5
Minimum heating flow @internal pressure differential (m^3/h/Pa)	0.45 / 1900	0.6 / 3300	0.75 / 2300	1.0 / 4100
Refrigerant: type/total charge weight (kg)	R407C / 0.9	R407C / 0.9	R407C / 1.25	R407C / 1.6
Weight (including packaging) (kg)	115	117	124	128
Nominal Voltage / fuse rating (V/A)	230 / 16	230 / 16	230 / 20	230 / 25
Starting current with soft starter (A)	24	26	38	38

[1] Performance standards measured to EN14511

*Heating mode performance as per equivalent SI ME model

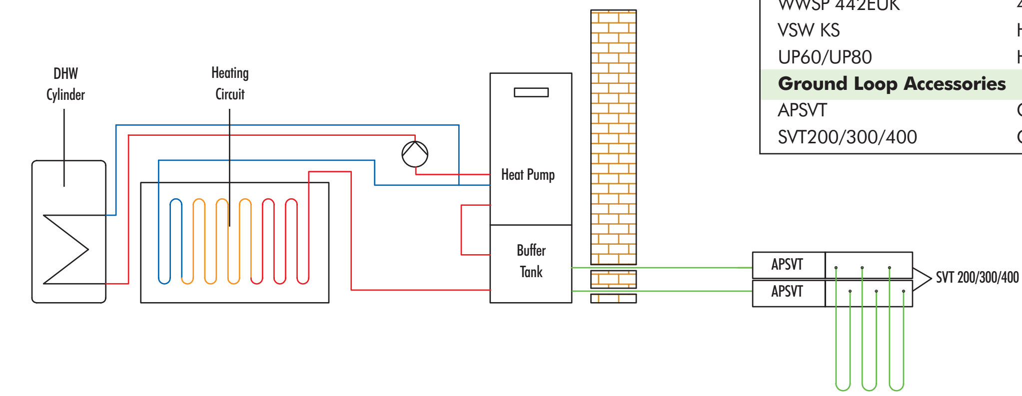
For additional hydraulic modules please refer to page 54.

Integrated Ground Source Heat Pumps: SI MEK range
Intergrated High Temperature Ground Source Heat Pumps: SI MEKH range

The diagram below shows a typical SI MEK heat pump configuration for heating and domestic hot water including typical accessories required for a single heating cicuit.

(Note this is for illustrative purposes only and is not intended as a full hydraulic schematic)

Heat Pump		**Qty**
SI 11/16 MEK	Ground source heat pump	1
SI 9 MEKH	Ground source heat pump (high temp)	1
Heating and Hot Water Accessories		
PSP100E	100L under-unit buffer tank	1
VSH KS	Buffer tank connection hose	1
WWSP 442EUK	400L hot water storage tank	1
VSW KS	Hot water tank connection hose	1
UP60/UP80	Heating/DHW circulation pumps	1
Ground Loop Accessories		
APSVT	Ground loop manifold connection kit	1 pair
SVT200/300/400	Ground circuit manifold 2/3/4 circuits	1 pair



Ground Source Heat Pumps: SI TE range (17 – 37kW)
Reversible Ground Source Heat Pumps: SI TER+ range

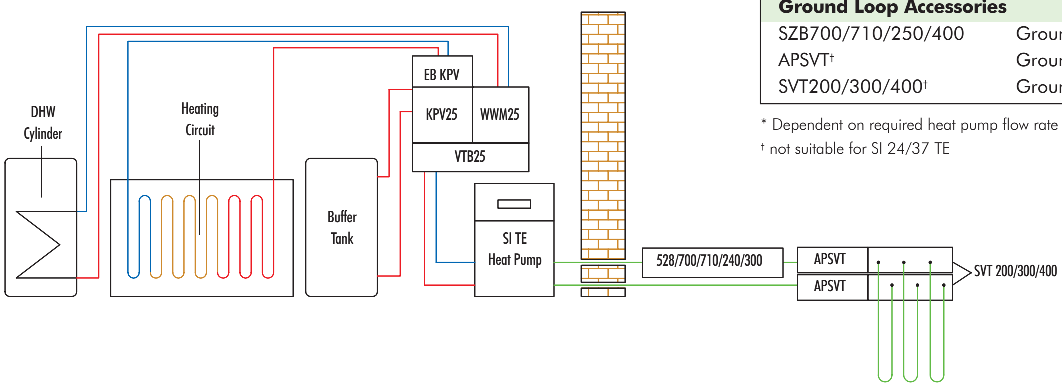
The diagram below shows a typical SI TE heat pump configuration for heating and domestic hot water including typical accessories required for a single heating cicuit.

(Note this is for illustrative purposes only and is not intended as a full hydraulic schematic)

Heat Pump		**Qty**
SI17/21/24/30/37 TE	Ground Source Heat Pump	1
Heating and Hot Water Accessories		
PSW200/500	200L/500L buffer tank	1
WWSP880UK/900UK	400L/500L Domestic hot water cylinder	1
UP60/UP80	Heating/DHW circulation pumps	1
UP32-70	Heating/DHW circulation pumps	1
FLH60	Three phase 6.0kW flange heater	1
FLHU70	Three phase 2.0/2.7/4.0kW variable output flange heater	1
DDV32*	Dual differ. pressure less module	1
KPV25*	Compact manifold	1
EBKPV*	Extension module for KPV	1
WWM25*	Heating circuit/hot water module	1
VTB25*	Manifold bar	1
Ground Loop Accessories		
SZB700/710/250/400	Ground loop circuit package	1
APSVT†	Ground circuit manifold connection kit	1
SVT200/300/400†	Ground circuit manifold 2/3/4 circuits	1

* Dependent on required heat pump flow rate – see page 54 for details

† not suitable for SI 24/37 TE



	SI 11 MEK	SI 16 MEK	SI 9 MEKH
Operating limits			
Heating water supply/return °C	Max 55 / min 18		Max 70 / min 18
Brine (heating) °C	-5 to +25		
Anti-freeze agent	Monoethylene glycol		
Minimum anti-freeze concentration	25%	25%	25%
Performance			
Heating capacity B0 / W35[1] (kW)	11.8	15.8	9.4
Coefficient of Performance B0 / W35	4.4	4.2	4.4
Minimum heating flow @internal pressure differential (m^3/h/Pa)	1.0 / 3500	1.3 / 3500	0.75 / 1800
Sound power level dB (A)	51	51	49
Refrigerant: type/total charge weight (kg)	R407C / 2.0	R407C / 2.3	R134A / 2.7
Dimensions H x W x L (mm)	1115x652x688	1115x652x688	1115x652x688
Weight (including packaging) (kg)	191	203	203
Nominal Voltage / fuse rating (V/A)	230 / 25	230 / 32	230 / 25
Starting current with soft starter (A)	38	50	43

[1] Performance standards measured to EN255

	SI 17 TE	SI 21 TE	SI 24 TE	SI 30 TE	SI 30 TER+	SI 37TE
Operating Limits						
Heating water supply/return °C	Max 58 / min 18					
Brine (heating) °C	-5 to +25					
Anti-freeze agent	Monoethylene glycol					
Minimum anti-freeze concentration	25%	25%	25%	25%	25%	25%
Operating Limits (Cooling)						
Cooling water supply	-	-	-	-	5°C to 30°C	-
Brine (cooling) °C	-	-	-	-	-5 to +25°C	-
Performance (Heating)						
Heating capacity B0 / W35 (kW)[1]						
1 compressor	16.9	20.8	12.7	14.4	15.2	18.3
2 compressors	-	-	23.7	31.2	28.6	35.4
Coefficient of Performance B0 / W35[1]						
1 compressor	4.4	4.1	4.3	4.2	4.2	4.5
2 compressors	-	-	4.1	4.6	3.8	4.3
Performance (Cooling)						
Heating capacity B10 / W18 (kW)[1]						
1 compressor	-	-	-	-	25.4	-
2 compressors	-	-	-	-	46.7	-
Coefficient of Performance B10 / W18[1]						
1 compressor	-	-	-	-	9.5	-
2 compressors	-	-	-	-	7.4	-
Minimum heating flow @internal pressure differential (m^3/h/Pa)	1.5 / 4000	1.6 / 4600	2.2 / 3100	2.6 / 1100	4.7 / 2200	3.2 / 1650
Sound power level dB (A)	58	59	59	62	62	63
Refrigerant: type/total charge weight (kg)	R407C / 2.3	R407C / 4.5	R404A / 3.7	R404A / 7.7	R404A / 8.1	R404A / 6.8
Dimensions H x W x L (mm)	805x650x462	1445x650x575	1660x1000x775	1440x775x1000	1660x1000x775	1660x1000x775
Weight (including packaging) (kg)	133	225	282	365	385	371
Nominal Voltage / fuse rating (V/A)	400 / 16	400 / 20	400 / 20	400 / 20	400 / 20	400 / 20
Starting current with soft starter (A)	27	29	20	25	26	26

[1] Performance standards measured to EN14511

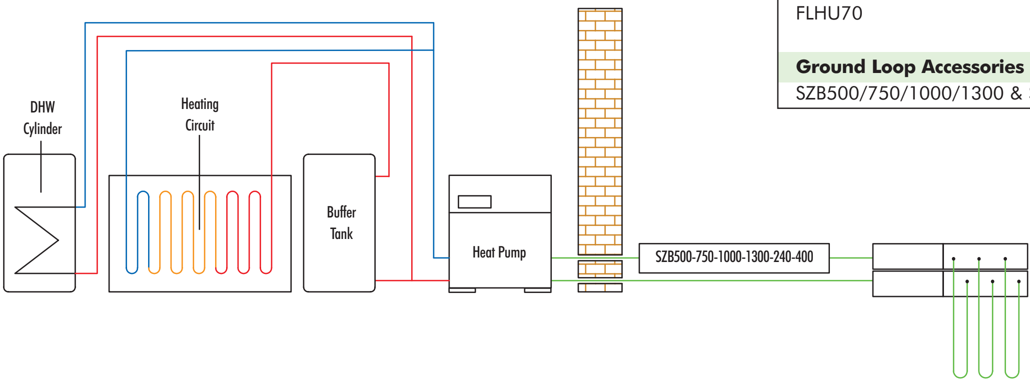
For additional hydraulic modules please refer to page 54.

High Output Ground Source Heat Pumps: SI TE range (50 – 130kW)
High Temperature Ground Source Heat Pumps: SI TEH range
Reversible Ground Source Heat Pumps: SI TER+ range

The diagram below shows a typical SI TE / SI TEH heat pump configuration for heating and domestic hot water including typical accessories required for a single heating cicuit.

(Note this is for illustrative purposes only and is not intended as a full hydraulic schematic)

Heat Pump		Qty
SI50/75/100/130TE & SI 20/40TEH Ground Source Heat Pump		1
Heating and Hot Water Accessories		
PSW500	500L buffer tank	1/2
WWSP900UK	500L Domestic hot water cylinder	1
FLH60	Three phase 6.0kW flange heater	1
FLHU70	Three phase 2.0/2.7/4.0kW variable output flange heater	1
Ground Loop Accessories		
SZB500/750/1000/1300 & SZB250/400		



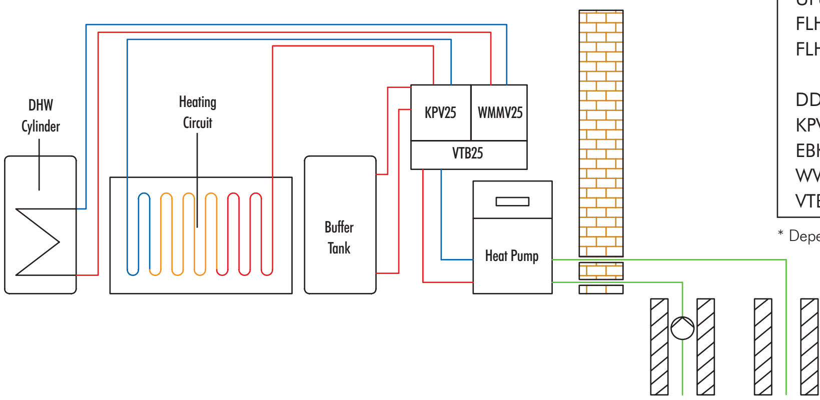
Water to Water Heat Pumps: WI ME / WI TE / WI CG ranges

The diagram below shows a typical WI ME / WI TE / WI CG heat pump configuration for heating and domestic hot water including typical accessories required for a single heating cicuit.

(Note this is for illustrative purposes only and is not intended as a full hydraulic schematic)

Heat Pump		Qty
WI9/14/18/22/27/40/90	Water Source Heat Pump	1
Heating and Hot Water Accessories		
PSW100/200/500	300L/500L buffer tank	1
PWS332UK	100L buffer cylinder/300L DHW combination cylinder	1
WWSP332UK/880UK/900UK	300L/400L/500L domestic hot water cylinder	1
UP60/UP80	Heating/DHW circulation pumps	1
FLH60	Three phase 6.0kW flange heater	1
FLHU70	Three phase 2.0/2.7/4.0kW variable output flange heater	1
DDV32*	Dual differ. pressure less module	1
KPV25*	Compact manifold	1
EBKPV*	Extension module for KPV	1
WWM25*	Heating circuit/hot water module	1
VTB25*	Manifold bar	1

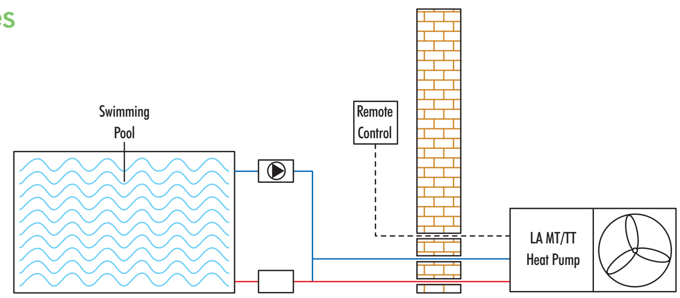
* Dependent on required heat pump flow rate – see page 54 for details



Swimming Pool Heat Pumps: LAS MT / LAS TT ranges

The diagram shows a typical LAS MT / LAS TT heat pump configuration for swimming pool heating.

(Note this is for illustrative purposes only and is not intended as a full hydraulic schematic)



	SI 50 TE	SI 75 TE	SI 75 TER+	SI 100 TE	SI 130 TE	SI 20 TEH	SI 40 TEH
Operating limits							
Heating water supply/return °C	Max 60 / min 18					Max 70 / min 18	
Brine (heating) °C	-5 to +25						
Anti-freeze agent	Monoethylene glycol						
Minimum anti-freeze concentration	25%	25%	25%	25%	25%	25%	25%
Performance							
Heating capacity B0 / W35 (kW)							
1 compressor	23.0[1]	37.6[1]	35.1[1]	48.4[1]	63.3[1]	11.5[2]	17.4[2]
2 compressors	46.7[1]	75.2[1]	65.3[1]	96.3[1]	125.8[1]	21.4[2]	34.2[2]
Coefficient of Performance B0 / W35							
1 compressor	4.4[1]	4.3[1]	3.8[1]	4.6[1]	4.2[1]	4.6[2]	4.1[2]
2 compressors	4.5[1]	4.4[1]	3.5[1]	4.6[1]	4.3[1]	4.4[2]	4.1[2]
Cooling capacity B10 / W18 (kW)							
1 compressor	-	-	53.2	-	-	-	-
2 compressor	-	-	98.2	-	-	-	-
Coefficient of Performance B10 / W18							
1 compressor	-	-	8.2	-	-	-	-
2 compressors	-	-	6.3	-	-	-	-
Minimum heating flow @ internal pressure differential (m^3/h/Pa)	4.5 / 2000	6.5 / 2500	11 / 6000	8.5 / 3600	11.5 / 2200	1.9 / 2310	3.2 / 1100
Sound power level dB (A)	50	54	54	55	56	47	50
Refrigerant: type/total charge weight (kg)	R404A / 8.6	R404A / 14.1	R404A / 16.1	R404A / 20.5	R404A / 27.0	R134A / 4.2	R134A / 8.0
Dimensions H x W x L (mm)	1890x1350x775	1890x1350x775	1890x1350x775	1890x1350x775	1890x1350x775	1660x1000x775	1890x1350x775
Weight (including packaging) (kg)	486	571	607	652	860	307	502
Nominal Voltage / fuse rating (V/A)	400 / 50	400 / 63	400 / 63	400 / 80	400 / 80	400 / 25	400 / 63
Starting current with soft starter (A)	56	105	105	120	115	30	84

[1] Performance standards measured to EN255
[2] Performance standards measured to EN14511

	WI 9 ME	WI 14 ME	WI 18 TE	WI 22 TE	WI 27 TE	WI 40 CG	WI 90 CG
Operating limits							
Heating water supply/return °C	Up to 55						
Water (source) °C	+7 to +25						
Performance							
Heating capacity W10/W35 (kW)							
1 compressor	8.2[1]	13.5[1]	16.9[1]	21.3[1]	26.1[1]	23.4[2]	49.8[2]
2 compressors	-	-	-	-	-	44.4[2]	91.2[2]
Coefficient of performance A7/W35							
1 compressor	4.8[1]	4.7[1]	5.2[1]	5.3[1]	4.9[1]	5.9[2]	5.9[2]
2 compressors	-	-	-	-	-	5.7[2]	5.4[2]
Minimum heating flow @ internal pressure differential (m^3/h/Pa)	0.75 / 7000	1.3 / 7000	1.6 / 2600	2.0 / 8000	2.4 / 12500	3.5 / 14000	8.0 / 13000
Refrigerant: type/total charge weight (kg)	R407C / 1.7	R407C / 1.9	R407C / 3.5	R407C / 4.2	R407C / 4.5	R407C / 6.7	R407C / 15
Dimensions H x W x L (mm)	1445x650x575	1445x650x575	1445x650x575	1445x650x575	1445x650x575	830x1480x890	830x1480x890
Weight (including packaging) (kg)	156	165	187	189	259	309	460
Nominal Voltage / fuse rating (V/A)	230 / 16	230 / 25	400 / 16	400 / 20	400 / 20	400 / 35	400 / 63
Starting current with soft starter (A)	26	45	28	27	29	26	60

[1] Performance standards measured to EN255
[2] Performance standards measured to EN14511

	LAS 10 MT	LAS 15 MT	LAS 22 TT
Operating Limits			
Heating water supply/return °C	+10 to +40	+10 to +40	+10 to +40
Air °C	-10 to +35	-10 to +35	-10 to +35
Performance			
Heating capacity (kW)			
A20/W24	12.1/2.9	16.6/3.5	22.3/4.4
Sound pressure level at a distance of 10m dB (A)	45	45	46
Refrigerant: type/total charge weight (kg)	R407C / 1.5	R407C / 1.6	R407C / 2.5
Dimensions H x W x L (mm)	860x127x67	860x127x67	860x127x67
Weight (including packaging) (kg)	147	155	162
Nominal Voltage / fuse rating (V/A)	230/20	230/25	400/16
Starting current with soft starter (A)	33	43	25

For additional hydraulic modules please refer to page 54.

Heating and hot water manifolds

Dimplex offer a selection of heating and hot water manifolds, subject to flow rate of the heat pump. Please refer to the individual product minimum flow rates which are shown in the technical specification tables.

Model	Flow rates (m^3/h)	
KPV 25	up to $1.3m^3/h$	Compact manifold
EBKPV	up to $2.0m^3/h$	Extension module for KPV module
DDV32	up to $2.5m^3/h$	Dual differ. pressure less module
WWM25	up to $2.5m^3/h$	Heating circuit / hot water module
MMH25	up to $2.0m^3/h$	Mixed heating circuit module
VTB25	up to $2.5m^3/h$	Manifold bar
Additional manifolds for alternative systems		
MMB25	flow rates up to $2.0m^3/h$	Bivalent mixing manifold
SST25	Max. of $10m^2$ solar panels	Solar station

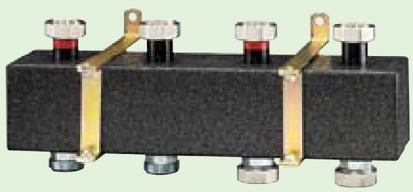
KPV25 / WWM25 / MMH25

MMB25

EBKPV

SST25

DDV32



VTB25

Support Information

As well as the most extensive range of heat pumps in the UK, Dimplex also has a wealth of support information available.

Case Studies

Dimplex heat pumps have been installed in a wide variety of installations across domestic and commercial applications from private and social housing developments, through to schools, hospitals, nursing homes and retail parks. To view a selection of case studies, simply visit the renewables section of our website.

Training

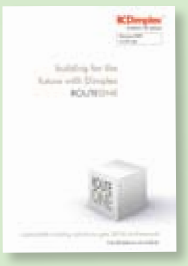
Whether you are an installer looking for new business opportunities or a specifier wishing to understand more about heat pumps, Dimplex can help with a variety of training courses available. If you are an installer with demonstrable competency and experience in plumbing and heating, you could become a Dimplex Accredited Installer for Dimplex air and/or ground source heat pumps. Our two and three day training courses are available throughout the UK and once you have passed the course, you will enjoy the many benefits associated with this programme. For specifiers, we offer a one day familiarization course and further details of all courses can be found on our website, or by emailing training@dimplex.co.uk.

CPD Seminars

Dimplex are part of the Construction CPD Service and take part in their annual roadshow seminars as well as hosting events ourselves at various venues around the country. Subject to numbers and timing, we are also able to undertake presentations at client offices. Copies of current presentations can be found on our website.

Planning Guide

This comprehensive technical guide provides all the detailed information a specifier or installer needs including performance data, system design and other relevant support information documentation. Available as a download on our website, or as a printed document – ordered via our website or by phoning 0845 600 5111.



RouteOne Specifier Guides

A series of specifier guides which cover the key issues which relate to low carbon heating solutions, including the Code for Sustainable Homes, with practical and detailed examples on how compliance can and has been achieved.

Newsletters

In addition to product based literature, we also produce a regular newsletter – EcoTalk which covers all the latest news and views of the industry.

Electronic support

In addition to web based product information, we also have links to more detailed information on Dimplex heat pumps to assist those involved in the specification or installation.

- Individual Product Data Sheets
- On-line Cost Calculator
  This powerful tool helps to select the correct heat pump for your application and compare the running costs with other types of heating systems.
- On-line Hydraulic Integration Diagrams

Aids system design and installation by creating customised hydraulic schematic diagrams of the heat pump system for your project.

Please visit the renewables section of **www.dimplex.co.uk** for full details.

Dimplex Heat Pumps – Always the right solution

CERTIFIED QUALITY

Maximum operational reliability of all Dimplex heat pumps is ensured at all times due to continuous quality assurance during production and quality certification to EN ISO 9001. The international heat pump quality label for heat pump heating systems guarantees highest safety and quality standards.The tests conducted by recognised testing institutes provide comparability of results, ensure compliance with standards and guarantee an extensive after-sales network with at least 10-year spare parts availability. Dimplex is also a Member of the Heat Pump Association [HPA], the Ground Source Heat Pump Association [GSHPA], BEAMA Low Carbon and the European Heat Pump Association.

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.

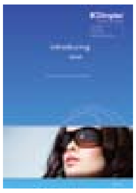
CE MARK

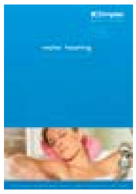
Products carrying the CE mark comply with European safety standards and the European Standard for electro-magnetic compatibility.

THE DIMPLEX RANGE

Dimplex offers the widest range of electric space and water heating products in the world – nearly 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.

Choose from:


Solar hot water brochure


Water heating brochure


Commercial brochure


Range brochure


Fires brochure


Portables brochure

General Information - Useful Contacts

Great Britain

Tel: 0845 600 5111
Fax: 01489 773050
Email: customer.services@dimplex.co.uk
Website: www.dimplex.co.uk

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Tel: 028 3833 7317
Fax: 028 3835 0208
Email: info@glendimplexni.co.uk
Website: www.glendimplexni.co.uk

Republic of Ireland

Tel: No. 01 8424833
Fax: No. 01 8424705
Email: sales@dimpco.ie
Website: www.dimpco.ie

Low Carbon Buildings Programme Phase 2 Grant Information

Great Britain

Tel: 0800 023 2243
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Designed and produced by CCA Marketing Limited, Christchurch (Bournemouth). www.cca-marketing.com

D1381/0209